

# INEQUALITY IN SOUTHERN AFRICA

AN ASSESSMENT OF THE SOUTHERN AFRICAN CUSTOMS UNION

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AN ASSESSMENT OF THE SOUTHERN AFRICAN  
CUSTOMS UNION**



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## ACRONYMS AND ABBREVIATIONS

<b>ASPIRE</b>	Atlas of Social Protection Indicators of Resilience and Equity (database)
<b>CEQ</b>	Commitment to Equity
<b>FAO</b>	Food and Agriculture Organization
<b>HCI</b>	Human Capital Index
<b>HIV</b>	human immunodeficiency virus
<b>ILO</b>	International Labour Organization
<b>IMF</b>	International Monetary Fund
<b>NIDS</b>	National Income Dynamics Study
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PIRLS</b>	Progress in International Reading Literacy Study
<b>PPP</b>	purchasing power parity
<b>SACU</b>	Southern African Customs Union
<b>SPI</b>	standardized precipitation index
<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>UNICEF</b>	United Nations Children’s Fund
<b>VAT</b>	value added tax

All dollar amounts are US dollars unless otherwise indicated.



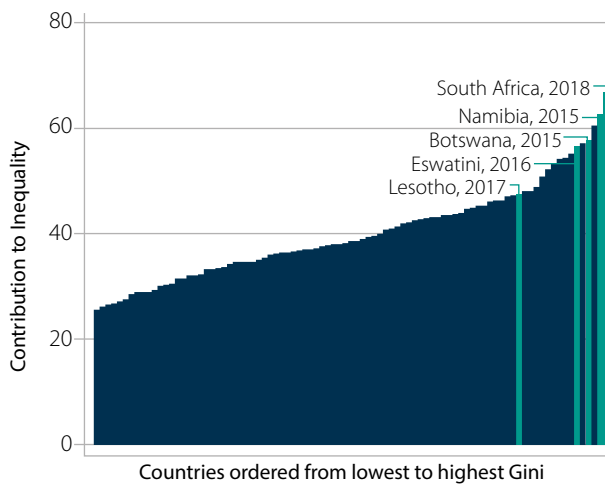
# EXECUTIVE SUMMARY

The Southern African Customs Union (SACU), comprising Botswana, Eswatini, Lesotho, Namibia, and South Africa, is the world's most unequal region. Based on Gini coefficients<sup>1</sup> of consumption (or income) per capita, South Africa, the largest country in SACU, is the most unequal country in the world, ranking first among 164 countries in the World Bank's global poverty database.

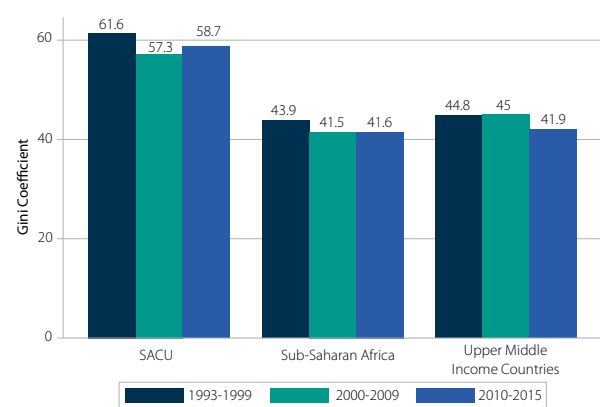
Botswana, Eswatini, and Namibia are among the 15 most unequal countries, and despite recent improvements, Lesotho still ranks among the top 20 percent. Consumption inequality across the SACU region is over 40 percent higher than the averages for both Sub-Saharan Africa and other upper-middle-income countries (Figure E.1).

**Figure E.1. International and regional comparison of Gini coefficients**

**a. Gini coefficients of countries**



**b. Average Gini coefficients of groups of countries**



Source: Based on data from the World Development Indicators database and PovcalNet, World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>.

Note: Panel b shows the unweighted average of Gini coefficients of countries in each group.

**Although there has been some progress, high inequality persists.** Consumption inequality in SACU has been declining—the Gini coefficient for consumption per capita in the region fell from 68.7 during the 2000s to 66.5 in 2016. Botswana and Lesotho saw the most rapid declines, whereas inequality was relatively stagnant in Eswatini and South Africa. Urban areas, which have consistently been more unequal than rural areas, experienced a larger reduction in inequality.

**This report aims to provide a comprehensive diagnosis of the sources of inequality and to recommend policies and measures to accelerate the reduction of inequality in the region.** It utilizes the latest available household survey data on income and consumption to provide the most comprehensive assessment of inequality in SACU to date, along with proposed measures to accelerate its reduction. Even though most of the information used in

the report predates the COVID-19 crisis, the diagnostic of the structural and historical issues underpinning the high levels of inequality in SACU remains relevant, if not more so, considering the implications of the pandemic.

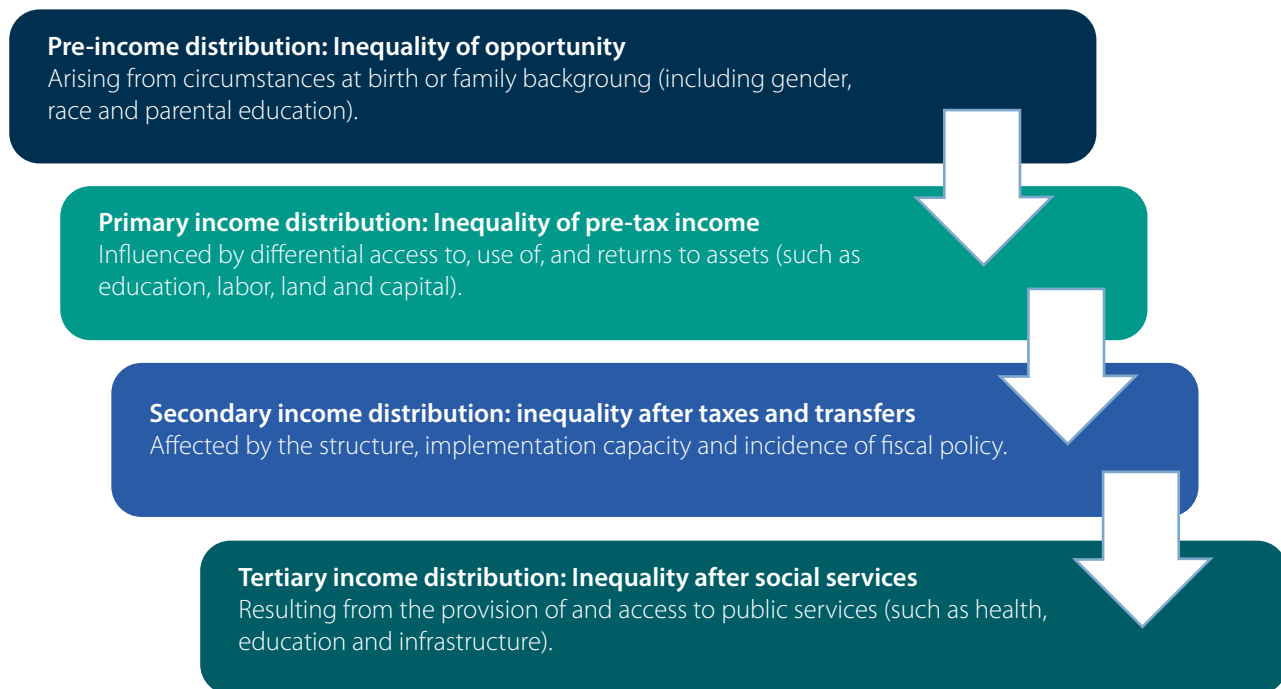
**The analytical framework examines the process of household income generation to identify the sources of high and persistent inequality.** The framework is organized into four sequential components, as per Figure E.2. The first focuses on the *pre-income distribution*, or the inequality of opportunity that arises from differences in circumstances at birth and during childhood, such as gender, race, location, parental education, and family wealth; these differences create expected inequalities in income distribution even before people interact with factor markets. The second component looks at the *primary income distribution*, or how inequality is affected by access to factor endowments (or assets), such as education, skills,

<sup>1</sup> Developed by Corrado Gini (building on the work of Max Lorenz), the Gini coefficient is a statistical distribution of welfare indicators commonly used to measure inequality, such as in income or consumption. It ranges between 0 and 1 (or 100), where 0 means perfect equality and 1 (or 100 percent) perfect inequality.

land, and capital, as well as their use and returns from interaction with markets. The third explores the *secondary income distribution*, or the remaining inequality after taxes and government transfer payments have been deducted from or added to primary incomes. Finally, the fourth component relates to the *tertiary income distribution*, or

disparities that remain after imputed benefits from social spending in the form of public goods (such as education, health, and infrastructure services) have been added to income after taxes and subsidies. Depending on their reach and quality, these services may have a significant equalizing effect.

**Figure E.2. Framework for assessing sources of income and consumption inequality**



Source: World Bank analysis.

Based on this analytical framework, Table E.1 summarizes the main findings of the report in terms of the drivers of inequality in SACU as a whole and in specific countries. These issues are discussed in more detail in the subsections below.

**Table E.1. Main drivers of inequality in the analytical framework**

Sources of inequality in household income generation	SACU-wide drivers	Country-specific drivers
<b>Pre-income distribution</b> Inequality of opportunity	<ul style="list-style-type: none"> <li>Place-based disadvantages: rural-urban, subnational regions</li> <li>Low intergenerational mobility</li> </ul>	South Africa: race, legacy of apartheid
<b>Primary income distribution</b> Inequality of pre-tax income	<ul style="list-style-type: none"> <li>Poor functioning of urban labor markets</li> <li>Dominant role of educational attainment</li> <li>Large gender gaps in earnings</li> <li>Constrained rural land markets</li> </ul>	<ul style="list-style-type: none"> <li>South Africa: “missing middle” in wage distribution</li> <li>Namibia and South Africa: historically high inequality of land ownership</li> </ul>
<b>Secondary income distribution</b> Inequality after taxes and transfers	<p>Lower inequality because of:</p> <ul style="list-style-type: none"> <li>Progressive personal income tax</li> <li>Wide coverage of social transfers</li> </ul>	Targeting needs to improve in countries besides South Africa

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**Sources of inequality in household income generation** **SACU-wide drivers****Country-specific drivers**

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**Tertiary income distribution**

Inequality after social services

- High spending on education and health
  - Outcomes worse than expected given level of spending
- 

## Inequality of opportunity is a persistent driver of unequal outcomes

**At least one-fifth of overall inequality in SACU is explained by inequality of opportunity.**<sup>2</sup> Disparities at birth are a crucial driver of inequality in the region, but their full significance cannot be estimated accurately because data on people's circumstances are limited (albeit less so in South Africa). In all SACU countries except Namibia, the contribution of inequality of opportunity to overall inequality has increased over the last two decades.

**Location contributes more to inequality of opportunity than do other individual circumstances, such as age and gender.** SACU's long history of spatial segregation continues to be reflected in the strong influence of geography and the rural-urban divide on inequality of opportunity. Factors associated with where people are born and grow up have a relatively larger effect on their life chances than their gender.

**In South Africa, the legacy of colonialism and apartheid, rooted in racial and spatial segregation, continues to reinforce inequality of outcomes.** Data in South Africa allow a more granular analysis of inequality of opportunity, including the role of race and parental attributes. Inequality of opportunity explains almost half (47.7 percent) of overall inequality in consumption per capita, mostly because of race, which contributes around 38.9 percent to overall inequality.

**Inequality in household wealth and low intergenerational economic mobility entrench inequality of opportunity.** Intergenerational mobility in SACU remains among the lowest in the world. The relationship between earnings across two generations is strong, suggesting little intergenerational earnings mobility and persistent high inequality.<sup>3</sup> In addition, inequality in wealth among one generation invariably results in inequality of opportunity for the next. Data from Botswana, Namibia, and South Africa reveal large disparities in holdings of household assets and liabilities, regardless of the component of wealth being considered.

For example, the top 10 percent of the population in South Africa hold 80.6 percent of financial assets; the figures are 61.2 percent for Botswana and 65.5 percent for Namibia. Many households in the bottom 10 percent have almost no assets and survive largely on transfers from other households, resulting in negative net wealth. The net wealth Gini coefficient is 76 for Namibia and South Africa and 71 for Botswana. Because of data limitations, detailed calculations could not be done for Eswatini and Lesotho. However, Credit Suisse (2018) estimates suggest coefficients of 80 for Lesotho and 78 for Eswatini.

## Poor labor market performance underpins high inequality in urban settings

**The poor functioning of labor markets significantly hampers progress in reducing inequality.** Labor is the primary productive asset of people at the bottom and middle levels of the distribution. For this reason, labor markets are vital for enabling upward mobility and reducing inequality. These markets shape unequal outcomes in two ways—through the employment possibilities provided and through the distribution of earnings among employed people. These factors have unfortunately reinforced each other in perpetuating inequality in SACU.

**In a constrained labor market, differences in education levels account for most of the inequality in outcomes.** Differences in post-secondary educational attainment contribute almost half of overall inequality in the primary income distribution. Higher educational achievement offers significantly higher employment opportunities and a large premium in earnings.

**Skilled labor is in short supply.** Access to higher education is limited, especially among vulnerable and poor people. As a result, returns on education are high and, by extension, contribute to inequality. The ongoing structural transformation of SACU economies has amplified this phenomenon. New technologies and changing trade patterns have encouraged the growth of tradable services, leading to a growing demand for skilled labor.

---

2 Data constraints mean that the results given here are lower-bound estimates of inequality of opportunity. The only inherited circumstances on which comparable data are available for all SACU countries are gender, age, and region of residence (urban, rural, and regional). The analysis of South African data suggests that including characteristics such as race and parental background would yield much higher estimates of inequality of opportunity in SACU.

3 Intergenerational mobility is measured by comparing the earnings of young people (ages 21–25) with the earnings of their fathers. Because of data limitations, the analysis is limited to young people living with their fathers.

But this has not been matched by growth in the supply of skilled labor, for example through higher education or skills development. This has compounded the structural mismatch between demand and supply in the labor market, which undersupplies skilled workers and oversupplies unskilled ones.

**Rising wages for skilled workers and stagnant wages for semi-skilled workers have fueled wage inequality.**

The wages of workers in the middle of the distribution have grown more slowly than those of the rest of the workforce. Both the availability of and returns to semi-skilled employment opportunities have been reduced, suggesting a “missing middle” in the labor market. South Africa provides a clear example of this phenomenon. At one extreme is a small number of people with highly paid jobs in large enterprises. At the other is most of the population, working in basic jobs that are poorly paid. Highly remunerated job opportunities are extremely difficult to access, and once people attain such positions, they are very unlikely to relinquish them.

**Race and gender contribute significantly to wage inequality.** Gender disparities are sizeable: on average, women in SACU earn 30 percent less than their male counterparts (with similar education and other relevant characteristics). Earnings gaps for females reach 24 percent in Botswana, 29 percent in Eswatini and Namibia, 32 percent in Lesotho, and 38 percent in South Africa. Data from South Africa also underscore the ongoing importance of race. When race is considered in the analysis, its contribution to income inequality amounts to 41 percent, while the contribution of education is reduced to 30 percent. Race therefore remains a key driver of South Africa’s high inequality through its impact on both education and labor market outcomes.

**Unequal land ownership leads to inequality of pre-tax income in rural areas**

**Unequal land ownership, particularly in Namibia and South Africa, perpetuate the historically high levels of income inequality.** Land is a key asset, especially for poor people in rural areas. The unequal distribution of agricultural land, which is deeply rooted in the history of the region, contributes significantly to inequality. Race-based restrictions on the movement of black South Africans and the ownership of land gradually unraveled in the late apartheid period but were only finally lifted with the abolition of the Bantustan system and the creation of new local government institutions. Currently, 70 percent of Namibia’s 39.7 million hectares of commercial farmland is still owned by Namibians of European descent. Land also remains a contentious issue in other SACU countries, though to a lesser extent. Although Botswana’s Constitution

does not guarantee land rights, government policies since independence have aimed to ensure equitable access to land. Eswatini’s system of land distribution is the bedrock of its traditional governance and the ultimate source of royal and chiefly power.

**Land inequality resulted in dual agricultural systems, which combine large-scale, commercial farms and resource-poor, subsistence-oriented smallholdings.**

The bulk of agricultural land belongs to large-scale farmers, while most people who depend on land for their livelihoods struggle on less than one hectare per family in the face of worsening terms of trade. By and large, they do not use modern agricultural practices and cannot afford to invest in machinery and inputs. This means that their agricultural productivity remains low, which perpetuates their low incomes and further entrenches inequality.

**Challenges around land tenure and security exacerbate inequality in SACU.** Most people hold land informally through either customary or community-based tenure systems. Such land can usually not be used as collateral and so do not attract or support investment. Even where land rights are recognized under statutory law, they may not be fully implemented and enforced. To make matters worse, rural land markets are limited and land valuations poor (that is, assessed values are not in line with market values).

**Taxes and transfers help reduce inequality but could be more efficient**

**Progressive taxation significantly reduces income inequality in the region.** All taxes, besides excise duties, are strongly progressive in all SACU countries and especially in Namibia and South Africa, the most unequal countries in the region. The progressive design of the *personal income tax system* means the wealthiest income deciles bear the largest share of this tax burden. SACU governments also aim to use *value added tax (VAT)* to support poor people by exempting or zero-rating food and other necessities. However, zero-rating of food items appears to have brought only marginal benefits to poor people, meaning that VAT does not significantly affect inequality.

**The social safety net system also reduces inequality, largely because of its extensive coverage.** Spending on social assistance systems in SACU exceeds that of most countries with similar income levels. These social assistance systems essentially rely on non-contributory transfers, and social insurance is limited. The high levels of spending on social assistance translate into relatively high coverage. Social assistance programs cover an estimated 52.2 percent of the population in Botswana and 41 percent in Namibia, while coverage exceeds 70 percent in Eswatini, Lesotho, and South Africa. All direct transfers are pro-poor, with poor people receiving more in direct transfers than their richer

counterparts. South Africa stands out for the progressivity of its transfers—it has the most progressive grants for foster care, adult and child disability, and old age pensions. Its child grant scheme also has the largest impact on inequality.

### **Improving the efficiency and implementation of social assistance could help reduce inequality even further.**

Inclusion errors remain high (especially outside South Africa), as about half of social assistance beneficiaries are in the richest three quintiles. This is mainly because social assistance programs such as school feeding schemes are categorical (not means-tested). Only South Africa has introduced a means test for social pensions, for example. The impact of these programs on inequality could be enhanced by the introduction of poverty-targeted programs in some countries. The implementation of social protection can also be improved. Currently, multiple ministries or departments administer safety net programs, with limited coordination at policy and administrative level. In Lesotho, for instance, paper-based application processes for some programs (such as the Public Assistance program and the old-age pension) are lengthy and result in unnecessary costs and delays. Each ministry involved has its own application process to determine eligibility, register beneficiaries, and manage information.

### **Vulnerability to climate risks and economic shocks exacerbate inequality**

**Climate shocks such as droughts and floods are unequally distributed and generally affect poorer people more severely.** The consumption loss from a climate shock can be substantial—on average, affected people suffer a 11.7 percent loss in per capita consumption from a drought and a 13.2 percent loss from a flood. The average consumption loss varies across countries, depending on the size of the shock and of the affected population. As households in disadvantaged groups suffer larger, longer-lasting shocks, they are also more likely to adopt coping mechanisms that could lead to lower productivity and consumption in the longer run. For instance, some incur debt at high interest rates, reduce food consumption, sell productive assets, or disrupt their children's education. Social protection programs can potentially offset these consumption losses; however, the current systems cover only a fraction of climate-vulnerable households in the region.

**The COVID-19 pandemic is exerting additional pressure on inequality.** The socio-economic consequences of the pandemic are being felt across SACU countries. The magnitude and velocity of the shock are testing the capacity of social protection systems to provide a cushioning response. The pandemic brings into sharper focus the need to narrow inequality of opportunity

between different groups to support a more durable and inclusive recovery. Addressing the underlying structural factors that constrained access to opportunities in these societies even before the pandemic would reduce the risk of the crisis leading to permanent increases in inequality and lower trajectories of social mobility and living standards over time.

### **Social services help reduce inequality, but their quality, targeting, and efficiency could be improved**

**SACU countries undertake some of the most redistributive spending in the world, particularly on education and health.** Spending on education remains among the highest in the world. In Lesotho, for example, around 13.8 percent of the overall government budget in 2018 was directed towards education; this was equivalent to about 6.3 percent of gross domestic product (GDP). In all SACU countries, primary education is free and compulsory. Spending on health is also relatively high. Lesotho has the highest relative spending on health in SACU; its health spending as a share of the national budget is around 11–12 percent. Except for tertiary education and hospitals, spending on education and basic health is pro-poor and, given the size of the spending, makes the highest marginal contribution to reducing inequality.

**Still, the quality and efficiency of social spending can be improved,** as high spending does not always mean high-quality services. Although investment in pre-tertiary education and health in SACU is highly progressive, the quality of these services remains relatively low. SACU countries fare significantly worse on the World Bank's Human Capital Index (HCI) than expected for their levels of development. Health outcomes among children are especially poor, with all SACU countries reporting extreme rates of chronic malnutrition or stunting among children under five. Recent World Development Indicators data suggest that stunting reached 34.6 percent in Lesotho, 27.4 percent in South Africa, and 25.5 percent in Eswatini. Overall, stunting rates are three times higher in SACU countries than in peer countries in Latin America. This is strongly linked to poverty, with the incidence of stunting among families in the poorest 20 percent of the income distribution being double that among families in the richest 20 percent. This suggests SACU countries could do more to maximize the potential effect of education and health spending on inequality.

### **Policy areas to accelerate inequality reduction**

**Building on this analysis, the report proposes four policy areas for accelerating the reduction in**



**inequality in SACU:** (a) promoting equality of opportunity, (b) addressing the highly skewed distribution of productive assets, (c) enhancing the impact of fiscal policy on inequality, and (d) strengthening resilience to climate change risks and economic vulnerability.

***(a) Promoting equality of opportunity***

**Improving the efficiency and inclusivity of public service delivery can help equalize opportunities.** This includes strengthening access to public services and ensuring that everyone, including rural and poor people, has equal access to these services. Although SACU has made progress in increasing access to basic public services, the remaining gaps entrench inequality of opportunity. Broad infrastructure gaps mean that rural areas are disadvantaged in accessing electricity, the internet, roads, and other public goods and services. Improving public service delivery in a way that addresses the spatial gaps would help level the playing field and harness the potential of rural development to reduce inequality. One option might be using technology to improve service delivery and reach remote areas.

**Strengthening the provision of early childhood development services is central to reducing inequality of opportunity.** Improving access to and the quality of early childhood care and development, which are especially limited among poor and vulnerable people in SACU, is a cost-effective strategy for reducing inequality and substantially improving long-term outcomes. Increasing the supply and quality of early childhood education would accelerate the flow through primary school, with more children entering junior secondary education with a solid knowledge base. Sustaining the gains in early childhood education requires developing benchmarks to measure quality and integrating within formal education systems the content, budget, and capacity of providers in preschool programs. This must be accompanied and steered by initiatives to reduce child malnutrition and improve child health outcomes.

**Regional development and agglomeration can also help reduce spatial inequality in access to opportunities.** Many people in SACU still live far from job opportunities and have limited access to basic services, because of both the legacy of apartheid and poor spatial planning and development. In Namibia and South Africa, for example, profound economic disparities are evident in township and informal settlements. Supporting urbanization that increases productivity can contribute to sustainable growth, but only when planned and managed well. Building cities that are inclusive, safe, resilient, and sustainable requires sound policy coordination and investment choices, as well as an approach that is coordinated across national and local governments. In all SACU countries, migration from rural areas in pursuit of jobs in cities has been significant. Namibia has one of the fastest

rates of migration in the world—the share of the urban population increased from one-quarter to half in the past three decades. High migration rates, however, have not reduced rural poverty: most of the population lives in rural areas, and natural population growth in these areas often exceeds the rate of out-migration.

***(b) Addressing the highly skewed distribution of productive assets***

**Generating jobs for the growing workforce and resolving the excessive segmentation of SACU labor markets are key to reducing unemployment and inequality.** This entails: (a) improving business environments through reducing business regulations that hamper domestic and foreign investment and through strengthening competition and productivity, for example by investing in the digital economy and building domestic technical skills; (b) boosting entrepreneurship, self-employment, and small business development by removing regulatory bottlenecks, supporting business and socio-emotional skills development, and expanding access to finance; and (c) developing programs to address youth unemployment along with a matching process to reduce the information gap between employers with job vacancies and potential workers with the appropriate skills for those jobs.

**The rural economy can benefit from resolving land inequality and strengthening land rights both in law and in practice.** The legacy of a highly skewed distribution of land perpetuates inequality in Namibia and South Africa, which in turn undermines rural development and entrepreneurship. Weak property rights remain a key source of policy uncertainty in these two countries. In Botswana, Eswatini, and Lesotho, agricultural land tenure is not properly secured, and land markets are underdeveloped. Weak titling restricts the value of property and its potential use as collateral. Recognizing land rights in law and protecting them in practice are vital; these include rights based on customary tenure systems and the associated sociocultural values of land. In certain cases, the parallel existence of tradition and modern legal systems creates inconsistencies in the interpretation and application of the law, which negatively affects women's access to land.

**Raising agricultural productivity will help close intersectoral productivity gaps and thereby reduce inequality.** Agricultural productivity can be improved through transitioning from subsistence to commercial agriculture, increasing the use of productivity-enhancing agricultural inputs, strengthening linkages between farmers and buyers, and investing in climate-smart agriculture. Commercialization could be prioritized in lowland and foothill areas, while the highlands would benefit from the creation of resilient landscapes, afforestation, and farmer-managed natural regeneration to restore less-fertile land. Agricultural commercialization involves enhancing linkages

between farmers and buyers, while supporting local agro-dealers and the expansion of services. Furthermore, agri-entrepreneurs should be trained in business skills, record keeping, marketing, the use of inputs, and agronomic practices. Investments in climate-smart agriculture offer the potential to transform agriculture into a more productive, climate-resilient, and low-emissions sector. The effective scaling up of climate-smart agriculture will require several adoption barriers to be addressed, including weak implementation capacity, insufficient access to inputs and credits, and limited agricultural research. There is an urgent need to strengthen research and establish partnerships with international research institutes to develop high-yield, stress-tolerant, and climate-ready crop varieties.

**(c) Enhancing the impact of fiscal policy on inequality by improving the equity and efficiency of social spending**

**Improving the efficiency of social assistance is important for reducing inequality, especially in Botswana, Eswatini, Lesotho, and Namibia.** This could be achieved by means of: (a) an integrated social registry with automated databases and better service delivery to address some implementation challenges, modernizing social protection systems, and improving policy coordination among ministries; (b) better targeting of social protection programs to ensure that benefits reach the intended beneficiaries—the fact that a significant share of benefits accrues to people who are not poor suggests weaknesses in the means tests used to identify beneficiaries, whether gaps in the tests or limited capacity for administering them; and (c) some SACU countries could reduce poverty and inequality in a budget-neutral way by allocating a greater share of social protection resources to children. Increasing the coverage and raising the value of child benefits could be achieved using resources saved by pension-testing the old-age grants. However, child grants should also be targeted better; this would need a social registry, for example.

**Improving the targeting and efficiency of public spending on education and health can enhance its redistributive impact.** This strategy entails improving the quality of education and healthcare. The focus should remain on enhancing early childhood development and education programs and improving basic *education* at all levels. Early childhood development and basic education programs should be redesigned to cater for the poorest sections of society. Opportunities to develop *skills* should be substantially broadened to generate human capital for economic modernization, while making investments to enhance the quality, relevance, and efficiency of skills training. Technical and vocational education and training and higher education systems also need reform. In terms of *health*, improving human development outcomes

will require improving overall outcomes in health, as the impact of the human immunodeficiency virus (HIV) remains significant and child malnutrition a major blight on society. Ultimately, improving the efficiency of spending on education and health requires improving both quality and equity in education, skills development, and healthcare, as well as closing gaps in access to key infrastructure in rural areas.

**(d) Strengthening resilience to climate change risks and economic shocks**

**Enacting measures to mitigate and adapt to water scarcity is vital for building people's resilience against climate shocks.** This could include investments in water conservation and storage interventions, groundwater preservation, and the development of new water resources, as well as cost-based pricing to encourage conservation and reallocation to more productive sectors. Mitigation of and adaptation to water scarcity are particularly important in SACU, which is exposed to prolonged droughts and water insecurity. Water scarcity has an adverse impact on inequality because it disproportionately affects vulnerable and middle-class people. Droughts pose substantial risks to agriculture, the mainstay of the poor and vulnerable rural population. Considering the proven regressive impact of water shortages and pollution, investments in mitigation and adaptation may be of particular benefit to lower-income households and households in rural areas, helping to protect their livelihoods and well-being and so reduce inequality over time.

**Adaptive social protection programs are critical for protecting the well-being of vulnerable households, including poor households and the middle class.** The region is bracing for shocks that might be increasing in frequency and intensity but remain highly uncertain in occurrence and distribution. Although it is important to protect households at the lower end of the income distribution (which find it harder to protect themselves against and recover from shocks), countries need social protection programs that can be adapted to the nature of the shocks and their distribution. Such programs should be properly targeted and provide broad coverage. Where the impact of a crisis is centered on the middle class and not necessarily on the chronic poor, social protection programs should be expanded to include the transient poor. Programs will need to be nimble enough and fiscally sound enough to allow for both *vertical* expansion (higher benefits) and *horizontal* expansion (more beneficiaries, to cover the people affected by the shock) as needed. Adaptive social protection also means building resilience among poor and vulnerable households to help them withstand economic shocks and natural disasters.





# CHAPTER 1

## INEQUALITY IN THE SOUTHERN AFRICAN CUSTOMS UNION

*One of the legacies of a shared history of apartheid is that the Southern African Customs Union is the most unequal region in the world. Although consumption inequality in the region has declined somewhat in recent times, the extent of the reduction varies significantly across countries. Inequality has consistently been higher in urban than in rural areas. The primary driver of inequality is differences in educational attainment, followed by labor market factors, such as labor force status or participation (that is, whether people work or not) and their occupation or industry of employment. The contribution of labor market factors, especially labor force status or participation, has increased over time. Household demographics likewise played a growing role (mainly age, and to some extent, gender). In terms of income sources, differences in wage income are the main driver of inequality. Social transfers (and to a lesser degree, remittances) help to reduce inequality, with the effect especially marked in Namibia and South Africa. Overall, though, such transfers are not enough to compensate for the disparities stemming from differences in wages and business incomes.*

### 1.1 Context

**The Southern African Customs Union (SACU), comprising Botswana, Eswatini, Lesotho, Namibia, and South Africa, is the world's most unequal region.**

South Africa, the largest country in the region, is the most unequal country in the world, ranking first among 164 countries in the World Bank's global poverty database. Botswana, Eswatini, and Namibia are among the 15 most unequal countries, and despite recent improvements,

Lesotho still ranks among the top 20 percent.<sup>4</sup> Such high levels of income inequality translate into—and result from—vast wealth gaps between rich people and the rest of the population. This is exacerbated by the health and economic impacts of the ongoing COVID-19 pandemic, which further undermines the prospect of inclusive growth in SACU in both the short and the long run.

<sup>4</sup> PovcalNet (World Bank) is an online analysis tool for monitoring global poverty (Accessed May 2020).

### Consumption growth continues to stagnate and is skewed towards the richer segments of society.

Annualized consumption growth for the bottom 40 percent of the consumption distribution, the World Bank Group's indicator for shared prosperity, has either remained unchanged or has fallen behind the average growth of the population in SACU's most unequal countries. In Eswatini and Namibia, the annual average consumption growth

for the bottom 40 percent of people was lower than population growth by almost 1 percent between 2009 and 2015. This negative "shared prosperity premium" suggests that inequality has been rising. In Botswana, the shared prosperity premium has been positive, but the bottom 40 percent of people saw little benefit—their annualized consumption grew by less than 1 percent in this period.<sup>5</sup>

The **shared prosperity premium** is the difference in income or consumption growth between the bottom 40 percent of people and the overall population. It is measured as annual average growth rates over 5 years +/- 2 years, depending on the availability of data.

World Bank Group 2016

### Improvements in well-being have been constrained by high inequality, which is associated with high inequality of opportunity.

Poverty levels in SACU are higher than its per capita incomes would predict. For example, measured at the international poverty line of \$1.90 per person per day, in 2011 purchasing power parity (PPP) terms, the poverty rate in South Africa is nearly 20 percent; this extreme rate is almost twice the average for countries with similar income levels. Research suggests that economic growth is less effective at lifting people out of poverty when the income distribution is more unequal. Income inequality in SACU is linked to a highly unequal distribution of assets and opportunities among groups with different characteristics, such as parental education and income, race, age, gender, and geographic location. This means that different groups and regions have starkly different levels of poverty and economic mobility.

**Inequality of opportunity** is the share of inequality that can be attributed to differences in circumstances over which an individual has little or no control. High inequality of opportunity signals a fundamental lack of fairness within a society and is typically deemed the most objectionable aspect of overall inequality.

### Inequality in some SACU countries stems from their shared legacy of apartheid.

In Namibia and South Africa, the story is one of incomplete transition after apartheid. Political progress in these countries has not been matched by progress in equity and economic fairness, mainly because distortions from their past pose critical obstacles to social progress. The main legacies of the long colonial

rule and racial segregation are stark divides in income and opportunities by race and geographic location, including severe disparities in access to basic services. Such structural inequalities are powerful barriers to progress. These countries have been slow to reduce gaps in endowments and opportunities, even though most forms of legal and institutional discrimination have been replaced by progressive policies based on the principle of equality.

### SACU governments have limited capacity to meet the needs of marginalized communities; this exacerbates inequality of opportunity.

Inadequate access to potable water, adequate sanitation, and electricity; weak infrastructure; and the poor quality of public health services disproportionately affect marginalized, poor, and historically disadvantaged people and worsen their unequal opportunities.

### Excessive inequality also hampers long-term growth.

Inequality has long-lasting negative effects on economic growth through channels such as political and social instability, weaker incentives for human capital formation, and ineffective institutions.<sup>6</sup> Countries with lower net income inequality tend to have longer periods of higher growth over time, whereas those with high levels of inequality are more likely to have shorter growth opportunities and to experience longer-lasting consequences after adverse shocks (Ostry and others 2014; Berg and others 2012). For example, poorer families might find it harder to access education during economic downturns because they lack income or credit; this could have long-lasting consequences for the country's human capital development and growth (Flug and others 1996). Basdevant and others (2012) argue that SACU countries could increase the duration of

5 For data, see Global Database of Shared Prosperity, World Bank, Washington, DC (Accessed March 17, 2020), <https://www.worldbank.org/en/topic/poverty/brief/global-database-of-shared-prosperity>.

6 Using a historical instrument for determining structural inequality—agricultural endowments (in this case the abundance of land suitable for growing wheat relative to growing sugarcane)—Easterly (2007) concludes that high inequality is a significant barrier to prosperity, good quality institutions, and schooling.

economic upturns by reducing inequality to levels seen in countries at similar levels of development.

**The COVID-19 pandemic underscores the urgent need to reduce inequality of opportunity and to spur a durable, inclusive recovery.** Disadvantaged groups tend to suffer disproportionately in pandemics, and in the short run, a pandemic's damaging economic and social outcomes are likely to be more uneven in countries with high levels of inequality. Without mitigating policies, the uneven outcomes are likely to persist and cause even higher inequality over time, thus reducing a country's resilience to future shocks. In SACU, policies to foster a sustainable, inclusive recovery from the pandemic must decisively address the underlying structural factors that constrain people's access to opportunities. This would

reduce the risk of COVID-19 permanently increasing inequality and lowering the trajectory of social mobility and living standards over time.

**This chapter sets the context for this report by discussing the key trends and patterns in income or consumption inequality in SACU countries.** It explains why reducing inequality is critical to achieving the region's development goals. The results from a decomposition of inequality by spatial, demographic, education, and labor market dimensions, as well as income sources, are used to shed light on the drivers of inequality in SACU. The chapter concludes with a framework for analyzing income inequality, which also serves as a roadmap for the rest of the report.

## 1.2 Reducing inequality within and between SACU countries

**SACU countries are among the world's most unequal, with South Africa topping the list.** The latest World Bank data rank South Africa as the most unequal country in the world, with a consumption per capita Gini coefficient of 67 in 2018 (Figure 1.1, panel a). The Gini coefficients of all other SACU countries, except Lesotho, exceeded 50. Even Lesotho, with a Gini coefficient of 45 in 2017,<sup>7</sup> was among the most unequal 20 percent of countries. Average inequality in SACU countries has declined since the 1990s. However, their Gini coefficients remained higher than those of other Sub-Saharan African and upper-middle-income countries between 1993 and 2015. In 2010–15, the average Gini coefficient for SACU countries was around 59, as against 42 for Sub-Saharan African and upper-middle-income countries (Figure 1.1, panel b). See Box 1.1 for more technical information on the inequality measurements used in the study.

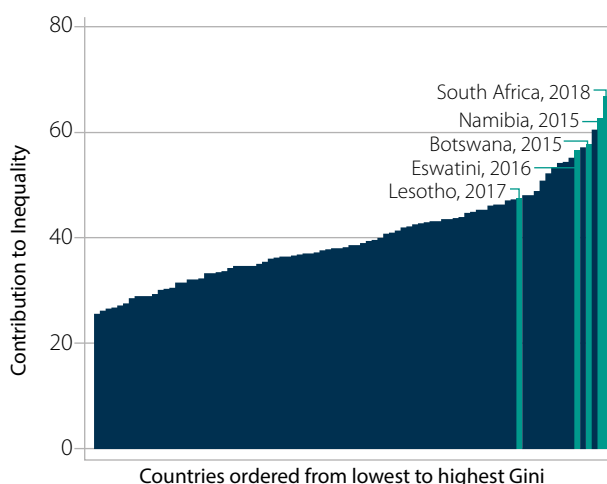
**In South Africa, inequality has increased since the end of apartheid in 1994.** The country is characterized by high wealth inequality and economic polarization (particularly across labor markets). Inequality of opportunity is likewise high and is determined by factors such as race, parental education, and the occupations of fathers. Wage inequality widened between 1995 and 2015, when the Gini coefficient for wages rose from 58 to 69. Wealth inequality is higher than income inequality; it was recently estimated that the top 10 percent of the population held 71 percent of wealth, whereas the bottom 60 percent held only 7 percent. In contrast, the corresponding figures for member countries of the Organisation for Economic Co-operation and Development (OECD) were 50 percent and 13 percent, respectively. The wealth gap is closely related to unequal ownership of assets. For instance, financial assets represent 75 percent of the total assets of wealthy households in South Africa, as against only 36 percent of those of poor households.

Developed by Corrado Gini (building on the work of Max Lorenz), the Gini coefficient is a measure of the statistical distribution of welfare indicators commonly used to measure inequality, such as in income or consumption. It ranges between 0 and 1 (or 100), where 0 means perfect equality and 1 (or 100 percent) perfect inequality.

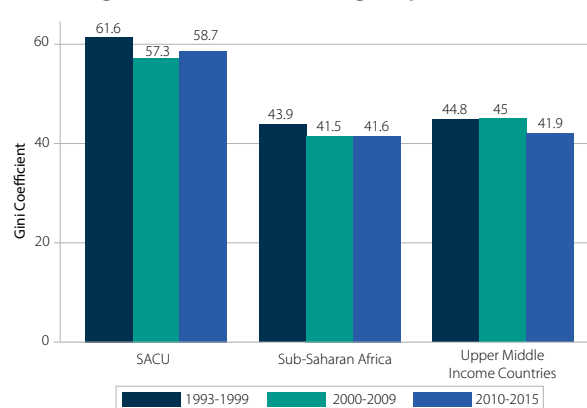
<sup>7</sup> The Gini coefficient figures here are based on consumption per capita in nominal terms.

**Figure 1.1. International and regional comparison of Gini coefficients**

**a. Gini coefficients of countries**



**b. Average Gini coefficients of groups of countries**



Source: Based on data from the World Development Indicators database and PovcalNet, World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>.

Note: Panel b shows the unweighted average of Gini coefficients of countries in each group.

## Box 1.1. Key concepts and definitions

To measure inequality in the region, a series of surveys of SACU member countries was used (Table B1.1.1). For each country, consumption per capita from each survey round was converted to 2011 US dollars at purchasing power parity (PPP): household consumption per capita in each survey was expressed in 2011 prices using the country-specific consumer price index, and this was converted into 2011 PPP dollars, using the World Bank's International Comparison Program (ICP) factors. The following definitions are used throughout:

- *SACU or regional inequality*: Inequality in the whole SACU region, using consumption per capita from surveys of all countries, expressed in 2011 PPP dollars. The measure of interpersonal inequality among all individuals in the region differs from the average of measures of interpersonal inequality of individual countries. Decompositions of regional inequality are conducted on measures (such as mean log deviation) derived from the regional distribution of consumption expenditure.
- *Local inequality*: Inequality within every country, using welfare aggregates expressed in local currencies.
- *Wave*. Each wave refers to a period. Wave 1 combines data from the earliest available surveys between 2001 and 2010 (the mid-point of the survey years is 2004). Wave 2 combines data from the latest surveys provided by member countries (the mid-point of the survey years is 2016). Table B1.1.1 shows the years included in each wave or round, as well as the survey sources used.

**Table B1.1.1. Survey sources**

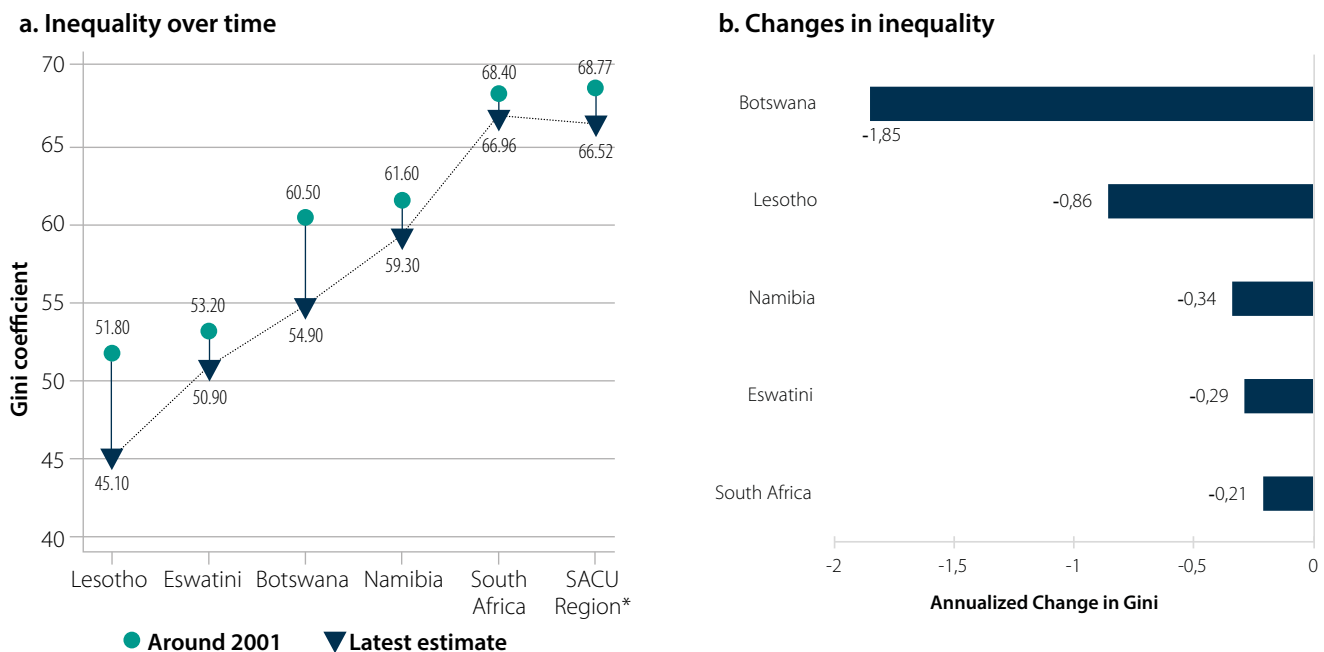
Country	Survey	Wave 1	Wave 2
Botswana	Botswana Multi Topic Household Survey (BMTHS), Botswana Core Welfare Indicators Survey (BCWIS)	2010	2015
Eswatini	Household Income and Expenditure Survey (HIES)	2001	2016
Lesotho	Household Budget Survey	2002	2017
Namibia	Namibia Household Income and Expenditure Survey (NHIES)	2004	2015
South Africa	National Income Dynamics Study (NIDS)	2008	2018

The legacies of apartheid and colonialism are significant drivers of inequality (see, for example, Odedokun and Round 2001; Angeles 2007). These historical factors are associated with strong inertia that allows inequality to persist over time.<sup>8</sup> The severe inequalities in wealth (including physical and financial assets) and in physical capital continue to drive income differentials in the region, particularly along racial and spatial lines (UNCTAD 2012). Highly skewed ownership of other assets, such as land, exacerbates inequality—the colonial concentration of agricultural land ownership is an ongoing source of wealth inequality, particularly in Namibia and South Africa (Moyo 2013). These structural foundations of inequality help widen wage and skills gaps and limit employment opportunities for certain groups. Thus, the labor markets of SACU countries, particularly South Africa, are increasingly

segmented along formal/informal, racial, and spatial lines (Bhorat and Goga 2013; Leibbrandt and others 2010; Bhorat 2004).

**Consumption inequality has been declining, although the extent of the decline varies across countries.** The Gini coefficient for consumption per capita in the region fell from 68.8 during the 2000s to 66.5 in 2016 (Figure 1.2, panel a). The most rapid declines were in Botswana and Lesotho and the slowest in Eswatini and South Africa (Figure 1.2, panel b). Between 2008 and 2018, South Africa’s Gini coefficient changed very little, declining from 68 to only 67, or by just 0.21 points per year. This is the slowest decline among the SACU countries, even though the country has the highest level of inequality in the region.

**Figure 1.2. Changes in inequality over time**



Source: World Bank calculations based on household survey data (per capita measures of welfare).

Note: Panel a presents the Gini coefficient of consumption for the whole SACU region, based on the earliest and latest rounds of household surveys from member countries expressed in 2011 PPP dollars. Panel b shows the annual change in Gini coefficients between the two surveys undertaken in each country (see Box 1.1).

**Most interpersonal inequality in SACU can be attributed to disparities within countries.** Decomposing the inequality indicator into two components—between and within countries—helps explain regional changes in

inequality.<sup>9</sup> Over 80 percent of the overall interpersonal inequality is explained by inequality within countries, which is consistent with the high levels of inequality in these countries. Inequality, both within and between

<sup>8</sup> Refer to Mahmood and Noor (2014) for empirical evidence from developing countries.

<sup>9</sup> The decomposition is done for mean log deviation (GE(0)) of consumption per capita, which, unlike the Gini coefficient, is additively decomposable. The between-country component refers to the level of inequality between countries when each person in a given country is allocated their country’s mean consumption per capita; the within-country component refers to the level of inequality observed in each country.

