1. Africa’s Poverty Financing Gap Remains Large

Beyond shifting development priorities and policies, the agenda to accelerate poverty reduction in Africa requires harnessing more resources. The message about spending more and spending better to address the critical needs for the poor is essential to meet SDG goals. Assessing a country’s poverty financing gap requires a sense of the needs of the country’s poor, as well as of the country’s capacity to mobilize the resources to meet them. This is challenging, conceptually and in terms of data. One metric regularly used to gauge needs is the aggregate poverty gap (APG). It is the monetary value of the gap between the income of the poor and the international poverty line aggregated across the poor population. It gives an estimate of the amount necessary to mechanically lift all the poor out of poverty through redistribution. As such, it provides a first (and imperfect) benchmark.\(^1\)

In 17 out of 45 countries with data, who have over one-third of the poor in Africa, at least 10 percent of GDP (in 2016 prices) would be needed to fill the aggregate poverty gap. All but two (Lesotho and Zambia) of these are low-income countries. For Burundi, the Central African Republic, the Democratic Republic of Congo, Madagascar, Malawi, and Mozambique, the gap requires over 50 percent of the country’s GDP. By way of comparison, government tax revenues were only 9 percent on average in Africa’s low-income countries. Filling the poverty income gap

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\(^1\) One downside is that the APG does not provide a direct estimate of the amount of public investments and support needed to strengthen the earning capacity of the poor today, and of their children in the future (through human capital investment today), nor an estimate of the amount needed to prevent those around the poverty line from falling back. Still, it is a frequently used starting point for considering a country’s poverty financing needs and whether it has, in principle, the domestic means to meet them. For applications of this method, see, for example, Chandy et al. (2016), Olinto et al. (2013), Ravallion (2009), and Sumner (2012).
would leave nothing for public good provision, so clearly not a realistic option. Not surprisingly, the APG is 3 percent or less of GDP (in 2016) for most middle-income countries (17 out of 20 countries), with Lesotho, Nigeria, and Zambia being exceptions. In most of the non-low-income countries, the challenge is not so much the amount of resources required by the poor to reach the poverty line, but the decision and effort to redirect resources to the poor to raise incomes.

Using a different, but related metric, closing the poverty gap would also imply an infeasibly high tax rate on the non-poor in many countries (Figure 1). In 22 (mainly middle-income and resource-rich) countries out of the 43 for which there are data, it would imply a rate of less than 10 percent on the income of the non-poor above the poverty line. Due to the depth of poverty and the number of poor, even redistributing the income from a country’s billionaires would only have a modest impact on poverty (Chandy et al. 2016). Despite rapid growth in natural resource revenue, for most countries in Africa, natural resource revenue is also not sufficiently large to address the poverty gap, even in theory (Figure 2). Only in five African countries (Angola, Botswana, Gabon, Mauritania and the Republic of Congo) would a direct transfer of 7 percent (or less) of resource revenues fill the poverty gap.

These numbers are indicative that, particularly, Africa’s low-income countries are unlikely to have the financial capacity to overcome poverty, and that international financial assistance will continue to be required. Other direct estimates of the cost of making some core social services available or so-called financing of the SDGs confirm the large gap (Development Finance International and Oxfam 2015; Greenhill et al. 2015; Schmidt-Traub 2015).
Figure 1. High levels of poverty imply high tax rates on the non-poor to cover need. Source: Authors’ calculation.

Figure 2. Resource revenues are not sufficient to eliminate the poverty gap. Source: Authors’ elaboration with inputs from Nga Thi Viet Nguyen and Rose Mungai. Subset of 23 countries out of 48 with resource revenues and complete data on the level of resources.
2. Fiscal Systems in Africa

2.1. Revenue and Spending Space

States get tax revenues directly (e.g., personal and corporate income tax) and indirectly (e.g., value added tax (VAT), excise taxes, and customs duties). Some governments obtain further revenues through grants from donors and international organizations and natural resources, when available. These different revenue sources as well as the ability of governments to manage arrears and borrow, and to draw in private capital for public–private partnerships determine the fiscal space for African governments to spend. There are huge challenges to both raising revenues domestically and increasing other sources of revenue, including from international aid, which is in fact decreasing, or international financial markets, given rising debt levels.

In most of Africa’s low-income countries, the domestic revenue imperative remains stark. Most have tax revenues relative to GDP under 13 percent (that is revenues net of grants) the ‘tipping point’ below which executing basic state functions and sustaining one’s development becomes problematic (Figure 3) (Gaspar et al. 2016). For Africa’s low-income countries, the average 2013 tax revenue share of GDP was in fact only 9 percent. It was slightly larger for lower–middle-income countries (19 percent). The Organisation for Economic Co-operation and Development (OECD) average in 2015 was 34.3 percent (OECD Organisation for Economic Co-operation and Development).
Figure 3. Most African countries have a domestic revenues deficit. Source: de la Fuente et al. (2018) based on the International Centre for Tax and Development (ICTD)/United Nations University—World Institute for Development Economics Research (UNU-WIDER), Government Revenue Dataset, June 2016.²

However, a country’s level of economic development does not fully predetermine its capacity to raise revenues. Government revenue as a percentage of GDP was more than 20 percent in Mozambique and Zimbabwe, both low-income countries. Lately, there has also been an improvement in domestic revenue collection across Africa. The region experienced the largest increase in tax revenue across the globe since the turn of the century (IMF 2015). As already stated, however, this improvement is beginning from a low level, and, disconcertingly, projections find that the countries with the lowest domestic resource mobilization levels are also expected to grow these revenues at lower rates, further widening the gap (Development Initiatives 2015).

