Expanding the coverage of programs represents a serious fiscal challenge. Currently, governments in Africa are spending about 1.2 percent of gross domestic product (GDP) on social safety nets. This is lower than the spending on other sectors, such as energy, health care, education, and, in some cases, the military. This level of spending and the predictability of expenditures are inadequate to face the high chronic poverty rates and vulnerability to shocks experienced in the region. Bringing these programs to scale will require a multipronged approach to fiscal systems.

First, countries need to make better use of existing resources. The operational efficiency of programs needs to be improved. The scale and quality of the operation of administrative tools are critical to greater efficiency. Governments across the region have recently put considerable emphasis on enhancing administrative processes and systems. Efficiency gains can also be harvested by raising allocative efficiency to expand the reach of programs among the poor and vulnerable.

The level and sustainability of financial resources must be upgraded. Development partners are crucial in the financing of social safety nets in Africa. Given the fiscal constraints facing many governments, development partner support will continue to be critical to bringing programs to scale in most countries. Governments must find the right mix of domestic, foreign, public, and nonpublic funding. Strengthening fiscal systems is the most sustainable option for financing social safety nets at scale because of the uncertainties in the global macroeconomic and political environment, the rising costs of borrowing, and the unpredictability of external financing. Reforming tax systems is a widely recognized imperative in Africa.

Finally, flexible financing strategies are needed to respond to shocks and crises efficiently and in a timely manner. Contingency or reserve funds could be established to finance relief, rehabilitation, reconstruction, and prevention activities to address emergencies. Risk transfer mechanisms, which are financial or insurance instruments, are another option to insure against shocks.
How to finance social safety nets at scale sustainably is a pressing issue for policy makers. This report argues that bringing social safety nets to scale is key to responding to the challenges of chronic poverty and vulnerability to shocks across the region. However, governments across the world, but especially in Africa, face competing fiscal demands and finite budgets.

Financing social safety net programs at scale in Africa is therefore a challenge. Rising to the challenge requires resolving both sides of the fiscal equation: expenditure and revenue. That means spending resources more effectively and boosting revenue. Considering social protection expenditure and revenue issues jointly boosts the likelihood of achieving revenue sufficiency for sustained programs.

**Spending and Financing for Social Safety Nets: A Snapshot**

Chapter 1 highlights the main traits of spending on social safety nets in the region. On average, the region devotes 1.2 percent of GDP on social safety nets (equivalent to 4.6 percent of total government spending), compared with the global average of 1.6 percent. This is lower than the spending on other sectors, such as energy subsidies, health care, education, and, in some cases, the military (figure 5.1; appendix G, table G.1). In particular, spending on energy subsidies—often cited as a means of supporting vulnerable households, but largely regressive in practice—is greater than spending on social safety nets in the region, with particularly high levels in Central and Eastern Africa and in low-income countries.

There is great variation across the Africa region in spending on social safety nets as a share of GDP. High-income and upper-middle-income countries spend an average of 2.5 and 2.2 percent of GDP (6.5 and 6.9 percent of total government expenditures, respectively), while low-income countries spend an average 1.4 percent of GDP (4.8 percent of total government expenditures; see figure 5.1 and appendix G, table G.3). Southern African countries spend an average 3.2 percent of GDP, three times more than countries in other subregions. Non-resource-rich countries devote more than twice as much to social safety nets (2.1 percent of GDP) as resource-rich countries (1 percent of GDP). Countries with lower exposure to droughts allocate fewer resources to these programs than countries facing high or medium exposure (appendix G, table G.3).

The composition of social safety net spending also varies. Overall, cash transfer programs account for 41 percent of all social safety net spending in Africa (chapter 1, figure 1.4, and appendix G, table G.6). Social pensions represent the second-highest share of spending (26 percent of total). In Southern Africa and upper-middle- or high-income countries, a larger share of social safety net spending goes to programs focused on the elderly. Spending on public
Figure 5.1  Spending Is Lower on Social Safety Nets Than on Other Sectors


Note: Methodology presented in appendix B.4 and more details in appendix G, table G1. Data do not reflect reductions in subsidies which have taken place since 2015. Social safety net spending estimates are moderately different from those in World Bank (2018) due to data updates in this report and different treatment of outlier data points.
works programs represents 16 percent of all safety net spending in Africa; these programs exist in almost all low-income countries and fragile states. While overall poverty-targeted programs account for the majority of spending in the region, most of the social safety net spending in Central Africa and West Africa is categorically targeted (chapter 3, figure 3.4, and appendix G, table G.6).

Current spending is inadequate for confronting the high poverty rates and vulnerability to shocks in the region. Many of the poor do not have access to social safety net programs. Average coverage is 10 percent of the total population, while the average poverty rate is above 41 percent (appendix F, table F.2; chapter 1, figure 1.1). If one assumes that the targeting of social safety net interventions is perfect, this implies that around 24 percent of the poor are covered. Most countries in Africa spend much less on social safety nets than the aggregate poverty gap, which is, on average, 14 percent of GDP, while social safety net spending is 1.2 percent of GDP (see chapter 1). Only upper-middle-income countries, some lower-middle-income countries, and countries in Southern Africa spend amounts on social safety nets that more or less match the poverty gap.

In terms of efficiency, the available data show that administrative costs represent an average 17 percent of program spending (appendix G, table G.9). This reflects the cost of the initial investments in systems and the small size of many programs. Though there are data limitations, the share of administrative costs appears to be lower in public works, school feeding, and social pension programs, possibly because of less costly targeting approaches. Administrative costs tend to fall, but not always, as programs increase in size. The administrative costs of the Social Safety Nets Project in Cameroon accounted for 65 percent of program spending at launch in 2015, but fell to 23 percent in 2016, while the number of beneficiaries quadrupled (figure 5.2). In Mali, the administrative costs of the Jigisemejiri (Tree of Hope) Safety Nets Project fell from 41.8 percent to 11.9 percent of program costs in 2014–16, while the number of beneficiaries grew from about 30,000 people to over 375,000 people. The administrative costs of the Mozambique Basic Social Subsidy Program decreased slightly when benefits were raised. However, expansion does not necessarily lead to immediate savings if new networks and systems need to be developed for geographic expansion, as occurred in the Tanzania Productive Social Safety Net (appendix G, table G.9).

On average, development partners finance 55 percent and governments the remaining 45 percent of social safety net spending in Africa (chapter 3, figure 3.3). Interventions supported by development partners often prioritize food-based programs, such as school feeding, food for work, and vouchers (appendix G, table G.8, presents detailed information for selected programs). Humanitarian aid represents the main source of funding in emergency situations, and development partners remain critical in many low-income and fragile contexts (chapter 1, figure 1.12). The average amount of humanitarian aid flowing to fragile and conflict-affected countries (3.9 percent of GDP) is larger
than the social safety net spending of the governments of these countries (1.4 percent of GDP). The Central African Republic and South Sudan are the largest recipients of humanitarian aid (21.6 and 11.3 percent of GDP, respectively), followed by Burundi, Chad, the Democratic Republic of Congo, Liberia, Mali, Niger, and Sierra Leone (appendix G, table G.1).

**Making Better Use of Existing Resources**

Maximizing the efficiency and effectiveness of social safety net programs is paramount given the tight fiscal environments and competing demands. For the purposes of this study, the general concept of efficiency reflects the achievement of desired outcomes at the lowest possible cost, while the concept of effectiveness encompasses the achievement of the highest possible impact for a given budget.
Desired outcomes and impacts depend on policy goals and preferences, country context, and specific programs. For example, the desired outcome of a particular cash transfer program could be limited to the immediate reduction of monetary poverty, while that of other programs might include enhancing the human capital of children, social cohesion, or resilience to natural disasters. (The discussion below mostly focuses on impact in terms of monetary poverty reduction because of the nature of the available data and the goal of facilitating cross-country comparisons.) Box 5.1 offers a more detailed discussion of the definition and measurement of efficiency and effectiveness in social safety nets used in this report.