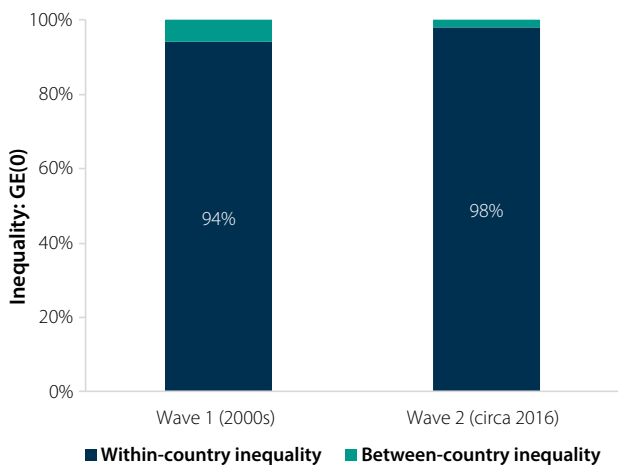


member states, has declined. The former points towards the general trend of falling inequality shown in Figure 1.3, panel a, whereas the latter suggests some convergence in inequality between countries over time. The contribution

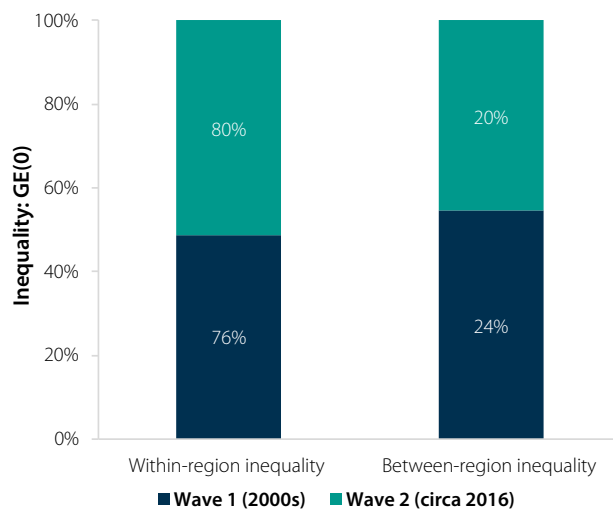
of between-country inequality to total inequality fell from 6 percent in the 2000s to 2 percent around 2016, even as total inequality decreased slightly.

**Figure 1.3. Measures of inequality and poverty**

**a. Within- and between-country inequality**



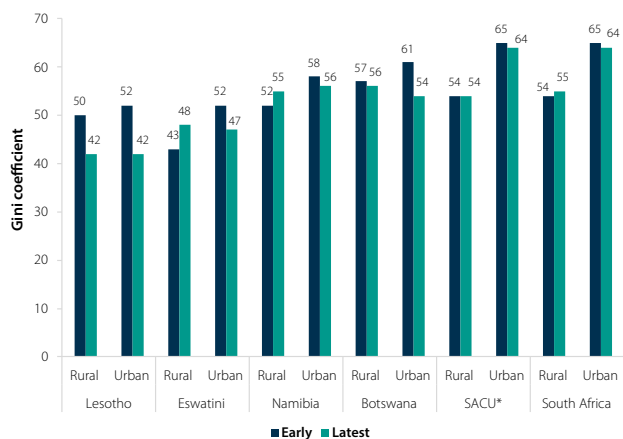
**b. Within- and between-region inequality**



Source: World Bank calculations based on household survey data.

Note: The height of the bars indicates total inequality in the SACU region, as measured by mean log deviation of (per capita) consumption. The numbers in the bars refer to the percentage share of each component in total inequality. "Regions" refers to urban and rural areas.

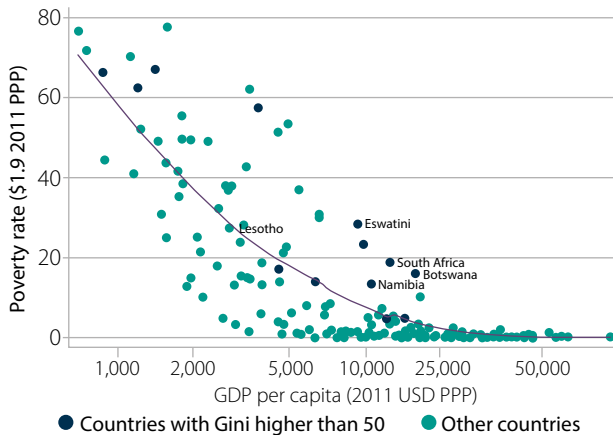
**c. Inequality in rural and urban areas**



Source: World Bank calculations based on household survey data.

**Although urban inequality has declined, it remains consistently higher than inequality in rural areas.** Urban and rural areas have seen some convergence in inequality, with the share of urban-rural inequality in total inequality falling from 24 percent in the 2000s to 20 percent around 2016 (Figure 1.3, panel b). Much of the decline in SACU's overall inequality was driven by the fall in inequality within urban areas between the 2000s and (circa) 2016; inequality within rural areas mostly stagnated (Figure 1.3, panel c). This is consistent with the finding that urban inequality fell

**d. Poverty levels and per capita GDP**



in all SACU countries, whereas rural inequality increased in Eswatini, Namibia, and South Africa. Lesotho is the only country to have achieved large reductions in inequality in both rural and urban areas.

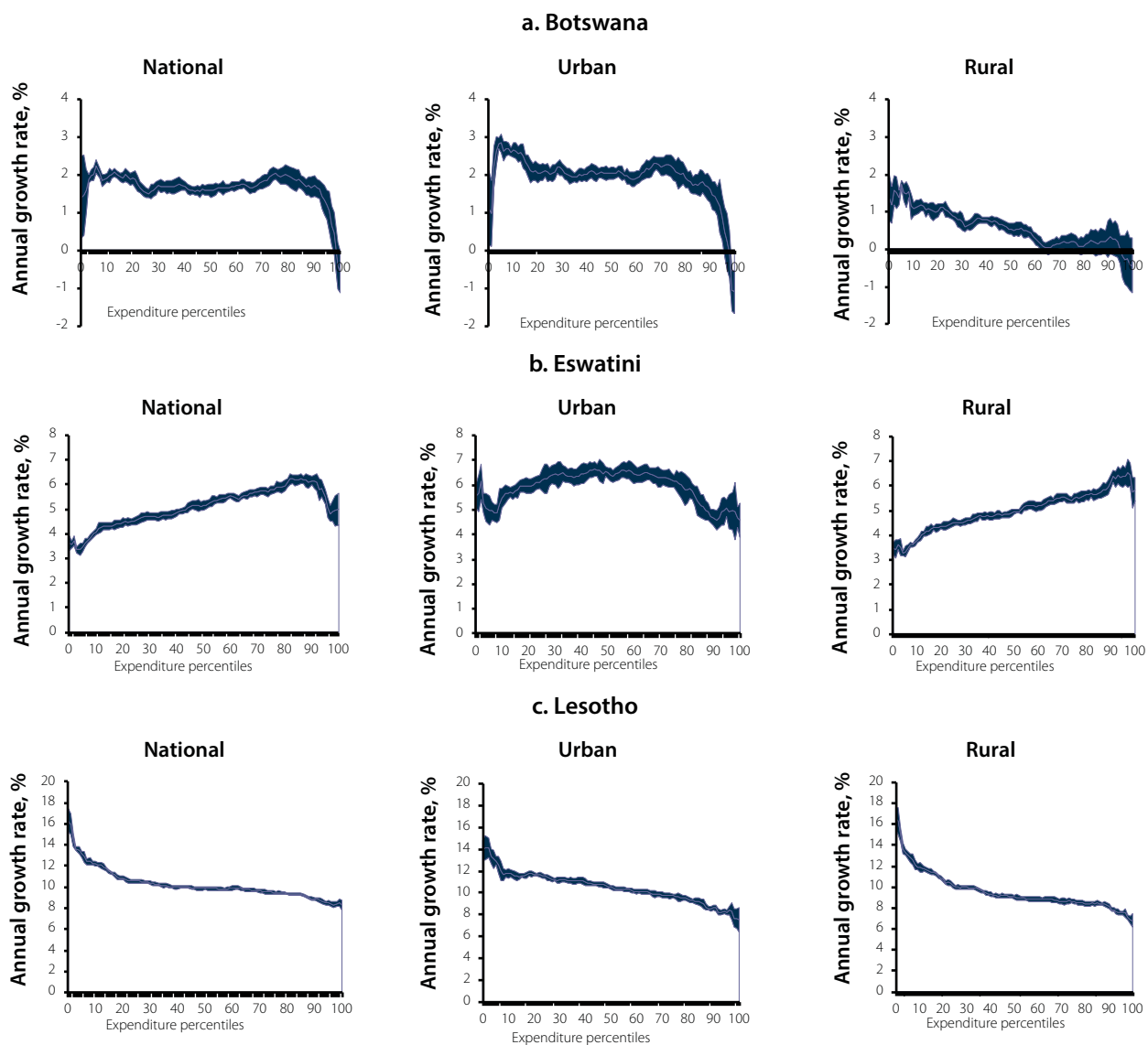
**Consumption growth across the distribution varies widely, but the pattern of growth was more pro-poor in urban than in rural areas.** This is consistent with the declining inequality seen in urban areas. Urban consumption growth was pro-poor or almost neutral in

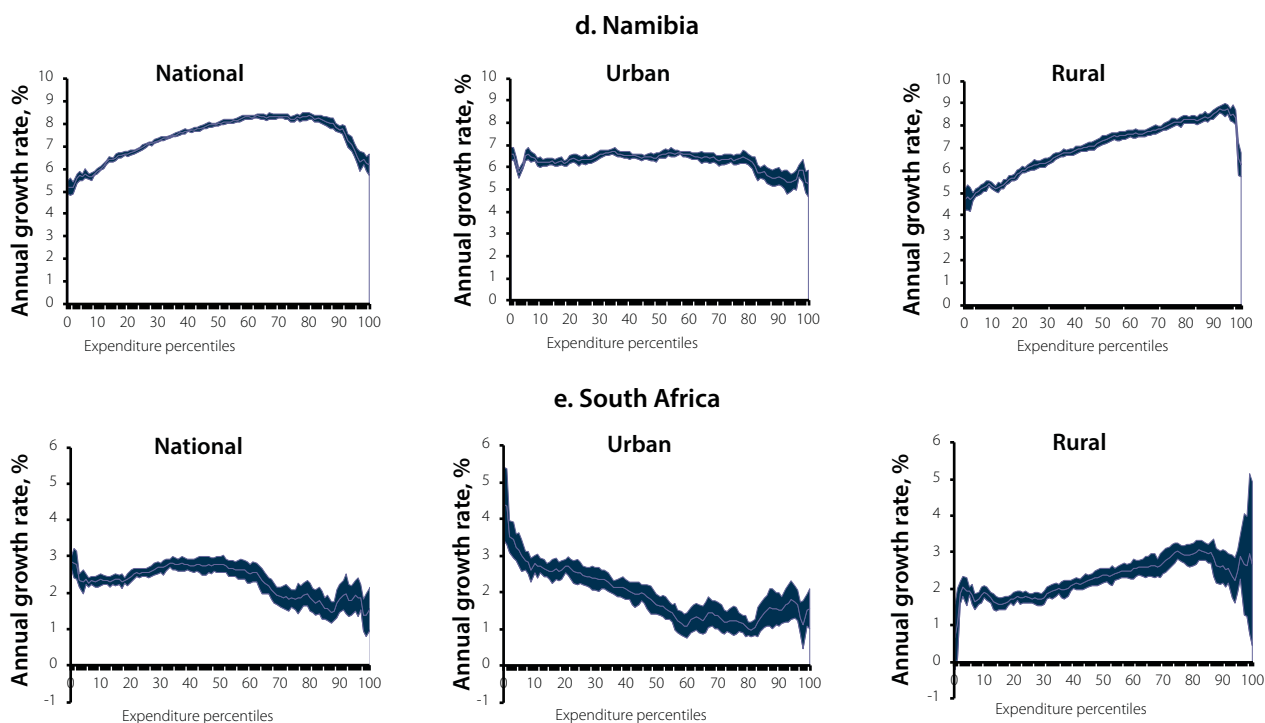
all SACU countries—the growth incidence curve slopes downward in Lesotho and South Africa, is flat across the consumption distribution in Namibia, and is U-shaped (or higher for the middle part of the distribution) in Botswana and Eswatini, respectively (Figure 1.4). In rural areas, growth was skewed in favor of the rich in three SACU countries: Eswatini, Namibia, and South Africa. In Lesotho, strong pro-poor growth in both rural and urban areas led to a decline in poverty and inequality between 2002 and 2017 (World

Bank 2019a). The consumption of the bottom 40 percent in Lesotho grew at an annual average rate of 2.2 percent, faster than the growth in the overall population. In South Africa, pro-poor urban growth led to mildly pro-poor overall growth in consumption between 2008 and 2018. In Eswatini and Namibia, by contrast, overall consumption growth was not pro-poor. In Botswana, growth was robust for the middle part of the distribution and much lower for those in the bottom and top 10 percent of the distribution.

The **growth incidence curve** shows the annualized growth rate of per capita income or consumption between two points in time for every percentile of the income distribution.

**Figure 1.4. Growth incidence of consumption per capita in individual SACU countries**





Source: World Bank calculations based on household survey data.

### 1.3 The importance of reducing inequality

**Addressing high inequality in SACU is critical for poverty reduction and sustainable growth.** The relationship between inequality, growth, and poverty has long been studied, dating back to Kuznets' (1955) famous hypothesis that as countries grow, income inequality first increases and then peaks before beginning to fall. The empirical literature testing this hypothesis has been vast but inconclusive (see, for example, Anand and Kanbur 1993; Srinivasan 2000). The weight of recent evidence suggests that high inequality negatively affects long-term growth, social mobility, and poverty reduction. This is primarily because it also implies inequality of opportunity stemming from circumstances (such as parental background, race, gender, and location) that individuals cannot control. Such inequality both wastes their potential and inhibits innovation. Effectively addressing inequality in SACU countries is therefore vital for development.

**Evidence from the SACU region confirms that high inequality slows poverty reduction.** Poverty levels in SACU countries are higher than their income levels predict (Figure 1.3, panel d above), suggesting that high levels of inequality reduce the effects of growth on poverty reduction. In contrast, wherever inequality has declined, poverty reduction has accelerated. In Lesotho, for instance,

about three-quarters of the decline in poverty can be attributed to distributional changes arising from lower inequality (World Bank 2019a). Inequality not only inhibits poverty reduction at a given rate of growth, but it also reduces the duration of growth cycles. It is estimated that reducing inequality in SACU countries could almost double the duration of periods of economic expansion (Basdevant and others 2012).

#### *Equalizing opportunities is key to reducing income inequality and increasing mobility*

**Higher income inequality is associated with lower social mobility, which means that inequality tends to persist across generations.** Intergenerational mobility, a common measure of relative social mobility, refers to the extent to which a generation's income and education outcomes are tied to those of their parents. Higher mobility means outcomes are less likely to persist from parent to offspring. Greater income inequality is empirically associated with lower intergenerational mobility, as depicted by the so-called Great Gatsby curve (Narayan and others 2018; Corak 2013). In this two-way relationship, greater inequality tends to limit relative mobility, which in turn tends to worsen inequality over time.<sup>10</sup>

10 Becker and Tomes (1979) developed the earliest version of this theoretical model, which has since been refined by various researchers. If endowments (such as monetary bequests and non-monetary traits) can be inherited from parents and parents attach a value to investing in their children, income levels may persist across generations.

The *Great Gatsby curve* illustrates the connection between the concentration of wealth in one generation and the relative ability of those in the next generation to move up the economic ladder. “Countries that had more inequality across households also had more persistence in income from one generation to the next.”

Alan B. Krueger 2012

**Imperfect capital markets are a key driver of low social mobility in highly unequal societies.** When credit is constrained (as it is in most developing countries), high income inequality can mean significant differences in parental investments in their children; these contribute to differences in earnings that persist across generations (Loury 1981; Piketty 2000). Piketty (2014) notes that similar underlying processes may strengthen the link between inequality and a lack of social mobility in a credit-constrained society. An increase in the capital-income ratio (because returns to capital exceed the pace of income growth) leads to greater income inequality; as a result, capital income tends to be concentrated at the top of the distribution. Since capital can be passed to the next generation more easily than labor income, larger wealth transfers tend to increase the persistence of earning levels across generations in credit-constrained societies.

**In general, inequality influences the policies, institutions, and power balances that determine access to opportunities** (the level playing field), which in turn determines social mobility (Corak 2013). The greater the inequality of opportunity, the lower relative mobility tends to be. This implies that the status and connections of parents strongly influence the life outcomes of their dependents. Countries with greater income inequality also tend to have high inequality of opportunity.

### **Promoting equality of opportunity fosters longer-term prosperity and stability**

**Greater equality of opportunity leads to higher relative mobility, which is both fair and essential for long-term growth.** In a highly mobile society, resources for education and in capital and labor markets are better matched with people’s ability, which can help realize their human potential. Evidence from the United States suggests that improving opportunities for social mobility benefits not only disadvantaged children but also society at large by increasing the rate of innovation and economic growth (Bell and others 2019). Inequality of opportunity may be particularly harmful to long-term growth because it discourages innovation and investment in human capital. In contrast, inequality produced by differences in effort (and unrelated to circumstances at birth) may have exactly the opposite effect. For example, higher inequality of

opportunity was associated with lower growth in the future incomes of poor people in the United States between 1960 and 2010 (Marrero and Rodriguez 2013; Marrero and others 2016).

**Inequality in human development outcomes among children in different socio-economic groups contributes to slower economic growth.** Inequality in health outcomes between children born to mothers with varying levels of education has a significant negative effect on growth. Grimm (2011) estimated that a 5 percent reduction in the under-five mortality rate among children born to mothers with low educational attainment led to an almost 8 percent increase in GDP per capita in a decade.<sup>11</sup> Based on a historical dataset of nearly 100 countries, Molina and others (2013) posit that inequality in children’s educational attainment because of their circumstances at birth negatively affects per capita GDP.

**A lack of social mobility erodes people’s perceptions of fairness and their trust in society, which in turn undermines the social stability needed to generate prosperity.** Behavioral experiments show that people are highly averse to inequality that is deemed unfair (Fehr and Fischbacher 2003; Fleib 2015). Perceptions of mobility are important building blocks of people’s aspirations, for both themselves and their children; such aspirations, in turn, contribute to actual social mobility. Conversely, a cycle of low perceived mobility and aspirations leads to social instability (Esteban and Ray 1994). Around the time of the Arab Spring in the Middle East and North Africa, studies in at least three countries found strong perceptions of downward mobility relative to a decade earlier, along with lower tolerance for inequality (Krishnan and others 2016). In terms of social stability, therefore, it is people’s perceptions of mobility that seem to matter. These are imperfectly associated with actual mobility—perceptions of mobility can diverge from actual mobility, particularly if comparisons are made across countries (Alesina and others 2018).

### **Addressing structural inequality is essential for an inclusive recovery from the pandemic**

**Pandemics such as COVID-19 affect everyone, but they also tend to worsen pre-existing inequalities.** For example, poor and vulnerable groups are more likely to work

11 Analysis based on a cross-national panel dataset of 62 low- and middle-income countries from 1985 to 2007.

in the informal sector, which was among the first affected by measures to counter the pandemic in urban areas. Low-skilled and informal workers are also more likely to be in occupations where they cannot easily work from home (Mongey and others 2020). Women are overrepresented in severely affected occupations, such as the retail, travel, and hospitality industries. Poor and vulnerable people also have limited access to clean water, sanitation, health insurance, and healthcare. In urban areas, they are more likely to live in densely populated housing, which exposes them to greater health risks. Mitigation measures also disrupt public services, particularly schools. School closures disproportionately affect children in families that cannot access distance learning or benefit from social programs provided through schools (such as school feeding programs). The marked shift

of public resources toward a public health emergency can also undermine reproductive and maternal health services, particularly when the health system already faces resource constraints. This was particularly evident during the Ebola crisis (Korkoyah and Wreh 2015; Minor 2017).

**Evidence from past economic shocks confirms concerns about the short-term impact of the crisis on inequality.** Historical analyses suggest that events of this kind are associated with higher income inequality (Furceri and others 2020). Similarly, economies with larger output and employment losses in the initial aftermath of the global financial crisis saw relatively greater increases in income inequality (IMF and World Bank 2020).

## 1.4 The drivers of income inequality

**Designing policies to reduce inequality requires a detailed understanding of the sources, drivers, and forms of inequality.** To identify the main drivers of consumption inequality, decompositions of inequality are presented below, using recent data from household

surveys in member countries (see Box 1.2 on the methodology). These decompositions reveal the extent to which spatial, demographic, education, and labor market factors, as well as income sources, contribute to differences in consumption by individuals.

### Box 1.2. Decomposing inequality into its sources

This decomposition of inequality is based on a technique proposed by Fields (2003), which adopts a regression-based approach to estimate standard income- or consumption-generating equations. The main drivers of inequality can be identified from the contributions of explanatory variables (such as education, labor market factors, and demographics) to the distributional changes in welfare aggregates captured by the size of the estimated coefficients (Heshmati 2004). The estimated coefficient of each variable in the regression captures its estimated share in overall inequality.

The shares of individual variables can be (dis)aggregated into groups to ease interpretation. The components considered in these inequality decompositions are grouped as follows:

- *Location.* Region/provincial and rural/urban dummy variables.
- *Educational attainment.* The share of adult household members with different education levels (none, primary, secondary, and post-secondary).
- *Household demographics.* Age groups and gender of household members and household size.
- *Labor market factors.* Labor force status or participation (employed, unemployed, and inactive); industry of employment (such as agriculture, construction, and services); and skills/occupation (such as supervisors, technical professionals, sales, manufacturing, and clerks).

Race, an important contributor to inequality in some SACU countries, particularly South Africa, is not considered at this stage. This is because data by race is not available in all member countries. Including it only for some countries would affect the comparability of results between countries.

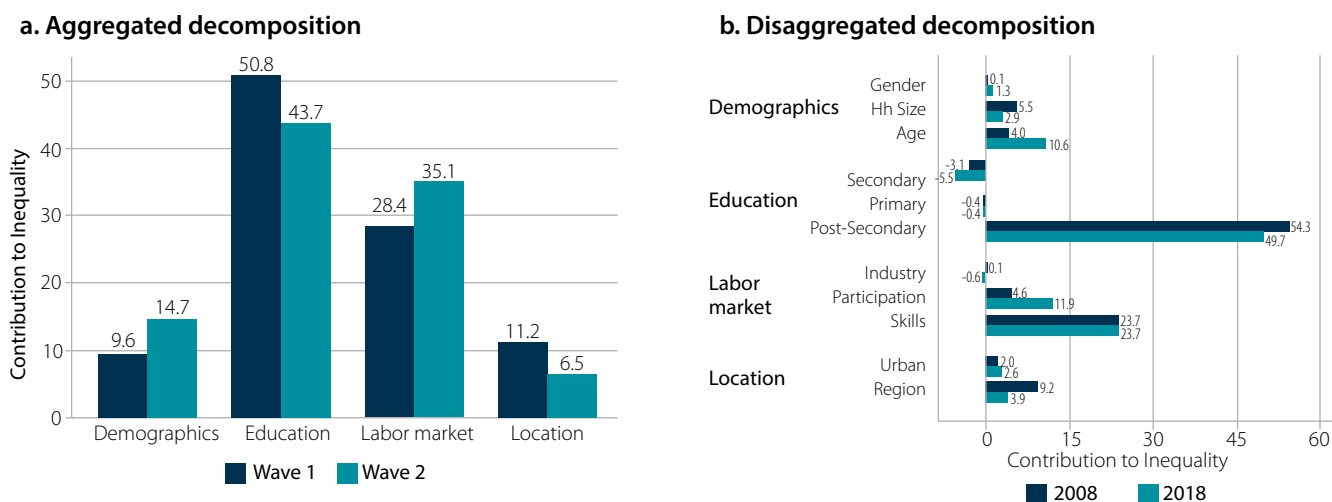
Also included is a decomposition of inequality by income sources, which follows Lerman and Yitzhaki (1985) and Stark and others (1986). A module developed by López-Feldman (2008) implements this approach in Stata.

## 1.4.1 Differences in household and individual characteristics

**Education is the most important driver of overall inequality in SACU.** Differences in educational attainment among adult household members accounted for more than half the region's overall inequality during the 2000s (Wave 1 data). The latest data (Wave 2, 2015–2018) suggest a slight decline in the importance of education, perhaps because better secondary and tertiary educational

attainment reduced inequality in education (Figure 1.5, panel a). Despite this improvement, education remains the most important driver of inequality, primarily because of differences in post-secondary educational attainment (Figure 1.5, panel b). The results suggest that high returns to post-secondary or tertiary education are the most significant driver of inequality across the region.

**Figure 1.5. Decomposition of inequality by individual and household characteristics**



Source: World Bank calculations based on household survey data (per capita measures of welfare).

Note: Wave 1 corresponds to survey years 2001–10 (2000s); Wave 2 corresponds to 2015–18 (circa 2016).

**Although the contribution of post-secondary educational attainment to overall inequality has declined, it remains large.** The two most unequal countries in the region saw these contributions fall from 60 percent of overall inequality in 2008 to 57 percent in 2018 for South Africa and from 56 percent in 2004 to 45 percent in 2015 for Namibia (Figure 1.6, panels d and e). In Botswana, where inequality declined significantly, the already small contribution of educational differences to inequality declined further from 2010 to 2015. In Lesotho, where inequality also decreased, however, the contribution of education to inequality increased substantially from 2002 to 2017. In both cases, the changes were driven by the role of post-secondary education. Tertiary education among adults in Botswana increased from 16 percent in 2010 to 21 percent in 2015, which may have helped reduce the contribution of post-secondary education to inequality. By contrast, tertiary education remained extremely low in Lesotho. Overall, inequality in access to tertiary or post-secondary education remains a key barrier to reducing inequality in SACU. In all countries (except Lesotho),

however, the contribution of post-secondary education to inequality (and with that, the contribution of education as a whole) has fallen over time. This could be related to the significant increase in tertiary education in the region (except for Eswatini and Lesotho).

**Labor market factors are the second largest contributor to inequality;** their role increased because of the large divide between employed people and those who are not working. Differences in labor market factors (labor force status or participation, industry of employment, and occupation type) contribute nearly a third of overall inequality in SACU, increasing from 28 percent in the 2000s to 35 percent in 2015–18 (Figure 1.5, panel a). This increase is driven by differences in occupation type (such as senior managers, professionals, and clerks), which suggests differences in skills or abilities. Occupational differences continue to account for the largest share of total inequality, at over 20 percent, and worsen the inequality-inducing effects of high returns to post-secondary education. The contribution to total inequality of differences in labor force status or participation (employed, unemployed, or inactive)

increased from 5 percent in the 2000s to 12 percent in 2015–18. This means that the contribution of labor market factors to inequality is primarily a result of differences in “what work people do,” although the importance of “whether people work or not” has increased over time. The “industry in which people work” does not seem to affect inequality significantly (Figure 1.5, panel b).

**The contribution of labor market access to total inequality has increased in most SACU countries,** except Eswatini, where it declined slightly (Figure 1.6, panel b). The increase was largest in Botswana and Lesotho. This change appears to be driven by increases in the contributions to inequality of both labor market status (or participation) and occupational differences.

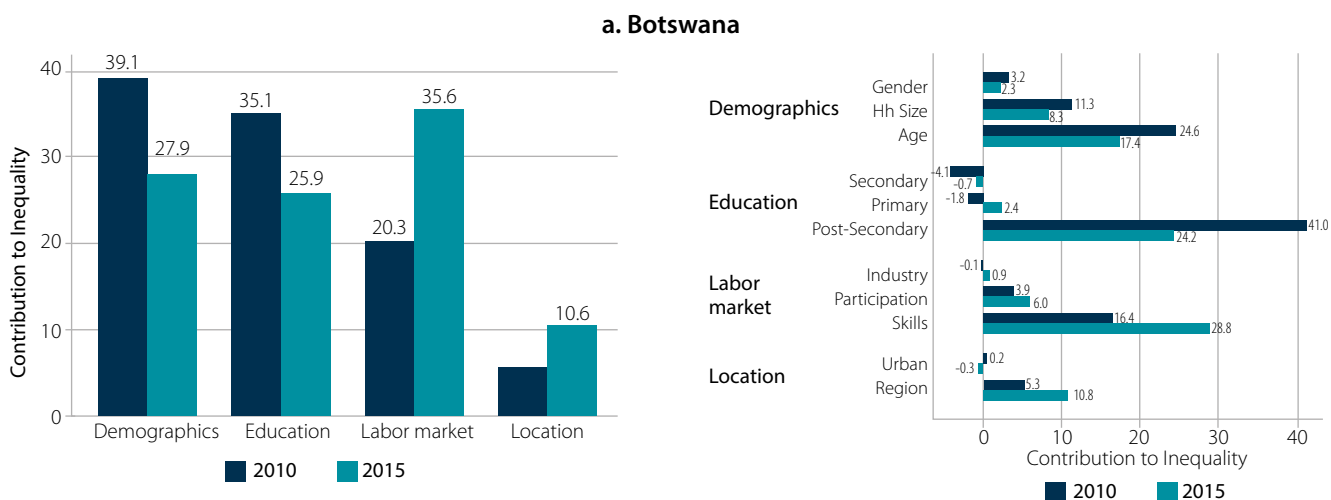
**The role of household demographics in inequality has increased.** The aggregate contribution of household demographics to overall inequality increased from 10 percent in the 2000s to 15 percent in 2015–18. This is largely because the age (and, to a smaller extent, gender) of household members plays a growing role in determining overall inequality in the region (Figure 1.5, panels a and b).

This points to a widening welfare gap between households with younger and economically active members and those without that “demographic dividend”. The contribution of differences in household size, on the other hand, decreased during this period. To some extent this reflects convergence in household size: in all SACU countries, household sizes declined over time.

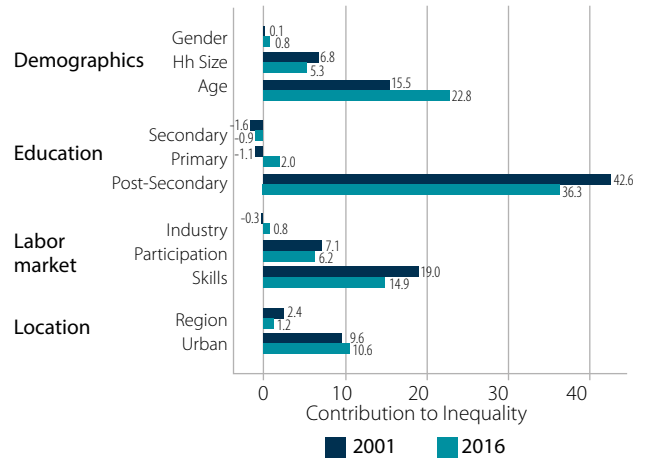
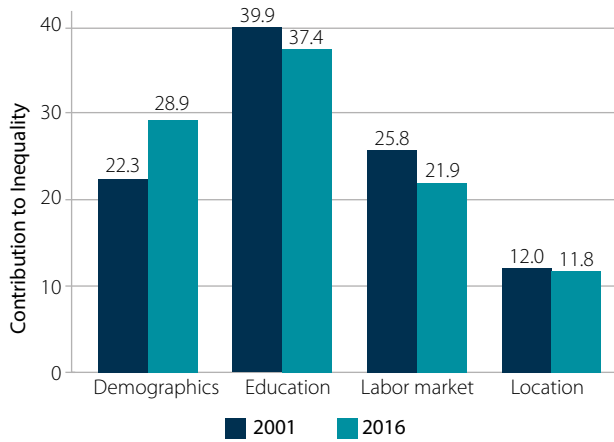
**By contrast, location has become less important.** Differences in location account for a smaller share of total inequality, declining from 11 percent during the 2000s to 7 percent in 2015–18. This is largely due to the convergence of urban-rural inequality noted earlier (Figure 1.3, panel d). Regional (or provincial) differences now contribute almost as much to total inequality as do urban-rural differences (Figure 1.5, panels a and b).

**The contribution of household demographics and location to inequality varies widely across countries.** The role of household demographics increased across all SACU countries, other than Botswana and Lesotho; this was mainly, as noted, because of the growing contribution of the age of household members to inequality.

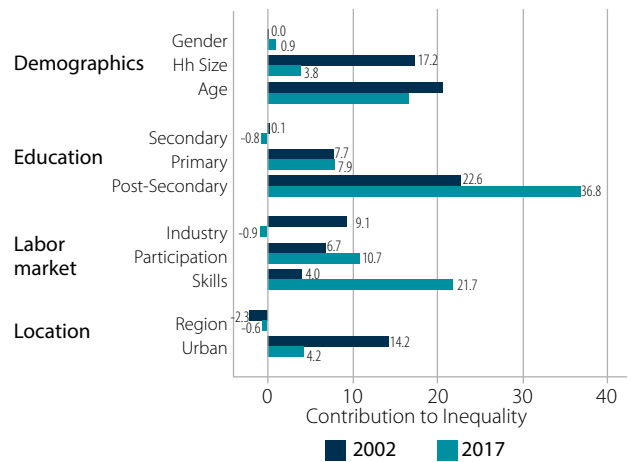
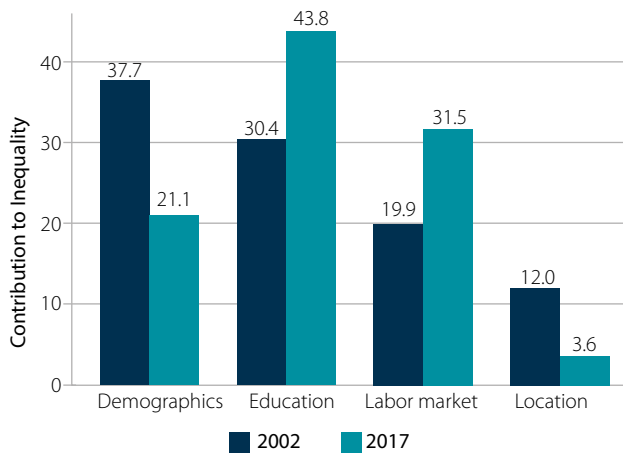
**Figure 1.6. Decomposition of inequality in individual SACU countries**



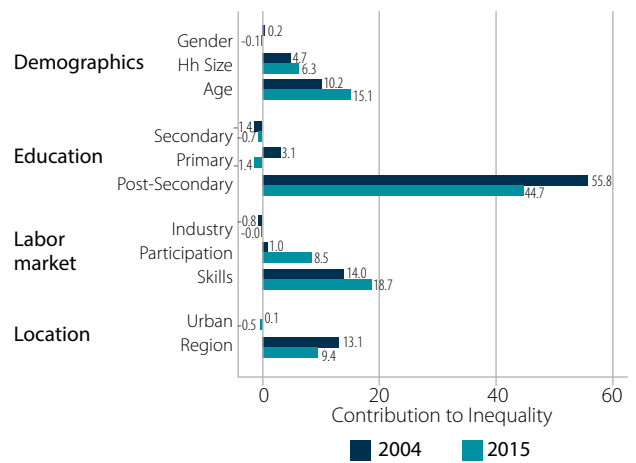
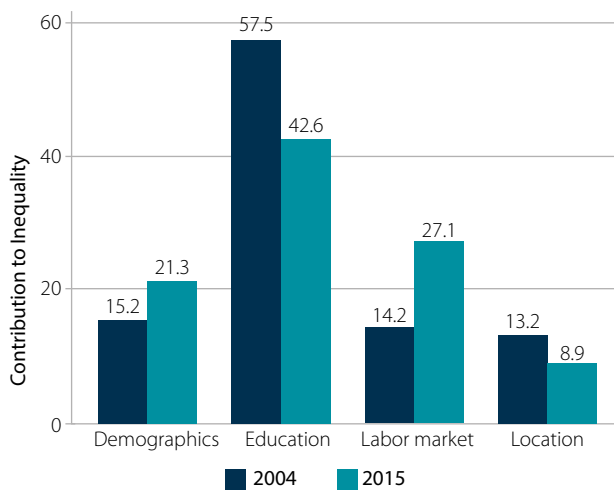
### b. Eswatini



### c. Lesotho

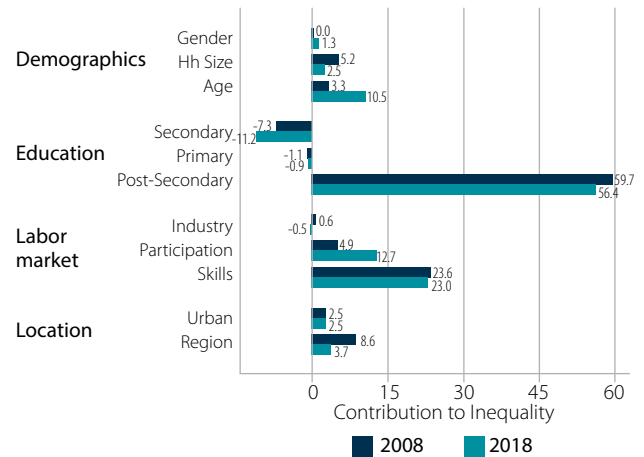
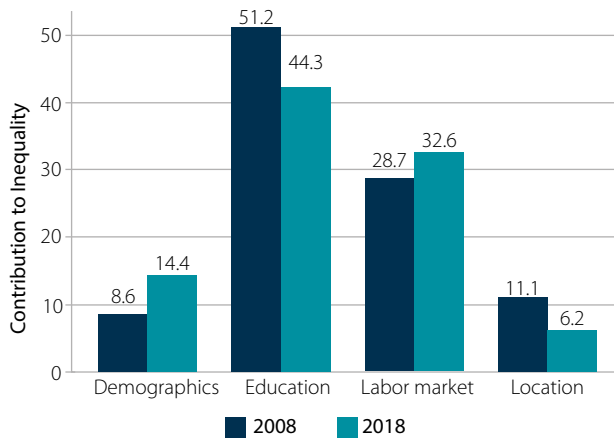


### d. Namibia





### e. South Africa



Source: World Bank calculations based on household survey data.

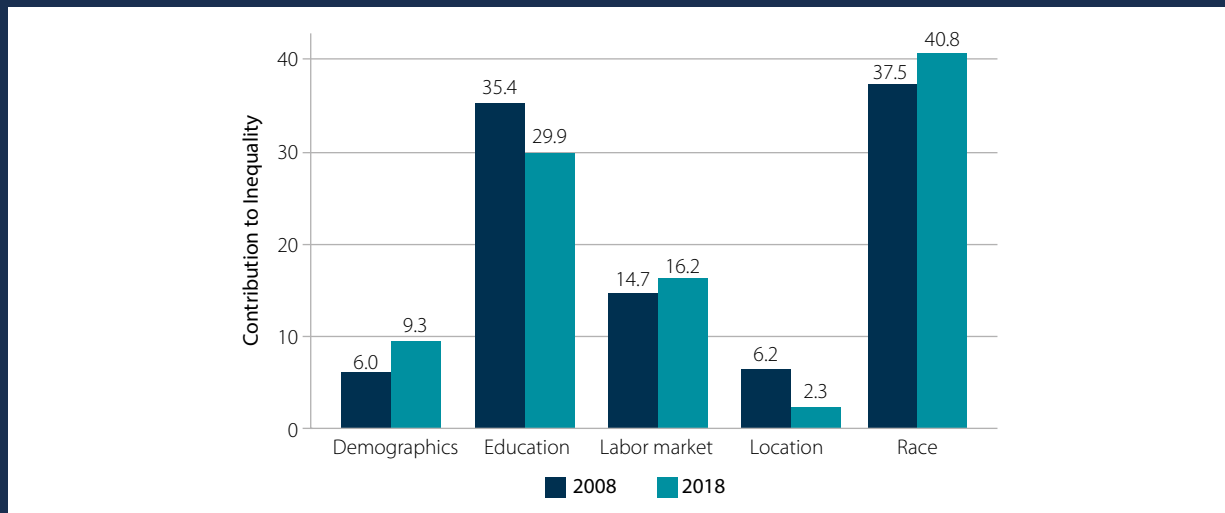
A lack of data means the role of race cannot be analyzed except for South Africa, where it contributes significantly to overall inequality. In both 2008 and 2018, race was the largest contributor to inequality in South Africa, with its contribution rising over time. Much of its

influence is through the labor market and education (Box 1.3). In other words, race remains a key driver of South Africa’s high inequality of opportunity, largely because of its influence on the education and labor market pathways to better outcomes.

### Box 1.3. Race and inequality in South Africa

Racial differences were the largest contributor to income inequality in South Africa in 2008, with a share of 38 percent, as against 35 percent for educational attainment and 15 percent for labor market factors. The share of race increased to 41 percent by 2018, whereas that of education fell to 30 percent; the role of labor market factors increased slightly (Figure B1.3.1). The influence of race on inequality appears to be channeled through all four dimensions—labor markets, education, household demographics, and location—as all their contributions decline when race is included in the decomposition (compare Figure B1.3.1 with Figure 1.6). The largest declines occur for education and labor markets, confirming that race plays a key role in their contributions to inequality.

Figure B1.3.1. Decomposition of inequality and race in South Africa



Source: World Bank calculations based on household survey data.

The significant contribution of race to inequality appears consistent with inequality of opportunity in South Africa. Inherited circumstances, including education, occupation, and the race of fathers, explain a significant share of the country's earnings inequality (Piraino 2015). The same study also estimates low intergenerational mobility in earnings. This is partly explained by differences in earnings by race, because of the persistent concentration of the white minority at the top end of the earnings distribution. In the United States, the continued presence of African Americans at the lower end of the income distribution has an analogous effect (Hertz 2008). The persistence of these inequalities across generations, even as incomes rise for everyone, seems to suggest "inequality traps" (Bourguignon and others 2007), in which "the various dimensions of inequality (in wealth, power and social status) interact to protect the rich from downward mobility and to prevent the poor from upward mobility" (Rao 2006, 11).

Apart from race, parental education, and location (whether an individual resides in developed urban areas, urban townships, or rural parts of the country) are key contributors to inequality of opportunity in multiple dimensions, such as primary school completion rates and access to improved sanitation, safe water, and health insurance. The location of workers, in fact, has the largest impact on the likelihood of full-time employment, particularly among younger workers, after controlling for other factors, including race (Im and others 2012).

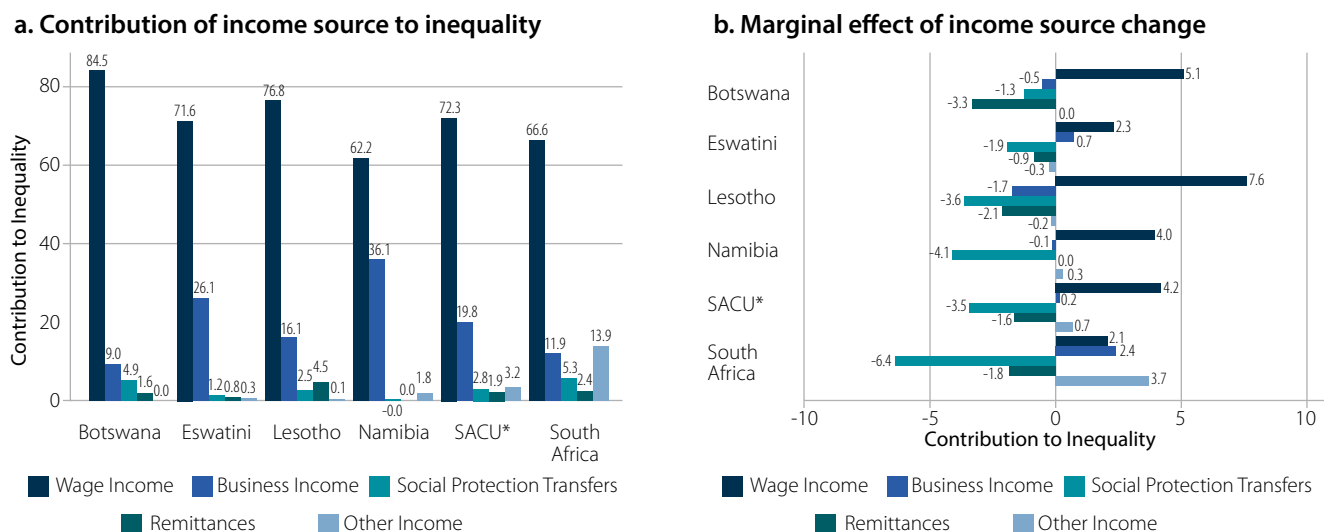
### 1.4.2 Differences in income sources

**Different sources of income affect inequality in dissimilar ways in SACU.** A different decomposition technique is used to calculate the shares and impact on overall inequality of a marginal change in each income source. The income sources considered are wage or labor incomes, business income (profits and agricultural income), social transfers (such as social protection benefits, pensions, and other government grants), remittances (including gifts), and other income sources.<sup>12</sup>

**Wage inequality is the main driver of inequality in the region, explaining 72 percent of overall inequality on average,** according to the latest surveys in member

countries (Figure 1.7, panel a). The impact of a marginal change in wage income on inequality is positive in all member countries, with an average of 4.2 percent (Figure 1.7, panel b). These findings are consistent with the large contributions of labor market status to inequality discussed above. Like wage income, business income (profits and agricultural income) is an important driver of inequality, contributing about 20 percent to overall inequality. However, the impact of a marginal change in business income on inequality is smaller than the impact of a change in wage income.

**Figure 1.7. Decomposition of inequality by income source, 2015–18**



Source: World Bank calculations based on household survey data (Wave 2 or survey years 2015–18).

<sup>12</sup> Rental income is excluded from this analysis because of a lack of data for some member countries.

**Closing wage gaps has the most significant effect on inequality in Botswana and Lesotho, which saw the largest declines in inequality.** Differences in wage income accounted for 77 percent of inequality in Lesotho in 2017 and 85 percent in Botswana in 2015, above the regional average of 72 percent. A marginal change in wage income is estimated to change the Gini coefficient by almost 8 percent in Lesotho and by 5 percent in Botswana. This suggests that inequality declined in these two countries in part because of smaller wage gaps. Social protection transfers and remittances also helped reduce inequality, with the impact of remittances on inequality in Botswana being the highest among all SACU countries.

**Social transfers have the largest effect on inequality in Namibia and South Africa.** The marginal effect of social transfers on inequality, measured by Gini coefficients, amounts to reductions of 6.4 percent in South Africa (2018)

and 4.1 percent in Namibia (2015), well above the regional average of 3.5 percent. Wage income also contributes significantly to inequality, at 67 percent for South Africa (2018) and 62 percent for Namibia (2015), both slightly below the regional average.

**Making economic development more inclusive in SACU by reducing inequality would require policies that moderate differences in wage and business incomes.** These differences in “market incomes” stem from a combination of individual, household, locational, and labor market factors. As the decompositions in Figure 1.7 show, existing social transfers (and to some degree, remittances) have an equalizing effect on incomes in all SACU countries. However, this effect is small relative to the disparities caused by differences in wages and business income.

## 1.5 A framework for analyzing income inequality

**The distribution of household income in an economy can be understood as the outcome of four different distributional components.** Interpreting income inequality in these terms is useful from a policy perspective, as the drivers of inequality can be identified at different points of the process. This framework is based on Van der Hoeven (2011)<sup>13</sup> but with an additional component (pre-income distribution) added because many inequalities in southern Africa arise even before individuals interact with markets. These inequalities, effectively inequalities of opportunity, merit explicit attention since they matter not just for human capital development but also for economic opportunities, such as access to jobs, finance, and markets. The four components are as follows:

- *Pre-income distribution* is the expected distribution of income attributable solely to circumstances inherited at birth or acquired exogenously during childhood, such as parental education and income, location, ethnicity, and gender. Differences in these characteristics create expected inequality, or inequality of opportunity, even before households and individuals interact with factor markets.
- *Primary income distribution* is the distribution of income based on the different factor incomes, before taxes and subsidies, as determined by market institution factor endowments. It is also influenced by the pre-income distribution (as above) and people’s decisions in different spheres, such as making human capital investments, acquiring skills, participating in markets, and so on.