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Most African countries rely heavily on indirect taxes levied on the sale of goods and services. This includes VAT, trade taxes paid at the port, and excise taxes (such as fuel taxes). VAT, in particular, has led the way to a raise in domestic revenues. Indirect taxes are often also invisible to consumers, and, if kept simple, easier to administer. This makes them a preferred tax instrument in many lower-income countries, where administrative capacity is limited. In addition, informal businesses are widespread in low-income countries; they are generally cash based and hard to tax. Therefore, lower-income countries rely more on indirect taxes than middle-income countries, but this has pernicious consequences on welfare, as Section 2.3 shows.

Direct taxes are the second main source of revenues for African countries. Yet, total revenues from personal income taxes amount to only 2 percent of GDP in sub-Saharan African countries (excluding South Africa). The main direct taxes are personal and corporate income tax. Their contribution as a share of GDP has not been improving either because governments discouraged marginal increases in corporate and personal income taxes. Or simply because income earners avoided complying. Property taxation contributes very little (recorded at 0.1–0.2 percent of GDP, for those countries where reliable information exists) (Moore and Prichard 2017).

Some countries in Africa also generate substantial revenues from natural resources. Out of 37 countries for which data are available, 22 are considered resource rich: from oil-rich countries like Chad and the Republic of Congo to diamonds in Botswana and minerals in Niger or Mauritania. In these countries, revenues from natural resources make up between 10–20 percent of GDP (Figure 3). Tax revenues in developing countries with substantial natural resources tend to be higher than for countries at the same income level that lack such resources. So, in principle, resource revenues can enhance spending on pro-poor sectors such as the social sectors (for example, health and education), agricultural and rural development, as well as social protection programs including cash transfer schemes strengthening the poor’s risk management capacity. However, often revenues go directly from extracting companies to governments, without citizen involvement. This weakens the ability of citizens to scrutinize government expenditures. As a result, poverty reduction is slower and multiple human development indicators are worse in resource-rich countries in Africa than in other countries at the same income level (Beegle et al. 2016; de la Brière et al. 2017).

Taken together, the low base on which to tax, the limited capacity to tax more, and the political inability to channel national income from natural resources to pro-poor spending result in a large poverty financing gap. Low-income countries face the greatest needs, have the lowest taxable base and are least efficient in
mobilizing revenues. Financing from foreign donors or international organizations will remain a critical source of funding for many of the poorest African countries in the foreseeable future.

While domestic resources are the largest resource available to African countries in aggregate, aid makes up more than 8 percent of gross national income (GNI) for half the low-income countries in Africa (Figure 4). It is often geared towards pro-poor sectors such as health, agriculture, and education. For example, aid finances three quarters of public health spending in Rwanda (Development Initiatives 2015) and donor funds finance 90 percent of public agricultural spending in Burundi (Pernechele et al. 2018). The sectors of education, health and financial support to the poorest through safety nets account for around a third of all donor aid.

![Graph showing percent of GNI by country](image)

**Figure 4.** ODA is a large share of GDP in low-income countries. Source: OECD database (2017).

Unfortunately, while global ODA has been increasing, reaching an all-time high of USD 140 billion in 2016 (at current prices)—ODA to African countries increased marginally in nominal terms from USD 45.8 billion in 2013 to USD 46.3 billion in 2017 (after a dip to USD 42.5 billion in 2016). In per capita terms, though, it has declined in nominal terms from USD 48.3 to 42.6 given population growth. The decline is, at

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3 We lack estimates of aid inflows from international charities, international nongovernmental organizations (NGOs), and private donations.
least in part, because donor countries were spending more in their own countries on refugees and asylum seekers. Such spending more than doubled in three years, from less than 4 percent of total donor spending before 2013 to 11 percent in 2016. Germany and Italy spent more on in-country costs than they gave in aid to Africa; Norway and Switzerland had increases in in-donor refugee costs and decreases in aid flowing to developing countries. Four Development Assistance Committee (DAC) donors—Greece, Italy, Austria, and Hungary—allocated more than 50 percent of their bilateral assistance in 2016 to in-donor refugee costs. When in-donor refugee costs are excluded, only three countries—Norway, Luxembourg, and Sweden—out of the 29 DAC donor countries reached the United Nations target of 0.7 percent of ODA/GNI in 2016 (Sebany 2017).