**BOX 5.1**

**How Are Efficiency and Effectiveness Defined and Measured?**

The concepts of efficiency and effectiveness represent ways to gauge inputs, outputs, and outcomes (Farrell 1957). The definitions of the inputs, outputs, and outcomes of social safety net programs depend on the policy goals and parameters of each program. The outputs and outcomes of cash transfer programs might relate to child poverty, school attendance, earnings, and so on depending on the program objectives. Defining the relationship between these variables is challenging, given that most social outcomes are the result of many factors and not a single policy. Empirically, measurement is also often difficult because appropriate data are often not available or are of poor quality.

The social protection literature presents multiple approaches to measuring efficiency and effectiveness (Bui et al. 2015; Castro-Leal et al. 1999; Galang, Lavado, and Domingo 2013; Herrmann et al. 2008; Mandl, Dierx, and Ilzkovitz 2008; Nelson 2012; Sudaram, Strokova, and Vandeninden 2014). The two main ones are the analysis of performance indicators and frontier analysis. Performance indicators include metrics such as the coverage and targeting of the poor, benefit incidence analysis, poverty reduction decomposition, and cost-effectiveness analysis. However, these do not include information on the maximum possible achievements, the yardsticks at the core of efficiency analysis. In contrast, frontier analysis provides a benchmark to assess efficiency and effectiveness by building a production possibility frontier based on cross-country data. There are multiple techniques to estimate a production possibility frontier, either parametric (Free Disposal Hull, Data Envelopment Analysis) or nonparametric (econometric methods such as Stochastic Frontier Analysis).

Results of the parametric data envelopment analysis are presented below to illustrate the kind of analysis that may be performed, though this is by no means an exhaustive examination of social safety nets’ efficiency and effectiveness. The methodology estimates the highest possible level of output that can be reached for a
Box 5.1 (continued)

given level of spending (called effectiveness in this methodology), based on the performance of other countries (Farrell 1957). Figure B5.1.1 shows the frontier calculated using social safety net spending as a share of GDP as an input and coverage of the poor as an output (other inputs and outputs could be used). The vertical distance of a country to the frontier shows how much a country could increase its coverage of the poor, keeping constant its current spending level. Effectiveness scores measure how close a country is to the frontier (calculated as \[\frac{d1}{d1+d2}\] for Lesotho in the graph). Table B5.1.1 shows the effectiveness scores for different country groups (a higher score shows greater effectiveness).

**Figure B5.1.1 Most Countries Can Improve Effectiveness**


Note: Coverage is calculated as the number of beneficiaries (administrative data) divided by the number of poor (WDI), except for South Africa and Namibia, for which it is estimated using household surveys.

**Table B5.1.1 Effectiveness Varies by Country Group**

<table>
<thead>
<tr>
<th>Country groups</th>
<th>Effectiveness score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income group</td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>32</td>
</tr>
<tr>
<td>Lower middle income</td>
<td>47</td>
</tr>
<tr>
<td>Upper middle income</td>
<td>81</td>
</tr>
<tr>
<td>High income</td>
<td>61</td>
</tr>
</tbody>
</table>

(continued next page)
The ability of programs to reduce poverty varies widely. Among others, programs’ impact on poverty depends on their ability to reach the poor. For instance, while $0.72 of each dollar transferred to households by Rwanda’s VUP Direct support program goes to the poor, this is only the case for $0.06 of each dollar transferred by the noncontributory pension in Mauritius (table 5.1). Programs’ ability to reduce poverty also depends on the number of beneficiaries. In 2014, Rwanda’s VUP Direct support program only reached 1.1 percent of the population, while the noncontributory pension in Mauritius’ coverage was 15.5 percent. Impact depends also on the value of transfers, and their ability to bring households above the poverty line (transfers represent about 22 percent of beneficiaries’ consumption for the VUP Direct support program, and 27 percent for Mauritius’s program). Therefore, Rwanda’s VUP Direct support program performs well in terms of reaching the poor and providing them with relatively large transfers, but its impact on poverty is limited by its limited coverage. In Mauritius, the noncontributory pension has large impacts on poverty, but is a costly program, as transfers are large and many are not reaching the poor.

Overall, there is significant room to improve the effectiveness of social safety net spending in many countries. The frontier analysis described in box 5.1 shows that most countries can significantly improve their effectiveness by increasing
Table 5.1 Performance Indicators for Selected Programs

<table>
<thead>
<tr>
<th>Country year</th>
<th>Program</th>
<th>Cost of program, (% of GDP)</th>
<th>Population covered (% of total population)</th>
<th>Benefit level (% of beneficiary welfare)</th>
<th>Transfers going to poor (% of total program expenditures)</th>
<th>Estimated impact of program (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi 2013</td>
<td>Public works (MASAF PWP)</td>
<td>0.2</td>
<td>15.2</td>
<td>10.8</td>
<td>28</td>
<td>1.0</td>
</tr>
<tr>
<td>Mauritius 2012</td>
<td>Social aid program</td>
<td>0.04</td>
<td>3.4</td>
<td>16.7</td>
<td>11</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>Noncontributory pension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52.0</td>
</tr>
<tr>
<td>Rwanda 2014</td>
<td>Vision 2020 Umurenge Program:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Direct support</td>
<td>0.5</td>
<td>1.1</td>
<td>22.2</td>
<td>72</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>- Classic public works</td>
<td>0.1</td>
<td>1.3</td>
<td>9.4</td>
<td>84</td>
<td>0.0</td>
</tr>
<tr>
<td>Senegal 2011</td>
<td>Community nutrition program</td>
<td>0.03</td>
<td>25.6</td>
<td>0.6</td>
<td>18</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Medical assistance for elderly</td>
<td>0.01</td>
<td>0.6</td>
<td>1.7</td>
<td>34</td>
<td>0.0</td>
</tr>
<tr>
<td>South Africa 2010</td>
<td>Grants for old-age, disability, veterans</td>
<td>1.2</td>
<td>5.6</td>
<td>22.2</td>
<td>19</td>
<td>49.0</td>
</tr>
<tr>
<td></td>
<td>Grants for child support, care dependency, and foster care</td>
<td>1.1</td>
<td>21.3</td>
<td>14.6</td>
<td>23</td>
<td>46.0</td>
</tr>
<tr>
<td>Uganda 2012</td>
<td>Expanding social protection program, Direct income support</td>
<td>0.05</td>
<td>0.3</td>
<td>6.5</td>
<td>13</td>
<td>0.1</td>
</tr>
</tbody>
</table>


Note: The reduction in the poverty rate [gap] is estimated as the difference between the pretransfer poverty [gap] (simulated using household survey) and the actual rate [gap], expressed in percentage of the pretransfer rate [gap].
their coverage of the poor while maintaining their current level of spending. Generally, countries with a strong social safety net system; with a central institution leading policy setting, oversight, and coordination; and with large social registries tend to be more effective (box 5.1, table B5.1.1). On the other hand, the presence of development partners and of a social protection strategy is negatively associated with effectiveness; this probably reflects lower effectiveness observed in poorer or fragile countries, where development partners and strategies are also more present. While these measures should only be taken as indicative, they suggest significant potential efficiency gains for many countries’ programs.

**Strong Delivery Mechanisms Are the Basis for an Efficient System**

Well-functioning administrative tools are critical to ensuring the cost-effective delivery of social safety net transfers to the intended beneficiaries, and governments across the world have begun to emphasize improving administrative processes and systems. The essential elements of the effective administration of a social safety net system include processes for identification, targeting, enrollment, payments, service delivery, and case management. The government of South Africa achieved significant efficiency gains by overhauling administration, by introducing a specialized agency for centralized administration and payments (the South African Social Security Agency), by introducing biometric smart cards, by reregistering beneficiaries, and by undertaking regular biometric proof-of-life verifications (notwithstanding recent controversies surrounding the arrangements regarding the payment systems) (Alam, Mokate, and Plangemann 2016).