- *Secondary income distribution* is the distribution of income after taxes and government transfer payments have been deducted from or added to primary incomes. This distribution is determined by the distribution of primary income and the incidence of fiscal policy.
- *Tertiary income distribution* is the distribution of income after imputed benefits from social spending in the form of public goods (such as education, health, and infrastructure services) have been added to household income after taxes and subsidies. It is determined by the distribution of secondary income and the net value of the public goods provided through social spending.

**The decomposition results above highlight the roles of the different distributional components in SACU.** Differences in demographic and locational characteristics contribute to income inequality (Figure 1.5) through all four components, but probably mainly via the pre-income distribution. The contributions of education and the labor markets, which are the highest on average, are likely to occur mainly through the primary income distribution. Social protection transfers (Figure 1.7), on the other hand, work primarily through the secondary income distribution. The decompositions do not include the imputed contributions of social spending and, therefore, do not offer direct insights into the tertiary income distribution.

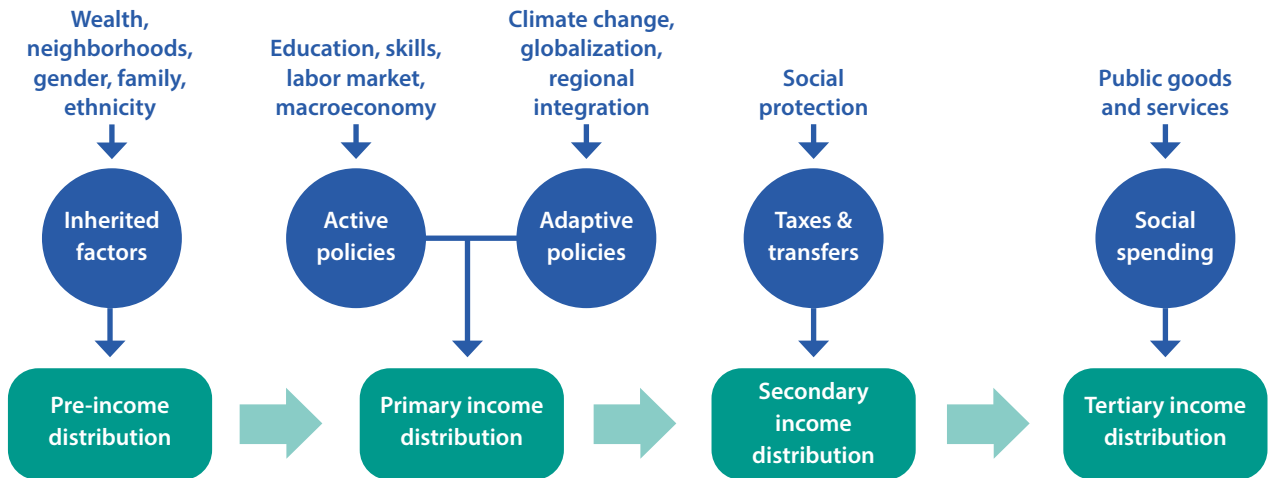
**The distributional components are also influenced by mediating factors that interact with each other.** These can be categorized as: (a) *inherited factors*, such as the circumstances into which a child is born; (b) *active public policies*, which interact with personal choices,

13 Also used in Seguino and others (2013).

institutions that influence the functioning of markets, and the macroeconomy; (c) *adaptive public policies*, which influence or mitigate the impact of exogenous conditions, such as climate change, globalization, and trade; (d) *taxes*

and transfers, which contribute to social protection and finance social spending; and (e) *social spending*, which produces public goods and services. Figure 1.8 depicts the four distributional components and their mediating factors.

**Figure 1.8. A conceptual framework of the components of income distribution**



**There are strong and reinforcing interactions across these components.** For example, fiscal policy directly affects the secondary income distribution, but it also generates resources for policy interventions that influence all distributional components. In addition to its direct impact on individual tertiary income distribution (or well-being), social spending on health, education, and other services also influences the pre-income distribution. Improving the tertiary income distribution potentially implies improving the pre-income distribution, but only if the spending reduces gaps in human capital development between privileged and disadvantaged people.

**Starting with pre-income distribution reflects the idea that policies should help minimize inequalities that emerge early in life.** These are driven by differences in circumstances at birth and childhood, even before people interact with markets, pay taxes, or benefit from social spending. Pre-income distribution helps determine the level of each person's human capital, a key factor in the distribution of primary income. Box 1.4 provides an intuitive representation of how household endowments interact with market factors and exogenous (or external) shocks to generate the distribution of primary income.

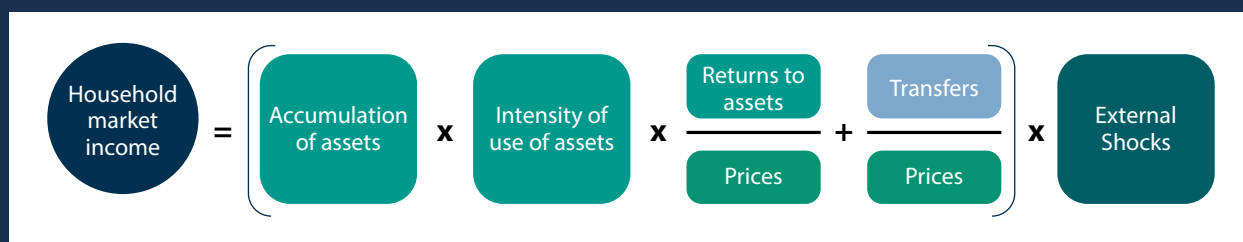
**This chapter described a region with stubbornly high inequalities of opportunity and outcomes, which reinforce each other and persist over time.** Although inequality remains unacceptably high, particularly in South Africa and Namibia, some signs of improvement emerged between the 2000s and the 2010s. There was a degree of convergence in inequality between countries and between urban and rural areas within countries, along with large reductions in inequality within Botswana and Lesotho. Differences in educational attainment, specifically in post-secondary education, remain the most significant contributor to inequality in the region. At the same time, labor market inequalities seem to play an increasing role, with occupational differences (“what work people do”) being the main contributor. Although social transfers help to reduce inequality in most countries, these payments are too small to close the gaps stemming from high disparities in wage and business incomes, which are largely due to inequality in human capital development and job opportunities. Even after transfers, income inequality in SACU countries remains among the highest in the world. Improving the effectiveness of social transfers would strengthen their effect on inequality but cannot substitute for the changes needed in other policies and institutions to moderate extreme differences in market incomes.

## Box 1.4. How the primary income distribution is generated

A household's potential market income (or secondary income in Figure 1.8) can be defined as a function of four main elements: (a) the capacity of households to generate income based on *assets* they own; (b) the *transfers* they receive, independent of such assets; (c) the *prices* of the goods and services they consume; and (d) external *shocks* that affect their incomes. Figure B1.4.1 illustrates the interaction between these elements.

An asset-based approach provides an intuitive interpretation of the processes underlying the distribution of primary income in Figure 1.8 (or element (a) above). The capacity of a household to generate primary income can be disaggregated into: (a) the *stock of income-earning assets* owned by each household member; (b) the intensity with which these assets are *utilized to produce income*; and (c) and the *returns* on these assets. Income-earning assets include human capital, enhanced by education and experience; financial and physical assets, such as machinery, bonds, and stocks; social capital, such as the norms and social networks that facilitate collective action; and natural capital. Indicators of the intensity of asset use include labor force participation, the utilization of machinery, and the use of land for agriculture. Returns to household assets are determined by wage levels, interest rates, rents from property rentals, prices of land, and any time devoted to collective action.

**Figure B1.4.1. Assets approach to market income**



Source: From López-Calva and Rodríguez-Castelán 2016, based on Attanasio and Székely 1999, and Bussolo and López-Calva 2014.





## CHAPTER 2

### THE ROLE OF INHERITED CIRCUMSTANCES

*Most people in SACU are unlikely to achieve economic and social “success” because of circumstances beyond their control, such as their gender, race, where they were born, or their family backgrounds. This implies high inequality of opportunity. Although the region has made important gains in advancing gender parity, for example, systematic differences between men and women remain and contribute to overall inequality. The geography of economic inequality likewise persists. The spatial patterns of people’s income are likely to be correlated with spatial patterns of economic resources and opportunities. The SACU region effectively has two spatial clusters. The first, to the west, comprises high-welfare subregions and the second, to the east, low-welfare ones. Although the levels of welfare in the subregions are converging, the pace of convergence has been slow. One pathway by which inequality of opportunity hampers intergenerational mobility is through high wealth inequality and its skewed transfers of wealth from one generation to the next. Thus, high wealth inequality is associated with high income inequality. This is exacerbated by the small size of the middle class, which constrains economic mobility and entrenches socio-economic immobility. The contribution of inequality of opportunity to overall inequality in the region has increased, further perpetuating socio-economic immobility and inequality. To help equalize opportunities, policies are needed to minimize the inequalities that emerge early in life and are driven by differences in individual circumstances at birth and during childhood. This would help level the playing field and reduce the influence of inherited circumstances on people’s life chances.*

#### 2.1 Inequality of opportunity

**Children do not all start life with the same set of chances.** Consider Nthabiseng, a 7-year-old girl living in the rural Senqu River Valley in Lesotho. She is the youngest of four children and lives with her widowed mother, who completed only three years of formal schooling. The family’s only source of income is a small life insurance policy that Nthabiseng’s late father acquired as part of his employment at a South African mine. James is a 7-year-old only child living in the leafy suburb of Northcliff in Johannesburg,

South Africa. His white parents both have university degrees and work in financial services. The chances of Nthabiseng becoming a bank manager or information technology specialist are remote and certainly much lower than those of James, who began life in relative privilege. Like Nthabiseng, many people in SACU face unlikely odds of economic and social success because of circumstances beyond their control, such as their gender, race, where they were born, or their family backgrounds.

**Inequality of opportunity** is defined as the component of inequality attributable to differences in inherited circumstances beyond the control of the individual, such as gender, race, place of birth, or parental background.

The circumstances a person inherits at birth interact with policies, markets, and institutions in shaping the opportunities available to them at various stages of life. These differences in inherited circumstances and their influence on people’s access to opportunities result in high inequality of opportunity. This systematically creates unfair differences in starting points for specific groups and amplifies the inequality of earnings and incomes. In the above example, Nthabiseng and James are separated by an unequal start in life, which also means they will face systematically unfair differences in opportunities throughout their adult lives.

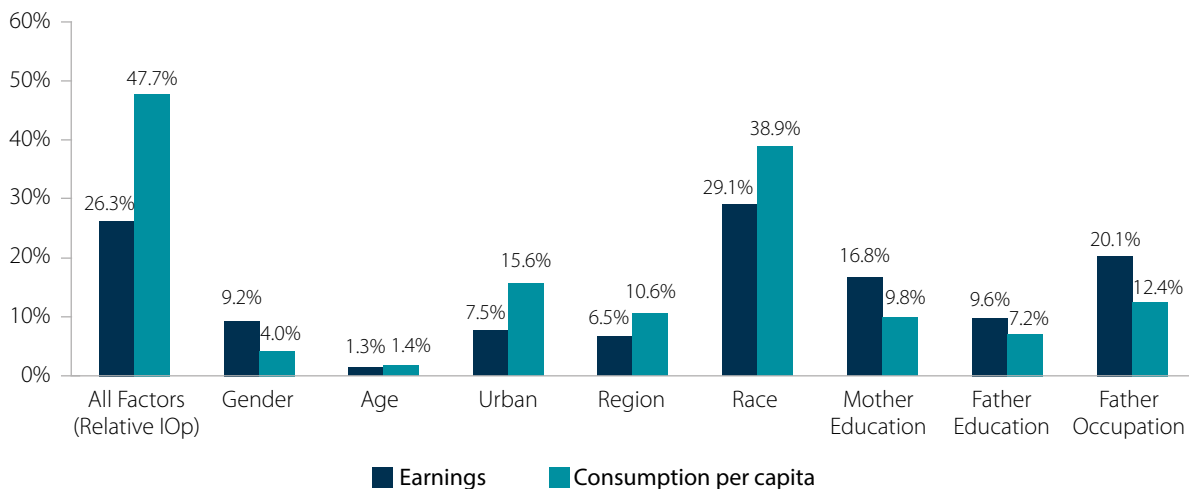
This section of the report reviews the contribution of inherited circumstances to overall inequality of outcomes, analyzing the extent and sources of inequality of opportunity. Data constraints for most countries mean the results presented here are lower-bound estimates.

South Africa, which is home to 88 percent of the region’s population, has more comprehensive data on inherited circumstances; these are used to suggest upper-bound estimates of inequality of opportunity for the overall region.

### 2.1.1 High inequality of opportunity

**Inherited circumstances account for almost half of overall inequality in South Africa.** Data on race and parental attributes suggest that inequality of opportunity explains as much as 47.7 percent of overall inequality in consumption per capita in the country (Figure 2.1). An earlier study found inequality of opportunity to contribute around 45 percent to overall inequality (World Bank 2018a). Even relative to other highly unequal upper-middle-income countries, such as Brazil and Colombia, inequality of opportunity in South Africa is exceptional, both in absolute terms and as a share of total inequality. Breaking this cycle would require the country to equalize opportunities and to reduce the disadvantages people face because of their circumstances at birth. Finally, the contribution of these circumstances to inequality in individual earnings reaches 26.3 percent, lower than that of consumption per capita but still relatively high.

**Figure 2.1. Relative inequality of opportunity in South Africa, 2018**



Source: World Bank calculations based on household survey data.

**Lower-bound estimates of inequality of opportunity suggest that at least one-fifth of inequality in SACU is explained by inherited circumstances.** Data constraints meant this analysis could only consider gender, age, and region of residence (urban-rural, and regions/provinces). Only in Lesotho is the role of inequality of opportunity relatively small, at 14.7 percent of overall inequality in

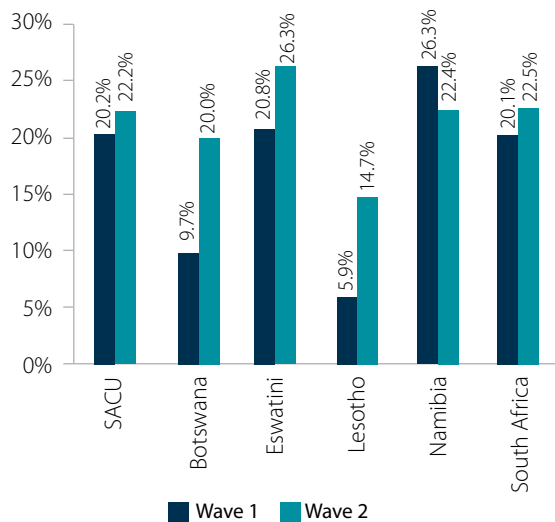
per capita consumption in 2017 (Figure 2.2, panel a). The contribution of inequality of opportunity to overall inequality increased in all SACU countries except for Namibia. Using individual earnings as an outcome, Figure 2.2, panel b shows that the contribution of inequality of opportunity to overall inequality tends to be lower than that of per capita consumption. Given the high poverty

rates in the region, this finding suggests that the impact of inequality of **opportunity** on the relationship between growth and inequality of outcomes needs more attention. When inequality of opportunity is high, economic growth

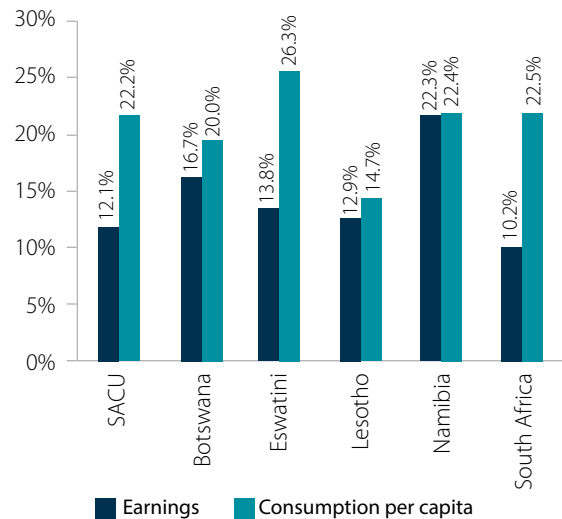
is less likely to help reduce inequality of outcomes. Instead, unequal outcomes tend to become entrenched; this both limits the investment opportunities available to poor people and hampers long-term growth.

**Figure 2.2. Contribution of inequality of opportunity to overall inequality**

**a. Contribution to overall inequality in consumption per capita**



**b. Contribution to overall inequality in consumption per capita versus earnings**



Source: World Bank calculations based on household survey data.

Note: Outcomes are log of consumption per capita and individual earnings, both deflated to 2011 prices using PPP. SACU includes all countries pooled and appropriately weighted. Circumstances include gender, age, rural/urban areas, and place of birth (proxied by current location). Wave 1 represents data from 2001 for Eswatini, 2002 for Lesotho, 2004 for Namibia, 2008 for South Africa, and 2010 for Botswana. Wave 2 provides data from 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa. Panel b uses data from 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa.

**Geography or location is a key determinant of access to opportunities.** Decomposing the contribution of inequality of opportunity to overall inequality shows that relative to age and gender, the location of residence (both urban-rural and regions/provinces) contributes relatively more to inequality in both consumption per capita and earnings (Figure 2.3).

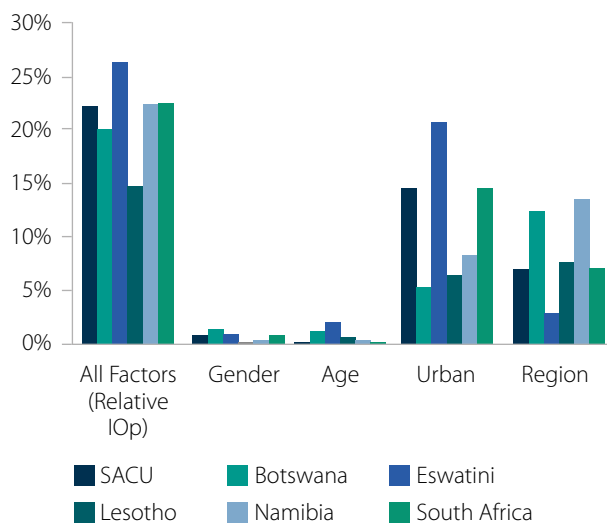
**The contribution of gender inequality to overall inequality in earnings suggests that the inequalities faced by girls and women start at birth and follow them throughout their lives.** Figure 2.3 shows that gender

makes a significant contribution to overall inequality when individual-level earnings are considered. The relatively low contribution of gender to overall inequality might be in part because consumption is averaged across all household members and not measured at the individual level. Since households typically include both males and females, the role of gender is difficult to interpret. In fact, gender is largely omitted from studies where the outcome variable is at the household level (Paes de Barros and others 2009, 136).

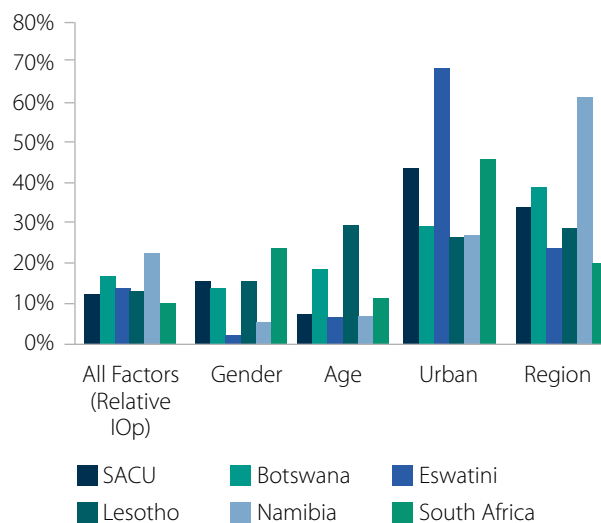


**Figure 2.3. Contribution of each circumstance to overall inequality of opportunity**

**a. Contribution to unequal consumption per capita**



**b. Contribution to unequal earnings**



Source: World Bank calculations based on household survey data.

Note: The shares are computed by decomposing the overall inequality opportunity using the Shapley approach. Data are 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa.

**Important gains have been made in advancing the structures for gender equality.**

In all five SACU countries, progressive legislation has been enacted to guarantee equality before the law, with gender and development strategies set in place and national institutions charged with implementation (Box 2.1). The region has made measurable advancements toward gender parity in education, labor force participation, and employment. However, women remain less likely to be employed, have less ownership of and control over assets, and tend to work in lower-paying, less secure sectors. Certain structural and societal barriers continue to marginalize women, which deprives the economy of the full contributions of almost half the population and prevents it from reaching its true potential.

**If race, a critical variable in South Africa, is included in the analysis, the contribution of inequality of opportunity is much higher.**

As noted, the estimates of inequality of opportunity in Figure 2.2 are lower-bound figures, given the limited availability of data on other SACU countries. With race included in the analysis, the share of inequality of opportunity in overall inequality increases from 22.5 percent to 47.7 percent for consumption per capita and from 10.22 percent to 26.3 percent for earnings. The significant contribution of race is consistent with Piraino (2015), who finds that more than two decades into democracy, race remains the most relevant factor in inequality of opportunity in South Africa.

## Box 2.1. The legal framework for gender equality in the SACU region

SACU has made significant strides in creating an *enabling legal framework* for gender equality. This is important, as the dual legal systems in the region can entrench discrimination against women. Namibia and South Africa have strong legislative frameworks for gender equality, ranking among the top three countries in Africa (alongside Rwanda) on the 2015 Gender Equality Index of the African Development Bank. In these countries, women and men have the same rights. In Botswana, the constitution was amended to prohibit sex-based discrimination, and several other laws were amended to recognize women as equal before the law (such as the 2014 Married Persons Act and the 2004 Abolition of Marital Powers Act). In Lesotho, the Legal Capacity of Married Persons Act gives men and women equal standing before the law, the 2010 Land Act provides equal access to land tenure and decisions on household property, and the 2005 Local Government Elections Act sets quotas for women's political representation.

*Gender-based violence* remains widespread, and several countries have passed laws to address this problem. Botswana passed a law against domestic violence in 2000 and amended it in 2008 to enhance enforcement. It revised the penal code to make rape a gender-neutral offence and criminalize sexual acts between adults and children under 16. It also adopted the National Strategy on Gender-Based Violence (2015–20). Eswatini's 2018 Sexual Offences and Domestic Violence Act criminalizes several acts of sexual violence and introduces an obligation on police and prosecutors to refer victims to support services, while requiring the latter to inform victims of the availability of post-exposure prophylaxis for human immunodeficiency virus (HIV). It also prohibits child marriages. The regulations and implementation mechanisms of the Act are, however, still being developed. Lesotho's draft Domestic Violence Bill has been under consideration since 2000. The 2003 Sexual Offences Act allows some protection against gender-based violence. In Namibia, the 2016 National Plan of Action on Gender-Based Violence guides efforts to reduce violence against women. South Africa enacted several laws, including the 1998 Domestic Violence Act, the 2007 Criminal Law (Sexual Offences and Related Matters Amendment) Act, the 2013 Prevention and Combating of Trafficking in Persons Act, and the 2011 Protection from Harassment Act. In 2020, Cabinet adopted a National Strategic Plan on Gender-Based Violence and Femicide for the next decade, which includes establishing a National Council on Gender-Based Violence.

The overall policy environment reflects *gender equality as a key policy priority*. Botswana's 2015 National Policy on Gender and Development expanded efforts to address norms of male supremacy and discrimination. It also acceded to most international protocols and agreements on gender equality. Eswatini's 2010 Gender Policy proposes guidelines, indicators, and a framework for gender equity. However, the policy remains under revision and is awaiting Cabinet approval. Lesotho's 2018 Gender and Development Policy provides an overarching framework for gender inclusion, setting goals for women's equal economic and political participation. South Africa has an extensive architecture for gender mainstreaming, including the Commission for Gender Equality.

Despite such progress, many *gaps remain*. For example, Eswatini's 2005 Constitution does not explicitly prohibit discrimination based on sex or marital status, and women married under customary law can still be excluded from its protections. Women's subordinate status remains enshrined in both civil law and customary practices, especially those governing marriage and inheritance. Customary law regards women as legal dependents of their husbands or next-of-kin males in virtually all matters. Even under civil marriages, unless both spouses sign an explicit prenuptial contract, women require their husband's consent for most legal or political activities, from custody of their children and divorce to employment, land ownership, inheritance, and access to finance (SALC 2018; Freedom House 2019). Lesotho has policies and bills on gender equality but lacks a strategy to incorporate changes at local level. Contradictions between customary and common law remain unaddressed, allowing exclusion from access to land and inheritance despite the equity required by law. Key institutions lack resources—the Department of Gender received less than 1 percent of the national budget over the past five years. In South Africa, the enforcement of laws on gender equality has been plagued by implementation challenges, including poor allocation of financial and human resources, backlogs in the criminal justice system, and uneven access to services. Women in South Africa can apply for protection orders against violent domestic partners, but the orders are rarely finalized and do not offer meaningful protection.

## 2.1.2 Uneven and inequitable access to basic services

### The availability and distribution of basic services and resources are key to equalizing opportunities.

Constraints on access to such services perpetuate the lack of both capacities and opportunities for many people. This section uses selected data on access to basic public services to illustrate the likely influence of restricted access to basic services on inequality of opportunity.

### Access to basic services has increased but remains limited in rural areas

**SACU is expanding access to improved water services**—all countries increased the share of people with access to at least basic water services between 2000 and 2017 (Figure 2.4). Eswatini achieved the largest increase at 16.5 percentage points (from 52.5 percent to 69.0 percent), in part because it started from the lowest base. Lesotho saw the smallest increase at 1.2 percentage points (from 67.5 percent to 68.0 percent). The SACU average increased by 9.4 percentage points (from 71.3 percent to 80.6 percent), but the region still lags other countries with similar levels of income. Although the regional average was 19.7 percentage points above the average for Sub-Saharan Africa in 2017, it was 7.7 points below that of lower-middle-income countries and 13.5 points below that of upper-middle-income countries.

**Progress has been driven by gains in urban areas, but coverage in rural areas remains low.** On average, 69.0 percent of SACU's rural population had access to at least basic water services by 2017 (up from 58.6 percent in 2000), which is lower than in countries with similar levels of income. Botswana made the most notable progress, but Lesotho achieved the least (a reduction of only about 5.1 percentage points). Coverage in urban areas is relatively

high, with about 96.4 percent of people having access to at least basic water services in 2017; this is above the averages for Sub-Saharan Africa by 12.3 percentage points and for lower-middle-income countries by 2.4 percentage points.

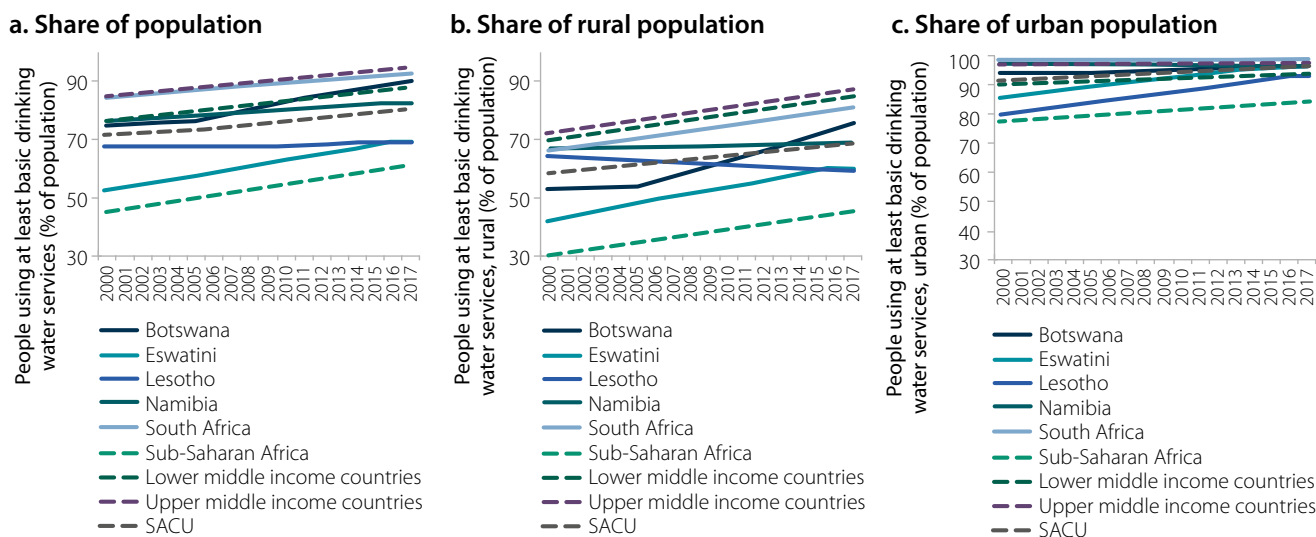
**Access to at least basic water services** means people using basic or safely managed water services. *Basic drinking water services* is defined as drinking water from an improved source, for which collection time is no more than 30 minutes for a round trip. *Improved water sources* include piped water; boreholes, tube wells, or protected dug wells; protected springs; and packaged or delivered water.

**Access to at least basic sanitation services** means people using basic sanitation services (not shared with other households) or safely managed sanitation services. *Improved facilities* include flush/pour flush to piped sewer systems; septic tanks or pit latrines; ventilated improved pit latrines; composting toilets; or pit latrines with slabs.

### At national level, access to sanitation services has increased rapidly in all SACU countries since 2000

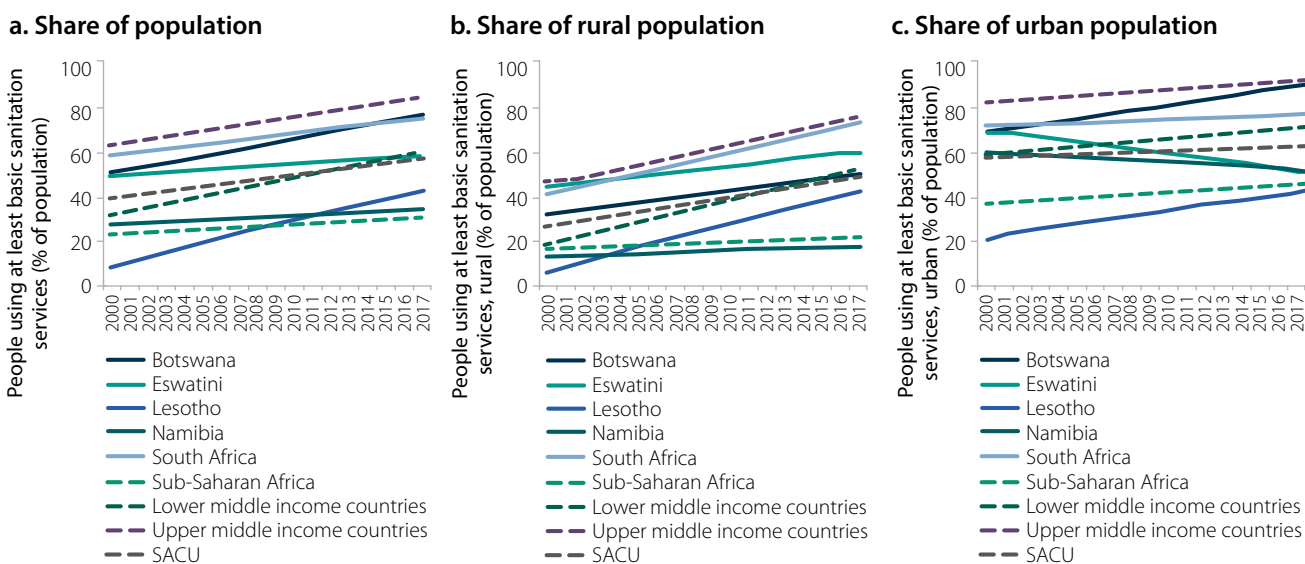
(Figure 2.5). Lesotho achieved the largest increase of 33.9 percentage points (from a low 8.9 percent in 2000 to 42.8 percent in 2017). In its rural areas, the share of people using at least basic sanitation services increased from 5.9 percent to 42.8 percent. This narrowed the gap between rural and urban access rates, with 42.7 percent of the urban population using at least basic sanitation services in 2017. Of concern is the decrease in coverage in the urban areas of Eswatini (17.2 percentage points) and Namibia (7.7 percentage points). On average, 57.7 percent of the SACU population could access at least basic sanitation services in 2017, with coverage at 49.4 percent in rural areas and 62.2 percent in urban areas.

**Figure 2.4. People using at least basic drinking water services**



Source: World Development Indicators database.

**Figure 2.5. People using at least basic sanitation services**

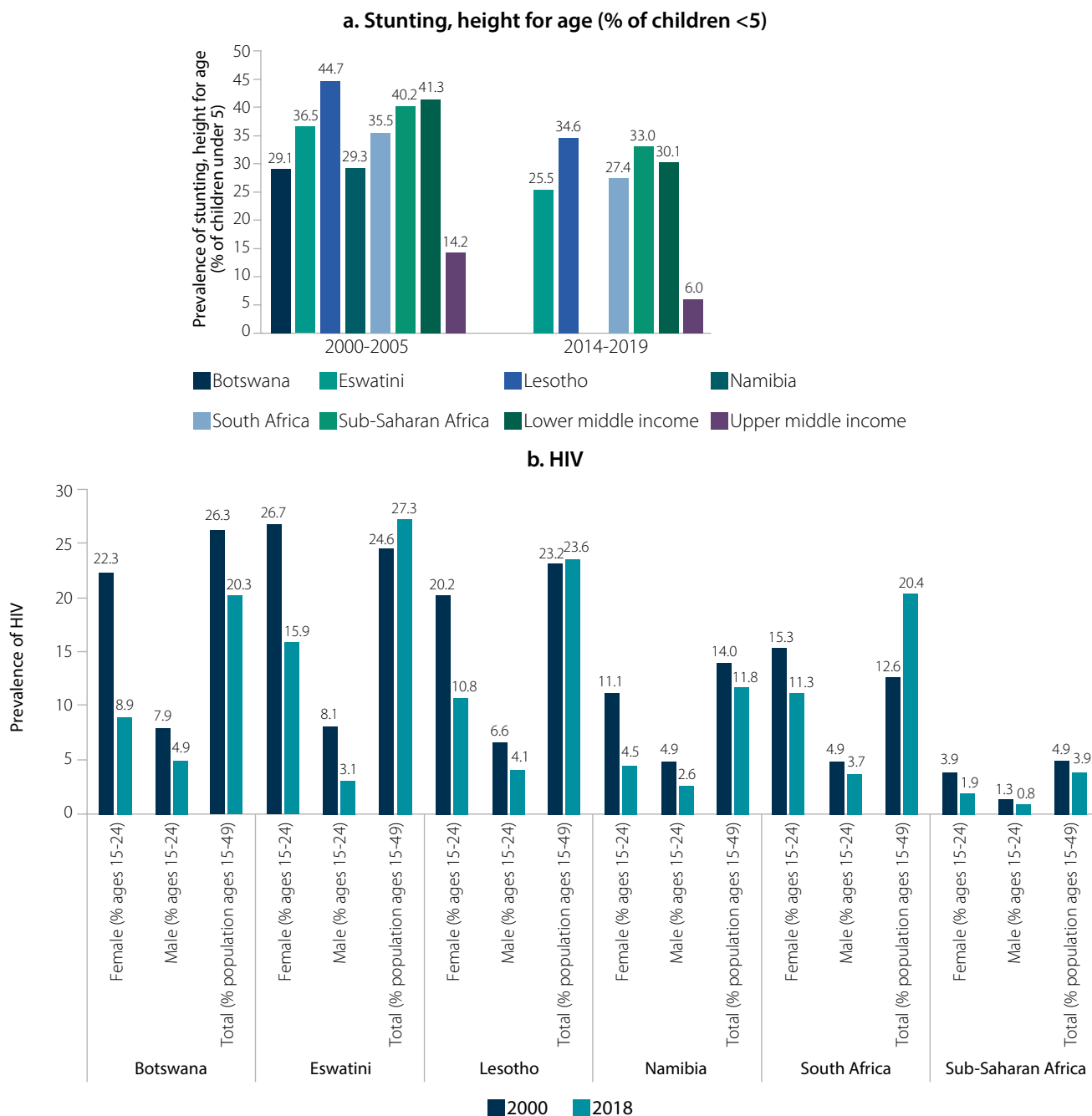


Source: World Development Indicators database.

**Gaps in the provision of water and sanitation services, especially in rural areas, are pathways from access to services to inequality of opportunity,** given the established linkages between water, sanitation, hygiene, nutrition, and stunting. This is particularly pertinent for SACU, where stunting rates are high relative to income levels; they reach 34.6 percent in Lesotho, 25.5 percent in Eswatini, and 27.4 percent in South Africa (Figure 2.6, panel a). Stunting reflects differences in sociodemographic characteristics

that result in unequal access to opportunities. It suggests accumulated malnutrition and damage to psycho-social development (Dercon and Sanchez 2011) and is associated with poor school performance and lower productivity and wages later in life (Glewwe and Miguel 2008). Another source of inequality is high rates of HIV (Figure 2.6, panel b), which is linked with lower average incomes and higher poverty (Haacker and Salinas 2006).

**Figure 2.6. Prevalence of stunting and HIV**

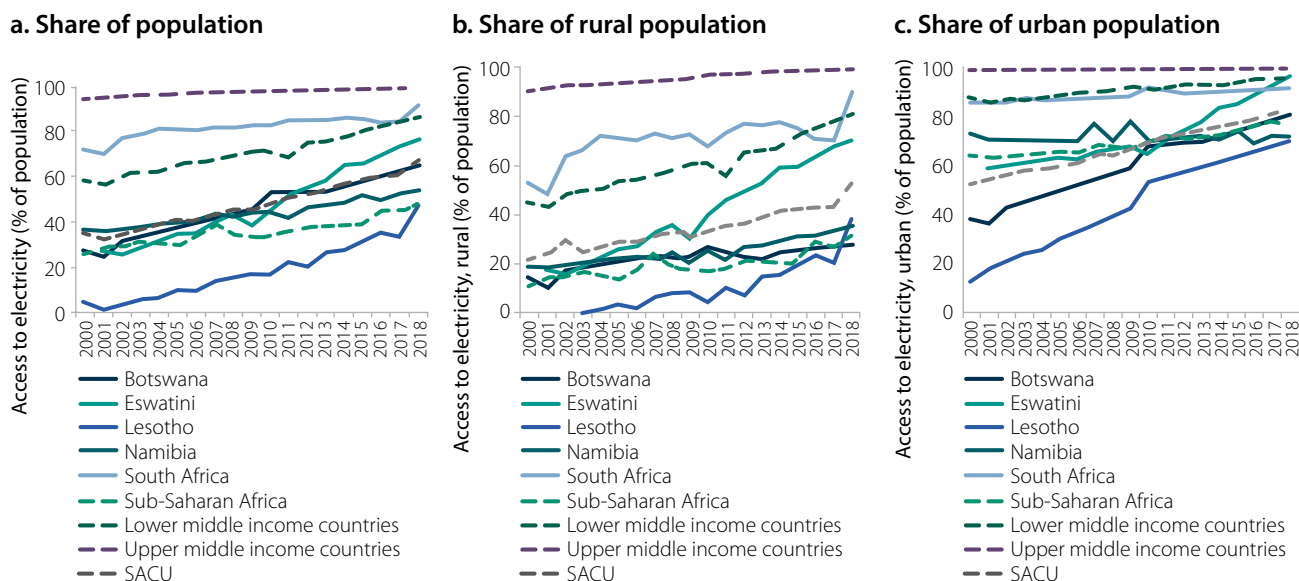


Source: World Development Indicators database.

**Progress in expanding access to electricity has been slow.** In 2018, about 66.7 percent of the SACU population had access to electricity, up from 34.9 percent in 2000. As expected, electrification rates are higher in urban areas (82.6 percent) than in rural ones (52.2 percent). Lesotho has the lowest figures, even after a 42.7 percentage point increase in national access rates (from 4.3 percent in 2000 to 47.0 percent in 2018). Predictably, most of the progress

in Lesotho was in urban areas, where the share of people with access to electricity increased from 13.6 percent to 70.7 percent. In rural areas, the share rose from 2.0 percent to 37.7 percent. For all SACU countries, access to electricity is mostly concentrated in urban areas. A lack of access to electricity hampers the investment climate, adversely affects people’s economic opportunities, and perpetuates inequality of opportunity.

**Figure 2.7. Access to electricity**



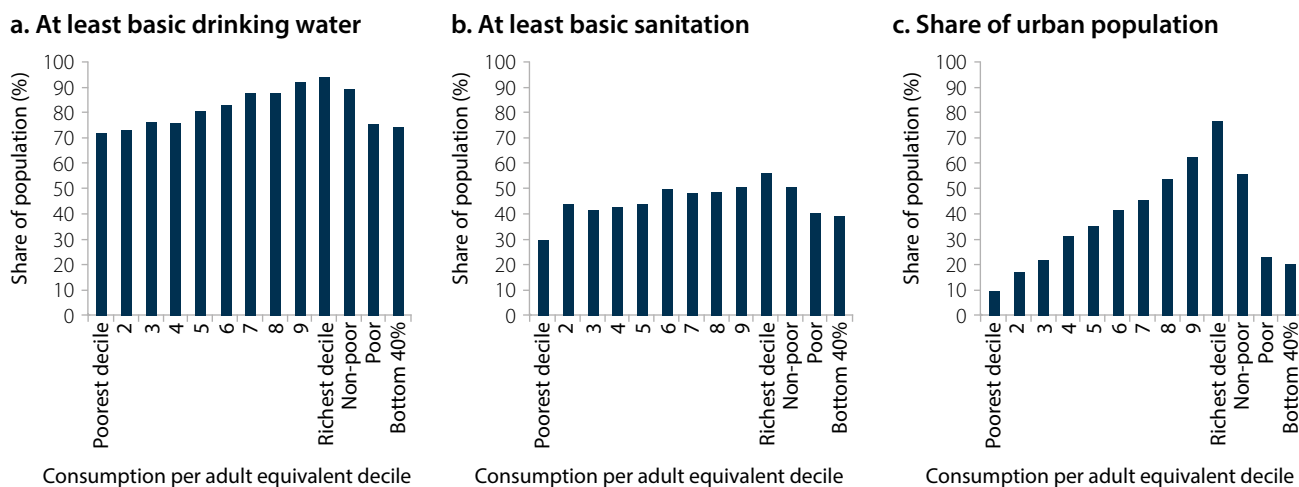
Source: World Development Indicators database.

**Access to basic services is uneven across income groups**

**Poor people in SACU have relatively worse access to basic public services.** Lesotho is a case in point. In 2017, only 72.1 percent of the poorest 10 percent (or decile) of its population had access to an improved water source, 22.1 percentage points lower than the share of the richest 10 percent (Figure 2.8, panel a). Similarly, at 29.2 percent, access to improved sanitation facilities was the lowest among the poorest 10 percent of people. Among the top decile, 55.7 percent had access to improved sanitation facilities. The access gap between poor and rich people is widest for electricity, with only 9.9 percent of the poorest

decile having access to electricity in 2017, as against 78.8 percent of the richest decile. In 2017, the access of the poorest decile to basic services was as follows: improved drinking water 75.5 percent; improved sanitation facilities 39.9 percent; and electricity 23.7 percent. Similar patterns are seen in South Africa, where 54 percent of the poorest decile had access to improved water sources in 2015, 43 percentage points lower than the access of the richest decile. About 98 percent of the richest decile had access to electricity, as against only 78 percent among the poorest decile (World Bank 2018a).

**Figure 2.8. Share of the population with access to selected basic services in Lesotho, 2017**



Source: World Bank 2019a.

**In summary, this section suggests that improving access to quality basic services, especially in rural areas, is vital for reducing inequality of opportunity in SACU.** Poverty is a barrier to access to basic services

### 2.1.3 Low intergenerational mobility

**In societies with low intergenerational mobility, parental backgrounds play key roles in shaping the lives of the next generation.** Mobility is closely linked with the notion of equality of opportunity, with parental background a quintessential “circumstance” variable. When a child’s access to basic opportunities depends on family resources, opportunities are not equal, and society is not mobile. People tend to tolerate higher levels of inequality

and contributes to (and results from) resource inequality. Governments need to address the constrained access of poor households to basic services, in terms of both affordability and infrastructure.

when they believe their children have good opportunities to advance (that is, intergenerational mobility is seen to be high). However, empirical evidence suggests that high levels of inequality are in fact associated with lower intergenerational mobility. Parent-offspring correlations in economic advantage show how inequality persists from one generation to the next. The analysis below examines two such correlations—in education and in earnings.

*Intergenerational mobility* is the extent to which people’s life outcomes (such as earnings, educational achievement, and occupation) correlate with those of their parents. Children benefit from their parents’ background in many ways, including through access to social networks, healthcare, and family culture (Roemer 2002). In a society where access to opportunities is more equal, people would be more socially mobile, and the link between the outcomes of parents and those of their children would be weak. But when poor and non-poor children face vastly different sets of opportunities, low intergenerational mobility is inevitable.

**All SACU countries other than Lesotho show evidence of upward educational mobility for young people.**

Educational mobility is not only important in its own right; it is also a key pathway to economic mobility, as schooling tends to be a strong predictor of lifetime earnings. Figure 2.9 compares the educational attainment of young people (ages 21–25) with those of their fathers. Because of data limitations, it focuses on young people who are co-resident with their fathers. (Note that Narayan and others (2018) show that limiting the sample in this way reduces the bias in the results; see also Box 2.2.) Figure 2.9, panel b shows that most young people whose parent(s) (or household head) attended only primary school were able to complete

secondary schooling. The exception is Lesotho, where 42 percent of the children of a parent with primary schooling have no schooling, while another 36 percent also only have primary schooling.<sup>14</sup> Panel d must be interpreted with caution, as some of the “children” in this sample might still be attending college or university and would therefore not yet have completed post-secondary education.

**Intergenerational earnings mobility remains limited.**

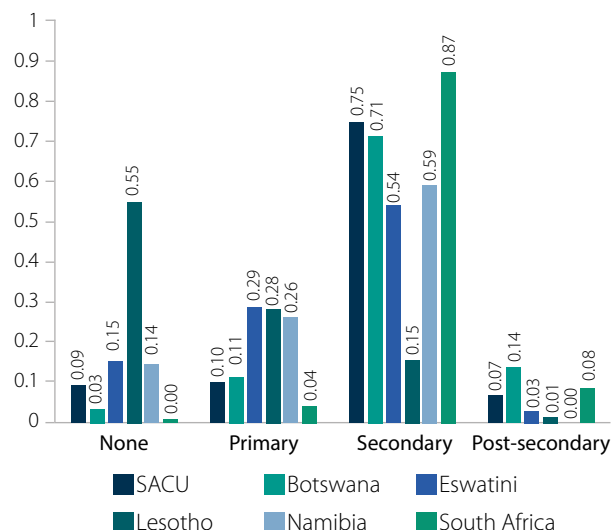
A strong relationship between earnings across two generations is found in all SACU countries other than Lesotho, suggesting little intergenerational earnings mobility (Table 2.1).<sup>15</sup>

14 “Primary schooling” here means the person has completed primary but not secondary school. A child may well have had significantly more years of education than the parent without having a full additional phase of schooling.