The combined resources from domestic revenue and ODA at current levels do not suffice to reach the SDGs goals related to universal education, universal health, and scaled up safety nets in developing countries; billions more are needed (Greenhill et al. 2015; Manuel et al. 2018). The costs for education, health and financial support needed for the poorest in Sub-Saharan Africa totals USD 262 billion (in 2017 prices) (Manuel et al. 2018). Some target getting an extra trillion (Development Finance International and Oxfam 2015). In light of the shortfalls, ODA is increasingly also being used to catalyze private sector investment in developing countries, though the jobs and poverty impact of blended finance needs to be better understood (Sebany 2017). Donors should recommit to the original ODA target of spending 0.7 percent of their national income on development aid overseas and reverse the trend of a declining share of ODA to Africa. In 2015, DAC countries spent 0.3 percent of ODA/GNI globally and 0.1 percent in Africa. If donors met aid targets (0.7 percent of GNI), the financing gap in low- and low–middle-income countries would be met (Greenhill et al. 2015).

Governments could in principle also borrow, domestically and internationally. Yet, many will find it difficult. Lenders may be unfamiliar with small countries who do not normally borrow. Countries that do borrow may have large existing debts and may not be able to raise additional sums.4 Standard & Poor’s has downgraded four African countries since the start of 2017, namely, Gabon, Namibia, the Republic of Congo, and South Africa. Additionally, for those with an International Monetary

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Fund (IMF) program, there may be additional restrictions related to taking on debt. A few countries are facing repayment problems, for example, Mozambique and the Republic of Congo. Additionally, even those with low debts may find it difficult to borrow when they most need to, due to the move to normalization of the monetary policy in advanced countries, a decrease in other sources of funding, and rising sovereign risks in the region.

2.2. A Mixed Record on Spending on Pro-Poor Sectors in Africa

Many measures to tackle poverty are embedded in the provision of basic services and direct transfers (for example, schools, clinics, or cash transfers that help to build human capital and manage risks) as well as in the sectoral allocation of public spending towards sectors that are more likely to benefit the poor, such as agriculture. As such, tracking pro-poor spending is usually sectorally focused even though, importantly, within-sector spending choices can also have quite different effects on poverty (Owori 2017).

Five key points emerge. First, while a number of countries are close to meeting or exceeding global targets for pro-poor sectoral spending as a share of GDP or government expenditures, absolute (per capita) spending levels are very low, often with room for expansion through reallocation, for example through a reduction in energy subsidies. Second, within-sector spending is often ill-targeted to the needs of the poor and, implementation is inefficient. Third, as a result of both these factors, many poor still pay for access to basic services critical for human development; out-of-pocket expenditures are high, or lack the public goods needed to increase their earnings (e.g., agricultural innovation and rural infrastructure). Fourth, resource-rich countries spend less on education and health than other African countries of similar income level, and spending is less efficient. Finally, in health and education, as well as agriculture and risk management (humanitarian aid), a large share of funding in many countries comes from donors, questioning government commitment and independence as well as the sustainability of pro-poor spending.6

5 Seventeen countries have an IMF Extended Credit Facility and/or Extended Fund Facility (Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, Cote d’Ivoire, Gabon, Ghana, Guinea, Guinea-Bissau, Madagascar, Mali, Mauritania, Niger, Sao Tome and Principe, Sierra Leone, and Togo). Two countries have IMF Stand-By Agreement and/or Stand-By Credit Facility (Kenya and Rwanda).

6 For a discussion on exploring how, when, and why poverty can be a priority in the national budget, see Foster et al. (2003) which summarizes five African country case studies that explore this.
Among the social sectors, governments consistently spend more on education (4.3 percent of GDP on average across low- and middle-income countries in Africa), typically followed by health (1.8 percent of GDP), and social safety nets (1.4 percent of GDP) (Figure 5). On average spending is in the target range for education (4–6 percent of GDP per capita or at least 15% to 20% of public expenditure to education) under the Education for All (EFA) initiative. However, spending is below the target for health spending (about 4 percent of GDP per capita since the Abuja Declaration target is 15% of public expenditure to health). Spending on social safety nets is lowest, but much lower in most countries, given there is a concentration of social safety net spending in Southern Africa. This is also well below the share spent on energy subsidies (3.8 percent of GDP on average). Agriculture spending as a share of GDP is 1.4 on average. Given low levels of GDP per capita, the absolute levels of pro-poor spending per person can be strikingly low, especially in low-income countries. Additionally, there is important heterogeneity across country groupings and sectors. Resource-rich countries, for example, spend less on critical social services (education, health, social safety nets) as a share of their GDP (i.e., given their income level) than their non-resource rich counterparts.