Upgrading administrative processes and introducing technology can be costly, but the benefits can be significant in the medium to long terms. During the first seven years of Mexico’s Prospera Program, administrative costs fell from 51 percent of the program’s overall budget to 6 percent. This was because of large up-front investments in systems—the purchase of equipment, the design of systems, the definition of procedures, and so on—that yielded benefits for multiple years, as well as a gradual increase in the number of beneficiaries served by the systems (Lindert, Skoufias, and Shapiro 2006). In Africa, the administrative costs associated with Cameroon’s Social Safety Nets Project declined from an initial 60 percent of total spending to 23 percent after one year. During the first year of the program, most of the spending was allocated to establishing appropriate information infrastructure; but, after the first year, the program implementation unit (PIU) became more efficient, and benefit payments became the largest cost item.

The adoption of technology in all aspects of administration can lead in lowering the cost of administering social safety net programs. A shift from physical cash transfers to electronic payments generates substantial gains in efficiency by reducing leakage and allowing the integration of payments with information management. In Mexico, thanks to a campaign to integrate electronic payments and social assistance, 97 percent of 2.6 million pensioners are paid through
a centralized electronic system, saving the equivalent of about $900 million annually in administrative costs.

The use of biometric smart cards is another example of how technology is able to boost efficiency by lowering administrative costs. In India, the introduction of biometric smart cards resulted in time savings to beneficiaries valued at $4.5 million and reduced annual leakage by approximately $38.5 million in the National Rural Employment Guarantee Scheme and $3.2 million in the social security pension program. The efficiency gains are particularly large relative to the total cost of the introduction of the smart cards, $2.3 million (Muralidharan, Niehaus, and Sukhtankar 2016).

Technology can also promote effectiveness. Thus, through a recent pilot program of the Fundación Capital in Colombia, recipients of the Más Familias en Acción conditional cash transfer program gained access to shared tablet computers and smartphones to use LISTA, an application designed as an alternative to in-person financial training through a peer-to-peer education methodology. Participants were able to access LISTA from home at their own pace and focus their learning on the choice of topics. Preliminary results indicate significant impacts on financial knowledge, attitudes toward formal financial services, the adoption of good financial practices, and financial outcomes.

Technology also holds promise for decreasing the cost and increasing the accuracy of targeting. The governments of Sierra Leone and Tanzania are using innovative spatial statistical modeling approaches to targeting. Georeferenced locational information (geotagged and satellite data) is combined with household survey data to generate poverty maps. In Tanzania, the maps are used to assess geographical targeting performance and will be used to select priority areas for retargeting and any eventual expansion of the social safety net program. In Sierra Leone, the maps are used to target multiple programs and are overlaid with other data, depending on the needs of each program; they are also used to help harmonize interventions across governmental and nongovernmental institutions (Gething and Rosas 2015; World Bank 2015).

Introducing technology does not guarantee cost savings, however. The quality of implementation and local conditions play a big role and there is often a learning period. In a cash-for-assets program in Kenya, electronic cash payments were 15 percent less costly to implement than the distribution of food of equivalent value (CGAP 2013). However, in the Malawi Cash and Food for Livelihoods Pilot Program, cash was more expensive to administer than food (though it assured greater food security) because the program was able to purchase food at much lower, more stable prices in the context of weak food market integration (Audsley, Halme, and Balzer 2010).

On the basis of international experiences, three crucial factors may be identified in determining whether technology can raise the efficiency and effectiveness of social safety nets. First, the quality of infrastructure and implementation is critical
for the successful introduction of technology. In four cash transfer programs in low-income settings (Haiti, Kenya, the Philippines, and Uganda), efficiency gains from the introduction of electronic payments were not immediately realized because of the lack of adequate mobile infrastructure, a high-quality management information system (MIS), technical capacity among administrators, and recipient understanding (CGAP 2014). In Zambia, an innovative mobile technology enumeration and registration system for the Social Cash Transfer Program did not outperform the existing paper system in a small pilot initiative, because of challenges largely “related to an isolated design flaw in the application, logistical challenges with power and the network, and poor compatibility between the m-tech database and the existing management information system” (IDinsight 2015, 1).

Second, the start-up costs of technology are high, either because it requires infrastructure investments or because switching technologies implies transaction costs. A review of e-payments for emergency cash transfers in Kenya and Somalia found that the choice of payment modality is not a large determinant of overall costs and that e-payments are not necessarily cheaper than manual payments, often because of the higher start-up costs (O’Brien, Hove, and Smith 2013). Nonfinancial factors (such as timeliness, the burden on beneficiaries, safety, risk of fraud, and so on) may then be determining factors in the choice of payment modality. An e-voucher pilot initiative of the World Food Programme in Afghanistan found that, although the program was successful in many aspects, costs were not lower than the costs of traditional paper vouchers because of the high costs of monitoring the pilot initiative, costs that would disappear in follow-up phases.

Finally, the legal and procurement aspects of the introduction of technology need to be carefully managed. Contracting information technology service providers entails unique challenges because such services may be based on proprietary source codes or other asymmetric information that can create excessive negotiating or market power among the service providers. Governments are advised to manage this risk carefully through appropriate legal and procurement processes or by relying on open source systems to avoid vendor lock-in. While the South African social assistance identification and payment card is one of the most advanced in the world, the South African Constitutional Court declared, in 2014, that the tender process and, thus, the contract for provision were invalid. The contract with the service provider was continued to guarantee service, but the court ruled that the South African Social Security Agency must reopen the tender. Since then, the agency has encountered numerous challenges in attempting to comply with court’s finding, and the same service provider is still administering payments, despite allegations of abuse of market power through the provision of complementary financial services using personal and biometric data collected through the grants payment system.
By Joining Programs and Tools, a System-Wide Approach May Promote Efficiency

All programs require basic administrative tools to identify and enroll beneficiaries, make payments, and manage information (box 5.2). Unifying these administrative tools and systems can lead to economies of scale and result in efficiency gains. Beyond more efficient delivery, a system-wide approach also encompasses program and policy integration, which can reduce costs and boost efficiency. Despite progress in achieving better coordination, social safety net programs in Africa are still largely fragmented, and responsibility for implementation is typically spread over several ministries (chapter 4). Governments can save resources by creating an integrated and coherent social protection system. The efficiency analysis presented above suggests that countries with a social protection strategy embodied in a ministry with a social protection mandate are able to establish a more efficient nationwide social safety net system. Systems enable governments to respond more efficiently and effectively to poverty and shocks and to promote well-being throughout the life cycle.

BOX 5.2

Key Instruments of Social Safety Net Programs and Systems

Social registries support outreach, intake, registration, and the assessment of needs and conditions. Beneficiary registries and benefit administration systems support decisions and notification along the delivery chain of a program. If several beneficiary registries are linked or integrated, they can support coordination across programs. Kenya is taking steps to enhance efficiency by consolidating some social safety net programs, including the Cash Transfer for Orphans and Vulnerable Children (OVC) Program, the cash transfer for older persons, the cash transfer for persons with severe disabilities, the Hunger Safety Net Program (HSNP), and the World Food Programme’s Cash for Assets Program. An integrated beneficiary registry has been developed, and the new, unified registry has allowed more efficient program monitoring, reduced double registration, increased transparency and accountability, promoted the efficient transfer of data, and enhanced the quality of operations.