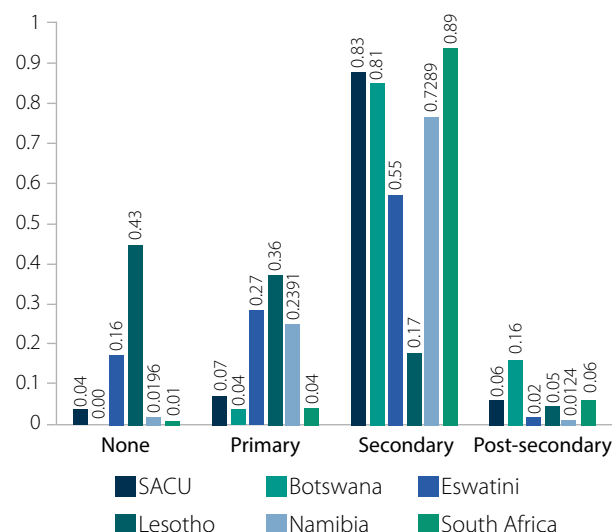
15 As with intergenerational educational mobility, intergenerational earnings mobility is measured for the same small sample of young people (21–25-year-olds) and their co-resident parental household head. The sample size is small, given that both the parent and the child need to be working (to have measurable income).

**Figure 2.9. Children's educational attainment, conditional on fathers' education**

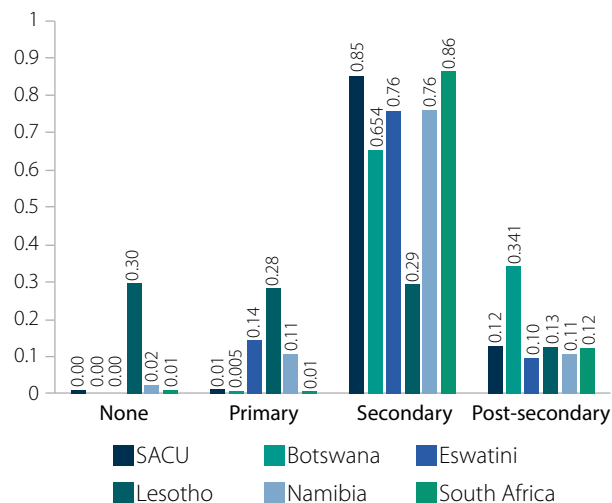
**a. Father has no education**



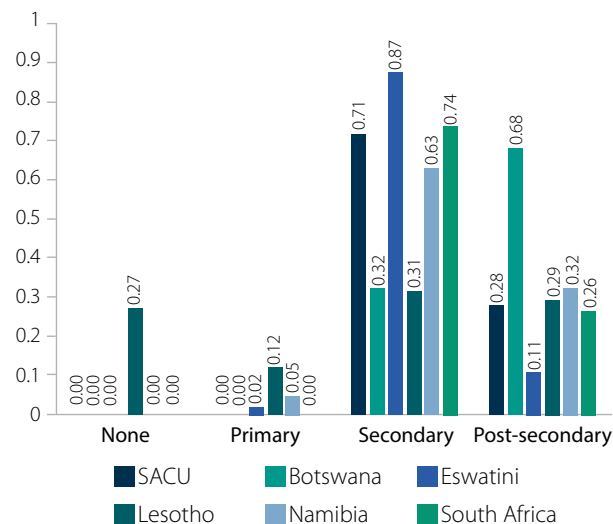
**b. Father has primary education**



**c. Father completed secondary education**



**d. Father has post-secondary education**



Source: World Bank calculations based on household survey data.

Note: The sample is restricted to children ages 21–25 living with a parental head of the household. SACU is the weighted sample across the five countries. Data are from 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa.

The *intergenerational earnings elasticity* measures mobility in earnings between generations. It is the coefficient of a regression of the lifetime income of the child on the lifetime incomes of their parent. The higher the elasticity, the more likely income patterns are to persist, which means intergenerational mobility is lower.<sup>16</sup>

<sup>16</sup> Accurate measures of intergenerational mobility are scarce, as they require survey data on relevant variables for parents and their adult children. Some surveys, such as South Africa's NIDS, do collect retrospective information on non-resident parents (Box 2.2), but this is rare. Typically, information on the characteristics of a person's parent is only available if the parent and adult child live together, and both can be interviewed for the same survey. Because adult children living with their parents are likely to be different from those established in their own households, using only the data for co-resident parent-child pairings is likely to introduce sampling bias.



**Table 2.1. Intergenerational elasticity of earnings for working young people living at home**

Area	Intergenerational elasticity of earnings
SACU	0.431
Namibia	0.583
Eswatini	0.476
South Africa	0.320
Botswana	0.278
Lesotho	0.159

Source: World Bank calculations based on household survey data.

Note: The sample is restricted to children ages 21–25 living with a parent head of household. SACU is the weighted sample across the five countries. Data are from 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa.

## Box 2.2. Intergenerational earnings mobility in South Africa

South Africa is among a small number of developing countries to have gathered household survey data that includes retrospective information on both resident and non-co-resident parents of adult respondents. In an important analysis, Piraino (2015) uses the first three waves of the NIDS (2008 to 2012) to estimate intergenerational earnings mobility in South Africa.

Wave 1 of NIDS was collected in 2008 and consisted of a nationally representative sample of about 28,000 people in 7,300 households. Waves 2 and 3, conducted in 2010 and 2012, attempted to reinterview the same households visited in 2008. Those that had moved but were still inside the country were tracked. NIDS used a combination of household and individual questionnaires to obtain information on a range of human capital variables, labor force experiences, and demographic characteristics. All adults were asked to complete a section on parental background (vital status, educational attainment, and occupation) if they did not live with their parents. For those who did live with their parents, this information was already available, as detailed information had been collected for all household members during each wave.

The earnings of non-co-resident parents was not available from NIDS. Piraino followed Bjorklund and Jantti (1997) in using a two-stage estimation approach, taking information on the father's socio-economic status to predict his earnings. The return to observable characteristics was estimated on a sample of "pseudo" fathers using 1993 survey data from the Project for Statistics on Living Standards and Development (SALDRU 1994). This dataset contains a range of sociodemographic variables, along with detailed information on income sources.

The empirical analysis focuses on males only. This is in line with previous studies of intergenerational earnings mobility that chose to avoid the additional complications of dealing with gender differences in labor force participation. The study is restricted to men ages 20–44, which yielded a good sample size, while keeping a reasonable overlap between the birth cohort of actual fathers and the adult males used in the first-stage regression based on 1993 data. About a quarter of the "child" sample did not know how much education their fathers had received. The analysis pools observations from the three waves of the NIDS available at that time—2008, 2010, and 2012. A respondent who had valid information in more than one wave was counted as a single observation, and the average value of pertinent time-variant variables was accordingly computed.

Piraino finds high levels of earnings persistence in South Africa, with an estimated intergenerational elasticity of 0.621 to 0.676 (depending on the model specification). About three-fifths of the earnings advantage of South African fathers is passed on to their sons, similar to estimates for Brazil, China, and Chile using the same estimation technique (Dunn 2007; Ferreira and Veloso 2006; Gong and others 2012; Nunez and Miranda 2010).

South Africa, with its high inequality of opportunity and low relative intergenerational mobility in earnings, illustrates how the expanded framework of opportunities leads to a better understanding of the factors restricting mobility. Race and location are important contributors to inequality of opportunity in South Africa, which increases the persistence of income inequality across generations. A framework that ignores these key factors would be of limited use in identifying the underlying causes of low intergenerational mobility in earnings.

## 2.1.4 A small middle class and low economic mobility

**Evidence from South Africa suggests that for many in SACU, poverty is a permanent state.** Between 2008 and 2015, close to half the country's population was trapped in chronic poverty, meaning that they were both poor and highly unlikely to escape poverty, measured at the upper-bound national poverty line (World Bank 2018a). The chronic poor are characterized by exceptionally low levels of human capital and financial resources and are geographically isolated from markets and employment opportunities. Overall, poverty is consistently the highest among black South Africans, less-educated people, unemployed people, female-headed households, large families, and children. These groups have less access to economic opportunities, which negatively affects their economic mobility. South Africa's chronic poor require both cash transfers and basic services for meeting their health, educational, and nutritional needs.

**The level of economic vulnerability is also high.** In 2009/10, half of Botswana's people were either poor or vulnerable; most of this group (about 31 percent of the population) were classified as vulnerable (World Bank 2015a). In Lesotho, despite progress in reducing poverty, about 77.4 percent of people were poor or vulnerable in 2017; about 27.7 percent of people were classified as vulnerable (Sulla and others 2019). Vulnerability was higher in rural (31.1 percent) than in urban areas (21.3 percent). In South Africa, 27 percent of the population lived in

households vulnerable to poverty and moved into and out of poverty between 2008 and 2015 (World Bank 2018a). A large portion of the SACU population is at risk of falling back into poverty; this risk is even higher among rural households that typically depend on small-scale and subsistence farming. Their vulnerability is worsened by the growing climate risks. In contrast, people with more education and access to stable labor market incomes are much less vulnerable to poverty.

**When the middle class is small, economic mobility is inhibited.** Although the size of the middle class increased throughout SACU,<sup>17</sup> many middle-class people are considered vulnerable. In 2014/15, only about a quarter of South Africa's population could be considered stably middle class or higher (World Bank 2018a; see also Box 2.3). These patterns reflect the high level of income polarization—a high concentration of low-income or poor people, a few very-high-income, wealthy or elite people, and only a small number of middle-income earners. Black South Africans remain underrepresented in the middle class, and race is still one of the strongest predictors of poverty. Members of larger, female-headed, or rural households face higher risks of poverty and are also less likely to enter the middle class. Again, access to stable, formal labor market income is a key determinant of household economic stability in South Africa.

### Box 2.3. Evolution of the middle class in South Africa

The size of the middle class in South Africa remained relatively constant in 2008–17. Using five waves of NIDS data, Zizzamia and others (2019) analyze the evolution of the country's economic classes. Classes are categorized based on a model that uses household characteristics and observed poverty status to predict each person's propensity to remain in or fall into poverty in the near future.

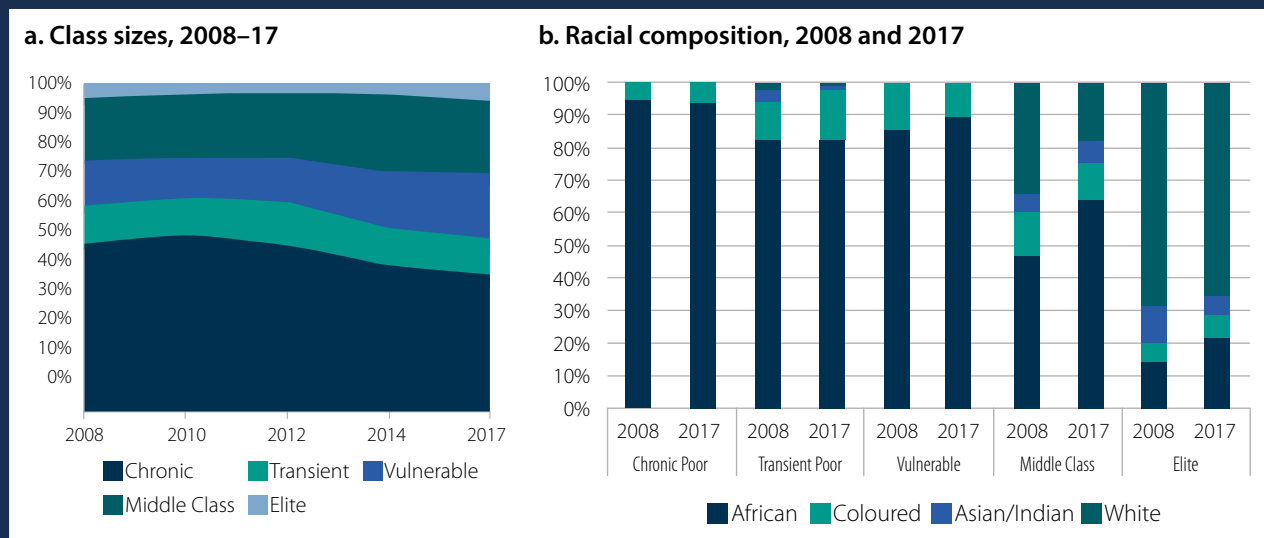
Five social classes are identified:

- The *chronic poor*, whose chances of exiting poverty are below the average exit rate and who thus face a comparatively high risk of persistent poverty
- The *transient poor*, who have a better-than-average chance of escaping poverty
- The *vulnerable*, who are above the poverty line but face an above-average risk of slipping into poverty
- The *middle class*, who face a below-average risk of falling into poverty and thus have better chances of sustaining a living above the subsistence level
- The *elite*, who enjoy a standard of living well above the national average.

17 For countries in the Southern African Development Community, the middle class is defined using the vulnerability-to-poverty approach based on panel data analysis introduced by Luis F. López-Calva and Eduardo Ortiz-Juarez.

No more than 25 percent of the South African population can be classified as stably middle class or “elite”. As per Figure B2.3.1, panel a, the middle class grew only marginally in the period under analysis. Although chronic poverty fell between 2008 and 2017, this was mainly from growth in the vulnerable class; the size of the middle class and the elite grew only marginally. This means that people moving out of poverty mostly remain vulnerable to falling back into poverty in time, rather than into the stable middle class.

**Figure B2.3.1. Evolution of social classes in South Africa**



Source: Zizzamia and others 2019.

Compared with transient poor and vulnerable households, almost all middle-class households live in urban areas. They are smaller and have fewer children and more workers. They rely more heavily on income from the labor market and less on social grants. Although black Africans are overrepresented among the poor and underrepresented among the middle class, Figure B2.3.1, panel b illustrates the rapid growth in the African middle class in the last decade: in 2008 only 47 percent of the middle class was African, as against 64 percent in 2017. Geographically, Gauteng and the Western Cape have the largest middle classes and elites. These differences are closely related to urban/rural divisions: most of KwaZulu-Natal’s population live in traditional areas, while Gauteng and the Western Cape, in contrast, have the highest share of urban residents.

Note: Based on Zizzamia and others 2019.

**Expanding the middle class increases economic mobility.** Empirical evidence suggests a larger and faster-growing middle class is associated with better reforms and improved governance. As people gain middle-class status, they tend to accumulate savings and acquire secondary and tertiary education. They are also likely to support accountable government and the rule of law. This group consumes high-quality goods and services, while fostering

economic stability. Economic mobility is more likely in areas with large middle classes than in those with smaller ones. Children who live in poor households and grow up in areas with large middle classes tend to become more financially successful than their peers from poor areas, suggesting that a strong middle class and economic opportunity are closely linked.

## 2.2 Wealth inequality

### 2.2.1 Staggering wealth inequality

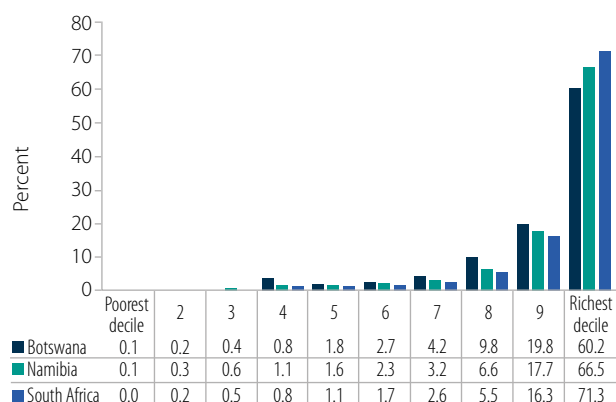
**The distribution of wealth matters beyond the income streams it generates.** Wealth inequality reduces inequality of opportunity for the next generation (Narayan and others 2018) through several mechanisms. One obvious mechanism relates to the purchasing function of wealth: the wealthy have access to better neighborhoods and schools and can save for post-secondary education. Another is the insurance function of wealth, whereby having a stock of wealth on which to fall back allows a household to take more risks. Thus, “the various dimensions of inequality (in wealth, power, and social status) interact to protect the rich from downward mobility and inhibit the poor from becoming upwardly mobile” (Rao 2006 11).

**SACU countries are characterized by huge disparities in all dimensions of wealth.** The top 10 percent (or

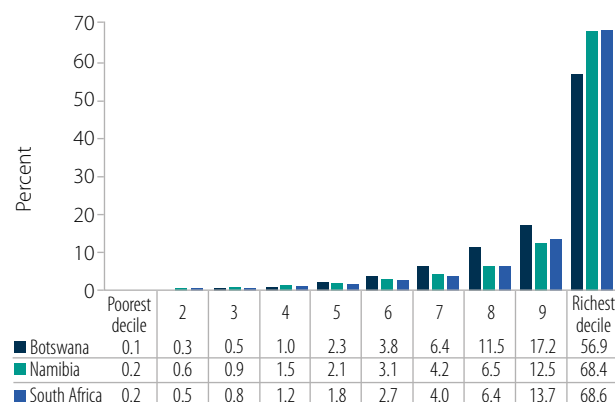
decile) of the population holds 60.2 percent of total household liabilities in Botswana, 66.5 percent in Namibia, and 71.3 percent in South Africa (Figure 2.10, panel a). On the asset side, the top decile of the South African population holds 68.6 percent of total household assets, almost equal to the 68.4 percent in Namibia (panel b). The figure for Botswana is also relatively high, at 56.9 percent. The distribution of financial and non-financial assets is similarly skewed. In South Africa, the top 10 percent of the population holds 80.6 percent of all financial assets (panel c). The corresponding figures are 65.5 percent in Namibia and 61.2 percent in Botswana. Likewise, the top 10 percent of households hold 64.4 percent of all non-financial assets in Namibia, followed by South Africa with nearly 54.2 percent (panel d). See Box 2.4 for the methodology behind this analysis.

**Figure 2.10. Wealth holding by income decile in Botswana, Namibia, and South Africa**

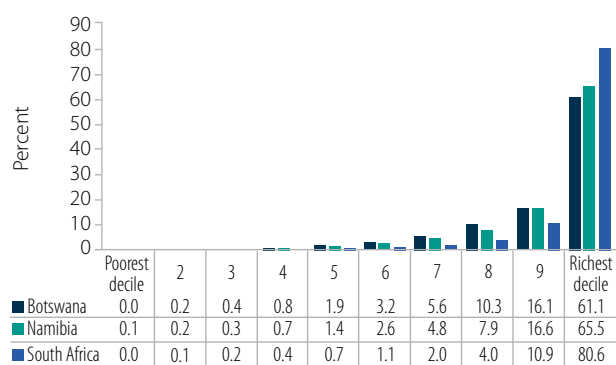
#### a. Total household liabilities



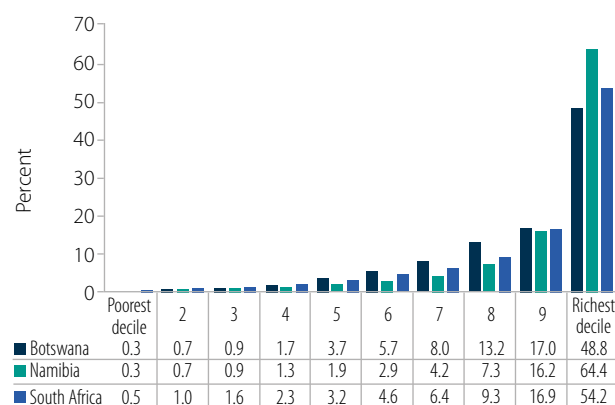
#### b. Total household assets



#### c. Total household financial assets



#### d. Total household non-financial assets



Source: World Bank calculations based on household survey data.

Note: Data are from 2018 for Namibia and Botswana and 2019 for South Africa.

## Box 2.4. Measuring wealth inequality in Botswana, Namibia, and South Africa

Data on the distribution of household wealth in SACU are scarce; for instance, data on household assets in Eswatini and Lesotho are very limited. The analysis, therefore, focuses on wealth inequality in Botswana, Namibia, and South Africa. Even in these three countries, data constraints prohibited a detailed breakdown of household assets and liabilities. The following broad categories were analyzed:

- *Non-financial assets*, including property, vehicles, household contents, and assets, for example.
- *Financial assets*, including savings, deposits, pension funds, long-term insurance policies, and savings.
- *Total household assets*, calculated by adding non-financial and financial assets.
- *Household liabilities*, including both secured and unsecured credit of households and individual members.
- *Household net wealth*, calculated by deducting the value of total liabilities from the value of total assets.

Figure B2.4.1 sets out the methodology used to derive these estimates.

### Figure B2.4.1. The research and modeling process

Obtaining aggregate household income, asset, and liability estimates of greatest likelihood.

Using available survey and administrative data to produce household income, asset, liability, and net wealth breakdowns by decile of greatest likelihood.

Verifying these estimates as a whole against available parameter estimates and applying corrections, where necessary.

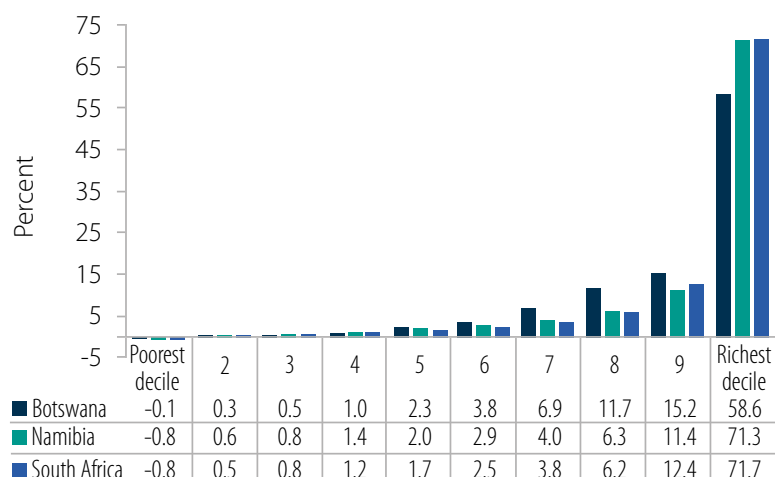
Calculating Gini coefficients for household income, household non-financial assets, household financial assets, total household assets, total household liabilities, and total household net wealth.

The analysis shows that household income remains very unequally distributed, with over 50 percent of total household incomes accruing to the top 10 percent of income earners in Namibia and South Africa. In all three countries, the bottom 70 percent of income earners receive less than a quarter of total household incomes.

**The disparities in household assets and liabilities are clear from the highly unequal distribution of household net wealth.** Figure 2.11 shows household wealth by income decile in Botswana, Namibia, and South Africa. As expected, the distribution of total household wealth is highly concentrated at the top 10 percent of the income distribution, led by South Africa at 71.7 percent and Namibia at 71.3 percent. In Botswana, the figure is 58.6 percent. Net wealth refers to the total asset value minus total debt;

hence, the negative shares of the poorest decile show that liabilities outweigh assets for most of these households. In fact, many households in this decile owe money to credit providers, other households, and community schemes. In many poor communities, households possess very little assets; instead, they survive on transfers from other households, community schemes, and microfinance loans. Their net wealth is also negative.

**Figure 2.11. Household net wealth holding by income decile**



Source: World Bank calculations based on household survey data.

**Wealth inequality remains high across SACU.** The Gini coefficients in Table 2.2 summarize inequality in the distribution of net wealth and various components of wealth. With a Gini coefficient of 76, inequality in total net wealth is highest in Namibia and South Africa, followed by Botswana at 71. Although data limitations prevent the calculation of detailed numbers for Lesotho and Eswatini, in 2018 Credit Suisse estimated Gini coefficients of 80 for Lesotho and 78 for Eswatini. Financial assets tend to be more unequally distributed than non-financial ones. In fact, the contribution of household financial assets to total asset values ranges from 90.8 percent of total assets in Botswana to 64.7 percent in South Africa and 56.7 percent in Namibia. The differences reflect the sophistication of financial sectors and the strength of saving cultures. The savings culture in South Africa and Namibia is relatively weak, and owning property, vehicles, and household contents (and hence, consumer spending) is deemed relatively more important

than the accumulation of money in savings, investments, and pension funds (Finmark Trust 2012 and 2018).

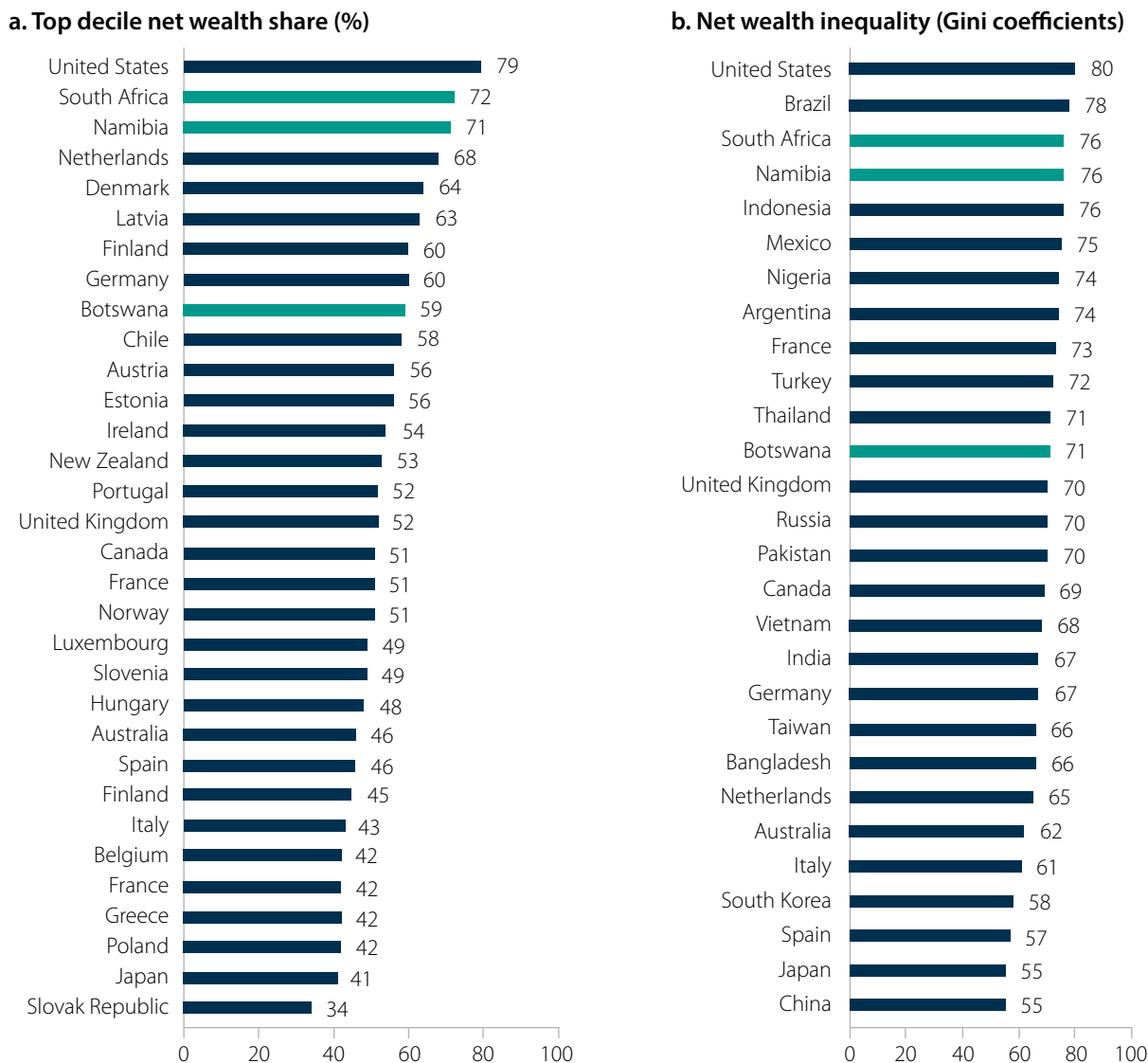
**Wealth inequality in SACU is consistent with that in other emerging economies.** The distribution of net wealth in Namibia and South Africa is significantly more skewed than in their OECD counterparts (Figure 2.12, panel a); higher wealth inequality is found only in the United States and Brazil. Even so, the inequality of household net wealth in Botswana, Namibia, and South Africa appears to be within the same range as many emerging economies. For example, household net wealth Gini coefficients are 78 in Brazil, 76 in Indonesia, 75 in Mexico, and 74 in Nigeria and Argentina (Figure 2.12, panel b). However, this does not dilute the concerns around wealth inequality SACU; rather, it illustrates that wealth inequality is also a concern in many other emerging countries.

**Table 2.2. Gini coefficients of wealth in Botswana, Namibia, and South Africa**

	Botswana, 2018	Namibia, 2018	South Africa, 2019
Total net wealth inequality	71	76	76
Total household liabilities	74	76	78
Total household assets inequality	70	73	74
Financial assets inequality	73	76	82
Non-financial assets inequality	63	73	65

Source: World Bank calculations based on household survey data.

**Figure 2.12. Relative net wealth inequality in selected countries**



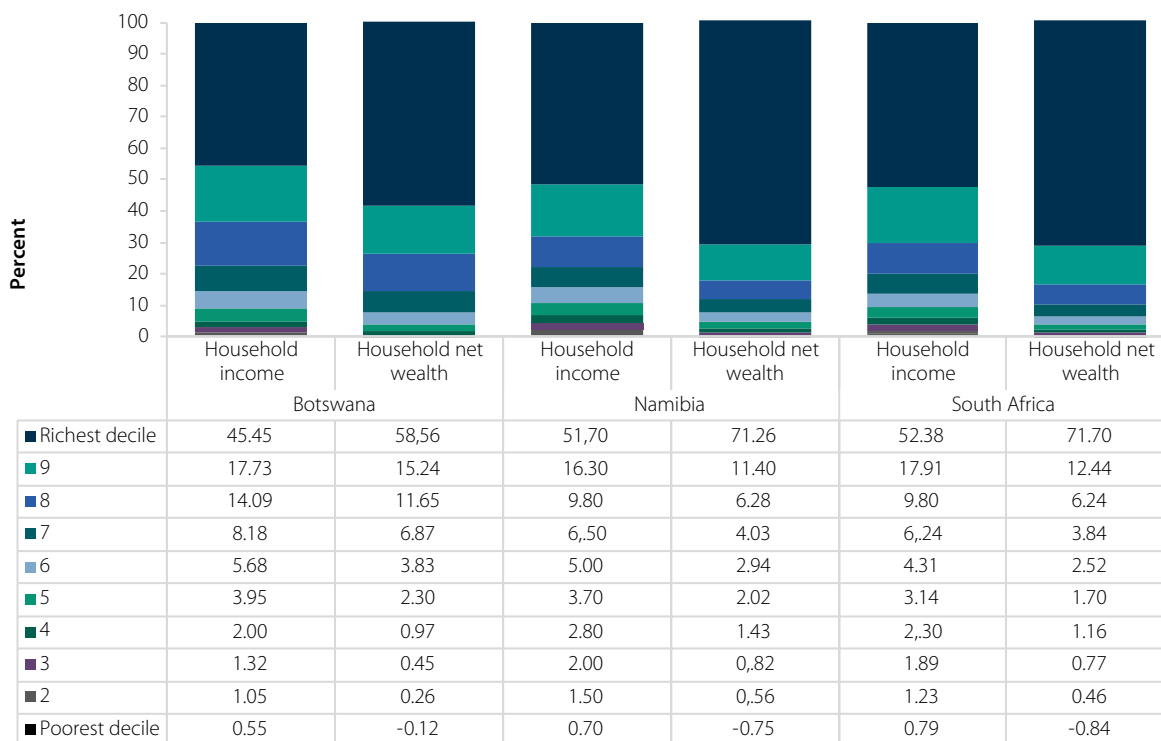
Sources: World Bank calculations based on household survey data; OECD 2018; Davies and others 2007.

## 2.2.2 High income inequality

**Income and wealth are closely related and positively correlated**, with income earned through labor being a major source of wealth (Berman and others 2016). However, the transmission from income to wealth seems to break down, probably because after taxation and consumption spending, only a relatively small portion of income is available for the accumulation of personal wealth. This implies that both income and wealth should be considered from a policy perspective—addressing income inequality alone would not necessarily translate into a more equal distribution of wealth.

**The higher the share of incomes earned by the top decile, the higher is the share of wealth concentrated in this decile.** There seems to be a strong relationship between the share of income earned by the top decile of income earners and the top decile of wealthy people in Botswana, Namibia, and South Africa (Figure 2.13). The relationship between incomes and wealth is very weak among the bottom deciles, possibly because these households often live in poverty, without the financial resources to accumulate substantial financial and non-financial assets.

**Figure 2.13. The relationship between wealth inequality and income inequality**



Source: World Bank calculations based on household survey data.

**The concentration of wealth at the top means that most of SACU's population does not enjoy the functional advantages of wealth.** Wealth brings many benefits, including a pool of savings to fall back on in emergencies, savings for old age, security, self-insurance, and value that can be passed on to children and grandchildren. Most SACU households do not have any emergency savings. They risk falling into poverty during crises, such as the COVID-19 pandemic. Also, most people will be unable to retire with sufficient savings. The resulting high levels of poverty among elderly people would require the state to provide adequate old-age pensions and other social transfers. Most households report very low property values, which probably means they live in substandard (that is, informal and backyard) housing. Beyond the health and developmental hazards of substandard housing, the

absence of formal house ownership means people do not have enough collateral to take out loans. Most can only access very expensive credit.

**Addressing wealth inequality requires a more nuanced understanding of its drivers and correlates.** Much more research and better data are required, but existing research points to some of the factors involved, such as differential access to quality education, limited access to high-paying employment and entrepreneurship, differential access to land, varying levels of financial capability, low levels of financial inclusion, corruption and cronyism, the legacy of apartheid, and ineffective and poor implementation of government policies and programs in ensuring wealth equality.



## 2.3 Spatial inequality

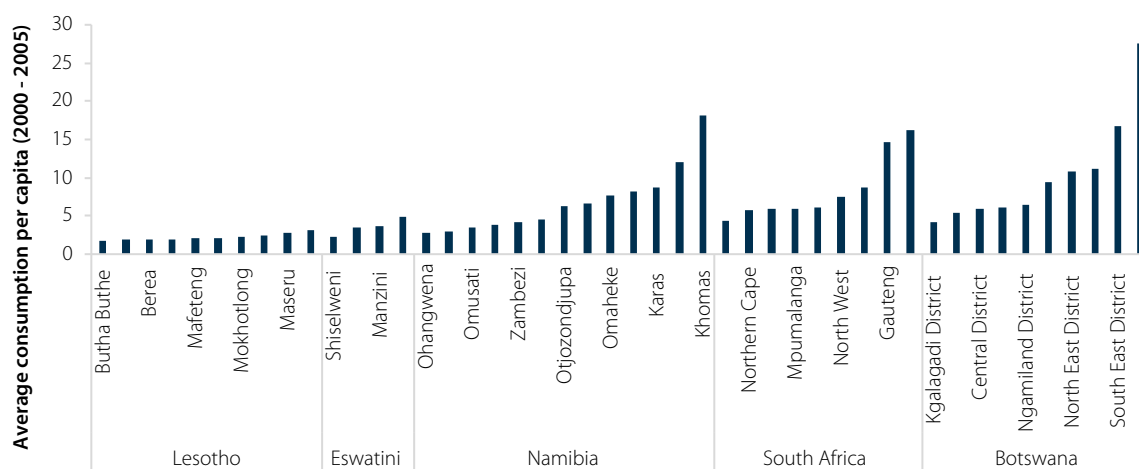
### 2.3.1 Wide and entrenched spatial disparities in welfare

With large spatial differences in living standards, place of birth is an important determinant of inequality of opportunity in SACU. The spatial differences in living standards have changed over time. Across SACU (except Botswana), welfare rose between 2000 and 2017, particularly in urban areas. At subnational level, most subregions also enjoyed better welfare, except in parts of Botswana (Figure 2.14).<sup>18</sup>

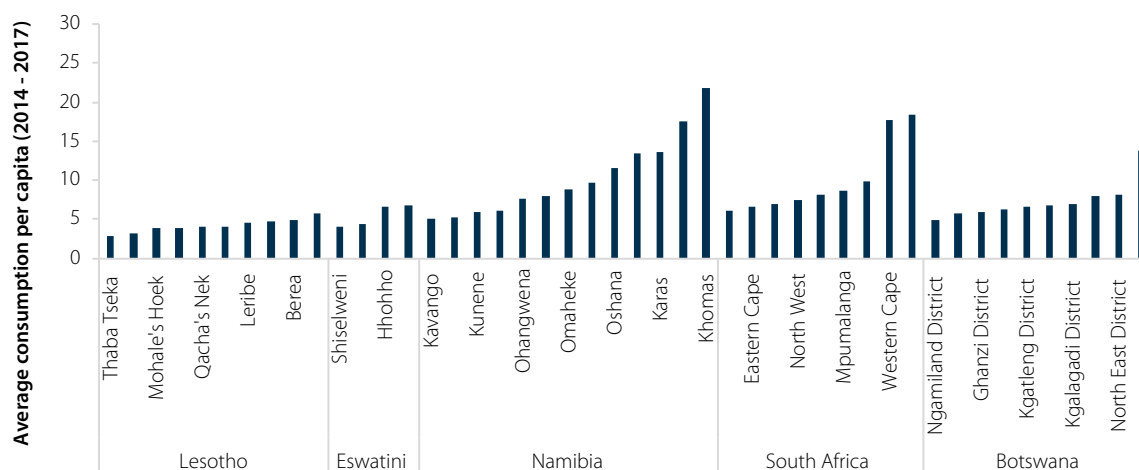
**There is significant spatial diversity at the subnational level.** For example, as Figure 2.14 shows, Kavango and Zambezi, the poorest subregions in Namibia, are similar to Berea and Maseru, the richest subregions in Lesotho. Figure 2.15 maps subnational patterns of per capita consumption. Some subregions share similar levels of welfare, even where they belong to different countries and differ sharply from their immediate neighbors. For example, Khomas in Namibia and the Western Cape in South Africa exhibit high levels of consumption per capita (above \$18 per day) and double the welfare per capita of their respective neighbors, Omaheke and the Eastern Cape.

**Figure 2.14. Average daily per capita consumption, by subregion**

#### a. Average consumption per capita, 2000–05



#### b. Average consumption per capita, 2014–17

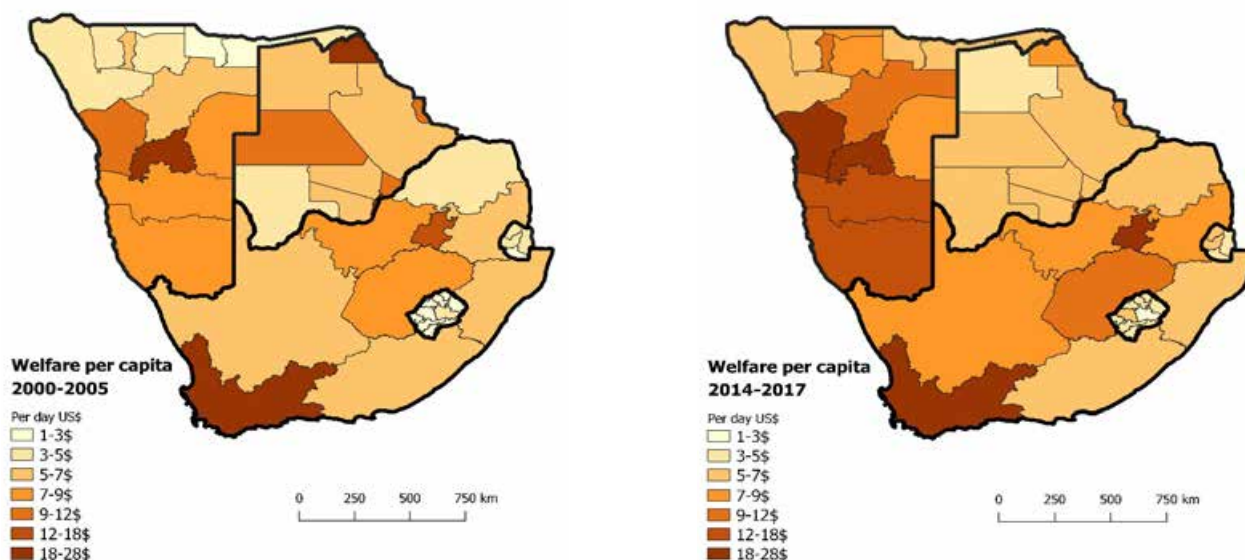


Source: World Bank calculations based on household survey data.

Note: Data for the first period (2000–05) are from 2001 for Eswatini, 2002 for Lesotho, 2004 for Namibia, 2008 for South Africa, and 2010 for Botswana. Data for the second period (2014–17) are from 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa.

18 There are 10 subregions in Botswana, 4 in Eswatini, 10 in Lesotho, 13 in Namibia, and 9 in South Africa.

**Figure 2.15. Subnational consumption per capita**



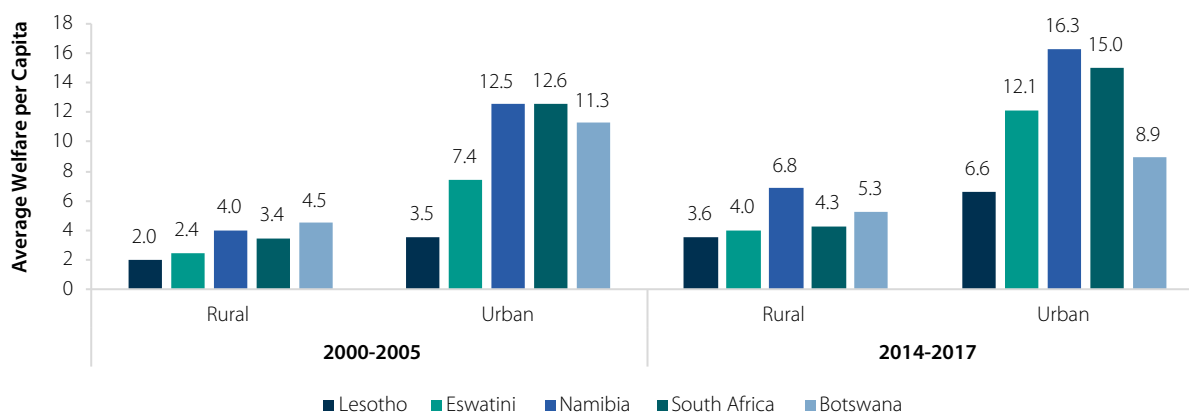
Source: World Bank calculations based on household survey data.

Note: Country boundaries are represented by thick black lines.

**An “urban advantage” persists, with consumption significantly lower in rural areas.** Consumption per capita rose in the rural areas of all five countries and in the urban areas of Lesotho, Eswatini, Namibia, and Botswana between 2000–05 and 2014–17 (Figure 2.16). There has been significant rural-urban convergence in Namibia and

Botswana. In Botswana, however, this has been driven by a decline in urban consumption rather than by higher rural consumption. The ratio of urban to rural consumption per capita in Lesotho, Eswatini, and South Africa remained largely unchanged between the two periods.

**Figure 2.16. Per capita consumption in urban and rural areas**



Source: World Bank calculations based on household survey data.

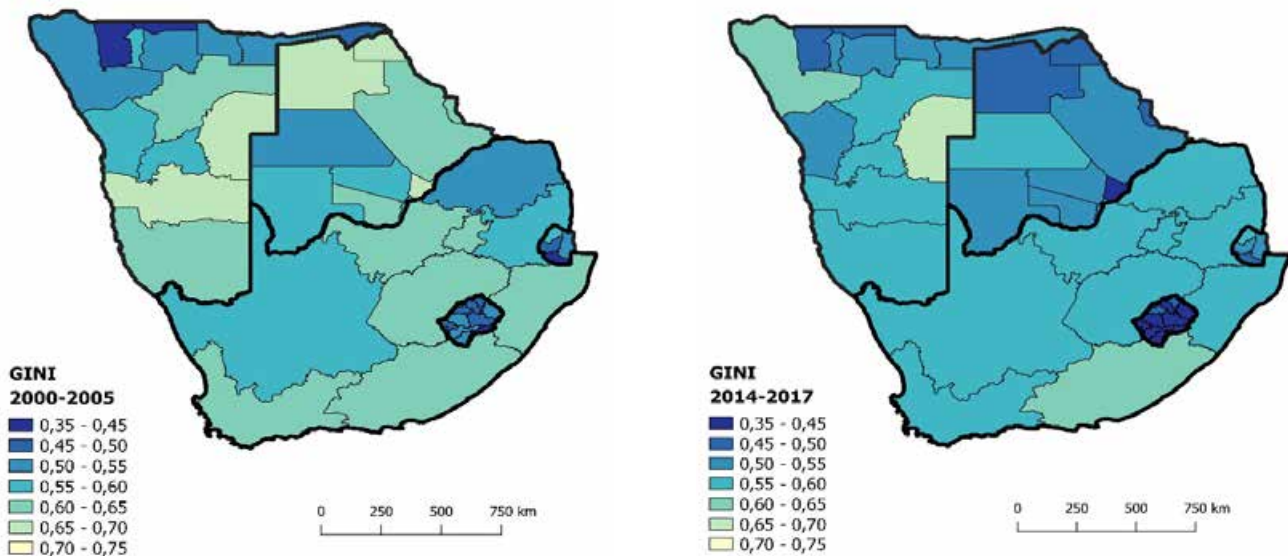
Notes: Data for the first period (2000–05) are from 2001 for Eswatini, 2002 for Lesotho, 2004 for Namibia, 2008 for South Africa, and 2010 for Botswana. Data for the second period (2014–17) are from 2015 for Namibia and Botswana, 2016 for Eswatini, 2017 for Lesotho, and 2018 for South Africa. Figures reflect PPP dollars per day.

**While urban inequality is falling, rural inequality is rising.** In 2014–17, Lesotho had the lowest Gini coefficient (0.45) and South Africa the highest (0.63). At the national level, all countries reported a slight reduction in inequality, except for Eswatini (with a 0.02 percentage point increase). Overall inequality in SACU decreased, with the Gini coefficient falling from 0.65 in 2000–05 to 0.62 in 2014–17.

The coefficient for rural areas increased from 0.51 to 0.52, while in urban areas it fell from 0.61 to 0.59.

**Inequality decreased in most subregions, but it increased in about a third of them** (Figure 2.17). The largest Gini coefficient increases were in the Shiselweni region of Eswatini (from 0.38 to 0.48) and the Ohangwena region of Namibia (from 0.40 to 0.48).

**Figure 2.17. Inequality by subregion**

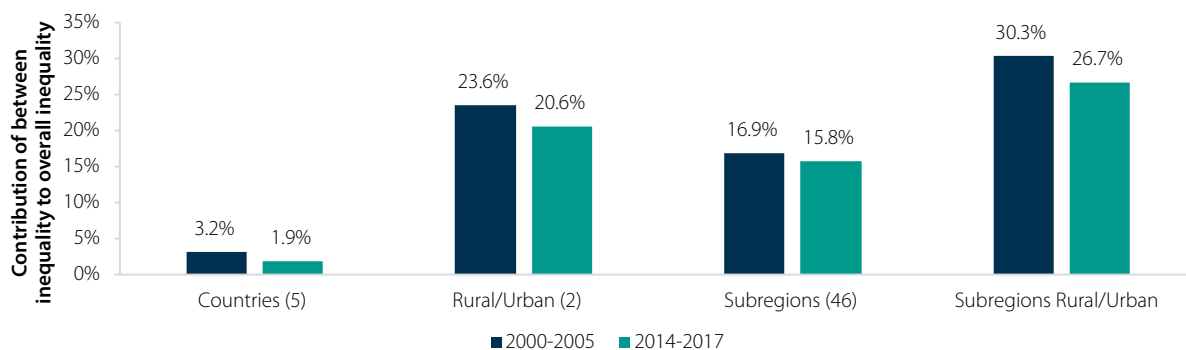


Source: World Bank calculations based on household survey data.