Spending is not usually tracked subnationally, although one could make the case that this should be carried out in many sectors. Some evidence suggests that the poorest places are not getting equal, let alone greater, spending. Recent work, using geo-tagged aid data and data sources as a proxy for poverty (night lights, other remoteness measures, and health outcome estimates) finds that aid specifically is disproportionately going to richer areas (Briggs 2018). Country-level studies often show disparities in public spending suggesting the same. Government health expenditure in the Democratic Republic of Congo were 1.8–3.5 times higher in Kinshasa than in provinces with lower poverty rates, and, though not adjusted for price-level differences, this disparity is reflected in starkly unequal access to service and health outcomes (Barroy et al. 2014). In Ghana, government spending per pupil is higher in regions with lower poverty rates (Abdulai et al. 2018). Even when spending data are not readily available, since the bulk of health and education spending is salaries, disparities in staffing per capita between poor and less-poor areas (which is well documented in many studies) reflects, in large part, overall unequal spending. Unequal investments in social sectors partly explains why geography is one of the strongest predictors of within-country inequality (Beegle et al. 2016).
2.3. Are Africa’s Fiscal Systems Impoverishing?

Fiscal systems can have an impact on poverty and inequality, both through the government’s overall fiscal situation and through the distributional implications of tax policy and public spending. Many policies can enhance equity. Governments can use taxes and transfers to redistribute income ex post and they can use public spending—through the provision of public goods and services—to reshape the distribution of ‘opportunities’ and foster mobility within and across generations (Bastagli 2016; Inchauste and Lustig 2017; Lustig 2018).7

The provision of quality public goods and services can help individuals increase their stock of assets—for example, in terms of human capital such as education, health, or skills; their financial capital; or their physical capital such as land or machinery, thereby equalizing opportunities. Promoting an environment of investment and innovation can expand access to opportunities as individuals use their capital and labor to generate income—for example, utilizing their skills to participate in the labor market or using their land for agricultural production. Social protection systems—including safety nets, subsidies, and transfers—also act as a mechanism for equity, redistributing resources to the most vulnerable.

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7 Figure 5. There is diversity in spending, but education dominates. Source: Country average spending as a percent of GDP among low- and middle-income countries in Africa; education, public health, and military from WDI; energy subsidies from IMF (2015); social safety nets from Beegle et al. (2018); agriculture from the SPEED database.
One increasingly used tool to assess who bears the burden and benefit from the different instruments upon which domestic resource mobilization and government spending depend, is Fiscal Incidence Analysis (FIA). A summary and expansion of the FIA tool applied to 11 African countries through Commitment to Equity (CEQ) Assessments shows that many fiscal systems in the region are at best neutral in terms of poverty impacts or, at worst, sometimes, poverty increasing (de la Fuente et al. 2018). South Africa and Namibia are exceptions, as the fiscal systems of these two countries deliver significant additions to income through direct transfer spending (Figure 6). Yet, even when the poverty rate is unchanged or has fallen like in Namibia and South Africa, African fiscal systems may still create burdens for some poor and vulnerable households. That is, some poor and vulnerable individuals may end up paying more in taxes than they receive in transfers—a phenomenon known as ‘fiscal impoverishment’ (FI) (Higgins and Lustig 2016). The FI index summarizes the number of poor individuals who are estimated to have experienced net losses from fiscal policy (i.e., they have paid more into the fiscal system in taxes than they are estimated to have received from it as benefits). The FI index is expressed as a rate among either the overall population or the poor population. When FI is stated in terms of the latter, it demonstrates how well the fiscal system did at protecting poor and vulnerable households from experiencing losses. The proportion of poor households who are disadvantaged by the fiscal system can exceed 80 percent in countries that deliver very few cash benefits directly like Comoros, Ghana, Mali, Togo, Uganda, and Zambia (Figure 7). This does not correct, however, for the proportion of poor households that are net beneficiaries of the fiscal system and escape poverty as a result.

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8 Note that this holds in the aggregate, as those who benefit and those who pay may not be the same poor or vulnerable individuals.

9 The FI index estimates the net losses experienced by those who are “post-fisc” poor, or those would be classified as poor given their CEQ Consumable Income levels. The Fiscal Gains to the Poor (FGP) index, meanwhile, estimates the net gains experienced by those who are “pre-fisc” poor, or those who would be classified as poor given their CEQ Market Income levels.
Figure 6. Fiscal Policy in Africa Frequently Increases Poverty. Source: de la Fuente et al. (2018).

Figure 7. Fiscal systems create net losses for the poor even when incidences of poverty are reduced. Source: de la Fuente et al. (2018).
Underpinning these patterns are three proximate causes or drivers of this FI in Africa. First, there is heavy reliance on consumption taxes like VAT to raise revenues and compensate the low levels of taxes collected from other sources, including corporate, income, and property taxes. Second, some governments spend large amounts on energy subsidies which fail to reach most poor households and agricultural subsidies which have low returns compared to other agricultural investments. Third, social protection systems provide only limited targeted, direct transfers to the poor, either because few households are covered, or transfer amounts are relatively low or both. For these reasons, it is further anticipated that the group of poor people who escape poverty by virtue of being net fiscal receivers is also small.