Unified national identification systems can support social protection systems. Unique identifiers are needed to integrate social safety net information systems and accomplish the following: (a) facilitate the verification and authentication of the identity of individuals, (b) link individuals to families and households, (c) eliminate duplication among registered individuals, and (d) access other information systems to share data or undertake cross-checks. India’s Aadhaar unique identification number is a 12-digit random number issued to residents based on voluntary enrollment. Aadhar has been used in the rollout of several government social safety nets and other social programs. It is the largest biometric authentication system in the world.

(continued next page)
Box 5.2 (continued)

Payment systems support the administration and provision of payment services. Linking payment flows with other processes is especially critical to ensure the delivery of benefits to the intended individuals in a timely manner while minimizing costs. Case management systems support the management of individuals, families, and households participating in one or many programs through needs assessment, service planning and implementation, advocacy, establishing appropriate links with service providers and complementary programs, and monitoring the delivery and use of services, including monitoring conditionalities. Grievance redress mechanisms support eligibility appeals, complaint handling, the engagement of applicants, beneficiaries and potential beneficiaries of social programs, and feedback. Business intelligence and analytics support the generation, aggregation, analysis, and visualization of data to inform and facilitate evidence-based policy making and strategic decision support in social programs. Other applications include data mining, report preparation, time series analysis and predictive techniques, online analytical processing, and statistical analysis.

Interoperability protocols for data exchange—including application programming interfaces, web services, enterprise service bus implementation, and connections to a whole-of-government architecture—are also key components of an integrated social protection information system. Within the broader country context of digital governance, integrated social protection information systems interact with numerous other administrative systems—such as national identification systems, civil registries, and tax authorities—exchanging and cross-checking data across central and subnational governmental entities. The architecture of integrated social protection information systems includes feedback loops between the various information system components, for example, feeding back data on enrollment decisions in a beneficiary registry to a social registry.

Source: Selected information from World Bank 2017a.

Information systems are a key tool in the implementation of core processes. Thanks to recent improvements in technology, countries have developed methodologies to integrate aspects of program management into MISs. MISs are made up of components that automate various functions of the delivery chain in a complementary manner.

Experience across the world shows that the development of information systems can lead to significant savings. The National Database of Social Information of Brazil contains records on 34 types of social security benefits among 30 million beneficiaries, or 16 percent of the population. In 2009, the data were deemed legally sufficient as proof of eligibility for social security benefits, meaning that, if a beneficiary’s records are complete, there is no need to provide additional documents attesting to the payment of contributions or the periods of employment. This led to a reduction of the time necessary to document a retirement to 30 minutes.
In addition, the unemployment insurance program processes 3.5 million requests per month and uses data from the national database to check in real time whether a person has another job or receives benefits. The database also provides information on an individual’s wages during the last three months worked, which serves as the basis for calculating benefits. Benefits can be received for up to five months, and, every month, an automatic verification is performed to ensure that the eligibility criteria have been met before the benefit is paid. In 2013, approximately R$900 million ($385 million) in payments were blocked as result of cross-checking.

Various documented experiences in Eastern Europe show similar success (World Bank 2014). In Kazakhstan, people now receive 578 different services through the e-government portal. Since its launch, more than 77 million electronic services have been provided, including various certificates or statements. The e-government system has served more than 2.6 million users. In the Kyrgyz Republic, the transition to an automated system for the allocation and payment of social safety nets—the Corporate Information Systems of Social Assistance—has facilitated a significant decrease in the time needed to process cases, from several days to only around two minutes per report. The government of Romania is able to carry out cross-checks between social safety nets and external data by using a unique personal identification number in all major national databases (tax administration, social assistance, health care, pensions, and disability). In 2013, these checks led to the recovery of €1.5 million (approximately $1.65 million). Cross matchings are now a regular activity in various social safety net programs and social services. In the Russian Federation, the Moscow city targeted social safety net program switched from paper-based in-kind transfers to an automated system centered on the Moscow Residents Social Card. The elderly now receive payments directly on their social cards rather than a box of goods and are able to use the cards like cash in authorized retail stores in Moscow. The introduction of this automated system has reduced processing time from weeks to 72 hours.

A reliable public financial management system is a key element in the efficient allocation and effective use of social safety net resources. A program that is supported by a reliable, transparent, and accurate public financial management system is more likely to allocate social safety net resources appropriately so that the resources reach eligible beneficiaries in a timely manner with minimal or no leakage. Such a system also enables the preparation and publication of detailed, precise, and comprehensive reports. Such a system can typically be used to ensure policy-based and consultative budget preparation; effective budget execution processes, including the identification and registration of eligible beneficiaries and the timely transfer of funds to beneficiaries; accurate and timely reporting of transactions; and high-quality external audits to satisfy parliamentary scrutiny and follow-up. The system can support a ministry of finance in coding social protection expenditures to allow efficient and transparent social protection expenditure tracking and analysis.
Enhancing the administrative efficiency of existing programs can also improve political and public buy-in, thereby facilitating their increase in scale (chapter 3).

**A Focus on the Identification of Beneficiaries**

Social safety net programs vary in nature and have different objectives. While poverty reduction is often at the core of social safety nets, promoting equity, resilience, and opportunity encompasses a much wider variety of goals (see chapters 1 and 2). The specific scope and design of social safety net programs often depend on social norms and ideological factors and are therefore contingent on country-specific contexts and preferences (see chapter 3). Inevitably, intended beneficiary groups differ across countries and programs, and the methods applied by programs to identify intended beneficiaries vary accordingly.

Whatever the specific objective of programs, the programs should provide for carefully selecting and monitoring beneficiaries to maximize the effectiveness of spending. The availability of national personal identification systems, sound MISs, and common beneficiary registries across programs is crucial to the identification and management of beneficiaries and to reducing fraud and errors (box 5.3). In Lesotho, demographic projections suggest that up to 25 percent of the beneficiaries of old-age pensions might be ineligible (World Bank 2016a). The government is taking action to address this problem by performing periodic cross-checks with other databases (such as the national identification and civil registry database, and the Civil Service Pensions database), introducing regular proof-of-life verification, and implementing a new electronic payment system. Estimates suggest Lesotho could save up to 0.5 percent of GDP annually once these measures are in place.

If the main program objective is poverty reduction, targeting on the basis of poverty (using income, consumption, or welfare indicators) is often advocated as a cost-effective way to achieve poverty reduction and, more generally, as a way to prioritize among people in allocating scarce resources. Indeed, transfer programs targeted on the basis of poverty (sometimes combined with geographical or categorical targeting) account for the largest share of social safety net expenditures (chapter 1). A number of factors, however, determine whether poverty targeting will improve the cost-effectiveness of social safety nets in reducing monetary poverty.

Simulations based on data on Africa and Latin America suggest that income-targeted programs have greater poverty impacts than categorical programs, even if errors in targeting are taken into account (Acosta, Leite, and Rigolini 2011; Guven and Leite 2016). But, the higher the poverty rate, the lower the need for income targeting, because income targeting and universal approaches yield similar beneficiary groups. In 15 African countries with high poverty rates, perfect poverty targeting (with transfers only made to the poor) and
Ways to Combat Fraud and Errors in Social Safety Nets

The efficiency of social safety nets can be improved by systematically tackling fraud and errors. Fraud involves intentional behavior to defraud a program, while errors refer to unintentional mistakes on behalf of benefit claimants or program staff. Fraud and errors are inevitable in social safety net programs, and steps taken to reduce them should be cost-effective and strike a balance among prevention, deterrence, and detection.

Irrespective of their size and design, all social safety net programs are prone to fraud and errors, including in countries with more sophisticated systems, more transparent processes, and more robust governance structures. Reducing fraud and errors contributes to greater efficiency and effectiveness by ensuring that more resources reach the intended beneficiaries. Combating fraud and errors also helps build public confidence in and support for social safety net programs by demonstrating that taxpayer money is secure and is being used efficiently (see chapter 3).