**Differences between subregions contribute more to overall inequality than do those between countries.** Inequality stemming from differences between subregions is 5 to 8 times higher than inequality stemming from differences between countries, using a decomposable inequality measure (Figure 2.18). When rural and urban

areas are considered separately per subregion, the pattern is even more prominent (9 to 14 times higher). This points to wide inequalities between subregions within countries, which increase the spatial concentration of overall inequality.

**Figure 2.18. Between-subregion and between-country differences and overall inequality**



Source: World Bank calculations based on household survey data.

## 2.3.2 Increased spatial clustering

With neighboring subregions affecting each other's welfare, two spatial clusters can be observed in the region. The first comprises high-welfare subregions on west, from southern Namibia and into South Africa. The other comprises low-welfare subregions to the east, from South Africa, up through Lesotho and Eswatini, and into Botswana.<sup>19</sup> These clusters evolved beyond country borders, and their characteristics have converged over time. In Figure 2.19, panels a and b show this convergence in

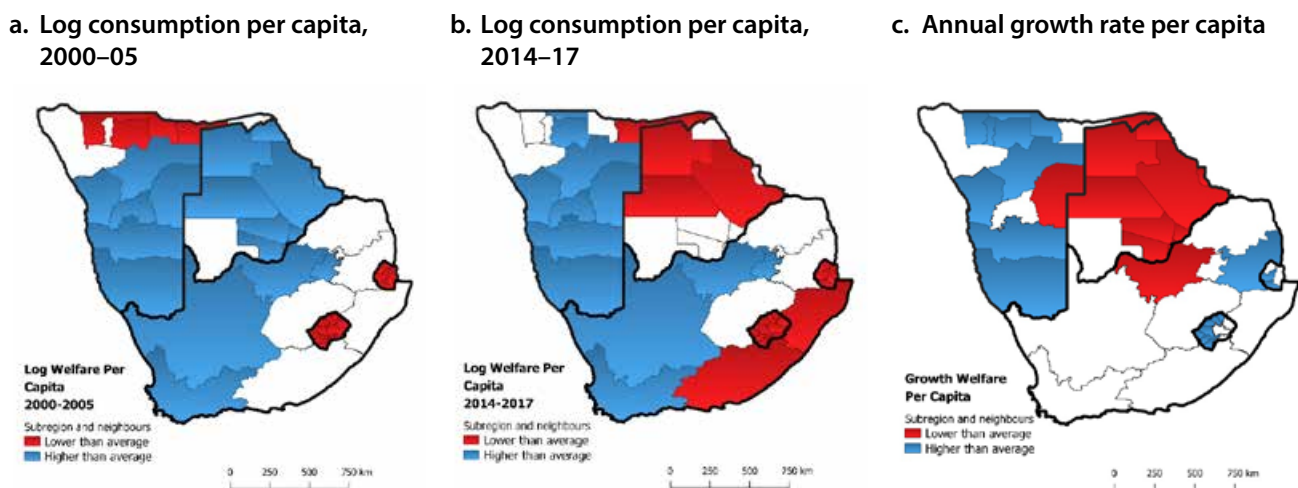
terms of consumption levels. In the figures, blue subregions share two traits: (a) higher consumption per capita than the average among subregions; and (b) higher consumption per capita than their contiguous neighbors. Those marked in red share the same traits but at the lower end of the spectrum. In the first period, some of the poorer clusters were clearly delineated by national frontiers—for example, Lesotho and Eswatini; by the second period, this cluster had come to include neighboring subregions of South Africa.

**Moran's I**, a measure of spatial autocorrelation, shows how the outcomes of neighboring spatial units are correlated with a specific unit's outcome. In this case, the outcome is daily consumption per capita, and the spatial units are the subregions. The statistic ranges from 1, perfectly positive autocorrelation, to -1, perfectly negative autocorrelation. Here, Moran's I increased from 0.34 in 2000–05 to 0.37 in 2014–17.

The pattern of growth in consumption per capita shows similar clustering. Consumption within the region is increasingly concentrated in specific spatial locations, and the subregions' growth is correlated with that of

neighboring subregions in the same country. Figure 2.19, panel c clearly shows a cluster of higher-growth subregions in Namibia and a cluster of low-growth ones in Botswana.

**Figure 2.19. Subregional spatial autocorrelations**



Source: World Bank calculations based on household survey data.

## 2.3.3 Slow convergence of welfare levels in subregions

The subregions in SACU appear to be converging to similar levels of welfare. They had, on average, more similar consumption levels in the second period than in the first, which suggests consumption levels might be converging. Urban and rural subregions with the lowest initial consumption per capita saw the highest growth

rates relative to those with the highest initial consumption per capita levels, suggesting unconditional convergence (Figure 2.20). This effect is driven mostly by subregions in Botswana that were initially wealthy but declined over time, such as the rural area of Chobe District.

<sup>19</sup> This analysis can only be done at a subnational level, as rural and urban subregions cannot be analyzed spatially.

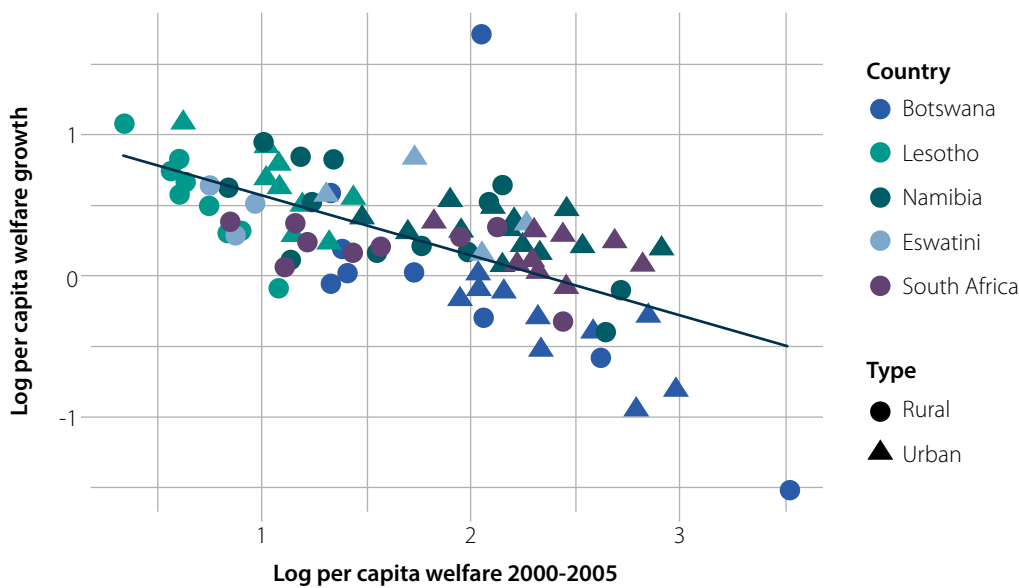
Two approaches were used to identify *convergence*:

- The first checked whether the final welfare level among all subregions varied less than in the initial period. The coefficient of variation, a measure of the dispersion of data points around the mean in a series, decreased from 0.41 to 0.24 between the two periods.
- The second examined whether the initial welfare level was negatively related to the subsequent growth rate. The literature suggests that if a low-income region has a higher growth rate than a high-income one, in the long run they would converge to the same income level or a steady state; this is *unconditional convergence*.

**The pace of convergence is, however, slow.** Additional regression analysis suggests that the subregions are converging at an average rate of 5.1 percent per year,<sup>20</sup> with a half-life of 14 years. This means that all else being equal, they would need about 70 years to reach the same

welfare level. Similar results were found for rural and urban subregions, where the convergence is even slower—an average of 4.2 percent per year, with a half-life of 16 years. This means they would need another decade (about 80 years) to erase the difference.

**Figure 2.20. Convergence rate for urban and rural subregions**



Source: World Bank calculations based on household survey data.

20 This was calculated assuming a 13-year difference between the first and second periods and the average between surveys for each country.



## CHAPTER 3

### THE ROLE OF THE PRIMARY INCOME DISTRIBUTION

*Inequality in the distribution of endowments and returns to key productive assets, such as labor and land, results in a highly skewed distribution of primary (that is, pre-tax) income. The first core issue lies in the use of those assets and, especially, having a job. Employment levels and job creation are low, resulting in a large class of unemployed and discouraged people. Second, conditional on employment, wage inequality is extremely high, and earnings are polarized. Whereas part of the population enjoys wages roughly equivalent to those in developed economies, wages at the lower end are comparable to those in the poorest countries. Disparities in labor market outcomes stem from both labor demand bottlenecks that limit job creation and labor supply constraints that manifest in skills mismatches.*

*Unequal land ownership contributes to historically high levels of income inequality. This is especially relevant in Namibia and South Africa, where highly skewed land distributions underpin inequality and social fragility. Land inequality led to dual agricultural systems with well-developed, large-scale commercial farmers on the one side and resource-poor, subsistence-oriented smallholder farmers on the other. Agricultural productivity is low, especially among smallholders, and contributes to low incomes and high levels of poverty among farming households, which entrench inequality. Challenges around women's security of tenure continue to undermine gender equality in SACU.*

#### 3.1 Labor markets as a source of inequality

**Labor markets shape unequal outcomes into two ways, first by determining who is employed, and second, through the distribution of earnings among employed people.** This section looks at these two ways, focusing on the drivers of labor market inequality.

##### 3.1.1 High unemployment and labor market segmentation

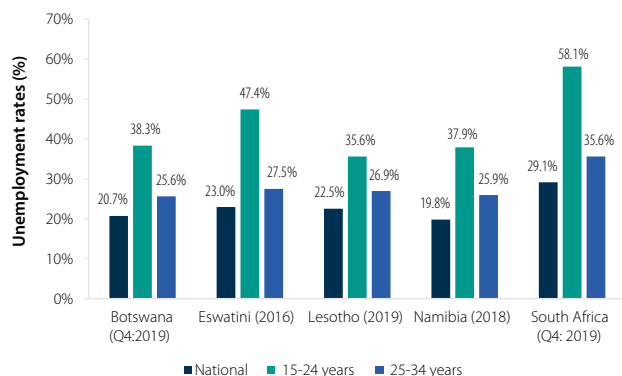
**SACU labor markets are characterized by extremely high unemployment.** Recent labor force surveys show that national unemployment rates (before the COVID-19 pandemic) ranged from 19.8 percent in Namibia (2018) to 29.1 percent in South Africa (fourth quarter, 2019) (Figure 3.1, panel a). Unemployment is higher in rural than in urban areas. It is particularly acute among young people

(ages 15–24), varying between 35.6 percent in Lesotho and 58.1 percent in South Africa.

**High unemployment reflects both demand and supply side constraints.** It is closely linked to the region's inability to spark a cycle of economic growth that creates enough jobs to absorb growing numbers of labor market entrants. The SACU context of low competition, high input costs, an uncertain regulatory environment, and skills mismatches poses structural constraints to private sector job creation (World Bank 2018). Self-employment is similarly constrained. It is difficult for people to start their own business or work as own-account workers. In South Africa, for example, only 10 percent of employed workers are self-employed, as against about 30 percent in upper-middle-income countries (World Bank 2021b).

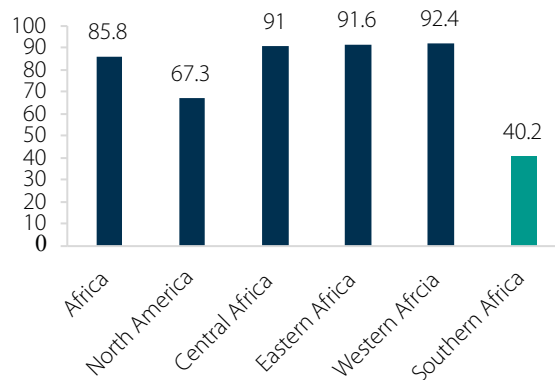
**Figure 3.1. Measures of employment and unemployment**

**a. Total and youth unemployment rates**



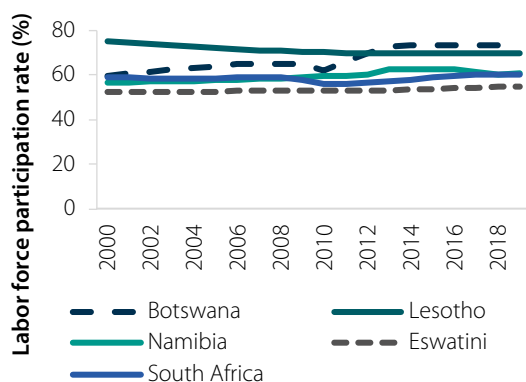
Source: Statistics agencies' publications of the respective countries (2016–20).

**b. Informal employment as a share of total employment**

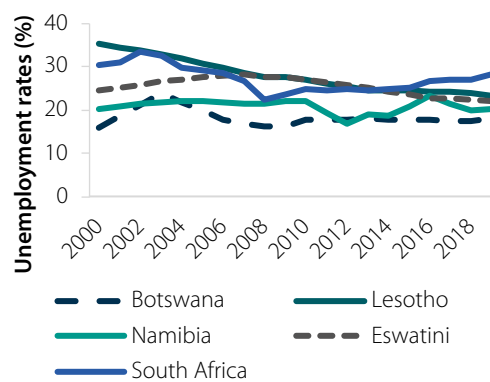


Source: International Labour Organization

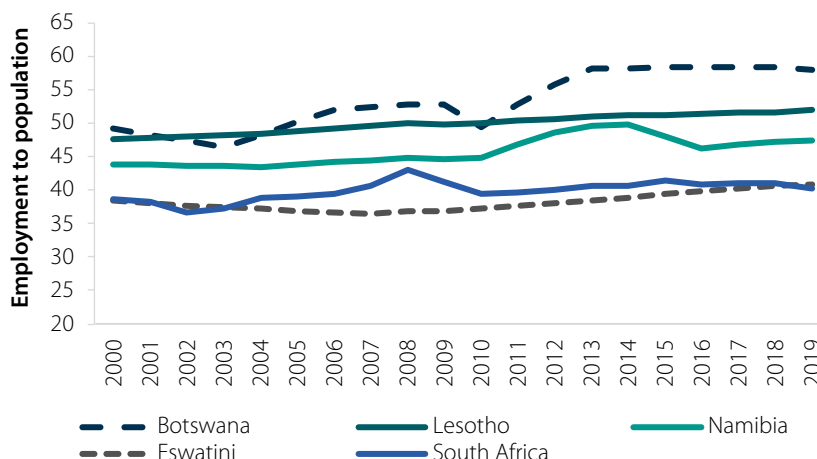
**c. Labor force participation**



**d. Unemployment rates**



**e. Employment as a share of the population**



Sources: International Labour Organization

Note: Data are from the GlobalEconomy.com database, <https://www.theglobaleconomy.com/download-data.php>.

## Explaining differences in the probability of employment

**Employment in SACU countries is below the average for Sub-Saharan Africa, but cross-country differences are large** (Figure 3.1, panel d).<sup>21</sup> Employment is relatively high in Botswana, Lesotho, and Namibia—between 47 percent and 58 percent in the latest year of available data. In Eswatini and South Africa, however, it is estimated at only around 40 percent. Employment appears to be increasing in all SACU countries, in contrast to the slight decline seen in Sub-Saharan Africa.

**Young people, women, and rural residents have lower chances of being employed** (Table 3.1). After controlling

for other demographic factors, the youngest cohort of workers (<25 years) is least likely to be employed in all SACU countries (Filmer and Fox 2014). The same holds for women—they are, in aggregate, 10 percent less likely to be employed than men, after controlling for age, education, and geography. This effect varies considerably between countries and is highest in Lesotho (19.7 percent) and South Africa (12.5 percent). The association between living in an urban area and the probability of being employed also differs. In Namibia, people in urban areas are less likely to be employed than those in rural areas. In contrast, in Eswatini, they have a 17 percent greater likelihood of being employed.

**Table 3.1. Probability of being employed**

	Whole sample	Botswana	Lesotho	Namibia	South Africa	Eswatini
Aggregate effect	–	Base	0.092***	0.160***	-0.131***	-0.007
Age (years)	0.047***	0.051***	0.052***	0.044***	0.058***	0.052***
Age squared	0.000***	-0.001***	-0.001***	-0.000***	-0.001***	-0.001***
Female	-0.105***	-0.037***	-0.197***	-0.078***	-0.125***	-0.082***
Primary incomplete	0.032***	0.021	-0.002	0.062***	-0.009	0.081***
Primary complete, secondary incomplete	0.056***	0.058***	-0.043	0.123***	0.027*	0.075***
Secondary complete	0.146***	0.060**	-0.047	0.111	0.127***	0.080
Tertiary completed or incomplete	0.236***	0.092***	0.036	0.206***	0.318***	0.231***
Urban	0.022***	-0.006	0.041***	-0.090***	0.089***	0.167***
Constant	-0.462***	-0.433***	-0.331***	-0.228***	-0.769***	-0.627***
Observations	104,205	14,762	10,045	24,364	46,630	8,398
R-squared	0.209	0.155	0.202	0.134	0.249	0.228
Adjusted R-squared	0.209	0.154	0.201	0.134	0.249	0.227

Source: World Bank calculations.

### Education levels are a key determinant of employment and, therefore, a key channel of income inequality.

Education significantly raises the probability of being employed, and higher levels of education consistently improve the chances of employment, regardless of the gender and age of the person. People with some form of tertiary education are over 20 percent more likely to have a job than those without formal education. This effect is large and significant for all SACU countries except Lesotho. At lower levels of education, the effects are more mixed; for example, an incomplete primary education appears to

improve the likelihood of employment by only 6 percent in Namibia and 8 percent in Eswatini.

**Most people work in semi-skilled occupations** (Table 3.2). These jobs are concentrated in the secondary sector, although many are also in the primary and tertiary sectors. At a regional level, highly skilled jobs account for less than 11 percent of employment, mainly in the tertiary sector (at nearly 19 percent). Finally, unskilled jobs account for 32 percent of total employment.

21 The employment rate is an imperfect measure, as it is strongly affected by various features of the total labor force.



**Table 3.2. Relative employment by aggregate sector and skill level**

	Percentage of total sectoral employment				
	Botswana	Lesotho	Namibia	South Africa	Sample average (excluding Eswatini)
<b>Primary sector</b>					
High-skilled	3.3	0.3	5.5	5.6	3.7
Semi-skilled	61.1	73.0	38.2	34.0	51.6
Low-skilled	35.6	26.8	56.4	60.4	44.8
<b>Secondary sector</b>					
High-skilled	8.4	2.4	10.0	12.4	8.3
Semi-skilled	64.7	74.2	63.7	64.2	66.7
Low-skilled	26.9	23.4	26.3	23.3	25.0
<b>Tertiary sector</b>					
High-skilled	4.0	22.9	25.5	21.4	18.5
Semi-skilled	59.0	31.6	39.1	61.5	47.8
Low-skilled	37.0	45.4	35.4	17.2	33.7
<b>Total</b>					
High-skilled	5.3	6.6	15.8	14.6	10.6
Semi-skilled	61.2	63.1	49.2	56.0	57.4
Low-skilled	33.5	30.3	35.1	29.4	32.1

Source: World Bank calculations.

Note: The table cannot be estimated for Eswatini.

### 3.1.2 Determinants of high earnings inequality among wage workers

#### Earnings polarization and wage inequality

**Wage inequalities in SACU are among the highest in the world**, as shown in Table 3.3. The large gap between wages at the 25th percentile and at the 90th percentile is a major component of the overall earnings inequality in the region. This is confirmed by several other measures of inequality. Earnings Gini coefficients for all countries are above 0.60. The average of 0.64 for the full sample is higher

than in most other developing regions. The 90-10 ratio shows that wages for the top 10 percent of earners are at least 18 times higher than those of the bottom 10 percent. By contrast, this ratio is 9.4 in India and 3.7 in Germany (Trapeznikova, 2019). Moreover, the 50-10 ratio suggests relatively small differences in earnings for the bottom half of the distribution—all are equally poorly paid. This is confirmed by the finding that the bottom half of income earners receive no more than 10 percent of total earnings, while the top decile receives almost 50 percent and the top 1 percent about 16 percent.

**Table 3.3. Wage distribution and inequality, by country**

	Botswana	Lesotho	Namibia	South Africa	Eswatini	Sample average
<b>Real hourly wage (December 2017 rand)</b>						
25th percentile	6.47	4.04	8.31	10.97	5.01	6.96
Mean	39.32	17.91	56.74	54.90	25.32	38.84
Median	15.06	7.98	21.28	19.80	9.67	14.76
75th percentile	47.22	21.84	66.70	49.49	30.02	43.05
90th percentile	102.46	46.59	149.12	115.47	66.67	96.07

	Botswana	Lesotho	Namibia	South Africa	Eswatini	Sample average
99th percentile	287.21	116.48	472.82	386.84	195.92	291.86
<b>Earnings inequality</b>						
Gini coefficient	63.67	58.89	65.04	66.91	62.16	63.33
90-10 ratio	32.51	22.40	41.01	20.00	26.18	28.42
50-10 ratio	4.78	3.84	5.85	3.43	3.80	4.34
90-50 ratio	6.80	5.84	7.01	5.83	6.89	6.47
Theil's T index: GE(1)	0.75	0.63	0.79	1.21	0.72	0.82
Atkinson index ( $\epsilon=1$ )	0.57	0.49	0.60	0.59	0.54	0.56
Bottom 50% wage share (%)	8.70	11.58	7.96	9.71	9.93	9.57
Middle 40% wage share (%)	17.03	19.92	17.03	15.77	17.50	17.45
Top 10% wage share (%)	46.40	42.37	48.24	55.07	45.82	47.58
Top 1% wage share (%)	10.75	9.27	10.77	24.81	10.34	13.19

Sources: Post-Apartheid Labour Market Series dataset, version 3.3; Namibia Household Income and Expenditure Survey 2015; Botswana Multi-Topic Household Survey 2015; Lesotho Continuous Multi-Purpose Household Survey/Household Budget Survey 2017/18.

Notes: Sample restricted to individuals 15 years and older. Weighted estimates presented for latest survey years.

**Levels of informality are low, and most workers are employees.** According to the International Labour Organization (ILO), SACU is the only subregion in which less than half the employed population (40 percent) is in informal employment (Figure 3.1, panel b). Informality is higher in Eswatini (53 percent) and Namibia (58 percent) than in Botswana (44 percent) and South Africa (39 percent).

Employees represent 84.3 percent of total employment, as against the 40.4 percent average for Africa and 37.2 percent in Sub-Saharan Africa. Generally, informality in Africa is more common in industry than in service. In SACU, by contrast, 34.1 percent of the industry sector and 37.8 percent of the services sector is informal.

**Polarization** increases when people shift away from the middle of the income distribution toward the extremes. Polarization measures, which are distinct from those of income inequality, typically examine distance from the median (or middle) value in a distribution.

The **Foster-Wolfson P (polarization) index** varies between 0 and 1, where 0.0 indicates no polarization (perfect equality) and 1.0 indicates that half of the population has no income, while the other half collectively has twice the average income.

**SACU countries are characterized by very high levels of both earnings and income polarization.** They have large numbers of low-income earners, a few people with very high incomes, and a small number of middle-income people. Wage polarization is among the highest in the world, with

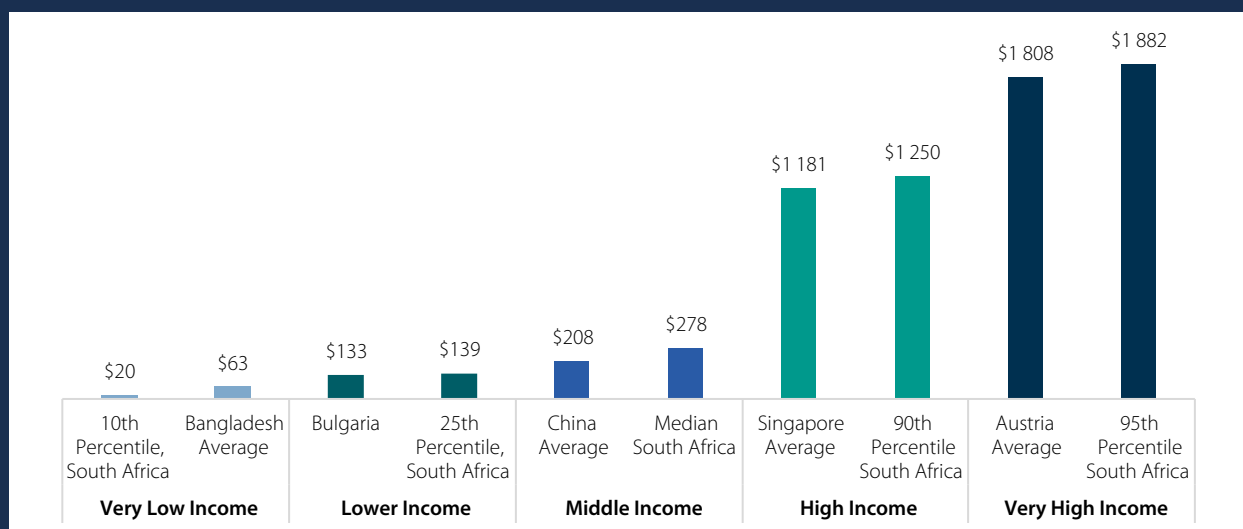
Foster-Wolfson polarization (P) indicators exceeding 0.3 in all SACU countries (Figure 3.2, panel a; see also Box 3.1). In all countries but South Africa, wage polarization exceeds income polarization (Figure 3.2, panel b).

## Box 3.1. Wage polarization in South Africa

Although part of the SACU population enjoys wages roughly equivalent to those of people in developed economies, wages at the lower end are nearer those in the poorest countries. There is substantial variation across SACU countries, with Namibia and South Africa generally the most unequal, followed by Lesotho, Botswana, and Eswatini.

In South Africa, high wage inequality is compounded by polarization between two extremes (Figure B3.1.1). The number of workers with high-end jobs is low, but most people work in jobs that pay very little. High-skill jobs earn nearly five times the average wage for low-skill jobs but account for less than a fifth of the total working population. A little over 10 percent of the working population is white, but white South Africans earn nearly three times the average wage of black Africans, who constitute nearly three-quarters of the labor force.

**Figure B3.1.1. Wage disparities in South Africa**



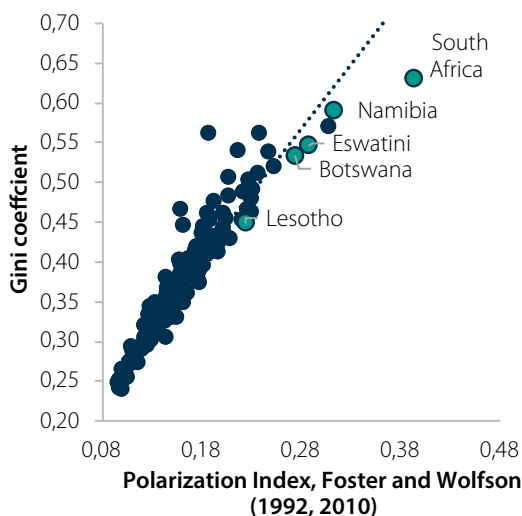
Source: World Bank 2018a.

**Wages at the top are increasing faster than wages for the rest, which fuels wage inequality.** For the richest 20 percent, wages have grown at an average of about 4 percent per year, while for the bottom 20 percent the rate was less than 2 percent (World Bank 2018a). Those in the

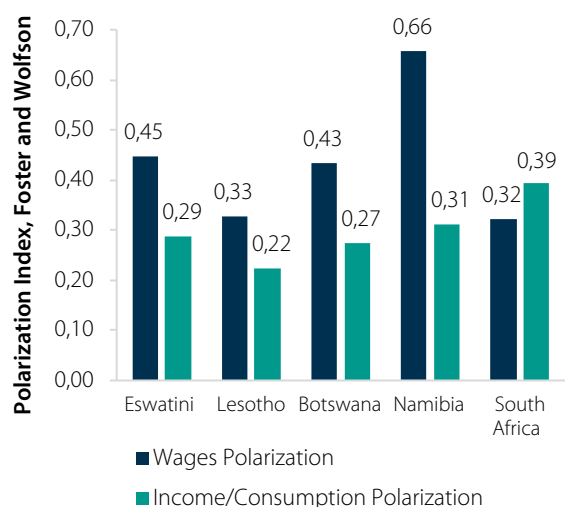
center of the distribution were even worse off, with average growth of only half of a percent per year. This contributes to the “missing middle” phenomenon shown in Figure 3.3, panel a. Thus, wage disparity in South Africa remains high and shows no signs of convergence (Figure 3.3, panel b).

**Figure 3.2. Measures of polarization**

**a. High polarization, Foster-Wolfson index**



**b. Wage polarization exceeds income polarization**

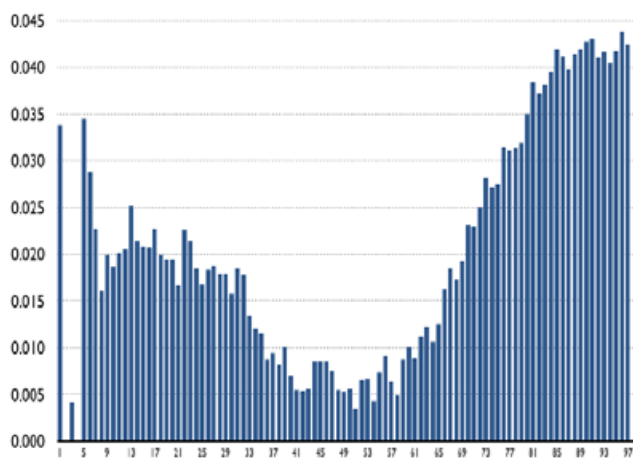


Source: World Bank calculations.

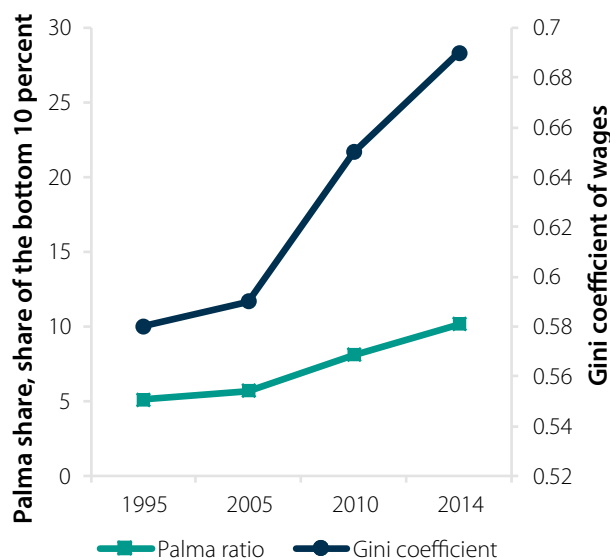
Notes: Data are from the Global Database on Intergenerational Mobility 2018. Development Research Group, World Bank, Washington, DC. Consumption per capita or income per capita, circa 2017 for all countries. Panel a shows Foster-Wolfson P index values.

**Figure 3.3. Real wages in South Africa, 1994–2014**

**a. Real monthly wage by percentile, average annualized percentage change, 1994–2014**



**b. Real wage inequality, 1995–2014**



Source: World Bank 2018a.

## Sources of wage disparities

Two types of analysis are used to **assess the sources of wage inequality**:

- *Mincer earnings functions* (regressions) are estimated to identify factors associated with earnings differentials. Named after Jacob Mincer (1902–2006), these are single-equation models that explain wage income as a function of schooling, experience, and other characteristics.
- The *Fields* (2003) method is used to quantify the contributions of different sources to earnings inequality.

**Wage inequality in SACU stems from various sources**, as shown in the analysis in Table 3.4:

- *Education is central, and earnings increase significantly as educational levels increase.* Having a complete secondary education is associated with earnings that are significantly higher than those of workers with less than a primary education. These returns range from 27 percent in South Africa to 87 percent in Namibia. The returns on tertiary education for wage employees range from 80 percent in South Africa to 121 percent in Namibia.
- *There is a substantial gender wage gap that is not explained by differences in occupation or education.* Women earn 30 percent less than men on average and across all countries, even controlling for personal demographics, location, sector, occupation, education, and formality.
- *Urban workers receive higher remuneration, even after accounting for differences in education and industry.* Earnings are on average 15.4 percent higher in urban than in rural areas, after controlling for differences in education or job types across locations. Although the size of this effect varies considerably across countries, it remains statistically significant.
- *The relationship between earnings and the employment sector is strong.* Aggregate earnings in all sectors exceed those in agriculture. Mining, public administration, construction, and finance have relatively high returns. On average, earnings in mining are 50–120 percent higher than in agriculture.

The gender gap ranges from 24 percent in Botswana to 38 percent in South Africa.

**Table 3.4. Mincer earnings functions**

Dependent variable	(1) South Africa	(2) Namibia	(3) Botswana	(4) Lesotho	(5) Eswatini
<b>Demographics</b>					
Gender (male = base)	0.378***	0.293***	0.239***	0.321***	0.286***
Age	0.025***	0.075***	0.147***	0.115***	0.092***
Age squared	-0.000	-0.001***	-0.001***	-0.001***	-0.001***
Urban	0.118***	0.184***	0.145***	0.131***	0.195***
<b>Education (no education = base)</b>					
Primary	-0.182**	0.416***	0.403***	0.211***	0.250***
Secondary	0.272***	0.869**	0.733***	0.526***	0.883**
Tertiary	0.822***	1.241***	1.190***	1.206***	1.312***
<b>Industry (agriculture, hunting, fishing = base)</b>					
Mining	0.513***	0.717***	0.619***	1.128***	-0.208
Manufacturing	0.215***	-0.048	-0.064	0.201**	-0.030
Public utility services	0.515***	0.280**	0.363*	0.557*	0.653***
Construction	0.279***	0.105	-0.223	0.396***	-0.212*
Commerce	-0.010	-0.165**	-0.171	-0.020	0.209**
Transport and communications	0.075	-0.111	-0.052	-0.010	0.207
Financial and business services	0.133**	0.211***	0.068	0.297	0.405**

Dependent variable	(1) South Africa	(2) Namibia	(3) Botswana	(4) Lesotho	(5) Eswatini
Public administration	0.305***	0.287***	-0.096	0.077	0.515***
Other services, unspecified	0.138**	-0.141*	-0.269*	0.226***	0.079
<b>Occupation (managers = base)</b>					
Professionals	-0.229***	-0.166**	0.050	-0.206	-0.538***
Technicians and associate professionals	-0.305***	-0.432***	0.083	-0.310**	-0.627***
Clerical support workers	-0.649***	-0.737***	-0.315	-0.764***	-0.580***
Service and sales workers	-0.852***	-1.255***	-0.724***	-0.715***	-1.265***
Skilled agricultural, forestry and fishery	-1.557***	-1.098***	-1.197***	-0.763***	-1.151***
Craft and related trades workers	-0.793***	-0.741***	-1.362***	-0.632***	-0.813***
Plant and machine operators	-0.915***	-0.700***	-0.859***	-0.466***	-0.706***
Elementary occupations	-1.101***	-1.089***	-0.900***	-0.989***	-1.062***
Armed forces	-0.197	-0.311***	-1.514***	0.037	0.062
Contract	0.403***	0.956***	0.441***	0.576***	0.660***
Constant	3.701***	5.564***	2.886***	2.909***	3.744***
Observations	5,599	6,102	4,910	2,814	2,188
R-squared	0.470	0.519	0.580	0.510	0.551

Source: World Bank calculations.

Notes: Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Data are from 2015 for Namibia and Botswana, 2015 for Eswatini, 2017 for Lesotho, and 2018 for South Africa. Controlling for subnational region fixed effects; regional dummies omitted for brevity.

### Factors associated with human capital accumulation and job type account for most of the earnings inequality

(Table 3.5). In SACU, human capital characteristics embodied in individual education levels and occupations represent close to 60 percent of wage inequality. Demographics and location account for around 25 percent of the inequality, with industry affiliation representing 13.2 percent. The decomposition results can be summarized as follows:

- *Educational attainment* accounts for 30.2 percent of the Gini coefficient of earnings. The impact of education on inequality is pronounced in all countries, ranging from 22.8 percent in Namibia to 36.9 percent in Eswatini. As noted, the returns on education are high in all SACU countries.
- Collectively, *worker occupation and industry* contribute 44.4 percent to earnings inequality. For the region, occupation stands at 31.2 and industry at 13.2 percent. Occupation is especially important in Botswana (44 percent) and South Africa (36.3 percent).
- *Worker demographic characteristics* contribute an average of 18.9 percent to the region's earnings inequality. These characteristics include age, gender, marital status, and household size. Demographics has the biggest impact in Lesotho (25 percent) and the smallest in Namibia (15.6 percent). Among the demographic characteristics, age makes the largest contribution (11.6 percent of the 18.9 percent). Gender differences contribute 1.3 percent to total inequality.
- *Geography* (location) contributes 6.4 percent to inequality. Location is represented by rural/urban affiliation and region or province. Although location is generally less important than labor characteristics, demographics, and education, it is particularly important in Namibia, where it contributes 18.1 percent of earnings inequality.

**Table 3.5. Factor contributions to earnings inequality**

	Namibia	Botswana	Lesotho	South Africa	Eswatini	SACU average
Demographics	15.6	20.4	25.0	16.7	16.7	18.9
Age	10.0	14.7	19.8	4.4	11.7	12.1
Gender	0.7	0.5	2.3	2.0	0.8	1.3
Marital status	4.9	5.2	2.9	10.3	4.1	5.5
Education	22.8	29.5	31.1	30.9	36.9	30.2
Industry	20.5	3.0	13.6	10.8	18.3	13.2
Occupation	23.0	44.4	27.5	36.3	25.0	31.2
Location	18.1	2.6	2.9	5.4	3.2	6.4
Rural/urban	3.9	1.3	3.5	1.7	2.6	2.6
Region	14.3	1.3	-0.7	3.7	0.6	3.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: World Bank calculations.

Notes: Decomposition of the earnings inequality by categories. Each number is a percentage contribution to the total earnings Gini coefficient.

## 3.2 The role of land ownership, governance, and productivity

A well-functioning land governance system is key to achieving economic growth and development, reducing inequality, and enhancing social development in SACU. Securing the rights of landholders and users, especially vulnerable groups, supports sustainable development and poverty reduction (De Villiers and others 2019). SACU governments increasingly recognize that land ownership and tenure security is pivotal to achieving key goals on poverty reduction, women’s empowerment, and climate change.

### 3.2.1 Inequality in land ownership in a historical context

**Land ownership is highly unequal in Namibia and South Africa.** The unequal distribution of agricultural land stems from the 1913 Natives Land Act, which denied Africans the right to purchase land outside the defined reserves that would later become the homelands (Bantustans). It also attempted to limit rent tenancy and sharecropping by Africans on white-owned land. The 1923 Native Urban Areas Act restricted black South Africans from entering urban centers unless they were on official work assignments and carrying a pass. Race-based restrictions on the movement of black South Africans and the ownership of land gradually unraveled in the late apartheid period but were only finally lifted with the abolition of the Bantustan system and the creation of new local government institutions.

**Given the extent to which exclusion in apartheid South Africa is linked to land, land reform remains a critical topic.**

The governments of both Namibia and South Africa have implemented various land redistribution programs. South Africa’s 1994 Land Restitution Act allows claims for dispossessed land and forced removals under various Acts after 1913. The resulting Reconstruction and Development Programme also addressed land reform through the restitution of land rights, land redistribution, and tenure reform. However, restitution and redistribution proved to be expensive and hampered by legal complications around issues such as multiple claimants, the burden of proof, price setting, and general implementation. There were also complications around land tenure and the sustainability of commercial farms, once transferred. The amount of land transferred remains negligible. At the 54th National African National Congress-led conference in 2017, a resolution was passed to grant ownership of traditional land to the respective communities. In 2018 a motion was passed to review the constitution’s property ownership clause to allow for the expropriation of land without compensation in the public interest. In 2019 and early 2020, parliament began discussing constitutional reforms that would permit the uncompensated seizure of private land.

**In Namibia, most arable and productive land was taken from black people and allocated to white settlers and their descendants.**

Despite the apartheid origins of land ownership patterns, the government has generally avoided expropriating farms since independence in 1991. Instead, it took a “willing seller and willing buyer” approach to land

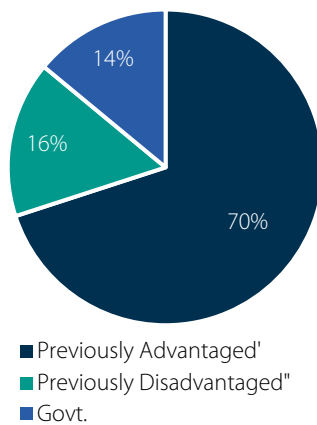
reform. Farms to be reallocated to previously disadvantaged people are mainly bought from farmers who wish to sell their land. Over the past 30 years, the government acquired 496 farms totaling about 3 million hectares at a cost of about N\$1.9 billion and resettled approximately 5,352 beneficiaries. The main reasons for the slow pace of land reform have been the limited number of willing sellers and rising land prices. For various reasons, the government also did not buy around 5 million hectares of land that did come to market. By 2018, Namibians of European descent owned about 70 percent (27.8 million hectares) of Namibia's 39.7 million hectares of commercial farmland,<sup>22</sup> whereas black Namibians owned only 16 percent (Figure 3.4, panel a). That year, Namibia held a second land conference to address these challenges. A key outcome of the conference was that the government would no longer rely on the "willing seller and willing buyer" policy as the primary

method of land acquisition. Instead, it would implement other means of land expropriation; however, it is still unclear what these methods would be and whether they would be market-based.

**Fewer than half of households in SACU own the land on which they live**, and land ownership is significantly lower in urban areas. In rural areas, the lowest land ownership rates are in Botswana and Lesotho, where fewer than 50 percent of households own their land (Figure 3.4, panel b). The highest land ownership is in Eswatini, at 79 percent of rural households. Namibia has about 7,000 white commercial farmers. Most smallholder producers farm on communal land, which is highly degraded, overgrazed, and vulnerable to bush encroachment. Farmers on communal land are less likely to have land titles, which makes it difficult for them to access finance from commercial banks.

**Figure 3.4. Distribution of land ownership**

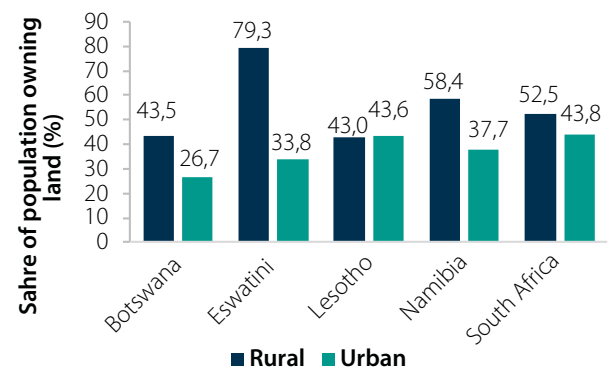
**a. Commercial land ownership in Namibia**



Sources: Namibia Statistics Agency 2018.

Note: Previously advantaged: Namibians of European descent; previously disadvantaged: black Namibians

**b. Share of population owning land**



Source: World Bank calculations based on household survey data.

**While the constitution does not guarantee the right to land in Botswana, government policies since independence have aimed to ensure equitable access to land.** Any national can apply for land anywhere in the country and obtain a customary land right certificate allowing use of the land for residential, grazing, or arable purposes. Access to the commons has a long tradition in Botswana and most of the country's 2–3 million cattle graze on communal lands. For the most part, access to land is inclusive, albeit plagued by administrative bureaucracy and time delays. There are, however, some exceptions:

- *Women* can access land in other ways, but Tswana tradition places specific restrictions on the inheritance of property (see also Box 3.2).

- Banks do not accept customary grants as *collateral* for mortgages; this constrains the secondary market for purchasing residences. Poorer farmers also tend to be excluded from ownership of commercial agricultural land because of the costs and processes involved.
- Accessing *suitable land* remains a challenge in some locations. In poor, rural communities, for example, over 43 percent of Botswana's land is designated for conservation purposes and an additional 15 percent for freehold or leasehold farms, fenced grazing areas, game ranches, or mining.

22 Land statistics are based on Namibia Statistics Agency (2018).



**Eswatini's system of land distribution is the bedrock of its traditional governance and the ultimate source of royal and chiefly power.** In theory, the distribution of land in Eswatini remains equitable and accessible to all. However, the country has a dual land tenure system consisting of Title Deed Land and Swazi Nation Land. This duality is a legacy of the British land partition of 1907–14, when the British ceded about 60 percent of the territory of present-day Eswatini to private, mainly white landowners. They left the remaining 40 percent to the native population as Swazi Nation Land. Upon independence in 1968, King Sobhuza II led a nationwide effort to reacquire land from foreign concessions and white landowners. This expanded

Swazi Nation Land to about 62 percent of Eswatini's 1,736,400 hectares of land. Today, just over 500,000 hectares are Title Deed Land. Chiefs may appear to have a high degree of personal power. However, they manage land and other customary affairs collectively with the support of a council of elders and others from their areas of jurisdiction. This collective management provides some checks and balances. There also are some social and institutionalized safeguards against dispossession. Insofar as Swazi Nation Land provides security of tenure and functions as a form of welfare system with relatively guaranteed access to landholding, the system will continue to enjoy legitimacy and popular support.

### Box 3.2. Gender gaps in tenure security

Overall, there is significant gender discrimination in land tenure in SACU, with women more likely to suffer from tenure insecurity. Despite land tenure reforms, unequal distribution of land persists in terms of gender and economic class. Women have little or no rights to land ownership, which leads to inequalities in asset ownership. Even though women are generally protected under statutory provisions for freehold land, customary land remains the primary tenure regime, which leaves women and minorities vulnerable (Bayer and others 2019; Manyatsi and Singwane 2019; Leduka and others 2018). Customary laws restrict women's rights to land and personal property (Eswatini), with land rights vested in males. Women can only function through their husbands or fathers in Lesotho (Manyatsi and Singwane 2019; Leduka and others 2018).

In Botswana, Namibia, and South Africa, rules and legislation on access to customary land provide protections against gender discrimination. Unsurprisingly, female land ownership in these countries is the highest in the region (Bayer and others 2019). South Africa performs well in this regard—more than 45 percent of land registered to physical persons is listed in the name of female owners (Franzsen 2017). For freehold land, the system discriminates against poor people, a significant majority in the region. In Botswana, women and young people are less likely to access state land because of a lack of financial resources (Bayer and others 2019).

**In Lesotho, the 2010 Land and Land Administration Authority Acts overhauled the system of land administration to regularize titles and strengthen security of tenure.** However, this is aimed mainly at urban and peri-urban areas, and a communal system remains in place in rural areas. Despite these improvements, the prevailing land tenure system operates under leasehold terms of 31 years, which mandates the state as trustee of land. A long-standing challenge to rural transformation has been people's limited capacity to access credit. To deal with this challenge, the 2010 Land Act seeks to enable rural land to be used as collateral for financing. The law allows female landowners to gain access to credit to invest in their land. However, gaining access to land could take up to a year.

**The lack of land ownership in Lesotho undermines land quality.** Almost 70 percent of the country's land area is classified as agricultural, but only about 10 percent is suitable for crop cultivation. The rest is low-quality land suitable only for extensive livestock grazing. Many

parts of the country are subject to extreme temperature fluctuations and highly variable rainfall, making rainfed crop cultivation and even livestock production extremely risky. Lesotho's irrigation potential seems to be hugely underexploited, which is somewhat ironic, as the country is a major exporter of water. Traditional land tenure systems do not ensure long-term security of access and, therefore, discourage investment in land improvements, such as irrigation infrastructure, soil and water conservation measures, and the planting of trees. Facing this insecurity, many farmers and herders have engaged in unsustainable land management practices that have contributed to poor soil fertility and severe erosion. Because the institutions charged with agricultural research and extension have been ineffective, very few farmers have adopted improved production technologies, and productivity remains low. The country also needs to re-evaluate the appropriate role of the state in supporting agriculture.