Note also that the FI index and the discussion directly below refers to reductions in the cash-based financial position or in the purchasing power of individuals. The FI index does not attempt to include the benefits provided by the provision of in-kind benefits like education, health, or infrastructure services as in-kind benefits cannot be “eaten”; i.e., they neither increase nor decrease purchasing power over other goods and services.

Direct taxes create very small burdens for the bottom 40 percent while indirect taxes paid by the bottom 40 percent often represent 10 percent or more of pre-fiscal income (Figure 8). Subsidies—even when they are extensive—provide little benefit to poor and vulnerable households who often do not access the subsidized services as much as the wealthy (such as electricity and transport fuel). Direct transfers provide compensation (for the bottom 40 percent) equal or greater than taxes paid only in South Africa and Namibia.

In the aggregate, the total cash benefit transferred to the poorest 40 percent of the population through subsidies and direct transfer programs is smaller in absolute magnitude than the burden created (for the same population) by direct and indirect tax instruments. In other words, most individuals in the bottom 40—including most poor individuals—can expect to be net payers instead of net recipients.10

Even if the fiscal system makes a portion of the poor net payers, one could argue that this would be fine as long as this may be the only way to finance strongly progressive and extensive public expenditure on sectors that benefit the poor such as education and health. However, is this the case for Africa? It is not clear that the

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10 To repeat: we refer here to the cash-based financial position purchasing power of individuals and we are not including the value of in-kind benefits like education, health, or infrastructure services.
poor benefit from in-kind spending in education and health as much as they could, given the problems with the quality of the services received.

It is important to note that a limitation of the fiscal incidence analyses reported here is that it does not account for infrastructure spending which in some countries may benefit the poor in terms of higher quality of life and/or more access to markets.

Figure 8. Indirect taxes paid outweigh subsidy and transfer benefits for the bottom 40 percent of national populations. Note: Direct transfers and subsidies represent 104 percent and 7.0 percent (respectively) of market income plus pensions in the bottom 40 percent of South Africans (in 2010). The vertical axis in this figure is truncated at 40 percent so that fiscal systems in the non-South African countries are more clearly comparable. Source: de la Fuente et al. (2018).

3. Mobilizing More and Less Harming Revenues

3.1. Heavy Reliance on Indirect Taxes and Unreliable Direct Taxes

As the previous section demonstrated, how taxes are raised matters to poverty as much as the amount raised, with the Bottom 40 often significantly affected by indirect taxation. VAT is preferable for efficiency and effectiveness reasons, but it can hurt the poor. Tax exemptions on goods and services primarily consumed by the poor provide a way to mitigate the negative effects. Yet, such goods and services are
few and far between. Additionally, often the goods and services exempted from VAT are consumed in significant quantities by the non-poor, implying important foregone tax revenues. Furthermore, the revenues raised through VAT and other indirect taxes will need to be properly channeled to the poor or vulnerable so that they become net receivers of the fiscal system. Targeted cash transfers provide an alternative way to compensate the poor. However, the amount of resources that are dedicated to cash transfers is often insufficient (both because of insufficient coverage and low levels of transfers) and needs to be weighed against other competing needs (spending on education, health, WASH, infrastructure, security, and so on). Section 4 sketches some ideas to inform those decisions.

Direct taxes, on the other hand, tend to be progressive because richer people more often have formal jobs. However, economists are quick to diagnose that direct taxes can affect efficiency and long-run growth—by disincentivizing investment, human capital acquisition, and innovation. Yet, the evidence suggests that for low-income countries, shifting away from consumption taxes (e.g., VAT) in favor of income taxes appears to have no negative effect on growth (McNabb and LeMay-Boucher 2014).

More importantly, the small formal sector in many African countries limits the scope for collecting more revenues through direct taxation. Personal income tax is generally limited in economies with large informal sectors as there are few formal employers. Nevertheless, there is room for direct taxation of a wider base of taxpayers, including from the informal sector. Inducing tax compliance also fosters good governance more widely; it comes along with a demand for state institutions that are more responsive, accountable, and competent.

Taxpayer noncompliance is a continual and growing global problem, but studies suggest that developing countries, many of them in Africa, are the hardest hit (Cobham 2005; Fuest and Riedel 2009). Part of the reason is that it often does not seem to pay to taxes. If taxpayers perceive that they do not obtain corresponding benefits from government collectors, tax compliance decreases (Junquera-Varela et al. 2017; Ali et al. 2014; Mawejje and Okumu 2016).

3.2. Taxing the Rich

In many African countries, the numbers of wealthy are growing fast (McCluskey 2016), as are the prices of real estate—one of the major assets held by the rich. Yet, many rich people pay relatively low taxes on their assets and incomes/enterprises. In Ghana, income tax revenue could have been higher by 22 percent (equivalent to 0.5 percent of GDP) if everyone who filed income tax in 2014 had paid full amounts of income tax due (Asiedu et al. 2017). Wealthy individuals often have significant
investments in local land and property and underdeclare their income from such activities. Out of 71 high-ranking Ugandan government officials owing large domestic business assets (like hotels and schools), only one had ever paid personal income taxes between 2011 and 2016 (Kangave et al. 2016).