Improving the clarity of business processes and introducing automation in the administration of social safety net programs can provide opportunities for program administrators to institute more advanced and effective strategies to reduce fraud and errors. The level of benefit fraud in the United Kingdom has fallen by over 60 percent since 2010 as a result of the actions taken by the Department for Work and Pensions, the institution responsible for social protection policy. A cost-benefit analysis has estimated that for every £1 invested in data matching, the automated system identifies £24 in irregularities (NAO 2008). These matching efforts have meant that fraud in the benefit system accounts for only 0.7 percent of total expenditures.

In Romania, the government decided to strengthen the institutions in charge of combating errors and fraud in 2010 by (a) implementing data matching across databases at the application stage to prevent ineligible households from registering for income or means-tested benefits that are intended for low-income households, (b) using risk profiles to target inspections by social inspectors on high-risk cases, and (c) introducing a sanctions policy to deter potential fraudulent claims and recover misspent resources. These efforts focused on large, high-risk programs and were accompanied by improved information technology and organizational structures. In particular, this included a review of the legislation supporting the legal power of social inspectors, a significant increase in the number of these inspectors, the allocation of inspectors proportionally across programs, the preparation of a manual, and the establishment of a risk analysis and profiling team. As a result of these efforts, spending decreased by $149 million from 2011 to 2012, and 84,000 beneficiary files were cancelled. In 2013, $58 million in resources misspent because of errors and fraud were recovered from beneficiaries.
universal transfers are simulated to have similar impacts on a poverty index (Kakwani, Veras Soares, and Son 2005). Programs that imperfectly target households on the basis of poverty and in which targeting costs 15 percent of administrative costs have been compared in simulations with a universal program in 13 countries in Latin America. The simulations indicate that, although poverty targeting tends to deliver higher poverty impacts, categorical targeting (combined with geographical targeting) yields better overall results in low-income countries with widespread pockets of poverty. In Nicaragua, for instance, a categorical program only achieves about the same poverty reduction as an imperfect income-targeted program that costs the same but does not leave out 30 percent of the poor. In contrast, in wealthier and more unequal countries, such as Colombia, the need to transfer larger amounts to a smaller pool of poor beneficiaries makes an imperfect poverty-targeted system more attractive than categorical targeting (Acosta, Leite, and Rigolini 2011).

The costs of implementing the chosen targeting methodology also influence the cost-effectiveness of the program. These include administrative costs associated with gathering the information necessary to determine eligibility, the costs of implementing targeting, and the indirect costs of targeting, such as any distortions in beneficiary behavior to qualify for benefits and the burden on beneficiaries (Samsen, van Niekerk, and Mac Quene 2011; Slater and Farrington 2009). These costs are not often calculated, so it is impossible to carry out an empirical analysis comparing the additional costs of targeting. Different targeting mechanisms imply various costs and levels of accuracy. Proxy-means-testing and hybrid mechanisms, such as the combination of community-based mechanisms and proxy-means-testing, are often costly to administer, but are relatively effective at excluding both the nonpoor and the poor, thereby increasing efficiency by decreasing leakage, but at the cost of substantial errors of exclusion (Brown, Ravallion, and van de Walle 2016; Karlan and Thuysbaert 2013).

Targeting affects the political acceptability of programs, which affects the willingness to allocate budgets to programs (chapter 3; Gelbach and Pritchett 2002). Treating budgets as fixed is therefore a simplistic approach. Depending on the country, there might be more or less support for poverty targeting versus universal or categorical targeting, and that choice might ultimately impact the total amount of resources. Choosing a politically unpalatable option (a narrow poverty-targeted program in a context of strong preferences for a broader or categorical program) might result in fewer resources available for the poor. The cost-effectiveness of targeting will therefore greatly depend on the country context, the methodology chosen, and the available technologies. Governments would therefore benefit from carefully choosing strategies on the ways to focus spending on the desired beneficiaries on the basis of effectiveness, but also equity within the wider political context.
A Focus on Programs That Have a Proven Impact on Stated Objectives

The effectiveness of social safety nets depends heavily on program choice and design. Indeed, even programs that have a poverty reduction mandate could have limited poverty reduction effects if their coverage of the poor is limited, they are poorly targeted, the amounts are too small, or there is a narrow causal link between the intervention and poverty reduction. Evidence on the effectiveness of alternative program choices, design, and implementation arrangements can help policy makers make effective choices (chapter 2).

Energy subsidies are an example of programs that have often been launched with a poverty mandate, but have weak poverty impacts because they tend to benefit the better off in society. Energy subsidies are typically regressive because large shares of benefits accrue to richer households that have the highest levels of consumption (Inchauste and Victor 2017). A number of countries have phased out or reduced energy subsidies in favor of social safety net programs that target the poor and vulnerable, thereby achieving stronger poverty impacts or fiscal savings. A key aspect of successful reforms has often been the parallel creation or expansion of social safety net programs as a compensation measure. For instance, in Iran in 2010, the government began a large energy subsidy reform, undertaking extensive public communication and using cash transfers as a means to compensate people for the loss of the subsidies. As a result, the reform had positive effects on poverty, inequality, and overall costs (Guillaume, Zytek, and Farzin 2011; Inchauste and Victor 2017). The government of the Dominican Republic adopted a similar approach, replacing an electricity subsidy with a targeted cash transfer to help poor households pay for the first 100 kilowatts of electricity each month. The effort was associated with an extensive community sensitization campaign, as well as the rehabilitation of electrical lines to guarantee access. The number of registered electricity users rose from 1.4 million to 2.3 million in three years, and the government achieved considerable savings, with annual costs of $150 million for the subsidy, versus $55 million for the cash transfer program (Inchauste and Victor 2017).

Overall, choosing programs with greater impact potential and selecting design features that maximize impacts are critical ways to improve the efficiency and effectiveness of social safety net spending. (Chapter 2 discussed some of the design features which are more likely to yield strong impacts on poverty and human development outcomes.) Instruments such as public expenditure reviews and distributional program analyses can greatly help assess how resources are being spent and their impact on poverty and other outcomes.
Securing Sustainable Resources to Expand and Sustain Coverage

While improving the efficiency and effectiveness of programs can bring gains, most countries in Africa will need to increase the amount of resources going to social safety nets to expand coverage to the poor and vulnerable, as well as create systems to make financing available to scale up coverage during crises. This section provides a broad overview of how governments can achieve this. The section focuses on ways to strengthen fiscal policy as a cornerstone to increasing government revenue, as well as options for alternative financing sources.

The literature on these themes abounds and extends well beyond social protection. For this reason, this section is not meant to be an exhaustive, in-depth discussion on these issues. Rather, it is meant to provide food for thought for policy makers on possible avenues to increase and strengthen financing.

Implement Measures to Boost Domestic Revenue

As with all government functions, strengthening fiscal policy is a cornerstone of the sustainable financing of social safety nets at scale. Given the uncertainties in the global macroeconomic and political context, the rising costs of borrowing, and the unpredictability of external financing, domestic revenue mobilization is the most durable way to create fiscal space (IMF 2015). An improved fiscal system also benefits the consolidation of the citizen-state compact and promotes the accountability of government to taxpaying citizens.

“Effective tax systems can be associated with a ‘virtuous circle,’” writes Bastagli (2016, 22), “whereby the generation of government tax revenues leads to improved service provision, which in turn increases citizens’ willingness to pay taxes.” The reform of tax policy can also enhance overall governance. Expanding a country’s domestic resource mobilization is likely to be politically feasible and sustainable only if it is associated with improved rule-of-law, accountability, and transparency standards (World Bank 2017b).