### 3.2.2 Quantifying the impact of land ownership

**Land ownership increases household consumption and significantly reduces the probability of falling into poverty.** Owning land increases household consumption by 29 percent in urban areas and 6 percent in rural areas (Figure 3.5, panel a). The return on land is highest in Namibia and South Africa, with around 40 percent greater consumption in urban areas; the figure for rural areas is 15 percent in Namibia and 13 percent in South Africa. The impact is smaller but still significant in Botswana and Eswatini. In Lesotho, the land ownership coefficient was insignificant. Land ownership also reduces the probability of being poor (Figure 3.5, panel b). Urban landowners have a 21 percent lower probability of falling into poverty, with rural areas at 11 percent. The poverty impact is strongest in Namibia and Botswana. The probability of being poor falls further in households with a higher share of female adults—96 percent in urban areas and 112 percent in rural areas.

**Land is an important asset for poor people.** Improving security of tenure in both urban and rural areas can significantly benefit household income and equity. Secure tenure is important for agriculture and food security, as it provides incentives for farmers to invest in land, borrow money for agricultural inputs and improvements, and use land sales and rental markets to ensure full utilization of land. In contrast, insecure tenure has a direct negative impact on financing, the implementation of public infrastructure investments, and people's well-being.

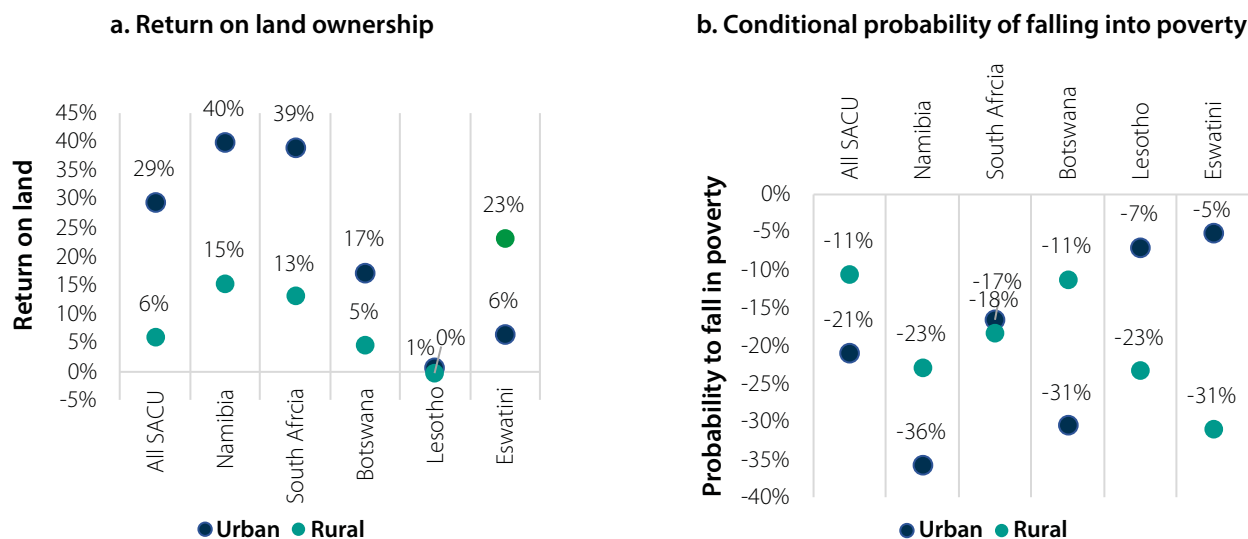
**Secure land rights are also important for commercial agriculture, private sector development, and job creation.** Companies and individuals often use land or property titles as collateral to finance operational costs, expand their businesses, or open new ones, thus adding more jobs.

**Land ownership makes a small marginal contribution to inequality,** once the effect of education, labor, and demographic conditions is accounted for. Figure 3.5, panel c shows that land ownership contributes 1.3 percent of overall inequality in SACU. Land contributes more to inequality in South Africa (1.4 percent) than in Lesotho (0.0 percent). This does not mean that land is unimportant, but rather that after controlling for the effects of education, labor, and demographics, the additional contribution of land ownership to inequality is relatively small. This is because land ownership is correlated with those characteristics and, therefore, it has limited additional explanatory power.

**A large share of SACU's population and most of its poor people rely on agriculture for their livelihoods.** Although the sector accounts for less than 10 percent of SACU's GDP, it employs large sections of the population. In Lesotho, for example, most people live in rural areas and depend directly or indirectly on agriculture for their livelihood. The livestock industry dominates the rural economy. The main agricultural outputs include livestock products, such as live cattle, sheep, goats, and pigs; processed meats, hides, and skins; and fishing activities. Local grain production includes maize, wheat, and pear millet, whereas horticultural products include grapes, cabbages, watermelons, potatoes, onions, and dates.

**The dualistic structure of agriculture contributes to inequality.** Namibia has two distinct farming systems, a large-scale, commercial sector that dominates output and a small-scale, communal farming sector largely engaged in subsistence farming. Agriculture is the second-largest employer, accounting for 33 percent of the workforce, and about 70 percent of the population relies on agricultural activities for their livelihood. Nevertheless, agricultural productivity is low, and the value added is limited. Most people in agriculture are smallholders with less than one hectare per family. Growth in the agricultural sector would be central to the reduction of inequality in the region.

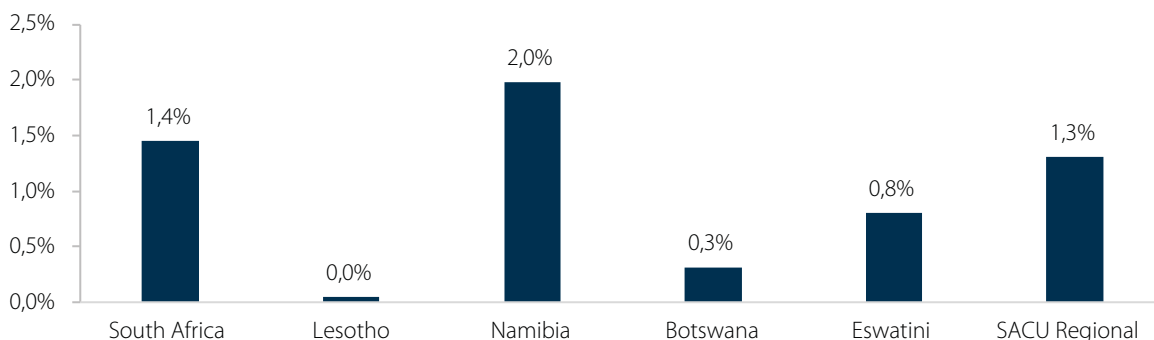
**Figure 3.5. Impact of land ownership**



Source: World Bank calculations.

Notes: Panel a is based on an ordinary least squares regression with log consumption per capita as the dependent variable; independent variables are household heads' demographic characteristics and composition, education, location, size, and land ownership (dummy =1 for land owners). The chart presents land ownership coefficients from this regression. Panel b is a logit regression with the poverty dummy as the dependent variable; panel b variables are similar.

**c. Contribution of land ownership to inequality**



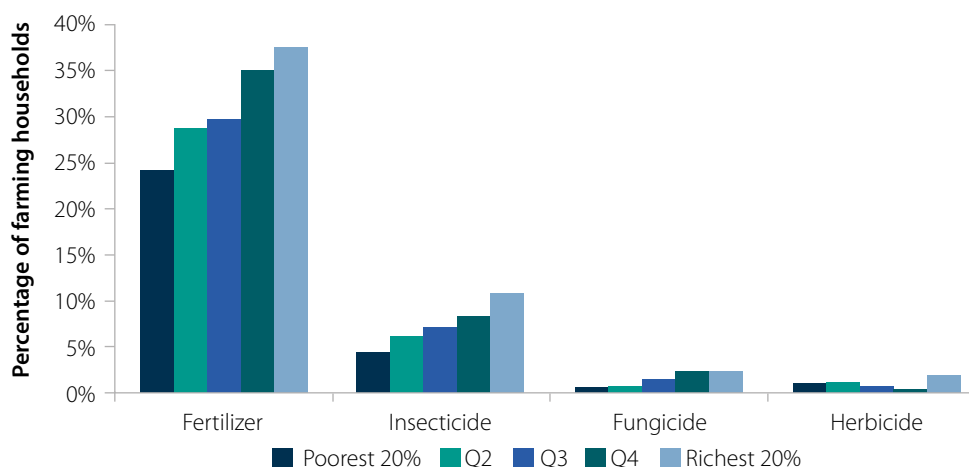
Source: World Bank calculations based on household survey data.

Notes: The results show the contribution of land ownership to Gini inequality of consumption based on the Fields (2003) approach. Other factors (not shown here) are location, labor, demographic, and education characteristics.

**Limited adoption of modern commercial agricultural practices and low investment in machinery and inputs contribute to low yields.** Household survey data on yields are scarce, but the evidence suggests that yields are significantly below those expected for the crop varieties planted. Low productivity in agriculture contributes to low incomes and high poverty among farming households (Figure 3.6). Livestock farming is the most prevalent agricultural activity in southern Africa. In Lesotho, for

example, over three-quarters of households raise animals. The agriculture sector is dominated by smallholder subsistence farmers. Most farming households produce for their own consumption, with only a small portion producing primarily for sale. Crop farmers tend to rely on rainfed, low-input/low-output production methods, with limited use of irrigation, improved seed, fertilizers, and pesticides.

**Figure 3.6. Farming households using production inputs in Lesotho, 2017**



Source: Calculations based on the 2017/18 Continuous Multi-Purpose Household Survey/Household Budget Survey, Lesotho Bureau of Statistics, Maseru, <https://catalog.ihns.org/catalog/8294/study-description>; World Bank 2019a.

**Investment in climate-smart agriculture and the commercialization of agriculture would increase rural resilience, boost productivity, and reduce inequality.**

The negative effects of climate change, including recurrent droughts, are expected to intensify. Building resilience through climate-smart agricultural technologies and practices is therefore critical. The key steps involve restoring degraded land; disseminating innovative, climate-smart

agricultural technologies, including the adoption of drought- and heat-resistant seed varieties and rotational grazing; and expanding knowledge and local capacity. Both private and public investments are required to increase capacity for clearing invasive bush species in an environmentally sustainable manner. Scaling up current efforts in communal smallholder areas is important.

**3.2.3 The challenges of land governance**

**Personal income inequality in SACU is closely associated with its colonial history of racially discriminatory socio-economic policies, including land dispossession** (Moyo 2013). Many farmers perceive their tenure situation as being insecure, and few have a legal title to their land. Better security of tenure would increase investment and labor productivity in rural areas and reduce income inequality. Box 3.3 gives additional details on land governance issues in southern Africa, as summarized in Table 3.6.

**Informality (a lack of land titles) remains a challenge for land governance and taxation** in Botswana, Eswatini,

and Lesotho. Land valuation and taxation principles and processes are applied consistently across the region for freehold/titled land (Bayer and others 2019). Aside from South Africa and Namibia, where 80–90 percent of properties are surveyed and registered, the valuation and taxation system does not apply to most land rights holders. The challenge around informality is that there is no ownership record (Bayer and others 2019). Typically, valuation is done for statutory purposes, such as the determination of rates and taxes, and for commercial purposes, such as insurance, lending, and sales.

**Table 3.6. Land governance in southern Africa**

Land tenure	Land rights and equity	Land registration	Valuation and taxation
<p><b>Dual land tenure</b> in three classes:</p> <ul style="list-style-type: none"> <li>• <i>Customary or traditional</i>: unregistered, under authority of traditional leaders or structures.</li> <li>• <i>Public or state</i>: registered or unregistered, under authority of government.</li> <li>• <i>Private or freehold</i>: registered and surveyed, for commercial, agricultural, and residential purposes.</li> </ul>	<p><b>Discrimination</b> (against women and minorities)</p> <ul style="list-style-type: none"> <li>• <i>Customary allocations</i>: women lack equal rights, except in Namibia.</li> <li>• <i>Statutory or freehold land</i>: women's access to land generally protected.</li> <li>• <i>State land</i>: often the only means for poor people to access land.</li> </ul>	<p><b>Deeds registration</b></p> <ul style="list-style-type: none"> <li>• For <i>freehold and public or state land</i>: transactions recorded in deeds registry.</li> <li>• <i>Cost of registration</i> on surveyed and registered land parcels: 5% of property value in South Africa and 7.6% in Namibia; no data on other countries.</li> </ul>	<p><b>Valuation</b></p> <ul style="list-style-type: none"> <li>• On freehold or titled land for statutory (rates and taxes) and commercial purposes.</li> <li>• Statutory valuations revised periodically (such as every 5 years).</li> </ul> <p><b>Taxation</b></p> <ul style="list-style-type: none"> <li>• On freehold or titled land.</li> <li>• Two types: primary taxes and capital gains tax.</li> </ul>

### Box 3.3. The legal framework and land tenure system in southern Africa

SACU is characterized by dual land tenure systems, with both customary and statutory elements. There are three main classes of land:

- *Customary or traditional lands* are under the authority of traditional leaders or structures and are largely unregistered.
- *Public or state lands* fall under government authority; they may be registered or deregistered and include areas such as national parks and other conservation lands.
- *Private or freehold lands* are typically registered, surveyed, and used for commercial, agricultural, and urban residential purposes (Bayer and others 2019).

Beyond Namibia and South Africa, customary tenure prevails. In Botswana, for example, over 70 percent of the total land mass is under traditional land tenure, while freehold land accounts for only 3 percent. In Eswatini, 75 percent of land, known as Swazi Nation Land, is administered by traditional chiefs.

Under customary tenure, the allocation and administration of land rights are carried out by traditional authorities. Despite the lack of formal registration systems and land parcels typically not being surveyed and registered, customary tenure is generally recognized and protected. In some cases, the role of customary leaders has been given to statutory bodies, such as land boards, which are responsible for the allocation of land rights. Formally, customary rights are provided free of charge. Only Namibia has codified its customary rights into a statute.

Land registration is based on the deeds registration system. For freehold and public or state land, transactions are recorded in a deeds registry, while surveying of cadastral parcels is managed by the survey registry in all cases, except for Lesotho (Bayer and others 2019). Customary rights in southern Africa are still not surveyed and registered. Registration procedures have not been standardized, except in Botswana and Namibia. The cost of land registration varies across the region, with South Africa spending about 5 percent and Namibia 7.6 percent of the property value on registration activities (Bayer and others 2019).

#### Land markets do not function efficiently in rural areas and vary between countries and by type of tenure.

Markets for freehold areas (rental and sales) function well, mainly in urban areas; these markets typically have little or no restrictions, except for agricultural land. Where customary tenure is the dominant tenure type, no formal land markets exist. Land acquired by the state through the various land reform programs is typically not tradable (Bayer and others 2019).

#### Land registration remains a problem in some countries.

Lesotho seems to have the least active formal market, with most of its land being unregistered. In its urban areas, over 70 percent of the population (both poor and relatively wealthy people) obtain land through informal means (Leduka and others 2018). Eswatini, a small country, has a relatively small market for land and property, but the market for title deed (freehold) land is active (Manyatsi and Singwane 2019).



# CHAPTER 4

## THE ROLE OF THE SECONDARY INCOME DISTRIBUTION

*Taxation and social protection spending patterns play a central role in the secondary income distribution in SACU. For personal income taxes, the tax system is progressive, although there seems to be space for raising additional revenue by increasing top progressive income tax rates and “unbunching” the top rates in Botswana, Eswatini, and Lesotho. While consumption taxation is not designed to equalize incomes or wealth, the value added tax (VAT) systems attempt to support poor people through exemptions and zero rates on food and other necessities. Given multiple exemptions on food and basic goods, and poor people’s high reliance on own consumption, VAT is close to neutral in terms of its impact on inequality. Targeted subsidies to vulnerable people tend to provide much better support than do categorical exemptions that benefit both poor and wealthy households.*

*In terms of social protection, SACU relies mainly on non-contributory transfers, with very limited social insurance. Its significant spending on social assistance translates into relatively higher coverage than in other countries with similar income levels. This spending reduces inequality, and child-support and old-age grants make the largest marginal contribution to redistribution in most countries. However, the efficiency of the region’s social assistance systems can be improved.*

**The secondary income distribution is defined as the distribution of income after taxes and transfer payments** have been deducted from or added to primary incomes. This chapter first examines taxes, exploring how the burden of personal income and VAT is shared

across households in SACU. It then briefly discusses the key features of tax policy design that may contribute to inequality. The next section reviews social assistance and social protection and labor programs in the SACU region.

### 4.1 Taxation as a source of inequality

**Taxation and inequality affect each other in two distinct ways.** Governments frequently use transfers and subsidies to support vulnerable people or fund healthcare and education services to build human capital and to reduce inequality. However, to fund such spending, they need to raise resources; this is generally through taxes on

consumption, income, or some other base. As these taxes are raised from individuals and businesses, two important questions define their impact on inequality: how the burden of the tax system is shared by individuals, and how it should be shared across income classes.<sup>23</sup>

23 The use of the tax/benefit system for redistribution has long been recognized. Piketty (2014) and Atkinson (2015) suggested that taxation could be a powerful way to make the income distribution more equal. Martinez-Vazquez and others (2012) analyzed data on taxes and inequality across 150 countries in 1970–2006, finding that a progressive personal income tax seems to reduce income inequality, whereas consumption taxes have the opposite effect.

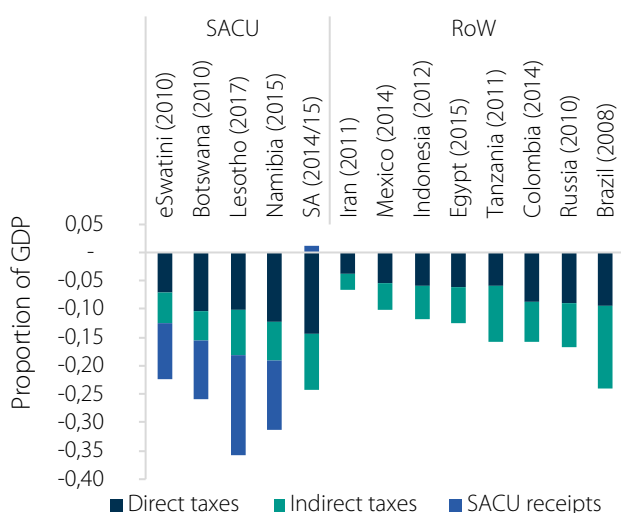
## 4.1.1 Features of tax policy in SACU

Revenue collection in the region is high, ranging from 12 percent of GDP in Eswatini to 26 percent in Botswana (Figure 4.1). By comparison, Iran, Mexico, and Indonesia all collect less than Eswatini (7–12 percent of GDP), whereas Egypt, Tanzania, Colombia, and Russia collect less than Lesotho. Only Brazil taxes as much as South Africa, at 24 percent. Note that SACU receipts are excluded from this analysis, as this source of government revenue is not part of “tax collections”.

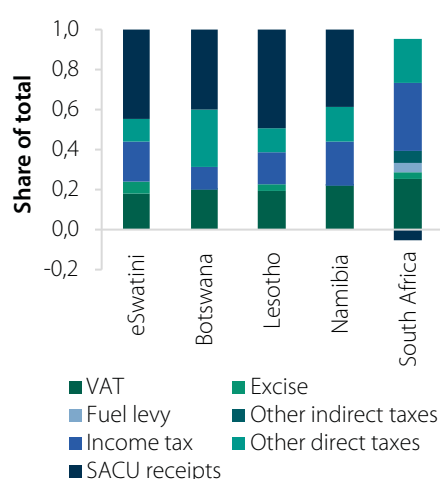
SACU countries rely more on direct than on indirect taxes for revenue collection. This is the same for comparator countries, where direct taxes are either higher or equivalent to indirect taxes, except in Tanzania and Brazil, which rely more heavily on indirect taxes as the main sources of revenue. (See also Box 4.1 for other aspects of the tax systems in SACU.)

**Figure 4.1. Revenue from tax collection**

**a. Revenue as a share of GDP, SACU and select other countries**



**b. Composition of tax revenue (including SACU receipts)**



Sources: Botswana: Younger 2020; Brazil: Higgins and others 2019; Colombia: Melendez and Martinez 2019; Egypt: Lara Ibarra and others 2019; Eswatini: Renda and Goldman 2020; Indonesia: Afkar and others 2015; Iran: Enami and others 2017; Lesotho: Houts and Goldman 2019; Mexico: Scott and others 2017; Namibia: Jellema and Renda 2020; Russia: Popova 2019; South Africa: Goldman and others, forthcoming.

Note: Income tax in Botswana refers only to non-mineral income tax.

**Namibia and South Africa have the highest tax-to-GDP ratios, but the shares of personal income and consumption taxes in total tax revenues are high across the region** (Figure 4.2, panel a). The SACU countries have some unique features in common:

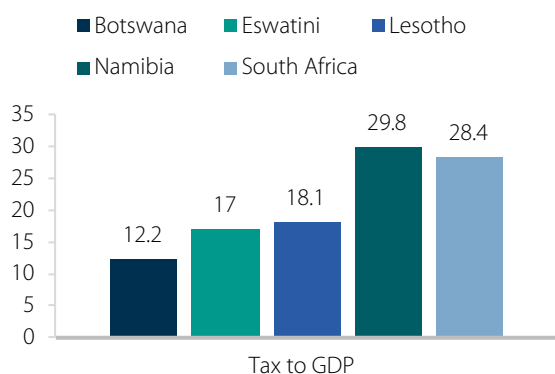
- They rely on receipts from the customs union, which ranged from less than 1 percent of GDP in South Africa in 2017–18 to about 10 percent in Botswana, Eswatini, and Namibia, and to over 20 percent of GDP in Lesotho.
- Their share of income tax in total tax revenue is considerably higher than the African or worldwide averages (Figure 4.2, panel b). All countries except for Namibia obtain over 30 percent of tax revenues (excluding SACU receipts) from personal income tax,

with another quarter coming from goods and services taxes (slightly below the OECD average). This implies that the most prominent tax instruments in these countries are more likely to have a major impact on the population than on the corporate sector.

**Apart from SACU receipts, income taxes and VAT are the major sources of tax revenue.** The exception is Botswana, which receives the largest share of tax revenue from other direct taxes. The share of income tax in Botswana’s other direct taxes is low, however, as the income tax is about equally split into mineral and non-mineral income taxes. (Only non-mineral income tax is included in the analysis.)

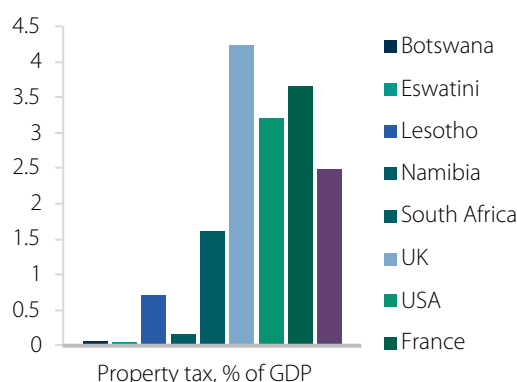
**Figure 4.2. Relative tax burdens**

**a. Tax to GDP in SACU**



Source: OECD Revenue Statistics in Africa.

**b. Property tax to GDP in SACU and selected OECD countries**



Source: Franzsen and McCluskey 2017.

### Box 4.1. Features of tax systems in SACU

*Personal income tax* systems in SACU are progressive by design, but only South Africa has a steep progressive scale. Interest and dividend income, which mainly accrue to high-income and wealthy taxpayers, are taxed at lower rates, and except for South Africa, at considerably lower rates. Exemptions for pension or education contributions are good from a policy design perspective, but are likely to favor wealthier people, who have enough income to invest in such policies.

Because *VAT* targets consumption, it is regressive by design—poorer households spend a larger portion of their incomes and save less. However, most countries use VAT because it is least likely to distort economic incentives. Governments, including those in SACU, partly compensate for VAT’s regressive nature by lowering rates and providing exemptions for goods and services on which poorer households spend relatively more, such as basic food supplies, medical care, education, and public transport. But exempting or zero-rating specific goods is an inefficient way to make a tax less regressive, because high-income households consume more of these goods than do low-income ones, and they buy less as a share of their income. It is also difficult to target the specific goods or services consumed by low-income households. For example, zero-rating fresh fruits and vegetables in Eswatini may benefit middle- and high-income families who could easily afford better diets. Giving well-targeted subsidies to vulnerable households might better support consumption and be more cost-efficient.

*Property tax* affects wealth rather than income redistribution. In most SACU countries, property taxes are called rates and are levied by local urban authorities. Except in South Africa, however, the revenues from property taxes are insignificant, because of policy design and the absence of capital gains taxation in some countries. In Lesotho, only properties in “designated areas” are taxed, and the tax rate for residential properties is negligible at 0.0025 percent. Namibia does not tax either capital gains or inheritance. South Africa is the only country where taxpayer income is used to exempt lower-income taxpayers. Another issue is poor valuation. In many cases, especially for properties outside major municipalities, the assessed value is not in line with the market value.

*Excise duties* are payable by manufacturers and are levied throughout SACU.<sup>1</sup> The following products are included: alcohol and tobacco products, malt beer, traditional African beer, spirits or liquor products, wine, vermouth and other fermented beverages, fuel or petroleum products, and ad valorem products.

*Note:* 1. To estimate excise duties for all countries except South Africa, the statutory rates were applied to consumption expenditures to impute the excise. For South Africa, consumption records for alcohol and cigarettes were underreported in the survey. Therefore, the national accounts excise amount was scaled down for coverage in the survey and distributed among households according to their shares of each item’s consumption.



## 4.1.2 Progressivity of the tax system

A common way of measuring the progressivity of a tax is by comparing the cumulative distribution of the tax burden with the cumulative distribution of reference income,<sup>24</sup> as illustrated through the Lorenz curves in Figure 4.3 (see also Box 4.2). This section considers the progressivity first of direct (income) taxes and then of indirect taxes.

**Lorenz curves** are used to show how progressive taxes are. They rank the population along the horizontal axis using per capita reference income, with the cumulative shares of taxes paid plotted along the vertical axis. A tax whose concentration curve lies anywhere below (or above) the Lorenz curve for reference income is progressive (or regressive). A tax with a concentration curve in the shape of the Lorenz curve of pre-tax income is neutral.

### Direct taxes (personal income tax)

**Income taxes in SACU are direct taxes imposed on business, employment, property, pension, and investment income.** Income from employment includes all remuneration, including bonuses, allowances, and taxes paid on the employee's behalf. The most common types of non-employment income are interest and dividend income. This analysis only considers direct taxes on employment,

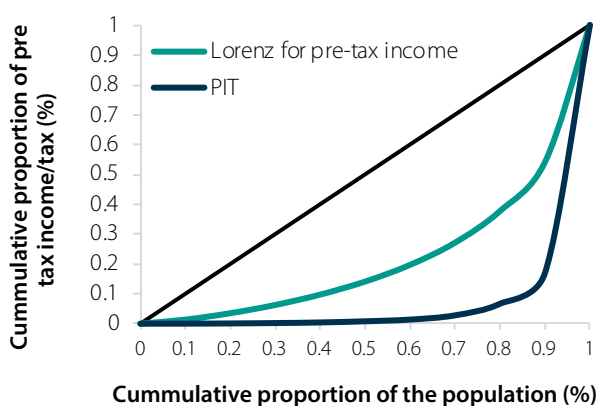
including income taxes (also known as pay-as-you-earn) and other payroll taxes.<sup>25</sup>

**The burden of personal income taxes is borne overwhelmingly by the richer deciles;** the wealthiest 10 percent of people contributed at least three-quarters of total personal income tax in SACU. The share of tax paid by the poorest deciles of the population is lower than their share of market income, showing that they bear a relatively smaller tax burden. Payroll taxes (social security contributions in Namibia and the Unemployment Insurance Fund in South Africa) are also progressive (Figure 4.3, panels b and e). However, the richest decile in both countries pays a relatively smaller share of total contributions than its share in income, mainly because contributions are capped above a certain threshold.

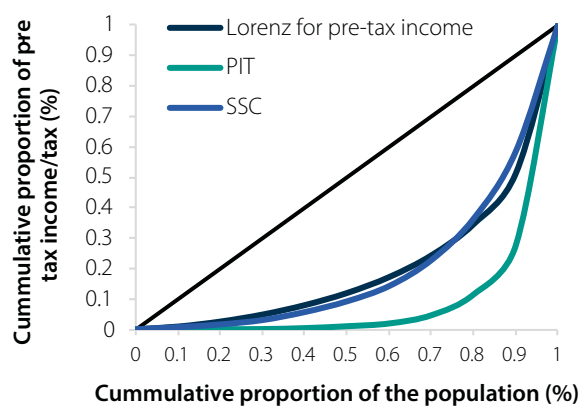
**While personal income tax is progressive overall, it only becomes progressive at the top of the income distribution.** The concentration curves are almost flat in the first two-thirds of the graph. This might, in part, show that the lower deciles earn additional, untaxed income from informal employment (outside their main jobs). However, the design of personal income tax is also progressive, as discussed below. For comparison, the example of Canada is provided in Figure 4.3, panel f to illustrate the concentration curve of a country in which personal income tax is highly progressive.

**Figure 4.3. Concentration curves of personal income and payroll taxes**

#### a. Lesotho



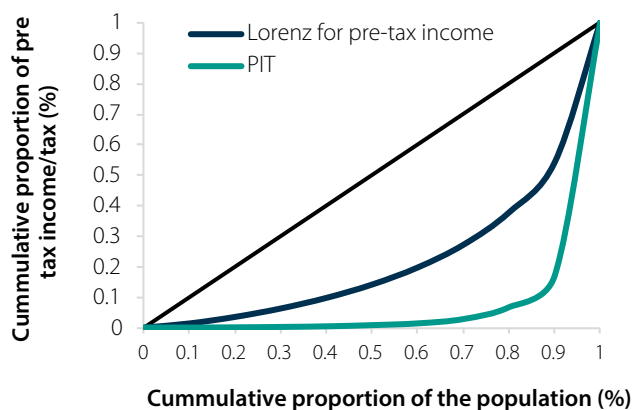
#### b. Namibia



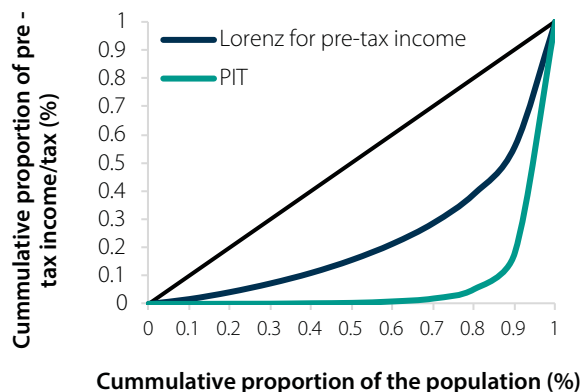
24 This subsection uses micro-data from household surveys to evaluate the impact of tax policy on poverty and inequality in SACU countries. Consistent with other studies for African countries, it uses household consumption as the underlying welfare indicator. Income concepts are derived from this total consumption expenditure by either subtracting or adding various fiscal interventions (direct and indirect taxes).

25 In the incidence analysis for South Africa, direct taxes comprise personal income tax, including pay-as-you-earn, and contributions to the Unemployment Insurance Fund.

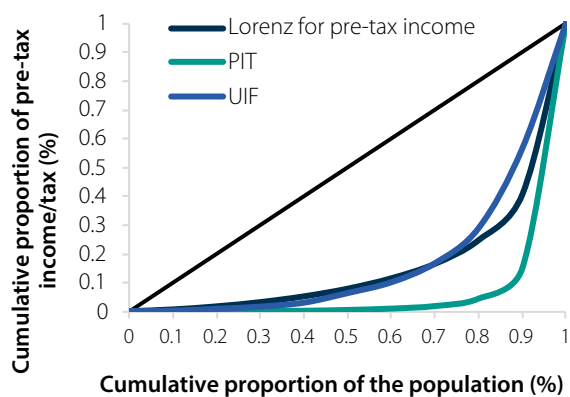
c. Botswana



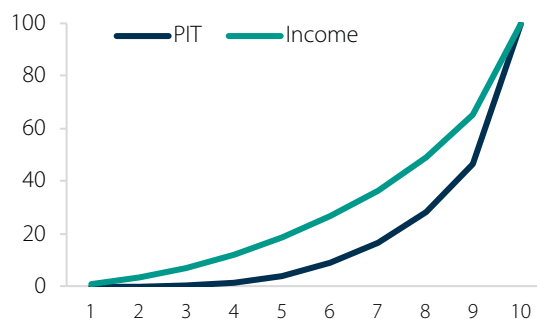
d. Eswatini



e. South Africa



f. Canada



Source: World Bank calculations.

Notes: UIF: Unemployment Insurance Fund, PIT: personal income tax.

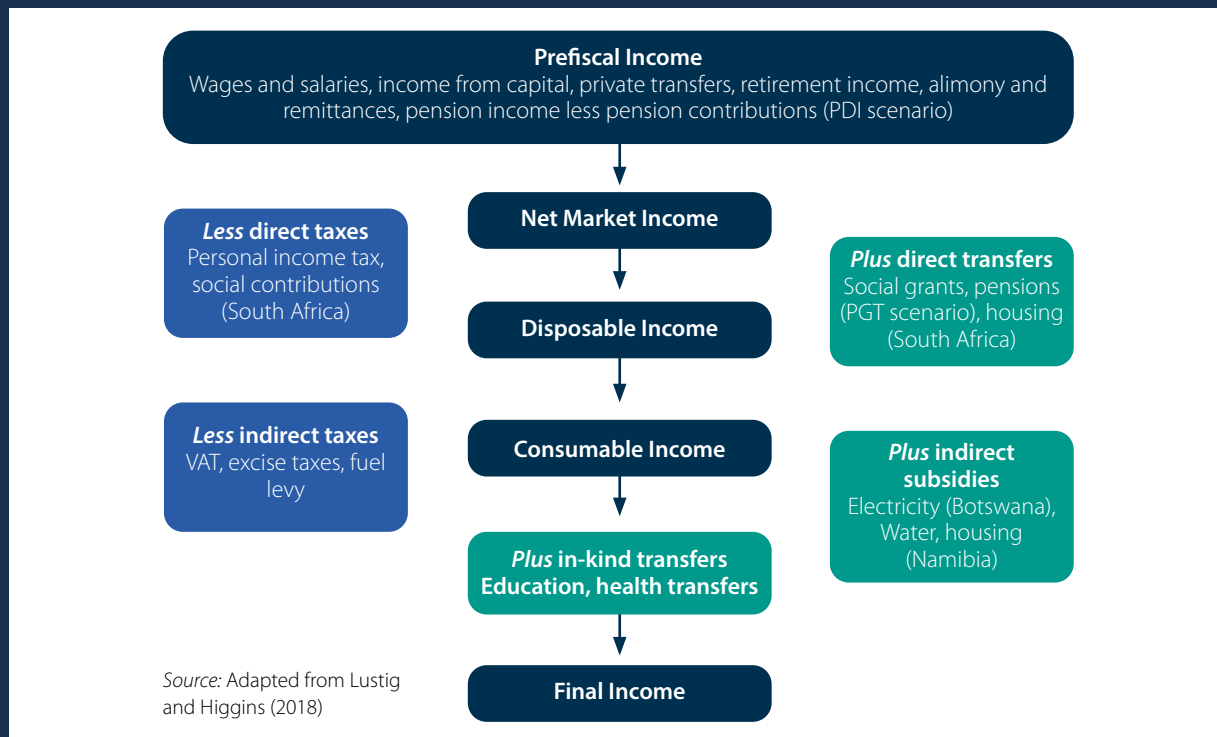
## Box 4.2. The CEQ methodology: Concepts and caveats

### Concepts

The analysis of secondary and tertiary income is based largely on the Commitment to Equity (CEQ) methodology. The CEQ framework permits systematic analysis of the distributional impact of taxes and public spending, using a common methodological framework developed by the CEQ Institute and presented in the CEQ Handbook by Lustig (2018). A CEQ assessment relies on fiscal incidence analysis to assess the distributional impacts of a country's taxes, transfers, and subsidies. In fiscal incidence analysis, taxes and public spending are allocated to households to allow comparisons of incomes before taxes, transfers, and subsidies (*pre-fiscal income*) with incomes after taxes, transfers, and subsidies (*post-fiscal income*).

The building block of fiscal incidence analysis is the construction of income concepts. Starting from *market income*, each new income concept is constructed by adding another element of the fiscal system to the previous one (Figure B4.2.1). The assessment can start with market income and work backward, or it can start with *disposable income* and work backward and then forward. For comparability, all results analyzed here started with setting disposable income equal to the official welfare aggregate. The analysis then worked backward to calculate net market income and pre-fiscal income, and forward to calculate *consumable and final income*.

**Figure B4.2.1. Flow chart of CEQ income concepts**



In terms of *secondary* income components, direct transfers comprise social grants, and housing subsidies in the case of South Africa. Direct taxes mainly comprise income taxes, and indirect taxes comprise VAT, fuel levies, and excise taxes. In terms of *tertiary* income components, indirect subsidies comprise water and housing subsidies in Namibia and electricity subsidies in Botswana. Education transfers are split into pre-school, primary, secondary, vocational, and tertiary education, and healthcare transfers comprise primary and in-patient healthcare.

### Caveats

The analysis excludes important categories of taxes and spending, such as spending on infrastructure, corporate income taxes (a large share of government revenue), defense, and other public goods, because no generally accepted methodology exists for assigning these benefits or burdens to any single individual. Thus, the analysis cannot consider whether the provision of public goods is skewed toward any group, gender, or race and may substantially underestimate the degree of inequality and overestimate the equalizing impact of public policy.

CEQ considers only the redistributive effects of taxes and transfers, but redistribution is only one criterion for public policy. The analysis does not assess the sustainability of taxes and transfers from macroeconomic, demographic, or natural capital perspectives. Results should be weighed with other evidence before deciding whether a tax or benefit is desirable in its present form or should be reformed.

The fiscal incidence analysis used in the CEQ assessments is at a point in time. It is a first-order approximation and does not incorporate behavioral or general equilibrium effects. This limits the framework in important ways:

- CEQ results *cannot show trade-offs* between spending on transfers to alleviate poverty in the present and investments in physical and human capital that could promote well-being in future through higher growth.
- CEQ assessments *cannot measure the redistributive role of pensions* in an intertemporal framework, which are important for accurately estimating their true redistributive impact.
- The framework currently *ignores the behavioral responses* that taxes and transfers trigger and which may imply important trade-offs in terms of efficiency, effectiveness, and sustainability.

In-kind benefits from free government services in education and health are valued at the average cost of provision. This ignores the fact that the “true” value to consumers and the returns to investments in human capital may be quite different from what they cost the government because of, for example, poor quality and waste.

CEQ analysis is based on household surveys, and the contribution to government revenues from the richest individuals in society is very poorly reflected, if at all. If the richest households are excluded from the analysis, it is difficult to assess the fairness of tax and transfer systems and their full impact on inequality.

Source: Adapted from Lustig (2018).

**There is little differentiation between the upper-middle-income class and the wealthiest decile in terms of tax rates.** A comparison with selected upper-middle-income and high-income countries suggests that most countries choose a path where the middle of the distribution could be bulked to avoid complicating administration without generating additional revenues (Figure 4.4). At the same time, the highest-income taxpayers are split into brackets to ensure that the system is highly progressive at the upper end.

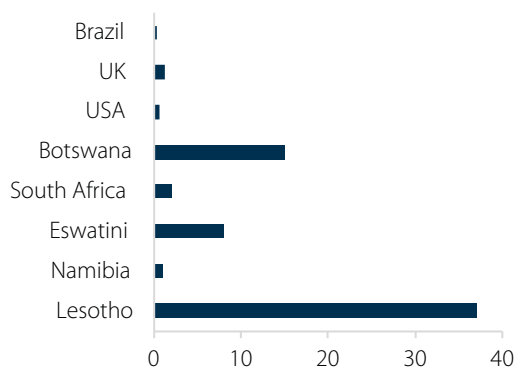
**The effective personal income tax rate is also likely to be reduced at the very top of distribution.** Lower rates

for dividends and interest would reduce the overall rates for the main beneficiaries of these income streams. At the same time, they would be less likely to be representatively covered by the household survey used as a main source of data for this chapter.

**The analysis shows that personal income tax is progressive for both urban and rural taxpayers.** In nearly all SACU countries, most of the tax burden falls on urban taxpayers. In South Africa, the outlier, the richest decile among rural taxpayers has an average effective rate of 27 percent. This can probably be attributed to the presence of large landowners.

**Figure 4.4. Top personal income tax rate bracket**

**a. Share of total taxpayers in the top bracket**



Source: World Bank calculations.

**b. Effective tax rate at the top tax bracket**



Sources: World Bank calculations; UHY data. **Note:** BRIC: Brazil, Russia, India, China; G7: Group of Seven (countries)

**Progressivity of indirect taxes**

**Indirect taxes, especially VAT, are important instruments for revenue collection.** Statutory VAT rates in SACU are similar, ranging from 12 percent (Botswana) to 15 percent (Namibia). However, the capacity to enforce them varies.

**The VAT regime generally comprises standard-rated, zero-rated, and exempt goods and services.** For zero-rated products, firms do not need to charge VAT on their outputs and can reclaim VAT paid on inputs. Their customers face no extra tax costs on such goods and services. Suppliers of *exempt* goods and services do not pay VAT on their final products but cannot claim credits for taxes paid on inputs, which means some tax is still shifted to consumers. In practice, the actual tax on exempt supplies typically falls somewhere between zero and the standard rate, because many exempt goods and services are in labor-intensive sectors (such as education, healthcare, and financial services) and in agriculture, where inputs are often also exempt. For this reason, this report focuses on the incidence of VAT with respect to (and ranked by) disposable income, defined as the sum of food and non-food household consumption.

**Overall, VAT is either mildly progressive or close to neutral in SACU.** Because of the many exemptions on food and basic goods, and the fact that many poor people use their own produce (auto-consumption), the impact of VAT on inequality is close to neutral. Note that this report uses consumption as a substitute for income, so any impact on savings by richer people is not captured; however, since people tend to use their savings later in life, the lifetime VAT burden would still be progressive or neutral. Figure 4.5 shows the concentration of VAT by decile. The incidence of indirect taxes on the poorest decile is between 6 percent

and 15 percent of disposable income and is mainly flat. The exception is Eswatini, where the incidence on the poorest decile is 3 percent of disposable income, rising to 12 percent at the upper end.

**VAT is progressive in Eswatini, neutral in Botswana, and regressive in South Africa, Namibia, and Lesotho** (Figure 4.5, panel b). The progressivity of Eswatini's VAT is potentially driven by the large number of exclusions. Only 50 percent of all household survey consumption goods are standard rated, as against 69 percent in Botswana and Lesotho and 76 percent in Namibia and South Africa.

The *Kakwani index* (Figure 4.5, panel b) of the progressivity of tax is given by the difference between the concentration coefficient of taxes and the Gini coefficient of income. It ranges between -1 and 1, with a higher value indicating a more progressive tax. An index value between -0.1 and +0.1 is considered neutral.

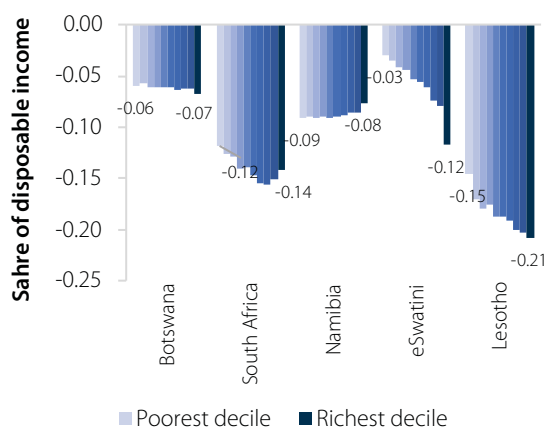
**The fuel levy is more progressive in Lesotho than in other SACU countries.** The richer deciles account for a higher proportion of fuel spending, presumably because of Lesotho's relatively high levels of pre-fiscal poverty. As with VAT, the fuel levy is regressive in South Africa.

**Excise tax on alcohol and cigarettes in Lesotho and South Africa is regressive in the short run**, with poor people paying relatively more than their share of the

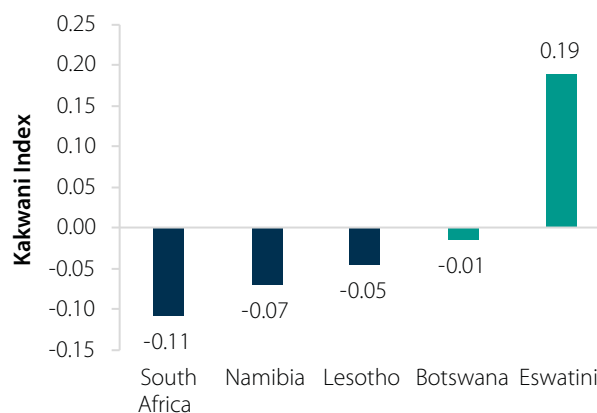
population. In the long run, however, Fuchs and others show that the future benefits of large tobacco price shocks can improve the welfare of lower-income households by reducing medical expenses and avoiding premature deaths. These effects can be enhanced if such revenues are used to fund policies that control the use of tobacco (World Bank 2019a). In Namibia, the excise tax on goods such as electronic goods and vehicles is neutral.

**Figure 4.5. Indirect taxes**

**a. Incidence of indirect taxes**



**b. Progressivity of indirect taxes**



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

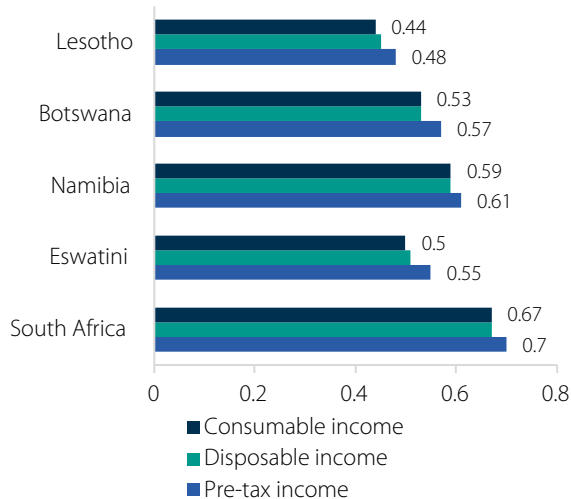
### 4.1.3 Quantifying the impacts of taxation on inequality

**Tax systems in SACU significantly reduce income inequality.** The Gini coefficients for pre-tax income range from 0.48 in Lesotho to 0.70 in South Africa (Figure 4.6, panel a). For consumable income (welfare aggregate minus tax payments), they fall to 0.44 for Lesotho and 0.67 in South Africa, with changes of 3 and 4 percentage points. Eswatini sees the biggest drop in inequality—5 percentage points, or 10 percent from the pre-tax level. Personal income taxes account for the biggest single reduction in inequality. In

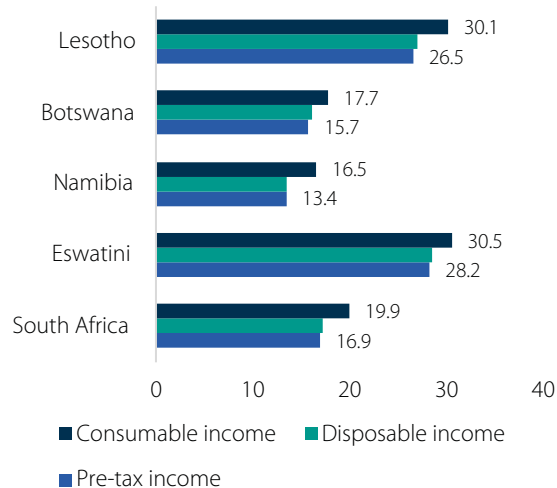
Botswana and Eswatini, the Gini coefficient for disposable income is 4 percentage points lower than its pre-tax levels; the figure is 3 percentage points in Lesotho and South Africa and 2 percentage points in Namibia. The effect of indirect taxes (VAT in this analysis) is generally low. After VAT, the Gini coefficient falls by about 1 percentage point in Eswatini and Lesotho, while it stays largely the same for the other SACU countries; this suggests that indirect taxes may have only a limited effect on inequality.