The barrier to collecting more property taxes may be largely political, but some technical measures can also widen the base for these taxes. Recent experiences in Sierra Leone point to at least three options for improvement.\textsuperscript{11} First, simplified valuation methods that rely primarily on observable features of properties (as opposed to sophisticated, often imported, information technology systems). Second, transferring the responsibility for valuation and property tax collection away from central tax agencies through hands-on and continuous training of local staff (instead of high cost, but short term, training programs). Additionally, third, long-term partnership at the local level is needed and should include continuous support to, and pressure on, political leaders when they have inevitably confronted political resistance (Jibao and Prichard 2016). Relatedly, concentrating the responsibility of collecting property taxes into those with stronger incentives to collect revenue can yield great results. In Lagos, Nigeria the local government undertook an overhaul of governance and property taxation since the early 2000s with the determination of Lagos’ leaders to realize their ‘mega-city ambitions’, in part to attract increased investment (Goodfellow and Owen 2018).

3.3. Corporations and Cross-Country Competition

Without overlooking domestic policies and revenue sources, additional revenues could further be raised from multinationals. A large portion of the tax bill of multinationals is domestic (through levies, payroll taxes and import taxes). However, multinational companies can minimize their tax bill on profits through transfer mispricing. Simply put this takes place when a company can appear to lose money—or to make very little profit—in the country it is operating in, while making money in secrecy jurisdictions—trading with a subsidiary—where there is no real production and sales activity going on, and remarkably low-tax or no tax applied.\textsuperscript{12} Trading goods that are mispriced to avoid tariffs is not illegal, but there

\textsuperscript{11} Property tax collection increased at least threefold from 2007 to 2011 in nominal terms, or at least doubling in real terms in the four mid-sized city councils of Bo, Kenema, Makeni, and Koidu-New Sembehun.

\textsuperscript{12} First, a corporation working in a developing country sets up a subsidiary in a tax haven. Second, they sell their product at an artificially low price to this subsidiary—enabling them to declare minimal
is widespread agreement that multinationals should refrain from this type of tax minimizing behavior.

However, evidence shows that multinational companies do give in to this temptation. A recent study using confidential tax return data of South African firms with connections to tax havens with no corporate tax, report 47 percent lower profits and have a 7 percent higher likelihood of reporting a loss (Reynolds and Wier 2016). The size of these responses is roughly twice as large as what have been observed in developed countries. This supports the commonly held view that multinational firms operating in developing countries are more aggressive in their tax planning.

When adding it all together—aggressive tax planning by multinationals, high reliance on the corporate tax and increasingly lower corporate tax rates, increased exposure to multinational activity, and increased complexity in multinational corporate activity—the future does look dire for African corporate tax revenues.

3.4. Tapping Mining Income

For some countries, a major cause of revenue losses is related to revenues generated in extractive industries. Natural resources as a prominent source of government revenues remains relevant despite recent downturns, given the prospects of new mineral resource discoveries and the eventual bounce back of falling commodity prices (Roe and Dodd 2017). At the same time, there is now a shared consensus that government revenues from extractive industries are far too small.

According to the IMF, the effective tax rate in mining is typically 45–65 percent of export value (cited in Africa Progress Panel 2013). In 2010–11, Sierra Leone, Ghana, and Zambia received only between 2 percent and 12 percent from natural resource taxation and royalties (Christian Aid and Tax Justice Network Africa 2014). A conservative estimate of the losses in concession trading in the Democratic Republic of Congo in copper and cobalt mining found USD 1.36 billion in losses for 2010–2012, compared to the budget in health and education of USD 698 million (Africa Progress Panel 2013).

The failure of African countries to capture income from the extractives sector is driven by a mix of factors. These include overly generous tax incentives and tax

profits and consequently pay very little tax to the government of the developing country. Thirdly, their subsidiary in the tax haven sells the product at the market price—for comparatively huge profits coupled with a low tax rate (or none at all). In other words, corporations are manipulating prices to pay minimal taxes. See blog post of 7 March 2014, on the “Africa at LSE” blog (http://blogs.lse.ac.uk/africaatlse/2014/03/07/tax-evasion-the-main-cause-of-global-poverty/) (accessed on 22 September 2021).
dodging, as well as weak tax revenue authorities and the corruption of elites. In some cases, governments give generous tax concessions to extractive companies which undercut its own revenue code and the government lacks the capacity or will to properly track what the industries should be paying (as an example see the discussion on Liberia in Sustainable Development Institute 2014). African state companies in the extractive sector lack transparency and the problem is compounded by the ‘global governance deficit’ in some international extractive companies that are major investors in Africa (Africa Progress Panel 2013). Levying appropriate royalty payments and corporate taxes from private companies has helped countries like Ghana and Zambia to raise more revenues in the recent past.13