There is scope to increase the domestic fiscal envelope through increased taxation (IMF 2015; OECD 2017). At current GDP levels, the median country in Africa is estimated to have the potential to increase tax revenue by between 3.0 and 6.5 percentage points of GDP (IMF 2015). Given that average spending on social safety nets in the region is 1.2 \[12\] percent of GDP, such potential increases in tax revenue would allow at least a doubling of social safety net spending on average and still leave room for additional spending in other sectors. In Africa, total tax revenues stood at an average of about 21 percent of GDP between 2011 and 2014, compared with over 30 percent in high-income countries. While still comparatively low, this represents a remarkable improvement. The region has experienced the largest increase in tax revenue in the world since the turn of the millennium (IMF 2015). With the exception of Botswana,
Nigeria, Zambia, and a few fragile states, all African countries have managed to increase their tax-to-GDP ratio. This improvement partially reflects the lower starting point of Africa. Even so, progress in the median low-income country in the region was still greater despite a higher starting point than the median low-income country elsewhere in the world. The largest contribution to the average change in tax revenue was provided by taxes on income, profits, and capital gains, as well as taxes on goods and services (IMF 2015).

Finding the balance between direct and indirect taxes and determining the overall level of taxes are crucial to boosting domestic revenue effectively and equitably (IMF 2017). The share of direct taxes—such as income, property, and corporate taxes—in overall tax revenue has traditionally been lower in developing countries, reflecting low per capita incomes, administrative challenges, and the political hurdles of taxing the rich and local elites. However, given their progressive nature and relatively low starting base, direct taxes have the potential to be effective instruments for revenue mobilization (World Bank 2017b). Improvements in tax administration, compliance, and formalization can help boost the revenue from direct taxes. At the same time, while often dismissed as regressive, indirect taxation—such as value added taxes—presents an opportunity for more revenue than other tax instruments in many African countries in the short term (IMF 2015). This is because its overall effect on distribution can be progressive if it is used to finance strongly progressive spending (Bastagli 2015). Furthermore, a shift from labor to consumption taxes (value added taxes, excise taxes, and so on) could boost formal labor demand by lowering nonwage labor costs, which is paramount in light of the emerging potential negative employment impact of automation (Alesina, Battisti, and Zeira 2015; Kudo and Weber 2017; Santos 2017). Indirect taxes can be implemented with a broad base, a fairly high threshold to avoid overburdening small businesses, and a single or limited number of rates to preserve simplicity and limit opportunities for rent seeking (IMF 2015). Concerns over the regressive burden of indirect taxes can also be mitigated by design options, including ensuring that taxes on the goods most often consumed by the poor are low (Bastagli 2016).

Improved tax administration and simplified tax systems are a fundamental pillar in increasing tax revenue and have contributed significantly to increasing fiscal revenue in a number of countries. In Rwanda, the government raised tax revenue by approximately 50 percent between 2001 and 2013 by establishing a revenue authority to cover nontax revenue and rationalize income taxation; introducing a value added tax; aligning the tax system with development priorities; introducing tax audits, appeals, and penalties for evasion; and harmonizing the domestic system with the system of the East African Community (IMF 2009). Through the expansion in tax revenues, the government was able to increase spending on infrastructure, education, health care, and social protection (AfDB 2010). In South Africa in 2009, the government simplified the tax
revenue system by introducing a turnover tax on microbusinesses, the value added tax, the provisional tax, the capital gains tax, and the dividends tax. The additional revenue generated through the introduction of the turnover tax allowed the government to maintain the country’s large social safety net system.

Innovative research points to the potential impact that behavioral nudging mechanisms can have on increasing tax compliance across the globe, including in Africa. Field experiments have been conducted around the world over the past few years to test mechanisms—such as reminders, messages, or well-designed default options—to incentivize taxpayers to pay their taxes, based on the concept that people evade taxes not only because of the expected net benefit of evading but also because of social and moral considerations (Kettle et al. 2016; Mascagni 2017). Social norms are more effective if tax evasion is perceived as an exception and if compliance is considered the norm. This is where the image of the tax administration plays an important role (World Bank 2017b). As a pioneer in Africa, the Rwanda Revenue Authority generated almost $9 million in additional revenue by sending messages to taxpayers regarding their taxes. Messages highlighting the importance of tax payments for public services and reminders about deadlines were more effective than messages focused on deterrence and emphasizing sanctions and penalties for noncompliance, and routine mailings outperformed more expensive letters in promoting increases in declared taxes (ICTD 2016; Mascagni, Nell, and Monkam 2017). While the validity of these type of interventions in other African countries has yet to be explored, this is a promising avenue for governments to follow, hand in hand with other policies.

Formalization can boost overall tax revenue, but evidence on the progress and future potential of this phenomenon for fiscal policy is mixed. Informality entails a loss in budget revenues by reducing the payment of taxes and social security contributions and, accordingly, the provision of public goods and services (Kuddo and Weber 2017). Formalization can be promoted by cutting the cost of compliance and regulation by simplifying administrative processes, enhancing the perceived benefits of formalization, and supplying a comprehensive package of support to firms, such as through training, support in opening business bank accounts, and help in dealing with tax authorities and tax mediation services. However, overall progress in the formalization of employment across the world has been slow, and emerging trends point to the need to rethink traditional fiscal mechanisms such as payroll-based systems (Kuddo and Weber 2017; Palacios 2017). The share of people of working age contributing to formal social security systems in developing countries has not increased significantly over the past 20 years. At the same time, there has been a shift in many countries toward shorter-term employment, more fragmented careers, and a progressive deindustrialization process, suggesting that emerging economies might not
follow the same path of industrialization and experience a premature deindustrialization (Palacios 2017; Rodrik 2016). These developments point to the need for government leaders of developing countries to think innovatively about fiscal strategy.

Technological progress can offer new opportunities for the collection of tax revenue in this context because governments will be able to track and tax earnings and incomes without the need for payroll-based systems. The impressive innovations in digital payments and e-commerce across the world, but especially in Africa and Asia, over the last 15 years, combined with inclusion, are effectively formalizing large parts of economies by opening these transactions as a new source of contribution collection with minimal transaction costs (Palacios 2017). Digital, unique identification systems and linked administrative datasets could allow governments to more effectively target fiscal policies, such as negative income taxes or subsidies, and to tailor contributions to income levels (Palacios 2017). Given the challenges developed countries might face in reforming or eliminating well-established but obsolete tax systems and their legacies, governments across Africa can potentially leapfrog developed countries in adopting innovative fiscal instruments.

Governments can also explicitly link a specific tax revenue source to social safety net financing to help establish a predictable and accountable domestic funding source for social safety nets. In Ghana, a share of value added tax and payroll tax revenues is earmarked to finance the country’s National Health Insurance System, improving the consistency of health financing and increasing spending on health care. There is debate about whether earmarking tax revenue for specific sectors is desirable (World Bank 2017b). In general, the literature agrees that appropriate levels of taxation of some temptation goods, such as alcohol or tobacco, can be used to finance social sector spending directly. In low- and middle-income countries, tax rates on such undesirable goods are relatively modest, and there is large scope for heavier taxation (World Bank 2017b). Raising taxes on tobacco products is a cost-effective measure that reduces consumption of products that lead to premature mortality, while generating substantial revenue for health care and other social programs (Savedoff and Alwang 2015; World Bank 2017b). Through tobacco tax reform, Moldova raised the value of tobacco taxes from 1 percent to 6 percent of total taxes from 2009 to 2016. Armenia has rapidly increased tobacco taxes, reaching 1 percent of GDP. The Philippines boosted tobacco tax revenues by a factor of 1.5 in three years, and this was used to increase the health care budget and the number of people receiving health subsidies (World Bank 2017c).