**Figure 4.6. Inequality and poverty at various levels of income**

#### a. Inequality



#### b. Poverty



Source: World Bank calculations.

Note: Income concepts were spatially deflated for the international poverty line in Lesotho and Eswatini.

**Although taxes reduce inequality, poverty increases moderately.** Taxes reduce disposable income, causing more households to fall below the poverty line. Measured at the national poverty line, the poverty headcount rate rises by 23 percent in Namibia, 13 percent in Botswana, 14 percent in Lesotho, and 8 percent in Eswatini (Figure 4.6, panel b). At the international extreme poverty line of \$1.9 per person per day (2011 PPP), the effect on the headcount rate is less pronounced, except in Lesotho (up 14 percent) and Eswatini (up 11 percent). VAT payments cause the biggest relative increases in poverty. The impact of income taxes is limited because poor households pay at most a small share of their incomes in personal income tax. These taxes increase the poverty headcount by 2 percent in Lesotho and about 1 percent in the rest of SACU in terms of the national poverty line. The results are similar for the international extreme poverty line, with Botswana seeing the biggest increase in the poverty headcount at 2 percent.

### 4.1.4 Summary

**SACU countries have progressive personal income taxes and single VAT rates with exemptions,** mainly for broad categories of food and some other supplies. Although personal income taxes are progressive, the top effective tax rates are considerably lower than in many developed and developing countries. This suggests a potential for additional revenue to help fund government programs, including social assistance and service provision to poor and vulnerable people.

**The analysis for Lesotho and Namibia illustrates that raising income tax rates by unbunching the top bracket might have only a marginal effect on overall income inequality.** This might be because the income gap between higher-income households and those at the middle- and lower-income levels is extremely large. Still, unbunching (through sizable increases in top income tax

rates and/or changes to the tax schedule) would raise extra revenue. Should all this revenue be explicitly redistributed to the poorest households, it could help to reduce poverty.

That said, any such plans should carefully consider the prevailing poverty rates before planning additional redistribution.

## 4.2 The role of social protection

### 4.2.1 Features of social assistance in SACU

This section assesses the effect of social protection and direct government transfers on income inequality. It systematically analyzes the main social protection

programs in the region. First, Box 4.3 gives an overview of these programs.

#### Box 4.3. Features of social protection in SACU

SACU has a long tradition of providing comprehensive social protection to its people. The region's social protection systems comprise non-contributory social assistance and contributory social insurance.

Namibia's social assistance system, summarized in Table B4.3.1, comprises an extended mix of categorical, means-tested, and geographically targeted programs, with 71 percent of spending on the categorical programs.

**Table B4.3.1. Social assistance system in Namibia**

Social Assistance			
Cash Transfers	In-kind Assistance	Social Care Services	Community Based Programs
<ol style="list-style-type: none"> <li>1. Child grants</li> <li>2. Old age grant</li> <li>3. Disability grant</li> <li>4. Veterans subvention grant</li> <li>5. Welfare Improvement Ex-Plan Combatant</li> <li>6. Public Works</li> </ol>	<ol style="list-style-type: none"> <li>1. Food Bank</li> <li>2. School feeding programs</li> <li>3. Disaster Relief</li> <li>4. OAG funeral grant</li> <li>5. Veterans funeral grant</li> <li>6. Tertiary bursaries (2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Children's Shelters</li> <li>2. Places of Safety</li> <li>3. Residential Care</li> <li>4. Community ECD Centers</li> <li>5. Children's Social Services</li> <li>6. Adult Social Services</li> <li>7. Old Age Homes/Welfare Orgs.</li> </ol>	<ol style="list-style-type: none"> <li>1. Marginalized Groups</li> </ol>

Botswana has a comprehensive social protection system, although it faces some targeting and harmonization challenges. The system includes social insurance, social assistance or safety nets, and active labor market programs. Social insurance comprises a defined-contribution pension scheme for public officers, the Botswana Public Officers Pension Plan. The social assistance mix includes a public works program (Ipelegeng); a social (non-contributory) old-age pension; cash and in-kind assistance for indigent persons (the Destitute Persons Programme); support for families who care for orphans (the Orphan Care Programme); support for families caring for the chronically ill (the Community Home Based Care Programme); nutrition programs for infants and pregnant and lactating women (the Vulnerable Group Feeding Programme); and a school feeding program for children in primary or secondary school. Scholarships and sponsorships to support students in tertiary education are another important safety net absorbing significant public resources. Active labor market programs include skills training, internship, and apprenticeship programs, as well as a Youth Development Fund to create sustainable employment for young people.

Eswatini's main social protection programs are neighborhood care points; secondary school grants to orphans and vulnerable children; food aid (Mshamndane); civil service pensions; and grants for elderly people (the country's only poverty-targeted cash transfer program). In addition, a school feeding program operates in government primary, secondary, and high schools. Administered by the Ministry of Education and Training in partnership with the Ministry of Agriculture, the program offers prepared midday meals every school day.

*Lesotho's* social protection includes the following:

- The Child Grants Programme was launched in 2009 with technical and financial support of the European Union and the United Nations Children's Fund (UNICEF).
- The Public Assistance program is the country's oldest social assistance program, which provides destitute people with cash and in-kind support on a temporary (up to six months) or permanent basis (for example, in cases of severe disability).
- The Orphans and Vulnerable Children Bursary was established in 2000 to support access to education (especially secondary education) for these children.
- The old-age pension was established in 2004 to prevent elderly Basotho from becoming destitute. It is a universal, non-contributory social pension available to Basotho 70 years or older who do not receive a civil service pension.
- The School Feeding Programme is overseen by the Ministry of Education and Training in cooperation with the World Food Programme.
- The Watershed Management Public Works, also known as the Fato program, is administered by the Ministry of Forestry, Range and Soil Conservation.
- The Public Officers' Defined Contribution Pension Fund was established in 2008.

*South Africa* has a comprehensive social assistance system, providing direct support to a third of the population. Three grants are available to individuals under 18: the child support grant, the care dependency grant, and the foster child grant. A disability grant is available to those with physical or mental disabilities who do not receive any other grants, are not in a state institution, and with their spouse, comply with the means test. The older-persons grant is available to elderly individuals on the same basis. The war veterans' grant is available to individuals who fought during World War II or the Korean War, do not receive another grant, and are not cared for in a state institution. South Africa also has several public employment programs. Finally, in response to COVID-19, it temporarily introduced the Covid Social Relief of Distress grant in 2020–21 to provide monthly transfers for poor, unemployed, or informal sector workers.

### **Relatively high spending on social protection**

**The long-established social assistance systems in SACU are characterized by high levels of spending, outpacing most countries at similar income levels.**

The upper-middle-income countries (Botswana, Namibia, and South Africa) spend 63–113 percent more on social assistance than the average for upper-middle-income countries. Similarly, the lower-middle-income countries, and in particular Lesotho, spend far more than the average lower-middle-income country. Social assistance spending in Namibia, Lesotho, and South Africa even exceeds the OECD average of 2.7 percent of GDP (Figure 4.7, panel a).

**The social insurance pillar is relatively limited; SACU countries mainly rely on non-contributory pensions to address risks related to old age.**

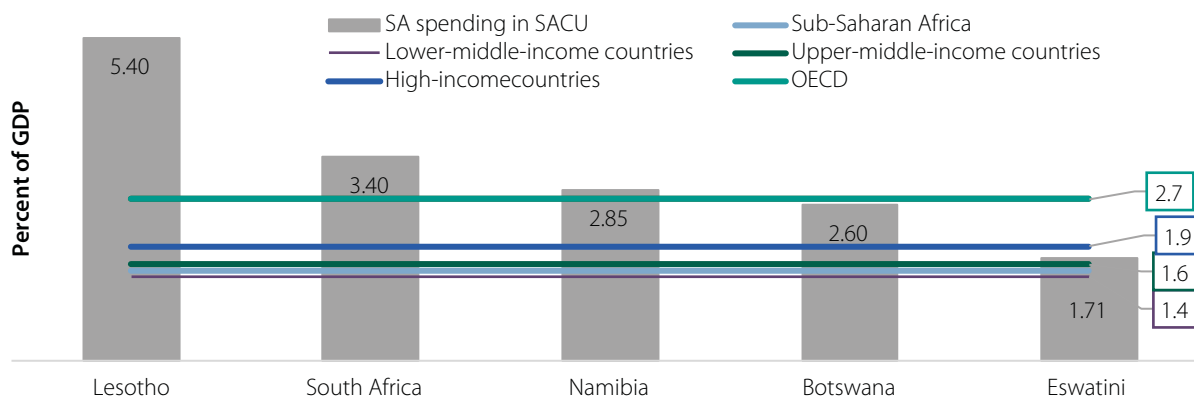
In most countries, old-age social pensions are the main component of the social assistance and pension systems, and contributory programs are small (mostly for civil servants and voluntary occupational schemes). Social pensions are a non-means-tested benefit (eligibility depends on age<sup>26</sup>) except for people ages 60–69 in South Africa.<sup>27</sup> Spending on social pensions is relatively high in Lesotho, South Africa, and Namibia (Figure 4.8).

26 Eligibility ages range from 60 in South Africa, Namibia, and Eswatini to 65 in Botswana and 70 in Lesotho. Social pensions in Lesotho and Eswatini are pensions tested (meaning those who receive a contributory pension cannot receive the social pension). In practice, it is unclear whether this is implemented (Güven and Leite 2016).

27 South Africa's means test is as follows: income cannot exceed R 49,200 a year for individuals or R 99,840 a year for couples. Assets must not exceed R 831,600 for single people or R 663,200 for married couples (HelpAge Social Pensions Database, HelpAge International: Pension Watch, London. <http://www.pension-watch.net>). Most cash transfers in South Africa are means-tested.



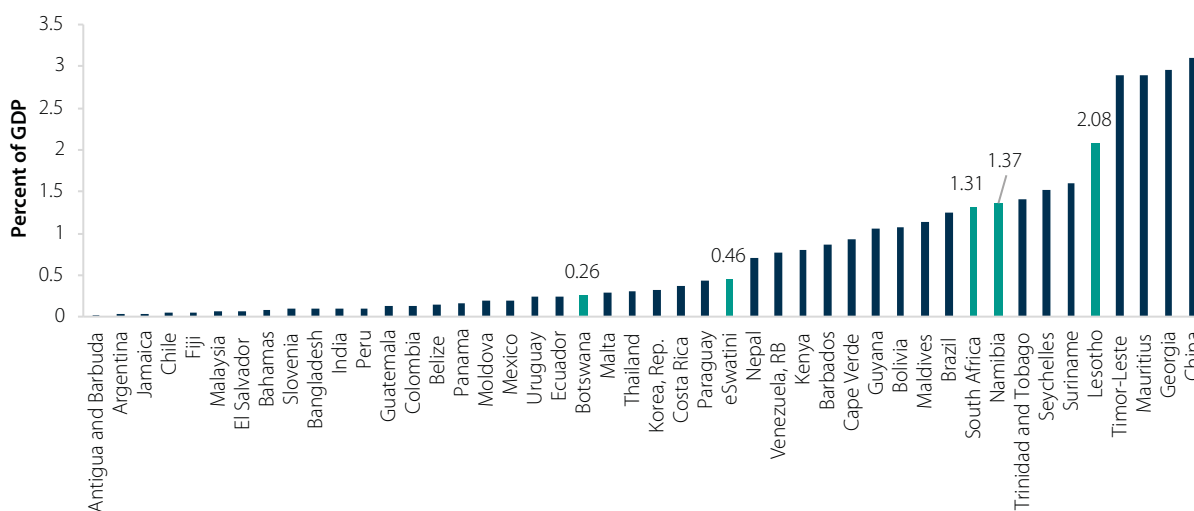
**Figure 4.7. Social assistance spending, as a proportion of GDP**



Source: World Bank calculations based on the Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE) database, World Bank, Washington, DC, <https://www.worldbank.org/en/data/datatopics/aspire>.

Notes: Spending data are from latest available years in the ASPIRE database (based on administrative data): 2018 for Botswana and Namibia, 2010–11 for Eswatini, 2014–17 for Lesotho, and 2015–16 for South Africa. Regional averages come from World Bank 2018b. Data for OECD countries refer to 2013 and are based on the social expenditure database. Economies are divided among income groups according to the 2016 gross national income per capita, calculated using the World Bank atlas method. The cutoffs are low income:  $\leq \$1,005$ ; lower-middle income,  $\$1,006$ – $3,955$ ; upper-middle income,  $\$3,956$ – $\$12,235$ ; and high income,  $\geq \$12,236$ .

**Figure 4.8. Spending on old-age social pension, as a proportion of GDP**



Sources: Data are from the Global Database on Intergenerational Mobility and the ASPIRE database.

**Social assistance outlays are skewed toward adults, particularly elderly people.**

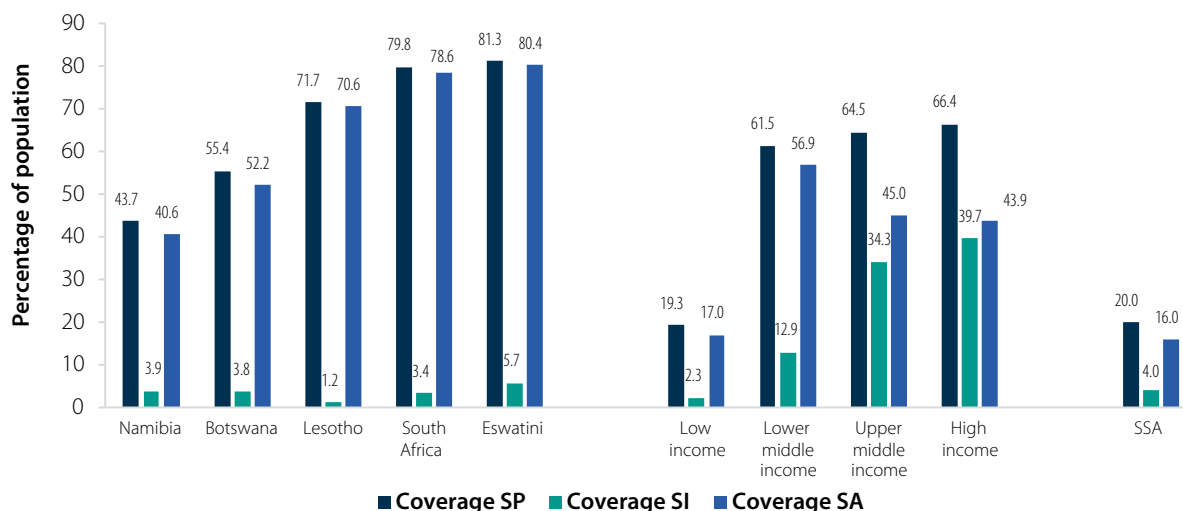
In Namibia, for example, about 75 percent of benefits are directed to the elderly, veterans, and other adults. The old-age grant absorbs 1.4 percent of GDP and over 50 percent of the social assistance budget, while child grants amount to 0.5 percent of GDP and 18.4 percent of the social assistance budget. Similarly, in Lesotho, the old-age pension takes over 2 percent of GDP, or over a third of social protection spending, while the Child Grants Programme accounts for only 0.15 percent of GDP.

**Wide social assistance coverage**

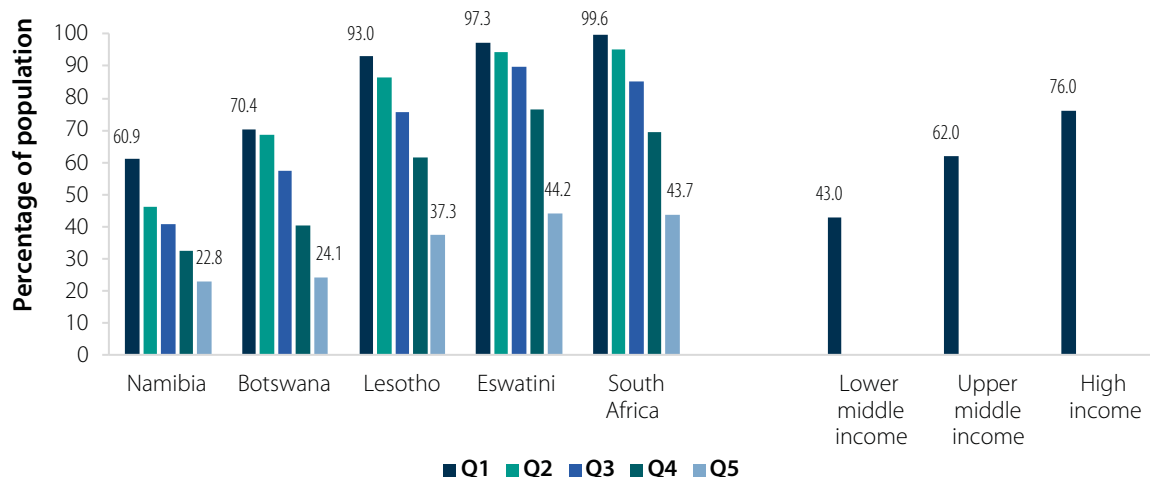
**Social protection coverage in SACU is relatively broad, driven mainly by the social assistance system.** Social assistance programs cover an estimated 40.6 percent of the population in Namibia, 52.2 percent in Botswana, and over 70 percent in Lesotho, South Africa, and Eswatini (Figure 4.9, panel a). As noted, the broad coverage in Lesotho is largely driven by the school feeding program. In South Africa the coverage is driven by the child support grant, which reaches around 13 million children, twice as many people as the older-persons grant.

**Figure 4.9. Social protection coverage**

**a. Coverage by country and region (% population)**



**b. Coverage by quintile**



Source: World Bank calculations based on the ASPIRE database.

Notes: Coverage is the percentage of the population participating in social protection and labor programs (and includes direct and indirect beneficiaries based on pre-transfer welfare). Specifically, in panel a, coverage is (the number of individuals living in a household where at least one member receives the transfer) / (number of individuals). In panel b, coverage is (the number of individuals in the quintile living in a household where at least one member receives the transfer) / (the number of individuals in that quintile). SP represents social protection, SI social insurance, and SA social assistance. Q represents a quintile.

**SACU’s social insurance and labor market programs have relatively limited coverage.** Social insurance coverage ranges from 1 percent to 5 percent of the population, well below the average for lower- and upper-middle-income countries (13 percent and 34 percent, respectively). Spending on labor market programs is marginal (below 1 percent of GDP in all SACU countries). Given the low coverage of social insurance and labor market programs, the remaining analysis focuses on social assistance.

**Social assistance coverage is particularly high for poor people.** Coverage of the poorest quintile exceeds 90 percent in Lesotho, South Africa, and Eswatini, above the average for both middle- and high-income countries (Figure 4.9, panel b). In other words, their exclusion error (failing to assist the poorest 20 percent) is very low. Coverage of the poorest quintile is much lower in Namibia (60.9 percent) and Botswana (65.5 percent) but remains in line with the average for upper-middle-income countries (62 percent).

**High social assistance coverage is mostly driven by non-means-tested programs, except in South Africa.** All SACU countries provide social pensions to elderly people, covering 15.5 percent of the population in Lesotho and 31.6 percent in Eswatini. School feeding programs cover 62.2 percent of the population in Eswatini, 29.5 percent in Botswana, and 59.8 percent in Lesotho. The coverage of child benefits programs is 51 percent in South Africa and 13.8 percent in Namibia. Most programs in SACU are therefore categorical, as they do not entail any eligibility conditions. However, South Africa stands out in: (a) means-testing most of its benefits; and (b) providing housing and utility subsidies covering about half of the population. Whether social assistance programs are categorical or means-tested affects their potential role in poverty and inequality reduction, as discussed in the next section.

## 4.2.2 Quantifying the impact of social assistance

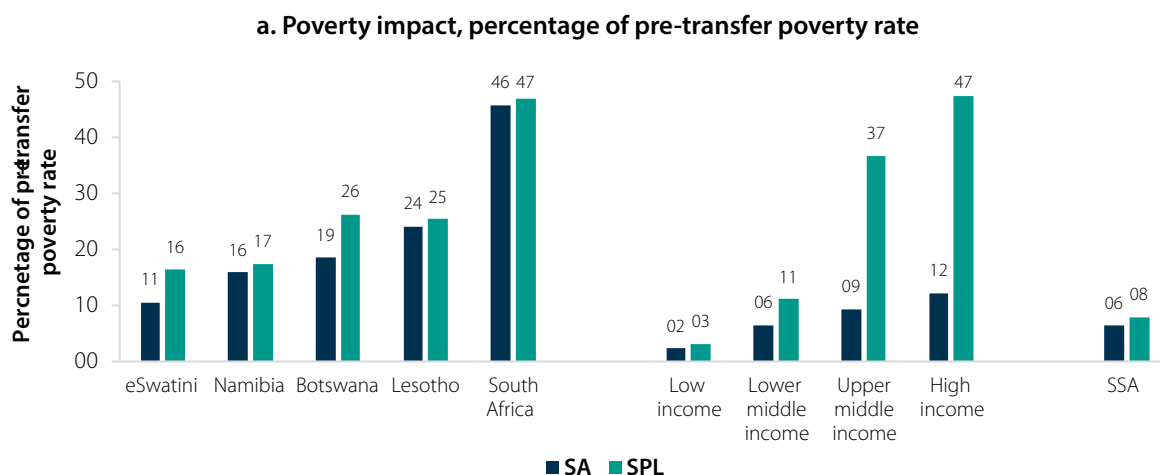
### *Social assistance has significant impacts on poverty and inequality*

**Social assistance programs have a remarkable impact on poverty in SACU, especially in South Africa.** Relative

to countries with similar income levels, the reduction in the poverty headcount from social assistance is relatively high. Even the lowest impact, in Eswatini (11 percent of the poverty rate without transfers), is well above the average for lower- and upper-middle-income countries (6 percent and 9 percent, respectively). The poverty impact in South Africa is noteworthy at 46 percent, which is equivalent to the overall impact of social protection and labor market programs (including the contributory pillar) in high-income countries (Figure 4.10, panel a).

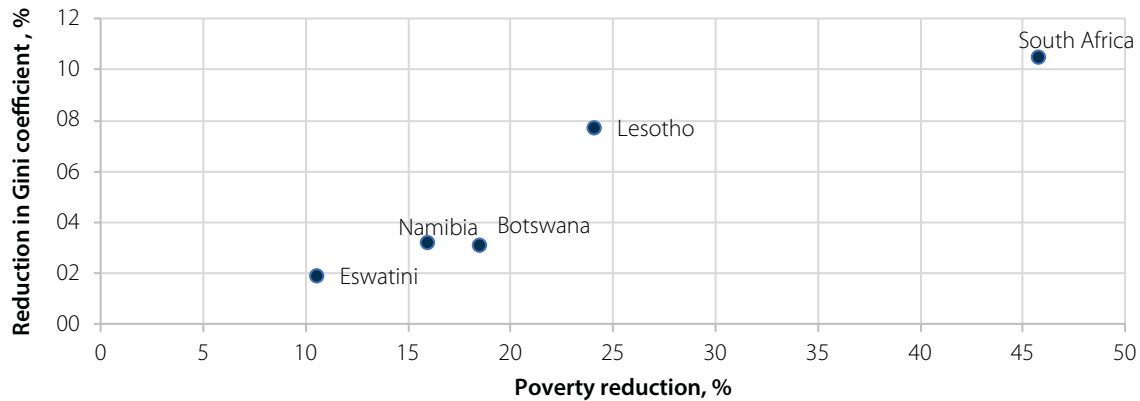
**By contrast, social insurance programs are limited, and their contribution to poverty reduction could be improved.**<sup>28</sup> In South Africa, the poverty headcount rate without social insurance and labor market programs is only 1 percent higher. This means the poverty headcount rate would rise by 46 percent without social assistance; removing the social protection and labor impact would increase it by 47 percent. In the rest of SACU, the impact of social protection and labor programs on poverty ranges from 16 percent in Eswatini to 25 percent in Lesotho (Figure 4.10, panel a). Apart from South Africa, the impact of social protection and labor programs on poverty headcount rates is below the average for upper-middle-income countries (37 percent).

**Figure 4.10. Impact of social assistance and protection programs**

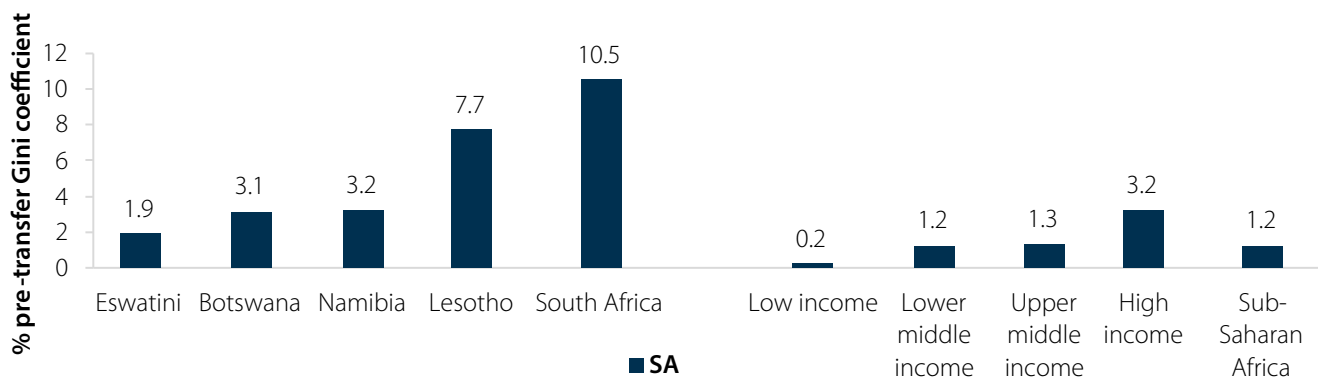


<sup>28</sup> People who receive benefits from social insurance schemes are relatively privileged in that they had either been civil servants or had earned enough to contribute to these schemes.

## b. Poverty and Gini reduction



## c. Inequality impact



Source: World Bank calculations based on the ASPIRE database.

Notes: In panel a, poverty impact is the simulated percentage change in poverty headcount because of social assistance or social protection and labor programs. The poverty headcount ratio is the percentage of the population below the poverty line; it is measured assuming the absence of these programs (pre-transfer welfare distribution). Specifically, poverty headcount reduction is computed as (poverty headcount pre-transfer / poverty headcount post-transfer) / poverty headcount pre-transfer.

Likewise, in panels b and c, inequality impact is the simulated percentage change in Gini coefficient inequality because of such programs and is also measured assuming their absence. Specifically, Gini inequality reduction is computed as (inequality pre-transfer / inequality post transfer) / inequality pre-transfer. SPL: social protection and labor programs; SA: social assistance.

**The impact of social assistance on poverty and inequality is correlated, but its impact on inequality is broader.** The poverty headcount rate decreases only if social assistance benefits allow individuals to escape poverty (that is, reach an income or consumption level above the poverty line). Even when the benefits are not sufficient for this, though, social assistance still improves the overall income distribution. The impact on the Gini coefficient captures the inequality reduction in each country. For a given reduction in inequality, a country may achieve a relatively larger impact on poverty (Figure 4.10, panel b).

**Social assistance significantly contains inequality in SACU,** with a larger Gini impact than in other upper-middle-income countries. In the latter countries, social assistance

reduces inequality by an average of 1.3 percent, whereas in SACU, the reduction ranges from 1.9 percent in Eswatini to 10.5 percent in South Africa (Figure 4.10, panel c). Without social assistance, inequality would be even higher—South Africa’s Gini coefficient would increase from 63 to a 70.4, and Lesotho’s from 45.1 to 48.8.

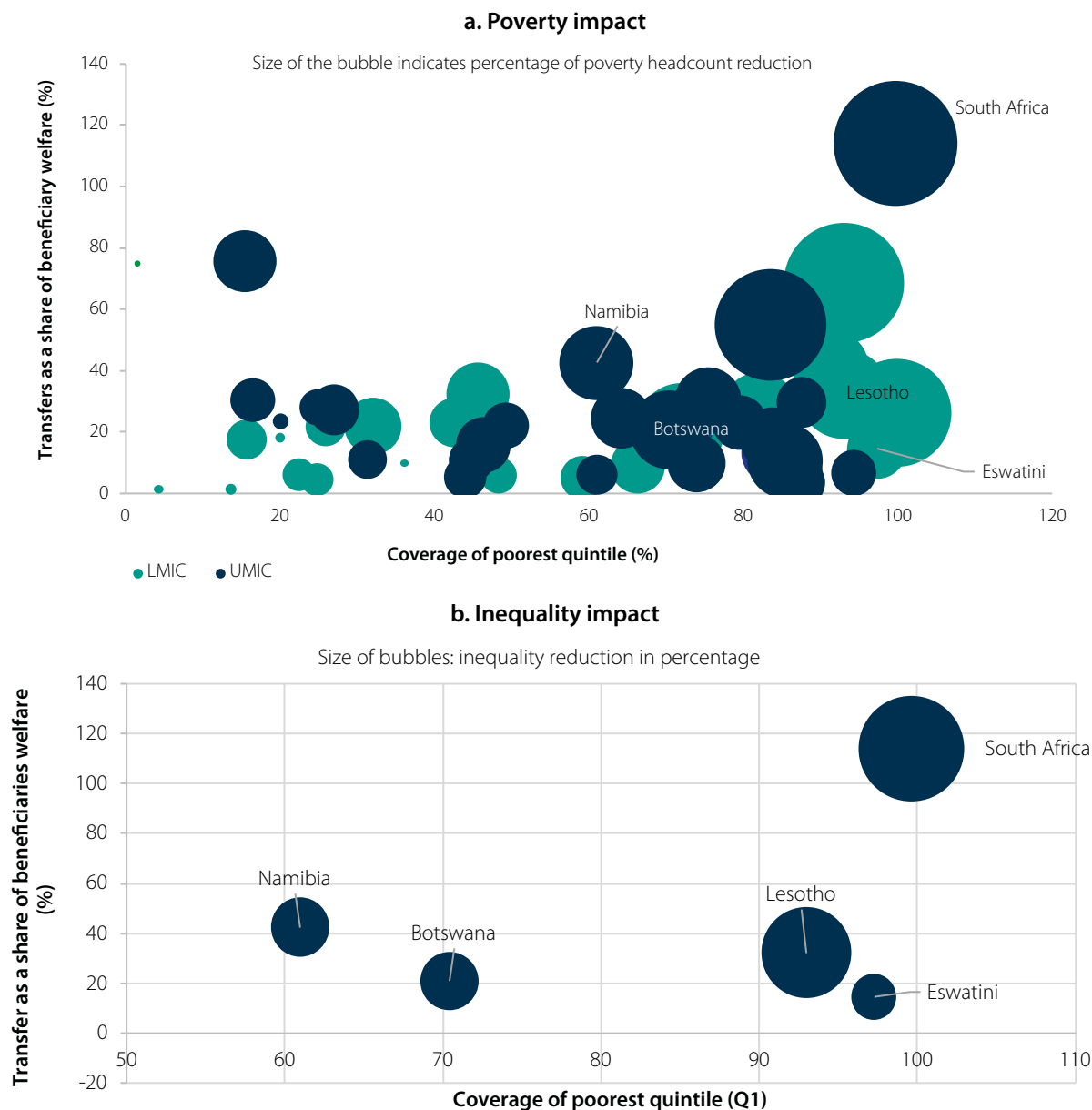
### Social assistance benefit levels and coverage of the bottom quintile

**The impact of social assistance on poverty depends on both the coverage of the bottom quintile and the benefits they receive** (also called generosity). Combining high coverage and benefit levels significantly reduces poverty, as in South Africa, which sees the largest poverty

impact among lower- and upper-middle-income countries (Figure 4.11, panel a). Most SACU countries perform relatively well on both coverage and generosity and

therefore see larger reductions in poverty (as measured by the bubble size in the figure).

**Figure 4.11. Poverty and inequality impact, coverage, and adequacy in poorest quintile**



Source: World Bank calculations based on the ASPIRE database.

Note: In panel a, poverty impact is the simulated percentage change in poverty headcount because of social assistance or social protection and labor programs. The poverty headcount ratio is the percentage of the population below the poverty line; it is measured assuming the absence of these programs (pre-transfer welfare distribution). Specifically, poverty headcount reduction is computed as (poverty headcount pre-transfer / poverty headcount post-transfer) / poverty headcount pre-transfer. In panel b, inequality impact is the simulated percentage change in Gini coefficient inequality because of such programs and is measured assuming their absence. Specifically, Gini inequality reduction is computed as (inequality pre-transfer / inequality post transfer) / inequality pre-transfer. In both panels, adequacy is the total transfer amount received by all beneficiaries in a quintile as a share of the total welfare of beneficiaries in that quintile. Specifically, adequacy of benefits is (value of transfers received by a quintile) / (total income or consumption of beneficiaries in that quintile). The indicator includes both direct and indirect beneficiaries. LMIC represents lower-middle-income countries; UMIC represents upper-middle-income countries.

As with poverty, the reduction in inequality differs significantly across SACU countries and is driven by a combination of coverage and benefit levels (Figure 4.11, panel b). The impact on inequality is particularly low for Eswatini, a country with high social assistance coverage but unusually low benefits. It is also low in Namibia for the opposite reason—a relatively high level of benefits, but low coverage. South Africa, with both high coverage and high benefits, achieves the largest impact on inequality. Lesotho, with both relatively high coverage and benefit adequacy, achieves a relatively high impact on inequality.

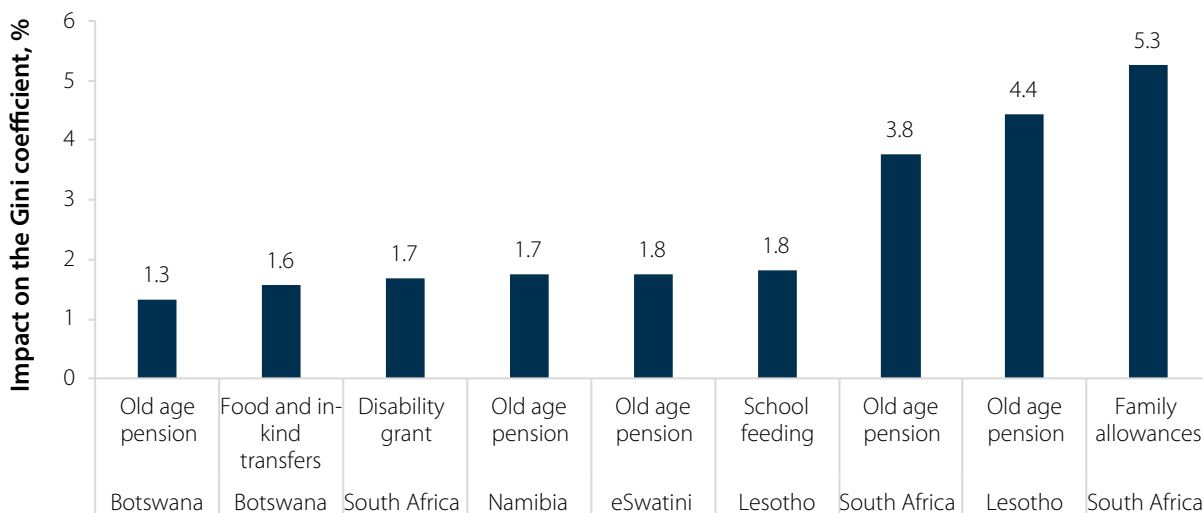
### Social assistance impacts are driven by flagship programs

The impact of social assistance on inequality is driven by specific programs, primarily social pensions. The most effective programs for reducing inequality are the child support grant in South Africa and the old-age social

pensions in Lesotho and South Africa (Figure 4.12). The school feeding program in Lesotho, the disability grant in South Africa, and food transfers in Botswana also contribute.

Programs vary in terms of coverage and adequacy across countries. South Africa’s child support grant, the program with the largest impact on inequality, also has the widest coverage of the poor (82 percent). But coverage is not a sufficient condition for reducing inequality. For instance, school feeding in Lesotho also has high coverage (76.4 percent of the bottom quintile), but its impact is much lower—a Gini coefficient reduction of 1.8 percent versus 5.3 percent for South Africa’s child support grant. In Lesotho, the benefit level is not sufficient to lift households out of poverty. Similarly, the old-age pension covers relatively less of the poorest quintile in Lesotho than in South Africa and Eswatini, but its inequality impact is larger in the latter two countries, because the transfers are larger (Figure 4.13).

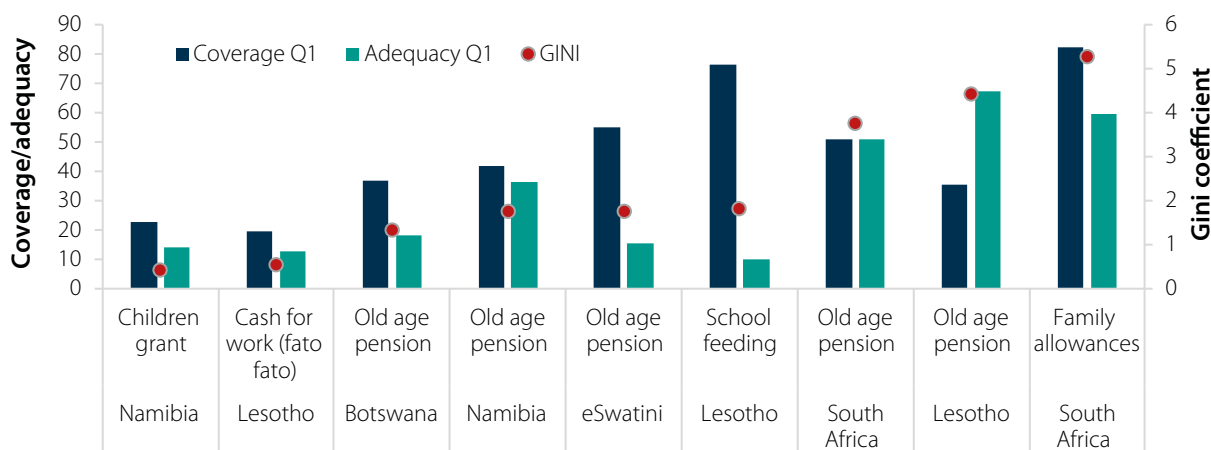
Figure 4.12. Inequality impact by program



Source: World Bank calculations based on the ASPIRE database.

Notes: Programs with a Gini impact on inequality lower than 1 percent are not included. Inequality impact is the simulated percentage change in the Gini inequality coefficient due to social assistance and social protection and labor programs. The Gini coefficient is measured assuming the absence of these programs (pre-transfer welfare distribution). Specifically, Gini inequality reduction is computed as (inequality pre-transfer / inequality post-transfer) / inequality pre-transfer.

**Figure 4.13. Inequality impact, coverage, and adequacy in poorest quintile, selected programs**



Source: World Bank calculations based on the ASPIRE database.

Notes: Adequacy is the total transfer amount received by all beneficiaries in a quintile as a share of the total post-transfers welfare of beneficiaries in that quintile. Specifically, adequacy of benefits is (value of transfers received by a quintile) / (total income or consumption of beneficiaries in that quintile). The indicator includes both direct and indirect beneficiaries in the poorest quintile. Q represents a quintile.

### 4.2.3 Fragmentation and gaps in targeted social assistance programs

**The distribution of the benefits of social assistance is directly linked to the methods, if any, of selecting beneficiaries.** It is important to examine the impact of such programs on poverty and inequality from a cost perspective, asking “By how much would \$1 invested in social assistance actually reduce poverty?” Other important

questions discussed elsewhere in the report are: “How can the programs be more productive and help poor people invest in human capital and get access to jobs?” and “To what extent do they protect people from shocks and build household resilience?”

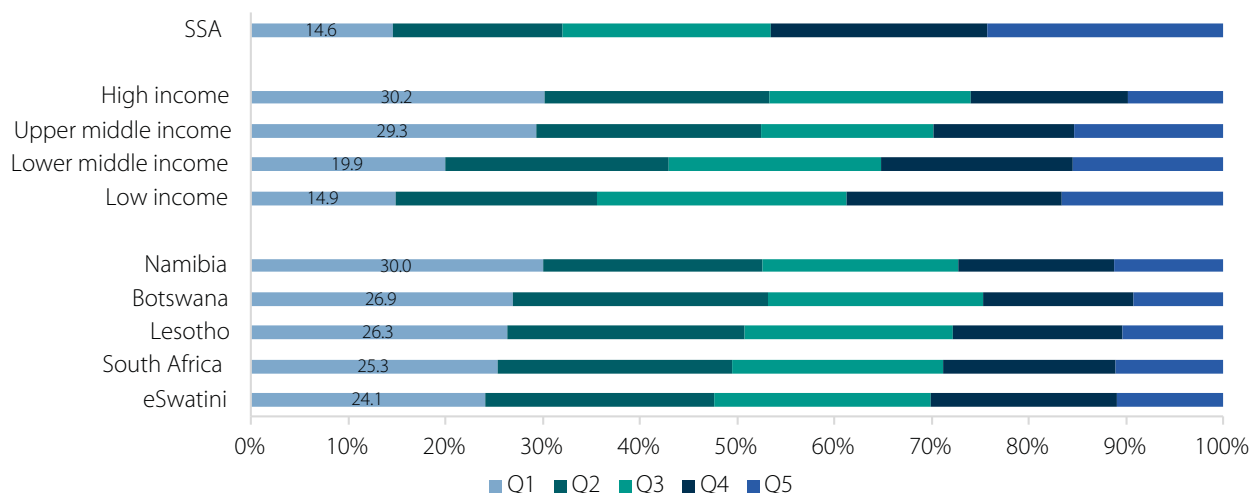
**Inclusion error** occurs when benefits are diverted to population groups that do not require assistance, raising questions about the efficiency of the system. Restricting eligibility to selected individuals using a means test or another targeting method can minimize inclusion error, so that more resources can be dedicated to those in need; this, in turn, allows coverage of a larger share of poor people (thus minimizing **exclusion errors**).

#### **Beneficiaries of social assistance and distribution of benefits**

**Despite the relatively large impacts of social assistance on poverty and inequality, a significant share of social assistance accrues to beneficiaries who are not poor.** About a quarter of social assistance beneficiaries in most SACU countries are poor, reaching up to 30 percent in Namibia (Figure 4.14). Overall, half the beneficiaries are poor

or near poor (in the first two quintiles). This is well above the regional average of 32.1 percent and in line with the average distribution of beneficiaries for upper-middle-income countries, where slightly more than half are in the lowest (29.3 percent) and second-lowest quintiles (23.2 percent). However, the other half of SACU beneficiaries belong to richer households; about 10 percent of beneficiaries are in the richest (fifth) quintile.

**Figure 4.14. Distribution of social assistance beneficiaries**



Source: World Bank calculations based on the ASPIRE database.

Notes: Beneficiary distribution is the percentage of program beneficiaries in a quintile relative to the total number of beneficiaries in the population. Specifically, beneficiary incidence is (number of individuals in each quintile who live in a household where at least one member participates in a social protection and labor program) / (number of individuals participating in social protection and labor programs in the population). The indicator includes both direct and indirect beneficiaries and is based on pre-transfer welfare. Q represents a quintile.

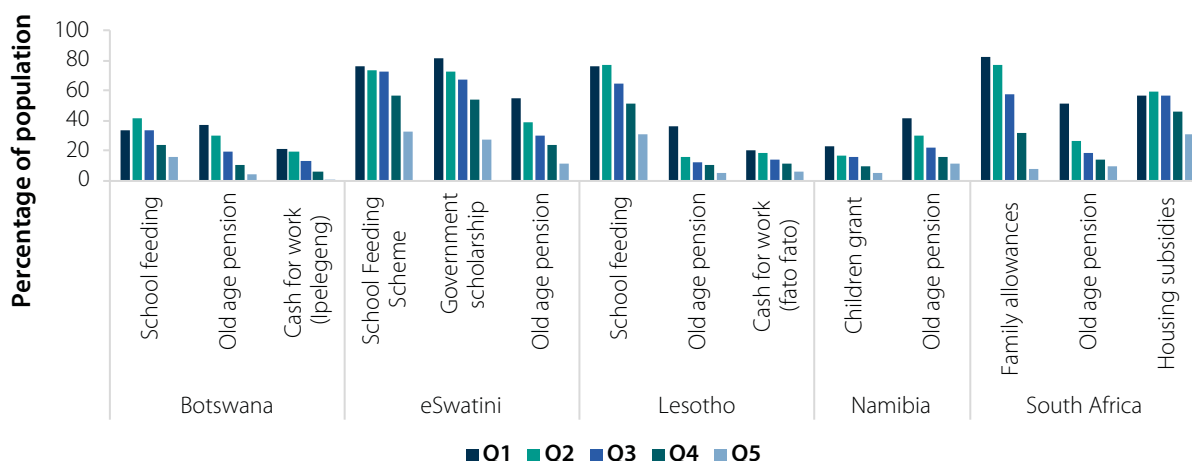
**The coverage of the largest social assistance programs in each country decreases with each quintile but to a different extent, depending on program type and design.** Overall, school feeding coverage is relatively high in wealthier quintiles because of the programs' categorical (not means-tested) nature; they cover more than half of the fourth quintile and a third of the top quintile in Eswatini (Figure 4.15). The progressivity of those programs is relatively limited and driven mainly by the population distribution, as poor households tend to have more children than richer ones. Old-age pensions are also categorical, except in South Africa. (Pensions vary slightly in terms of the eligibility age, which also affect coverage.) South Africa's child support grant and older-persons grant are both means-tested and decidedly progressive, decreasing at higher quintiles of the income distribution. By contrast, the coverage of housing

and utility subsidies in South Africa is rather regressive (that is, relatively constant across quintiles).

**Some programs have high inclusion errors because of their categorical design.** In general, school feeding schemes have large inclusion errors, with coverage of the top quintile of 15.5 percent in Botswana, 32.4 percent in Eswatini, and 30.3 percent in Lesotho. School feeding programs are designed as equalizers for schools in poor communities. In this sense, they are also targeted but at the school or community level. About a third of the richest quintile is covered by scholarships in Eswatini and housing subsidies in South Africa. The categorical nature of old-age pensions explains their relatively high inclusion errors of 11.4 percent in Namibia and 11.5 percent in Eswatini, but even the means-tested South African pension still covers 9.8 percent of the richest quintile.



**Figure 4.15. Coverage of social assistance programs by quintile, largest programs**



Source: World Bank calculations based on the ASPIRE database.