4. Towards Better Spending for the Poor

The fiscal agenda to reducing poverty in Africa is not only about greater revenues and spending more. Improving the efficiency and equity of that spending, to be more impactful for poor and vulnerable households is equally critical. This means getting more for each dollar spent, but also spending more in the sectors and sub-sectors as well as the places that improve the lives of the poor more effectively within the given budget.14

4.1. Overspending on Subsidies

Consumer price subsidies are one way to ‘pay back’ consumers some of their taxes. They are almost always regressive: those with assets or services to subsidize are generally better off than the poorer segments that often pay indirect taxes that pay for the subsidies. For instance, less than 15 percent of kerosene subsidies in the region are received by the bottom 20 percent—the fuel type most used by the poor (3 percent in the case of liquified petroleum gas and gasoline). For African countries, on average, providing USD 1 to the poorest 40 percent of households through untargeted gasoline subsidies is accompanied by spending USD 23 to the top 60 percent of households (Coady et al. 2015). Two-thirds of global poverty in 2012 based on USD 2.50 per day would have been covered with redistribution of national fossil-fuel subsidies to the poor (Sumner 2016). Subsidies are, hence, a very

13 See Natural Resource Governance Institute (2014) for more discussion on taxing and revenue collection from natural resources.
14 This also relates to finding the right sources of financing, including crowding in private sector finance and public-private partnerships (often in infrastructure), to enable governments to allocate more resources to pro-poor investments.
inefficient way of increasing the consumption of the poorest households. Replacing energy subsidies with a basic income guarantee could both save money and have health and environmental benefits (Coady et al. 2017; IMF 2017).

Within agriculture, farm input subsidies were almost phased out in the 1990s, during a period of structural adjustment in Africa, but they have made a strong comeback due partly to residual support for subsidies among African leaders and partly to the uncertainties about food supply during the 2007/2008 global food and fertilizer price instability. Ten African governments spend roughly USD 1.2 billion annually on input subsidies alone, primarily on fertilizers (Goyal and Nash 2017). In principle, farm input subsidies could make a dent on poverty by making available key inputs to a large population of poor farmers and potentially raise their productivity thereby promoting household and national food security and enhance rural incomes. However, have farming input subsidies delivered?

The existing body of research shows modest impact of fertilizer subsidy programs on yields and overall production; this, in turn, attenuates the subsidy programs’ contribution on retail food prices or poverty reduction (On poverty: see Ricker-Gilbert 2016 for a review in Malawi; Mason and Smale 2013, Mason and Tembo 2015 in Zambia; and Jayne et al. 2016 for Africa). This lack of impact of input subsidies on productivity and poverty gets magnified because countries in Africa do not spend much on agriculture. Farm input subsidy programs have crowded out other complementary public investments that have proven more efficient drivers of agricultural productivity growth. Take the cases of Malawi and Zambia—two of the largest spenders on agriculture in the region: in 2014, the budget allocation to fertilizer and seed subsidies was over 40 percent of the total budget to the Ministry of Agriculture (Goyal and Nash 2017).

15 Farm input subsidies, particularly on inorganic fertilizer, have been justified on the basis that soil nutrients, particularly nitrogen, are essential for maize production, and that most smallholders lack the cash resources or access to credit that would enable them to purchase inorganic fertilizer at commercial market prices.

16 There is no one-size-fits-all rule for deciding what is an optimal response rate; but in Malawi and Zambia—the two countries in Africa where input subsidies are the largest relative to agricultural spending—estimates suggest modest returns to fertilizer use at best. Burke et al. (2012) found that, on average, the response of maize is 2.7 kilograms (kg) of grain per kg of subsidized fertilizer acquired by households, which is only 50 percent of the Government’s expected maize-fertilizer response rate of 5 kilograms. In Zambia, participation raises maize production by 1.88 kg of maize per kg of fertilizer, which is considerably smaller than similar application in other countries, like Kenya, where participation in a similar scheme NAAIAP raises maize production by 361 kg on average, other factors constant (Mason et al. 2016).
Removing subsidies and shifting that spending to public goods and services could improve efficiency and possibly equity. Such reform creates winners and losers and thus brings political pressures to the government. Vested interests and populist pressures exist in all countries. Transport leaders, mining companies, and politically connected firms will want to hold on to energy subsidies, for example, to maintain the preferential treatment in their business as well as to raise barriers to entry for newcomers. The political economy of agricultural subsidies is no less real. Political influence concentration is associated with more subsidies (Figure 9). Nonetheless, some countries have managed to remove subsidies (Inchauste and Victor 2017). To address the politics of reform, it may be necessary to compensate affected groups to preempt opposition. Such compensations may not be cost-efficient, but failing to compensate them (for instance, in the Dominican Republic, transporters and middle classes for removing the fuel and electricity subsidies) could have stopped the reform from passing altogether. Secondly, consumers need to see what they get in exchange for rising prices if the process is to be sustained. Strong communication on the need for price liberalization and trust in the ability of government to handle competing interests is important to sustain price increases.