In resource-rich countries, one option is the use of natural resource revenue to finance human capital investment, including direct dividend payments, that is, cash transfers (de la Brière et al. 2017; Devarajan and Giugale 2013). Historically, reliance on natural resource revenues has been associated with
volatility, instability, and financing sustainability concerns, as well as possible lower government accountability before citizens because the revenues are unearned (Bastagli 2016). Some countries have avoided the resource curse and effectively promoted long-run development by pursuing a balanced approach that includes investment in human capital (de la Brière et al. 2017). In Mongolia, for instance, the government has levied royalty rates of 5 percent on the extraction of natural resources, applied a 10 percent corporate income tax on profits, and established royalties and licensing fees for exploration and production. A fund was created using such revenues to finance expenditures on health insurance and pensions, housing payments, cash transfers, and medical and education service payments (ILO 2016). Direct dividend payments could present an opportunity to avoid the resource curse by “using cash transfers to hand the money directly to citizens and thereby protect the social contract between the government and its people” (Devarajan and Giugale 2013, ii). The authors’ estimates suggest that a country with a large natural resource base relative to population size would be able to provide citizens with considerable cash transfers financed directly through resource revenues. Angola, Gabon, and Equatorial Guinea could close the poverty gap by distributing 10 percent of resource revenues in cash transfers. Less resource-rich or more highly populated countries would be able to cover less, but still a considerable share of the poverty gap, such as Nigeria (39 percent) and Tanzania (26 percent).

Curtailing illicit financial flows—that is, capital associated with illegal activities or money that crosses borders that has been illegally earned, transferred, or used—can also help governments raise additional resources for social safety nets (World Bank 2016b). Illicit financial flows include traded goods that are mispriced to avoid tariffs, wealth transferred to offshore accounts to evade income taxes, and unreported movements of cash. In 2012, almost $1 trillion in illicit financial flows were estimated to have been drained from developing countries, and these flows amounted to almost 10 times the total aid received by developing countries (Kar, Cartwright-Smith, and Hollingshead 2010; Ortiz, Cummins, and Karunanethy 2015).

**Attracting Alternative Resources**

While it is a fundamental instrument, fiscal policy alone may not supply the financing needed to take social safety nets to scale in Africa. Governments can therefore also seek alternative funding sources. An assessment of Ethiopia’s taxation and social protection system finds that it does not have the capacity to achieve the desired level of redistribution by applying higher marginal rates on relatively high incomes, nor to close the poverty gap or fully fund the main social safety net program using domestic income sources alone (Hirvonen, Mascagni, and Roelen 2016).
Development partner financing is an obvious option that already plays an important role in financing social protection spending. It is particularly strategic in financing initial investments in the sector, for instance, in establishing the building blocks for delivery. It can also be a catalyst for gathering domestic resources for social protection. In Mozambique, development partners were key in advocating for an increase in budget allocations for the social protection strategy and plan (Bastagli 2015). Responsibility for financing can gradually shift to governments once initial investments have been made and country systems are in place. The financing and implementation of social safety nets have gradually been taken over by the governments of Ethiopia, Lesotho, and Senegal (box 5.4). Ethiopia’s Productive Safety Net Program (PSNP) is an example of the successful integration of government and development partner funding, as well as of development partner harmonization. Eleven development partners coalesced and created effective implementation arrangements that span multiple ministries and now provide a unified stream of technical advice in support of the government-led program (Monchuk 2014).

Other options include development impact bonds, which are innovative tools that governments can use to mobilize private sector financing for development objectives, including those of social safety nets. Development impact bonds “provide funding for development programs by private investors, who are remunerated by development partners or host-country governments—and earn a return—if evidence shows that programs achieve pre-agreed outcomes” (CGD and Social Finance 2013). The returns to investment are contingent on the achievement of the envisaged development objectives (Coleman 2016). The principle of this approach is that socially motivated private investors provide upfront funding for a development program. Development impact bonds are the developing-country adaptation of social impact bonds, which are used in higher-income countries to promote socially desirable results, mostly in the areas of criminal justice, homelessness, and the workforce. Most development bonds are still at the design stage, but early lessons are emerging (Gustafsson-Wright and Gardiner 2016; Gustafsson-Wright, Gardiner, and Putcha 2015).

Diaspora bonds could also be used to direct remittances toward development goals. They are debt instruments issued by a government to raise financing from its diaspora (Ketkar and Ratha 2007). The bonds are long-dated securities that may be redeemed only upon maturity. Typically, investors who purchase diaspora bonds are motivated by a desire to contribute to the development of their country of origin. Diaspora bonds have been successfully introduced in India, Israel, and Nigeria. Through such bonds, the State Bank of India had raised over $11 billion by 2007, while Nigeria issued $100 million in diaspora bonds in 2013, and, given the success of the first issue, decided to raise €300 million from a second diaspora bond issue under the 2016–18 borrowing plan (Ketkar and Ratha 2007; Ozaki 2016).
**How Senegal Finances Most of Its Main Social Safety Net Programs**

In the mid-2000s, social safety net spending in Senegal was low, around 0.4 percent of GDP in 2004. Social safety net funding was largely dependent on development partner financing. Of the nine programs on which there is funding information, development partners financed 62 percent of costs (World Bank 2013). Since then, however, government spending on social safety nets has increased significantly (figure B5.4.1). This follows the adoption by the government of its flagship conditional cash transfer program as a key element of the 2012 national development strategy. Government leadership has helped mobilize substantial national resources, and development partners now mostly focus on supporting the development of tools, instruments, and systems.

**Figure B5.4.1** Government Spending on Social Safety Nets Has Risen Considerably since 2004

Corporate social responsibility (CSR), relative to other social sectors and regions, might be an underutilized source for financing social safety nets in Africa. A few governments have developed strategies and tools to access these resources to fund economic and development strategies. In El Salvador, multinational companies have supported the creation of two major foundations in education and in broader socioeconomic development. In Mauritius, the Ministry of Finance requested that all firms spend 2 percent of their profits on CSR activities approved by the government or transfer the funds to the government to be used for social and environmental projects. Some elements required for CSR to bring additional funding for social safety net programs in Africa include (1) placing social protection on the global business development agenda as a sector of CSR activity, (2) building government leadership in the development of CSR within countries, (3) developing a national CSR strategy among public sector companies, (4) ensuring that CSR activities are aligned with the development objectives of social safety nets to maximize synergy, and (5) defining the needs in social safety nets that can be effectively addressed by CSR activities and resources (Forstater et al. 2010; GIZ 2012; Visser and Tolhurst 2010).

**Developing a Financing Strategy for a Reliable, Effective Emergency Response**

Current financing strategies to manage crises, including humanitarian support and commercial insurance, cover only a fraction of disaster losses, creating a protection gap that leaves many of the vulnerable exposed. Only around 30 percent of catastrophe losses have been covered by insurance over the past 10 years, which means that close to 70 percent of catastrophe losses have been borne directly by individuals, firms, and governments (Swiss Re 2016). Furthermore, humanitarian assistance is struggling to keep up with growing needs. Almost half the humanitarian appeals of the United Nations were left unmet in 2016 (UNHCR 2017). Finances are strained, and the status quo in financing for disaster response may suffer because of delays in mobilization, during which livelihoods suffer, particularly those of the poor.

To manage the risk of shocks effectively, ensure predictable and timely access to resources, and ultimately mitigate long-term fiscal impacts, many governments are adopting a strategic approach to disaster risk financing that relies on a range of preplanned, renegotiated financial instruments. In a number of countries in Africa, these disaster risk financing strategies and shock-responsive social safety nets are being developed or considered. This builds on several global initiatives
that seek to improve the financial resilience of low- and middle-income countries. There is growing interest in the international community to build the financial resilience of such countries, which is evidenced by the multiple global initiatives. The most relevant for Africa is the G7’s German-presidency-sponsored InsuResilience Initiative, which looks to expand climate risk insurance to an additional 400 million poor and vulnerable people in these nations by 2020.