**Figure 9.** Greater concentration of political influence can result in more subsidies. Source: Bolch et al. (2017). Note: The index is measured by an index of how many individuals at the bottom of the income distribution (the potential winners from more redistributive policies starting from the poorest) would need to come together to outweigh the opposition from the top of the income distribution by accounting for the wealth owned by those individuals.
When, and if, subsidies are scaled back, it needs to happen with a scaling-up of social protection systems. Redistribution has been shown to significantly increase the odds that reforms will succeed. A review of reforms in the Middle East and North Africa classifies all reforms that are combined with cash and in-kind transfers as successful, as opposed to only 17 percent of those without such transfers (Sdralevich et al. 2014). However, greater revenues for government do not ‘automatically’ lead to higher allocations for safety net programs as Ministries of Finance come under many competing demands to reallocate the savings. A concerted effort from civil society or from external financiers to ensure that as part of the subsidy reform, safety nets are funded adequately, is vital. In recent years, IMF has suggested introducing or expanding social protection programs to compensate vulnerable households during price subsidy reforms (Feltenstein 2017). Equally useful, politicians could earmark part of those savings to build credible commitments to carry out the reform as intended.

4.2. Boosting Pro-Poor Spending within Sectors

Certainly, increased government spending on sectors that are critical for the poor—such as agriculture, WASH, education, health, and safety net systems is part of the solution. However, at the same time, current spending could be made more impactful for the poor. In two dimensions, the spending in these sectors underperforms for the poor: in terms of within-sector allocations and in terms of the productivity of spending.

Within-sector spending is not neutral with regard to the poor and non-poor. For example, in education inequality in public sector spending in Africa is common and means that children from wealthier households benefit more from public resources allocated to education. This results from two channels. First, children from poor households are less likely to attend post-primary schools for which per pupil spending is higher (Darvas et al. 2017). Second, within school levels, more public resources go to schools in wealthier areas (often urban) (Bashir et al. 2018). This is, in some cases, due to horizontal imbalances in funding resulting from decentralization of service delivery. Partly, this reflects the fact that teacher salaries are by far the largest category of public expenditures on schooling. The distribution of teachers, especially trained and experienced, is biased toward urban schools leaving rural schools with higher pupil/teacher ratios. Additionally, urban public schools have better infrastructure and learning materials.

In health, government expenditures are skewed toward tertiary services. In the Democratic Republic of Congo, 87 percent of government health expenditure were
focused on hospitals, used disproportionately by the wealthy (Barroy et al. 2014). The unequitable spending relates to both staffing and non-staff costs. Again, in the Democratic Republic of Congo, the modest operating budget almost entirely goes to hospitals. Though hospitals can presumably help people avoid large health costs and income shocks, evidence suggests this spending is off target from a poverty perspective. Capital investments in both education and health services need to be rebalanced toward primary education and care, which are usually more cost-effective. Public investments in curative care are especially regressive, driven by the lower use of such services by the poor (Castro-Leal et al. 2000). Lower usage is attributed to several factors, including the perceptions of poor households about illness as well as low access and quality of services for poor households.

Spending more on services that are needed and utilized more by the poor, does not necessarily imply it is effective. The effectiveness of spending is as important as its magnitude; but the quality of public schooling, health care, and other service provision is generally low, even when adjusted for spending levels. A handful of African countries are relatively efficient with respect to early grade education and are also managing to improve their efficiency (Figure 10 upper-right quadrant). The bottom-left quadrant of the figure shows these countries have a current high level of inefficiency and the index has deteriorated over time. Beyond primary, there are large inefficiencies in spending in secondary education in Africa. These are largest in low-income countries where the consequences are arguably greatest in terms of poverty reduction (Grigoli 2015). Globally, health care systems in Africa are the least efficient and this is also the region with the neediest people (Sun et al. 2017).

In agriculture, ample evidence shows that rebalancing the composition of public agricultural spending in Africa could reap massive payoffs for reducing poverty and increasing agricultural productivity. While studies often show low returns to spending in the sector, specific types of spending (such as investments in core public goods related to R&D, technology generation and diffusion, and market linkages) yield high returns for productivity. The inevitable conclusion is that choices about how to allocate public agricultural spending matter significantly (see the detailed discussion in Goyal and Nash 2017).

There is no single solution to mis-targeted resources and poor quality of services. A number of approaches can be identified. Improved financial accountability is one avenue in health (CMI 2006) and in education (Hubbard 2007). There are a range of other avenues to improve pro-poor investments, such as better financial management, results-based financing approaches, private provision, decentralization, better inputs and support to civil servants, and information/social accountability. Many of these
have been detailed in other reports (for example, see the discussion in de la Brière et al. 2017). Technology can serve an important role (see Technology Spread).

How best to improve efficiency in spending remains an exigent space for further experimentation and learning.

**Figure 10.** Internal Efficiency in Education Remains a Challenge. Source: Bashir et al. (2018). Note: African countries in red. Figure plots the current value of the internal inefficiency index and its improvement over a 35-year period. Positive values indicate less inefficiency.

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