Disaster risk financing involves planning ahead and mobilizing resources to finance shock-responsive activities before the impacts of the shock affect households. Emerging evidence on this approach is promising, demonstrating significant cost savings over the status quo. In Ethiopia, every $1.00 secured beforehand for early drought response can save up to $5.00 in future costs, and well-targeted early interventions in slow-onset disasters, such as droughts, cost a fraction of emergency aid after a famine develops (Clarke and Hill 2013; Hess, Wiseman, and Robertson 2007).

Contingency or reserve funds have been established in many countries to finance relief, rehabilitation, reconstruction, and prevention activities associated with national emergencies. Funds specifically dedicated to disaster response exist in Colombia, Costa Rica, India, Indonesia, the Lao People’s Democratic Republic, the Marshall Islands, Mexico, the Philippines, and Vietnam. In the Philippines, the National Disaster Risk Reduction and Management Fund finances a range of disaster-related expenditures, but is not able to disburse rapidly in response to a crisis. For that reason, the government created the Quick Response Fund, which focuses on emergency response. In Mexico, FONDEN was created as a budgetary tool to allocate federal funds rapidly for emergency response and the rehabilitation of public infrastructure affected by disasters. A number of African countries are working on the establishment of similar funds. In Kenya, the government is in the final stages of operationalizing a national contingency fund dedicated to drought emergencies. Efforts are also under way to create such funds in Madagascar and Mozambique.

Contingent financing consists of financial instruments designed to offer countries access to liquidity prior to or immediately following an exogenous shock, such as a terms-of-trade shock, financial shock, or natural disaster. Contingent loans have been used by multilateral development banks to strengthen national capacities in risk management and supply countries with access to liquidity immediately following an exogenous shock. These instruments promote early responses, which can help mitigate the risks of exacerbating crisis situations and reduce overall costs.

Risk transfer financial instruments enable governments to transfer the risk of specific meteorological or geological events (droughts, hurricanes,
earthquakes, and floods) or commodity price shocks to actors in the market (insurance companies, reinsurance companies, banks, and investors) that are willing to accept them. These market-based risk transfer products use scientific information and actuarial modeling to estimate losses that would be sustained because of a specific event and price the risk. Payments are triggered by the performance of a prespecified, underlying parametric index, such as levels of rainfall, length and intensity of drought, or commodity price movements. Risk transfer products can be implemented in various forms, including direct access to insurance, reinsurance, and capital markets (derivative contracts or catastrophe bonds or indirect access through a dedicated vehicle such as a catastrophe risk pool) (World Bank 2017d). Catastrophe risk pools create a platform that allows governments to take a collective and standard approach to quantitative analysis and modeling, improve information sharing, coordinate response, lower the costs of coverage (through the pooling of diverse exposures, the retention of some risk, and the transfer of excess risks to capital and reinsurance markets), and strengthen subregional and regional cooperation and policy dialogue. Examples include the Caribbean Catastrophe Risk Insurance Facility, the Pacific Catastrophe Risk Assessment and Financing Initiative facility, and African Risk Capacity. Governments can also purchase indemnity insurance for public assets, such as buildings and other key infrastructure. This, however, is not typically an approach used to deal with risk and secure reliable financing for social safety nets.

Each instrument serves different purposes and the frequency and severity of the risks to be managed vary by country. Hence, governments should take a strategic approach—possibly combining or layering instruments. Such an approach prioritizes cheaper sources of funding, ensuring that the most expensive instruments are only used in exceptional circumstances. Insurance may be cost-effective to cover extreme events (though it could be prohibitively expensive in countries frequently affected by extreme events), but it may be inefficient and costly in the case of low-intensity, recurring events. For such disasters, a dedicated contingency fund may be a more appropriate solution. Figure 5.3 provides a graphic representation of this risk-layering approach. Combining instruments also enables governments to take into account the evolving needs for funds, from emergency response to long-term reconstruction. For instance, a government could decide to purchase (ex ante) quick-disbursing risk transfer instruments to ensure immediate liquidity just before or in the aftermath of extreme events, but raise the larger sums required to finance reconstruction efforts through (ex post) budget reallocations or by issuing bonds.
In addition to natural disasters, social safety nets can play a central role during economic contractions. In the face of macroeconomic shocks, the demand for social safety nets typically rises, while governments must operate on tighter budgets. During these times, social safety net spending needs to be protected and even increased to prevent the long-lasting negative impacts of the lack of protection for the poor. Several countries have made efforts in this direction. Thus, the government of Ghana set targets for social safety net spending to mitigate the impact of fiscal consolidation under its arrangements with the International Monetary Fund in 2015–18.

Governments in Africa must find the appropriate financing mix to ensure that social safety nets are funded sustainably and that resources are available if and when needed both for permanent programs and for emergency responses. Each option explored in this chapter has advantages and disadvantages (table 5.2), which largely depend on country contexts. Governments can fund a larger share of the social safety net over the medium term through a range of efficiency improvements, strengthened domestic revenue, leveraging alternative financial sources, and using risk financing mechanisms.
<table>
<thead>
<tr>
<th>Financing methods</th>
<th>Advantages</th>
<th>Challenges</th>
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<tbody>
<tr>
<td>Increased efficiency in administration of social safety nets</td>
<td>Creates fiscal space without raising taxes; increases acceptability of social safety nets</td>
<td>Implementation of administrative reforms can be difficult; the amount saved is often insufficient to finance the effort of bringing programs to scale</td>
</tr>
<tr>
<td>Reallocation of expenditures toward desired beneficiaries and goals</td>
<td>Creates fiscal space without raising taxes; can increase the productivity of government outlays and efficiency by reducing unproductive expenditures; can increase the acceptability of public spending, depending on the social contract and expectations; feasible in the short term on a small scale, particularly if low-hanging fruit can be identified</td>
<td>Requires significant commitment by the government to implement changes and face trade-offs; requires detailed analysis of public expenditure programs and medium-term commitments by the government; may imply winners and losers among previous and new beneficiaries, leading to potential political discontent</td>
</tr>
<tr>
<td>Boosting domestic revenue</td>
<td>Most sustainable option in the medium to long expenditures; may have a positive redistributive effect depending on balance in the tax mix; increases the overall productivity of the government if it is achieved through improvements in tax administration, compliance, or design; potentially improves the transparency of resource revenues</td>
<td>Tax reforms can be difficult to implement administratively and politically; higher taxation may have direct and indirect effects on economic growth and the poor: needs to be designed well; tax increase may produce limited returns, given the narrow fiscal base, and may be politically unpopular</td>
</tr>
<tr>
<td>Leveraging alternative resources</td>
<td>Development partners can provide financing in the short and medium terms; usually associated with technical assistance for the design of reforms; innovative instruments (for example, development impact bonds) can be sustainable mechanisms for long-term financing</td>
<td>Cyclicality of funding and downward trend can imply unreliable development partner or private sector financing; bureaucratic or policy requirements may hinder government ownership; development partner coordination may be a challenge; long-term performance of innovative instruments has yet to be tested</td>
</tr>
<tr>
<td>Tools for crisis financing</td>
<td>Different risk-financing instruments are available to cover risks that vary in frequency and severity</td>
<td>Choice among instruments requires careful risk assessment and financial planning during normal times (risk-layering strategy)</td>
</tr>
</tbody>
</table>
Notes

1. The poverty gap is the mean shortfall of the total population from the poverty line. It is expressed as a percent share of the poverty line. It counts the shortfall of the nonpoor at 0.0 percent. The gap reflects the incidence and the depth of poverty.
2. Rwanda and South Africa offer examples. See on tax administration reform above in the text. See also Bastagli (2015); Benhassine et al. (2016).

References