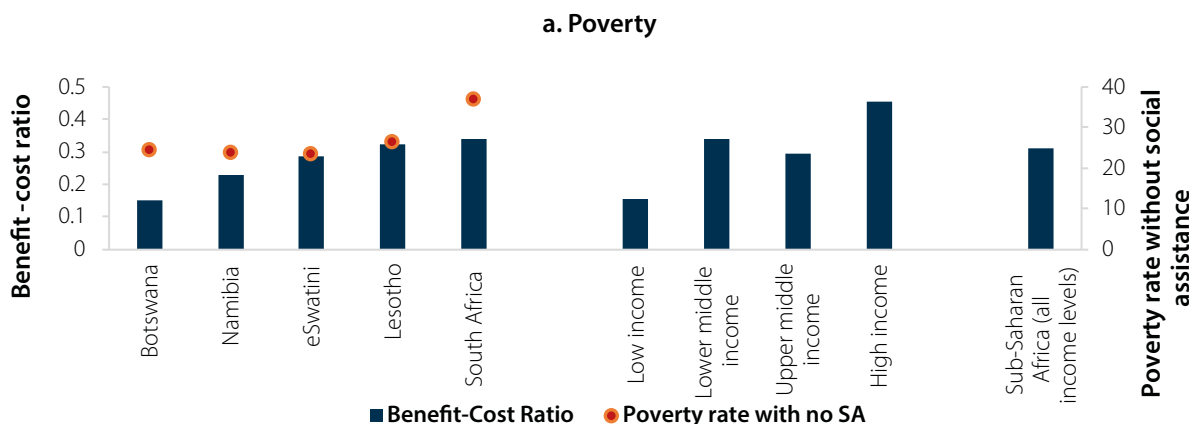
Note: Only programs with more than 10 percent total coverage are shown. Coverage is the percentage of the population participating in social protection and labor programs. Specifically, coverage is (number of individuals in the quintile who live in a household where at least one member receives the transfer) / (number of individuals in that quintile). The indicator includes both direct and indirect beneficiaries and is based on pre-transfer welfare.

### Targeting efficiency of social assistance programs

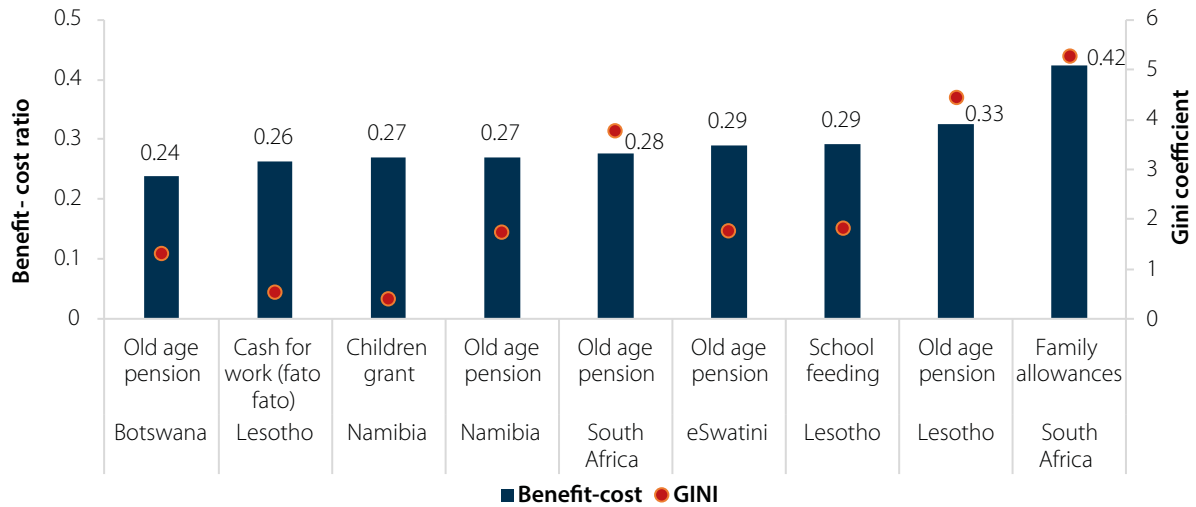
**The efficiency of social assistance in reducing poverty and inequality across the region can be improved.** The benefit-cost ratio remains below 0.4 in all SACU countries, meaning that each \$1 spent on social assistance reduces the poverty gap by less than \$0.40. The ratio is as low as 0.15 in Botswana. The benefit-cost ratio is highest in South Africa (0.34), an expected result for a country that means-tests two of its largest programs (Figure 4.16, panel a). Benefit ratios for means-tested programs are usually relatively

higher. Excluding South Africa, the benefit-cost ratios of the main programs range from 0.24 for the social pension in Botswana to 0.33 for the social pension in Lesotho (Figure 4.16, panel b). South Africa's child support grant stands out with a benefit-cost ratio of 0.42, as means-testing reduces its inclusion error and improves its cost-efficiency. Surprisingly, South Africa's older-persons grant, which is also means-tested, shows a relatively low benefit-cost ratio; many of its resources accrue to people who are not poor.

**Figure 4.16. Benefit-cost ratios and impact of social assistance**



## b. Inequality



Source: World Bank calculations based on the ASPIRE database.

Notes: The benefit-cost ratio is the reduction in the poverty gap from each \$1 spent on social protection and labor programs. Specifically, it is estimated as (poverty gap before transfer – poverty gap after transfer) / total transfer amount.

**Programs with a high impact on poverty and inequality tend to have a relatively high cost, regardless of their benefit-cost ratios.** Although they may have the highest coverage and benefits levels (and, in general, larger levels of spending), such programs are not necessarily more efficient. For instance, South Africa's older-persons grant is not the most efficient in reducing poverty, given its large inclusion error. Still, its coverage and benefit levels are so high that it significantly reduces poverty.

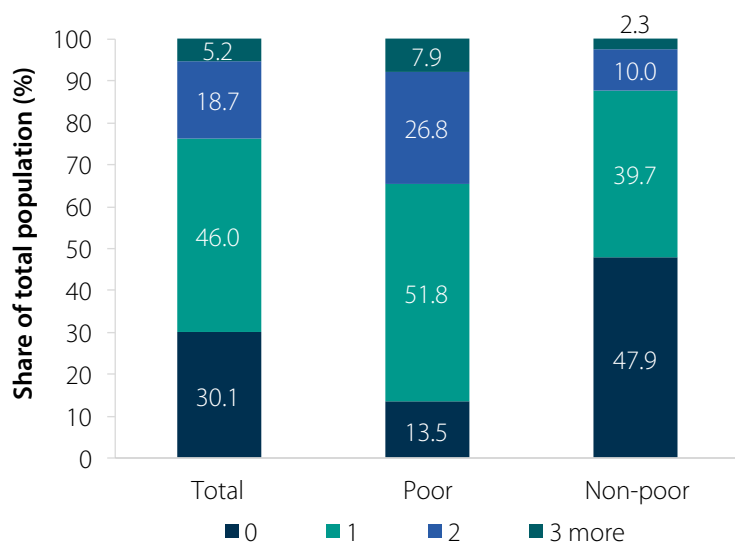
**A program that is efficient may not necessarily have a larger impact on inequality and poverty.** Programs with similar benefit-cost ratios (such as the child grants in Namibia at 0.27 and school feeding in Lesotho at 0.29) may have very different impacts on poverty and inequality. Although the Namibian child grants are efficient, their benefit levels and coverage (and, hence, total spending) are so low that they do not lift many people out of poverty. Likewise, Lesotho's Child Grants Programme is well targeted, but given its limited coverage and very low benefits, its overall contribution to poverty reduction is low.

**Gaps in the targeting of social assistance programs dilute their impact on poverty and inequality.** In Namibia for example, 63 percent of poor people are covered by at least one social assistance program, but that still

means that more than one-third are not covered at all. The old-age grant has the largest reach, at 45.2 percent of poor people. Since it is a universal program, however, most of its beneficiaries are not poor, and most of its benefits accrue to people who are not poor. Likewise for child grants—despite being a means-tested benefit, 77 percent of the benefits go to people who are not poor, and 69 percent of the beneficiaries are not poor. Similar disparities are evident in Botswana, Lesotho, and Eswatini.

**Fragmentation and problems of program design cause significant overlaps.** In Namibia, eight different agencies administer 21 social assistance programs, although the recent merger of two main social protection ministries is a step in the right direction. In Lesotho, households often benefit from several programs, and the overlap is not monitored. Figure 4.17 shows the frequency of transfers for the country's total population and by poor and non-poor segments. The large number of programs is a good feature of the social protection system—different programs have different objectives. Also, some programs, such as school feeding schemes or old-age pensions, are universal and available to all children and elderly people. The issue that deserves attention, though, is that 13.5 percent of poor people do not receive any transfers at all.

**Figure 4.17. Transfer frequency by income level in Lesotho**



Source: World Bank 2019a. Calculations based on Lesotho 2017/18 Continuous Multi-Purpose Household Survey/Household Budget Survey.

#### 4.2.4 Summary

**Social protection systems in SACU are characterized by high spending and wide coverage of social assistance.**

The systems rely mainly on non-contributory transfers, with a very small social insurance pillar. The high spending on social assistance translates into relatively higher coverage than for countries with similar income levels.

**All direct transfers are pro-poor.** In all SACU countries, poor people receive more in direct transfers than do rich people. South Africa stands out for the progressivity of its transfers, with the most progressive being the foster care grant, the adult and child disability grant, and the older-persons grant.

**High spending on social assistance reduces poverty and inequality.** Without social assistance programs, poverty in SACU would have been much higher (ranging from 11 percent in Eswatini to 46 percent in South Africa), well above countries with similar income levels. The impact of social assistance programs depends on the combination of their coverage of the poorest quintile and their benefit levels. Specific programs are more effective in reducing

poverty and inequality in each country: social pensions and school feeding in Lesotho and the child support grant in South Africa have the largest impact on poverty and inequality.

**The efficiency of social assistance could be improved.**

Given the rights-based approach to social protection, focusing mainly on categories of people who cannot participate in the labor market, inclusion errors in SACU remain high. Overall, about half of social assistance beneficiaries are in the top three quintiles of the income distribution. This is mainly because of the categorical (non-means-tested) nature of most social assistance programs, such as school feeding and social pensions (only South Africa has introduced a means test but only for people below the age of 70). Overall, SACU countries are effective but not efficient in reducing poverty and inequality through the network of social assistance programs. The system could potentially be improved by moving towards more poverty-targeted programs, which currently exist in some but not all SACU countries.



## CHAPTER 5

# THE ROLE OF THE TERTIARY INCOME DISTRIBUTION AND FISCAL POLICY

*Fiscal policy in SACU significantly reduces poverty and inequality through progressive tax systems and social spending. Member countries undertake some of the most redistributive spending in the world, particularly on education and health. These two sectors are the largest social expenditure items in country budgets and make the largest marginal contribution to income redistribution. Although social spending benefits the poorest people relatively more than rich people, the quality of services is not always high. This suggests countries could do more to maximize the potential effect of spending on inequality.*

**The tertiary income distribution is the distribution of income after imputed benefits from social spending on public goods** (such as education, health, and infrastructure) are added to secondary incomes. It is the broadest concept in the four-part framework underlying this examination of poverty and inequality in SACU. This chapter discusses a distribution of income that includes imputed benefits

from social spending in the form of public goods and in-kind government spending on education and health. The final part of the chapter looks more broadly at fiscal policy, assessing the overall impact of taxation and social assistance (as discussed in Chapter 4), as well as of spending on education and health.

### 5.1 Inefficiencies in spending on education and health

The **Human Capital Index** estimates how children born today would fare as adults relative to children who enjoyed complete education and full health.

**SACU countries do significantly worse on the World Bank's Human Capital Index (HCI) than other middle-income countries with similar levels of economic**

**development** (Figure 5.1). In 2020, all SACU countries had HCI scores below 0.5. This means that a child born in SACU today would grow up to be less than half as productive

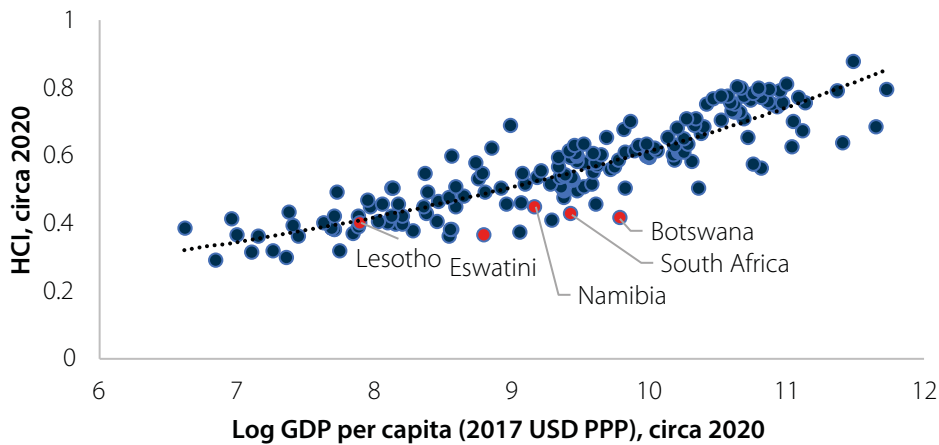
as those with better education and health. For Eswatini, the child would only be 37 percent as productive, while for South Africa, the figure would be 43 percent. Namibia has the highest HCI score of 0.446. In general, low levels of human capital adversely affect labor productivity. Investing in education and health is, therefore, important for productivity (in both government and the private sector), growth, and poverty reduction in the long run.

**SACU allocates between one-fifth and one-quarter of public spending to education** (Table 5.1) or about 6–8 percent of GDP (Figure 5.2, panel a). Primary education is free across the region, and the largest share of education spending is on primary and secondary education, which enroll the largest number of individuals. Spending per

primary student, however, remains a fraction of spending per tertiary student; for example, in Eswatini, primary-level per capita spending is equivalent to 12 percent of GDP per capita, whereas tertiary-level per capita spending is 10 times higher, at 120 percent of GDP per capita.

**Spending on health, likewise, is relatively high.** At 5.5 percent of GDP, Lesotho has the highest relative spending on health among all SACU countries (Figure 5.2, panel b). Health spending as a share of the national budget is around 11–12 percent, below the Abuja Declaration commitment of 15 percent of the national budget. Spending by other SACU countries is also at the high end, but they are not outliers.

**Figure 5.1. Human Capital Index in SACU and other lower-middle-income countries**



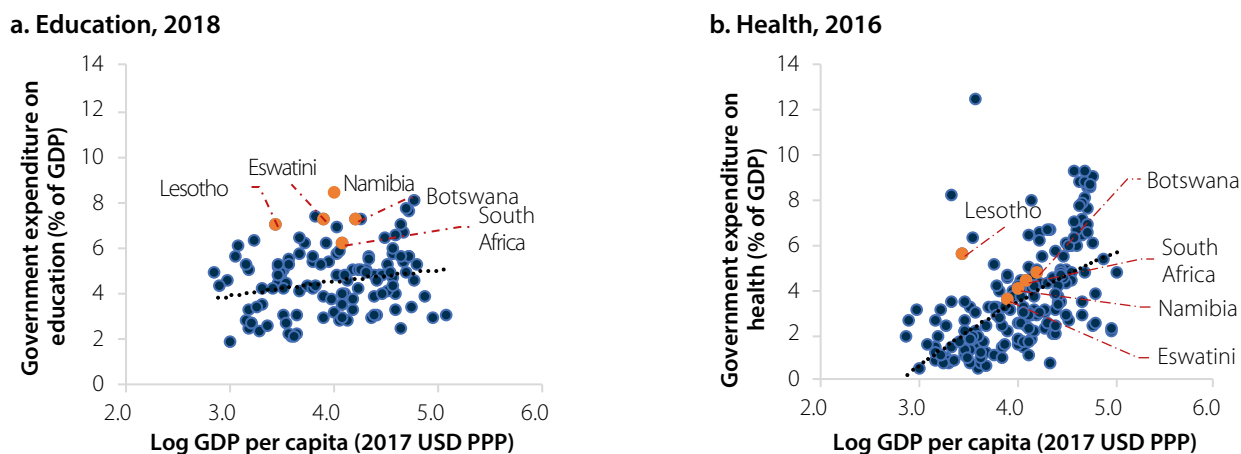
Source: World Bank 2018b.

**Table 5.1. Expenditure on education**

	Botswana	Eswatini	Lesotho	Namibia	South Africa
Expenditure on education (% GDP)	7.6 (2019)	5.5 (2020)	8.9 (2019)	8.6	6.2 (2019)
Education expenditure (% total government spending)	22	16	19	28	19
% Education budget on primary education	38	39	43		
% Education budget on secondary education	22	31	23.5		
% Education budget on tertiary education	26	21	27.8	17	25

Sources: World Bank 2019a, 2019b, 2021a.

**Figure 5.2. Government expenditure on education and health, as proportion of GDP**



Source: World Development Indicators database.

Note: Data for Botswana are from 2009, for Eswatini from 2014, and for Namibia from 2010.

**Despite widespread access to primary education in SACU, education outcomes, including learning, are relatively poor** (Table 5.2). Educational participation improved significantly in the past 20 years because of higher investment in education. Net primary enrollment rates exceed 90 percent in Botswana, Lesotho, Namibia, and South Africa and 80 percent in Eswatini. Primary

completion rates, however, are relatively low, ranging from 69 percent in Lesotho to 90 percent in South Africa. Secondary attainment also differs significantly between SACU countries—among people ages 25 and older, only 22 percent have at least a secondary education in Lesotho, as against 82 percent in South Africa.

**Table 5.2. Education outcomes**

	Botswana	Eswatini	Lesotho	Namibia	South Africa
Net primary enrollment rate	91 (2015)	82.5	93.3	97.5	87.0
Survival to last grade of primary	NA	85.4 (2017)	69.2 (2015)	84.1 (2017)	89.7 (2017)
Learning-adjusted years of schooling	5.1	4.5	6.3	6.1	5.6
Adult population (ages 25+) with at least secondary education	71%	48%	22%	58%	82%
Harmonized test scores	391.3	440.3	329.9	406.7	342.8

Source: World Development Indicators database.

**Learning outcomes are poor throughout the region**, with harmonized test scores ranging from 342 in South Africa to 440 in Eswatini.<sup>29</sup> Among the SACU countries, however, only Botswana and South Africa have participated in any international, large-scale assessment to place

learning outcomes in an international context. Factoring in what children learn, expected years of schooling is less than 7 years in all SACU countries. This suggests that government resources for education could be used more efficiently.

<sup>29</sup> Harmonized test scores from major international student testing programs are measured in Trends in International Mathematics and Science Study (TIMSS) equivalent units, where 400 represents the low international benchmark and 625 represents the advanced international equivalent benchmark. Analyses of Progress in International Reading Literacy Study (PIRLS) data from South Africa suggest scores are improving (Gustafsson 2020).

## 5.2 Improving the equity and efficiency of spending

### 5.2.1 Spending on basic and higher education

A common way to assess equity and measure the progressivity of government spending is through concentration curves that compare the cumulative distribution of the benefits<sup>30</sup> from spending with the cumulative distribution of market income (Inchauste and others 2015).

#### Non-tertiary education spending benefits the poor.

Public spending on non-tertiary levels of education in SACU is somewhat progressive and tends to benefit poor people

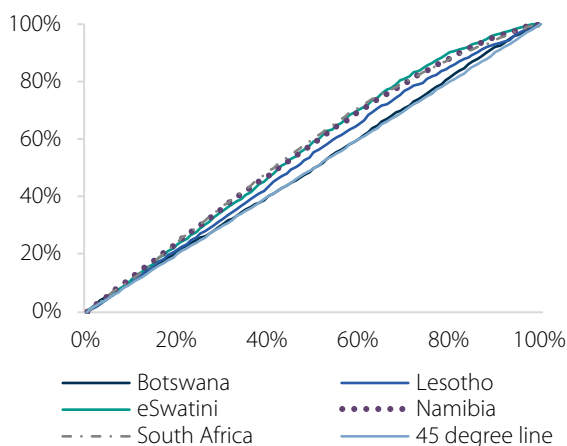
(Figure 5.3, panel a). The most progressive spending on non-tertiary education is in South Africa, where, for example, the poorest 40 percent of the population receive 49 percent of the benefits of spending on education. Tertiary education spending, by comparison, is highly regressive, benefitting the rich (Figure 5.3, panel b). Differences between members are substantial. The least regressive spending on tertiary education is in Botswana, where the poorest 40 percent of people receive (only) 23 percent of education benefits, while the most regressive spending is in Eswatini, where the poorest 40 percent do not receive any tertiary education benefits.

A **concentration curve** plots the cumulative percentage of the education variable (y-axis) against the cumulative percentage of the population, ranked by living standards, from the poorest to the richest (x-axis).

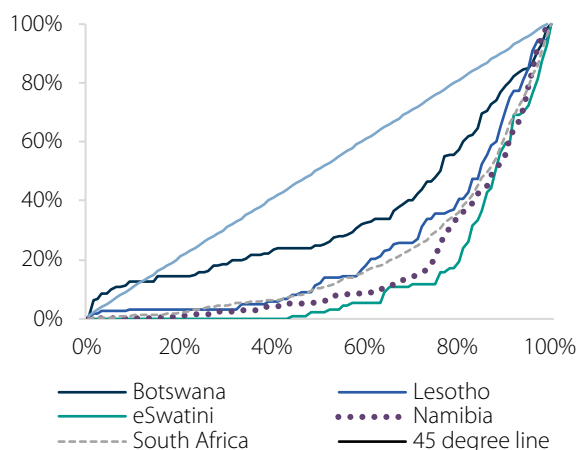
- An absolutely *progressive* “pro-poor” transfer is one for which the concentration curve lies above the diagonal; this indicates that the benefit from the transfer declines with income.
- For a *regressive* transfer, the concentration curve lies below the diagonal.

**Figure 5.3. Education concentration curves**

#### a. Non-tertiary education spending



#### b. Tertiary education spending



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

Note: Percentiles ranked by market income plus pensions

**Poor people receive a larger share of the benefit of education spending in all SACU countries.** Another way of representing equity in spending is to consider the value of the benefit received from education as a share

of household disposable income (Figure 5.4, panel a). In all SACU countries, poor people receive more benefits from public education than do rich ones. The households in the poorest decile that received the most as a share of

<sup>30</sup> Benefits include direct transfers, indirect subsidies, and in-kind transfers (free government services in education).

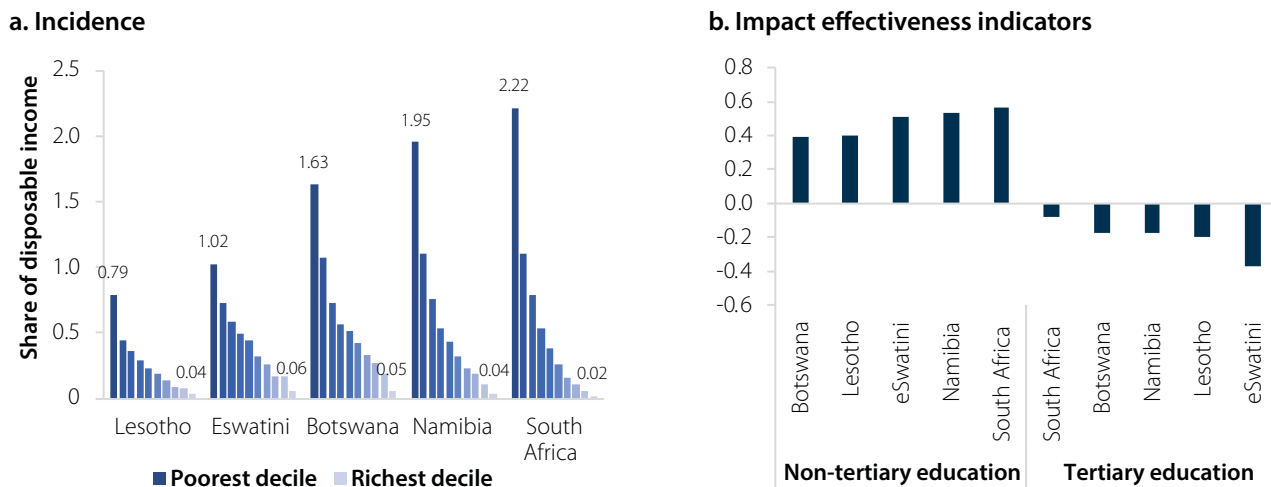
their disposable income were in South Africa (222 percent); those who received the least were in Lesotho (79 percent). In contrast, in Lesotho, the richest decile received only 4 percent and in South Africa, only 2 percent. In Namibia, Botswana, and Eswatini, the benefit to the richest decile was 4–6 percent of disposable income, and for the poorest, 102–195 percent. This is not surprising, since poor people typically have more children (more beneficiaries) and lower disposable incomes (smaller denominators), while the unit costs of education may be similar for everyone.

**Spending on tertiary education increases inequality.**

While non-tertiary education spending reduces inequality in all SACU countries (that is, a positive Kakwani index), spending on tertiary education increases inequality (that is, a negative Kakwani index), as shown in Figure 5.4, panel b.

**All SACU countries have within-country inequalities of access to basic, primary education.** These stem from location (rural versus urban school provision), teacher allocation policies, gender, and policies on the language of instruction. Unwarranted variations in student-teacher ratios for schools with similar enrollment levels are also closely linked to the lack of a coherent, consistent policy for appointing additional teachers or reducing teacher numbers in schools with falling enrollment. Teacher allocation policies vary significantly across SACU. In Eswatini, for example, the number of teachers assigned to a school is highly aligned with the number of students in the school; this is not the case in Lesotho.

**Figure 5.4. Incidence and concentration of education spending**



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

Note: Panel a: For all SACU countries, public students are directly identified in the survey. Average per capita costs of each level of schooling are imputed using administrative records and then allocated to each student. Panel b: The CEQ Effectiveness Indicators are summary indicators of the impact of each fiscal instrument on poverty and inequality (Enami 2017). They compare its actual impact to the impact it could have had if precisely distributed to create the largest drop in inequality.

**Efficiency of spending** relates to how well resources are converted into desired outcomes.

*Allocative efficiency:* how resources are allocated to different inputs

*X-efficiency:* how resources are used

*External efficiency:* whether what is being “produced” meets the needs of the economy.

**Efficiency of education spending could be improved through better allocation of resources** (allocative efficiency). There are three main questions: Could outcomes be improved by changing the share of resources devoted to the sector overall? Could they be improved by changing the share of resources devoted to each subsector? Could they be improved by changing the mix of inputs the subsectoral resources provide?

**The resources allocated to education in SACU seem to be in line with needs.** The SACU average for education spending is 7 percent of GDP, with spending ranging from



5.5 percent in Eswatini to 8.9 percent in Lesotho.<sup>31</sup> Although the average exceeds international recommendations for education spending, SACU has large school-age populations (32–38 percent of the population is under 15 in all countries other than South Africa), large shares of poor people, and often low parental education. This suggests that spending on education may need to be relatively higher than for other middle-income countries with smaller school-age populations, less poverty, and higher adult educational attainment. Diverting public spending away from education is unlikely to improve either equity or efficiency.

**Lesotho and Namibia devote around 9 percent of GDP to education**, although the share of spending on education is greater in Namibia (28 percent) than in Lesotho (19 percent). Namibia introduced no-fee primary education in 2013 and extended the policy to secondary education in 2016, which may explain the difference in progressivity between primary and secondary education. Primary education is pro-poor—as noted, the poor utilize the public primary education system more than the rich.

**Botswana's spending on education is average (7.1 percent of GDP), and the services seem to be of good quality.** Primary education spending accounts for 38 percent of the education budget and is the most equal, with the various income deciles accessing spending according to their population shares. This translates into a low effectiveness indicator for Botswana (that is, it looks undesirable for purposes of income redistribution). However, the outcome is arguably the most favorable for primary and secondary education outcomes—as noted, the fact that the richer deciles are using the education system is probably a signal of relatively high quality. In 2011, school participation rates in Botswana for ages 13–15 were the highest in SACU (Van der Berg and Knoesen 2018).

**Eswatini and South Africa spend less than 7 percent of GDP on education, and their non-tertiary education spending is equally and significantly pro-poor.** Both countries face significant challenges to their education systems. In Eswatini, the problems include poor enrollment outcomes, particularly at the secondary level (IMF 2020a) and poor learning outcomes. South Africa, in turn, continues to grapple with the apartheid legacy of two parallel systems of education, a private one for the rich and a public one for the poor. The challenges facing the public system include violence in schools, high dropout rates, and absenteeism (Mouton and others 2013). But learning appears to be improving. The 2015 Trends in International Mathematics

and Science Study (TIMSS) showed that 62 percent of ninth-grade students reached the low international benchmark in math, up from 37 percent in 2011. Also, a secondary analysis of the 2015 and 2011 Progress in International Reading Literacy Study (PIRLS) found that the score, although still low, increased significantly from 295 in 2011 to 320 in 2016 (Gustafsson 2020).

**However, allocations to tertiary education in SACU seem disproportionately high.** These range from 17 percent of the education budget in Namibia to 28 percent in Lesotho, despite relatively low levels of participation in tertiary education. Moreover, as students at tertiary level are disproportionately non-poor, tertiary spending is regressive (World Bank 2017). Botswana also provides tertiary education bursaries (included under direct transfers) of 1.3 percent of GDP, which discourage vocational training and mostly benefit the wealthiest (World Bank calculations; IMF 2018). Better targeting of tertiary subsidies and bursaries could increase cost recovery in tertiary education. This includes the introduction of fees and means-testing mechanisms for bursaries. Reallocating any savings toward primary and secondary education could improve both income distribution and educational outcomes, if utilized effectively.

**Allocations to non-tertiary education tend to benefit poor people more than wealthier ones.** This could be because poor households tend to be larger or because richer people are more likely to use private schools, which are generally seen to provide better education. In Botswana, the benefits of basic education spending do not vary by wealth, which suggests that the quality of public education is relatively high.

**Reallocating the mix of inputs, particularly at the primary and lower secondary levels, could bring important benefits.** The largest share of public education spending is allocated to recurrent costs, mainly teacher salaries. In Eswatini, for example, teacher salaries account for the bulk of education spending—78 percent at primary level, 84 percent at junior secondary level, and 85 percent at senior secondary level. This leaves only 6 percent of spending for materials and supplies at the primary level and 1 percent at the secondary levels (World Bank 2021a). SACU countries could also benefit from more investment in teacher training on the newer curricula, strong coaching and supervision mechanisms for teachers at the school level, and continuous learning assessments to provide information on learning outcomes. Such a reallocation could improve the “production efficiency” of education.

31 Recent public expenditure reviews and education sector work in SACU countries provide updated data.

## 5.2.2 Healthcare spending

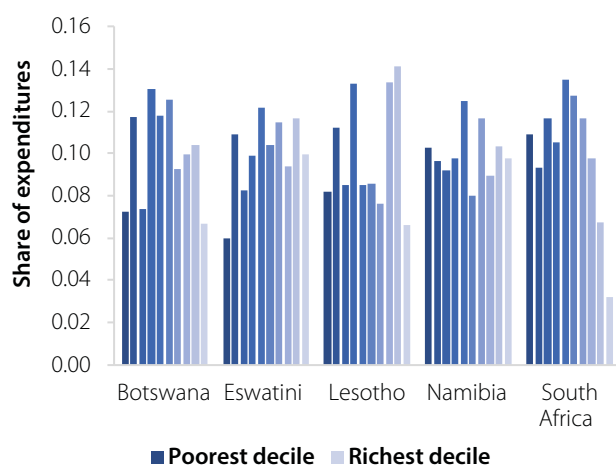
**Healthcare spending is progressive, benefitting poor people relatively more than the rich.** Health spending as a share of the disposable income of the poorest decile was 84 percent in South Africa, 56 percent in Namibia, 27 percent in Eswatini, and 18 percent in Botswana. Botswana has the most progressive health spending, on both primary and hospital healthcare. In Eswatini, spending

is the least progressive on hospital care, and in Lesotho, it is least progressive on primary healthcare (World Bank calculations).

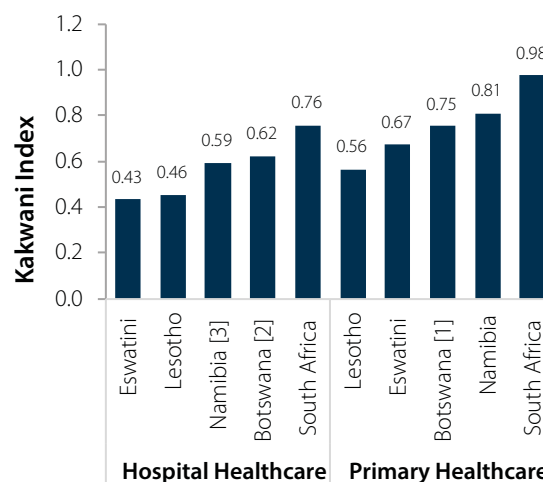
**The poorest decile, however, receives a relatively small share of overall public spending on health.** South Africa and Namibia respectively spend 11 and 10 percent of their budget on the poorest decile. Eswatini spends the least (6 percent), followed by Botswana (7 percent), and Lesotho (8 percent) (Figure 5.5, panel a).

**Figure 5.5. Efficiency of health spending**

### a. Concentration



### b. Kakwani index



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

Notes: Administrative healthcare spending and health visits were split into primary and hospital services, and a per capita subsidy was calculated for each. This subsidy was then allocated to individuals directly identified in a survey as visiting a primary or hospital healthcare facility, according to the Bastagli (2015) actual consumption approach. In Botswana, World Health Organization estimates were used for the health subsidies allocated to each user, instead of the World Bank calculations.

**Among SACU countries, Lesotho spends the largest share on health, at 6 percent of GDP.** However, its access to primary healthcare is the least progressive and access to hospitals ranks just above that of Eswatini. The primary healthcare sector has been underfunded because of spending inefficiencies and an uneven distribution of funds between the primary and hospital sectors. Lesotho's poor health outcomes (such as the second-highest rates of HIV after Eswatini) places strain on the health sector (IMF 2019).

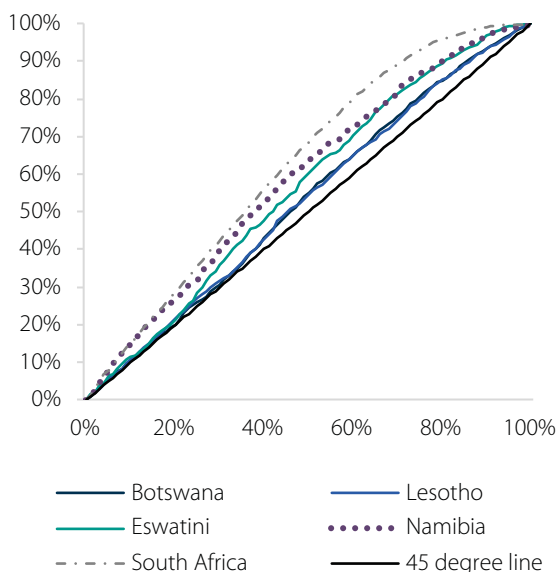
**Eswatini spends as much as other members on healthcare overall (4 percent of GDP), but its hospital care is the least progressive in the region.** Its wealthy people capture more of the benefits in absolute terms (in

Figure 5.6, panel b, the concentration curve lies completely below the 45-degree line). Poorer deciles have limited access to healthcare, particularly in hospitals. This is mainly due to the prohibitive costs of access—40 percent of the bottom decile report high cost as the reason for not getting care.

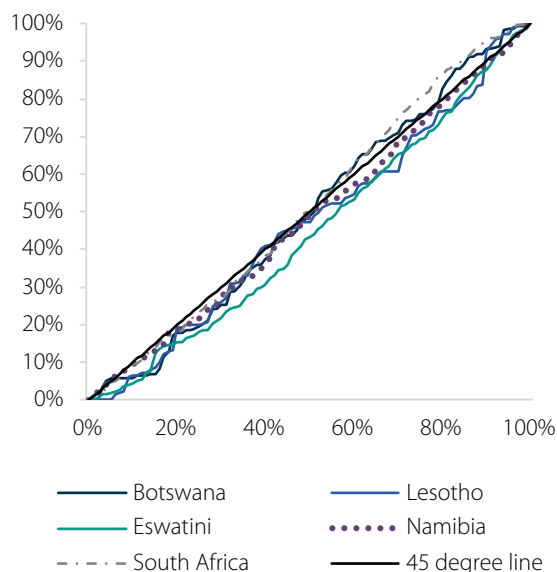
**SACU's primary healthcare spending is progressive.** In absolute terms, primary healthcare spending by South Africa and Namibia is the most pro-poor in SACU (Figure 5.6, panel a). In both countries, richer households are generally less likely to use public health services (World Bank 2017; Inchauste 2017).

**Figure 5.6. Healthcare concentration curves**

**a. Primary healthcare**



**b. Hospital healthcare**



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

**South Africa’s primary and hospital healthcare are the most progressive in the region relative to pre-fiscal income** (Figure 5.6). Botswana’s hospital care is also highly progressive, and the country has had notable positive health outcomes, including a decline in HIV with the provision of free antiretrovirals (IMF 2018). Spending on

primary healthcare is slightly more progressive in Eswatini than in Lesotho. In 2016, however, Eswatini reported the highest levels of HIV prevalence in the world (IMF 2020a). In Lesotho, in turn, spending inefficiencies and the large wage bill undermine health outcomes.

**5.2.3 Indirect subsidies**

**Indirect subsidies** are those subsidies that do not hold a monetary value; they include activities such as government support to lower the prices of important goods and services.

**SACU countries rarely use indirect subsidies.** Four subsidy programs were analyzed for this report: electricity in Botswana, and water and two housing subsidies in Namibia

(Box 5.1). These programs account for less than 0.6 percent of GDP. (South Africa’s free basic municipal services were not included.)

## Box 5.1. Allocation methods for indirect subsidies

In *Botswana*, electricity subsidies comprise four components:

- Transfers to the Botswana Power Corporation
- The cost of electrifying villages
- A standard subsidized payment for grid connections, irrespective of location
- A stepped, two-block tariff structure.

In this analysis, the official tariff rates were applied to directly identified electricity consumption data in the survey and then subtracted from the cost of production per kilowatt hour.

For *Namibia's water* subsidies, the budget total was scaled down for consumption coverage in the survey and then allocated equally to all eligible households.

For housing, eligibility for *Namibia's Building Together Programme* was determined based on credit risk predicted by the difference between total income and disposable income, the household head's employment and marital status, the number of dependents, levels of education, and whether the household lived in an urban or rural area. The benefits were then randomly allocated to a set of eligible individuals. The benefit value allocated comprises the difference in annual financing costs at private market interest rates and interest rates specific to the program.

**Namibia's rural water infrastructure program is the most pro-poor of all the indirect subsidies**, with a Kakwani index of 0.82 (Figure 5.7, panel b). The aim of the program is to provide rural residents with access to improved water sources.

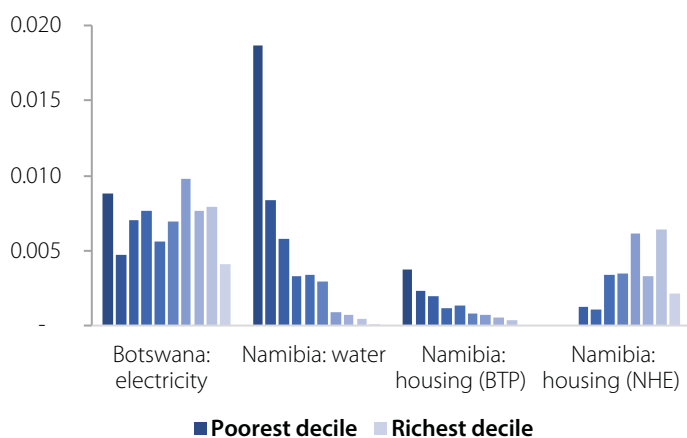
**Namibia's housing programs are well targeted for indirect subsidies, but only the Building Together Programme targets the poor.** The incidence of the spending under this program is higher in the lower-income deciles (Figure 5.7, panel a), and it has a Kakwani index of 0.66. The National Housing Enterprise program, which

specifically targets medium-income households, is just slightly more progressive than the pre-fiscal Gini, with a Kakwani index of 0.05.

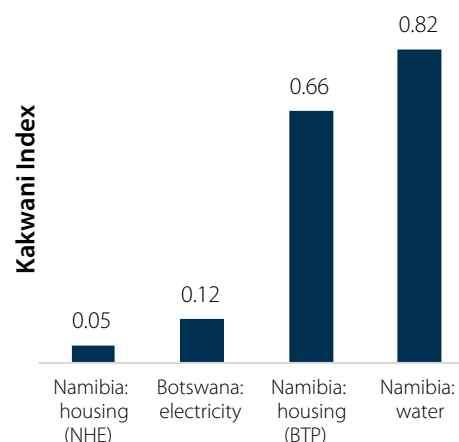
**Botswana's electricity subsidies mostly accrue to non-poor households.** Although its spending on the electrification of rural villages is directed towards households without electricity, its subsidized consumption, transfers, and subsidized connection payments exclude those households. Botswana plans to reduce electricity subsidies by raising tariffs towards cost recovery rates by 2020 (IMF 2018).

**Figure 5.7. Efficiency of indirect subsidies**

### a. Incidence



### b. Progressivity



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

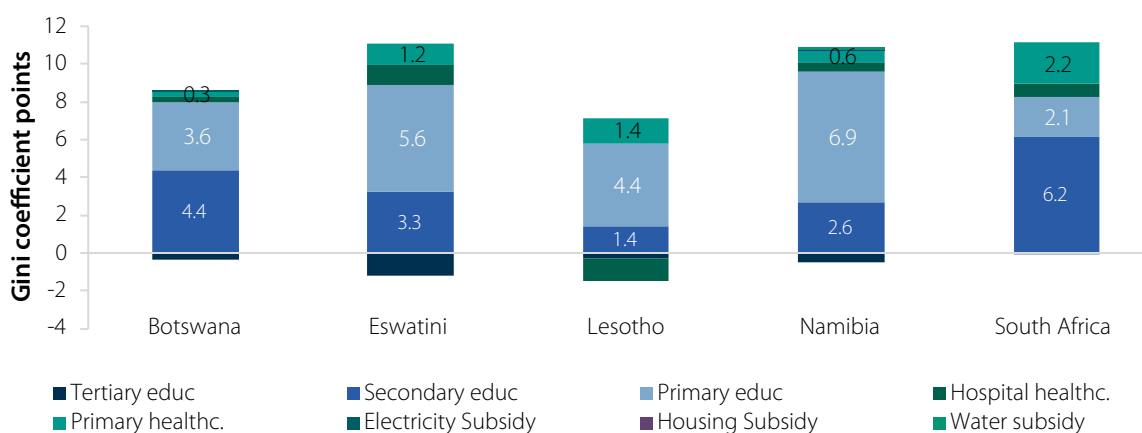
Note: BTP: Building Together Programme; NHE: National Housing Enterprise (program).

## 5.3 The overall impact of fiscal policy on inequality

**Fiscal spending on education and health significantly reduces inequality.** The resources allocated to the provision of education and health services, and received by the population as in-kind benefits, have a substantive role in decreasing inequality. Figure 5.8 shows the impact

on inequality of different components of social spending, highlighting the important role of spending on primary and secondary education, and primary and hospital healthcare facilities. Meanwhile the impact of indirect subsidies on inequality is very limited.

**Figure 5.8. Impact of tertiary income components on marginal inequality**



Sources: Botswana: Younger 2020; Eswatini: Renda and Goldman 2020; Lesotho: Houts and Goldman 2019; Namibia: Jellema and Renda 2020; South Africa: Goldman and others, forthcoming.

Note: Marginal impacts are taken at consumable income—once all the income components are included, except for in-kind education and health transfers.

**Social spending in the region is high** relative to other countries for which Commitment to Equity (CEQ) assessments have been completed (Box 5.2). At about 20 percent of GDP, Botswana's social spending, the largest

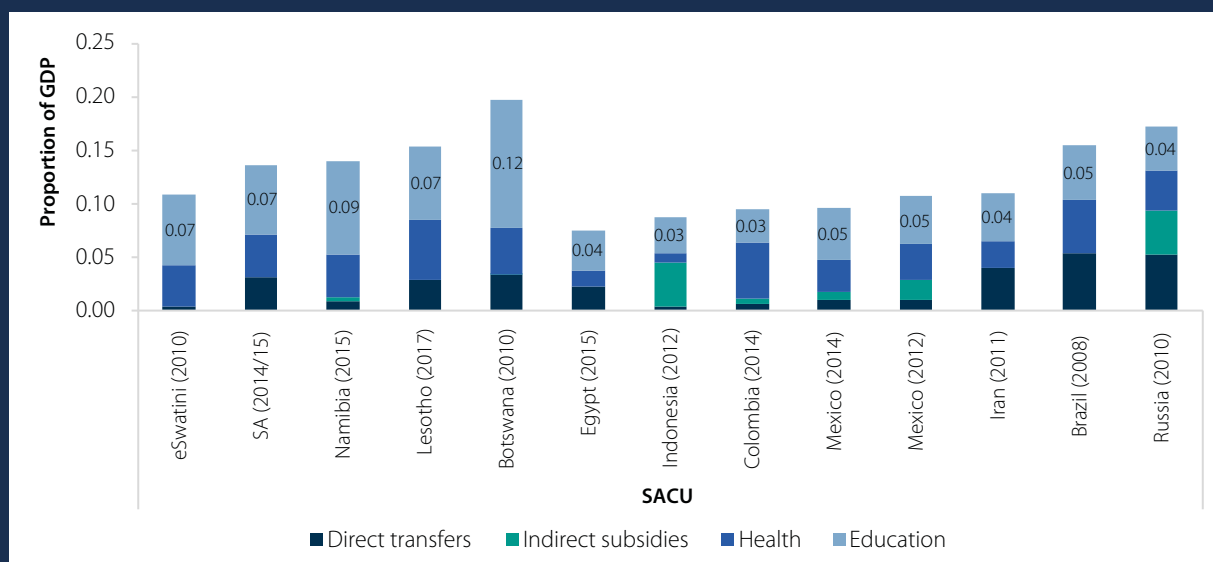
in the region, is higher than that of countries such as Russia and Brazil. Eswatini's spending, the lowest in SACU, is on par with that of Mexico at 11 percent of GDP.



## Box 5.2. The range of fiscal instruments in SACU

Spending on *education* is the largest component of social expenditure in SACU, ranging from 7 percent of GDP in Eswatini, Lesotho, and South Africa to 12 percent in Botswana. This is significantly higher than in comparator countries, which spend at most 5 percent of GDP on education (Mexico, Brazil, and Tanzania). Indonesia and Colombia spend as little as 3 percent. *Health* spending is also high at 4 percent of GDP in all SACU countries except Lesotho, which spends as much as 6 percent. The comparator countries spend between 1 percent (Indonesia) and 5 percent (Colombia and Brazil) on health.

Figure B5.1.1. Social spending, as a proportion of GDP



Sources: Botswana: Younger 2020; Brazil: Higgins and others 2019; Colombia: Melendez and Martinez 2019; Egypt: Lara Ibarra and others 2019; Eswatini: Renda and Goldman 2020; Indonesia: Afkar and others 2015; Iran: Enami and others 2017; Lesotho: Houts and Goldman 2019; Mexico: Scott and others 2017; Namibia: Jellema and Renda 2020; Russia: Popova 2019; South Africa: Goldman and others, forthcoming.

The share of *direct transfers* varies but remains significant in the region. Transfers are relatively lower in Eswatini and Namibia, at less than 1 percent of GDP, and higher in South Africa, Lesotho, and Botswana, at about 3 percent of GDP. In contrast, most comparator countries spend less than 2 percent of GDP on direct transfers; Iran, Brazil, and Russia spend more than any of the SACU countries at 4–5 percent of GDP.

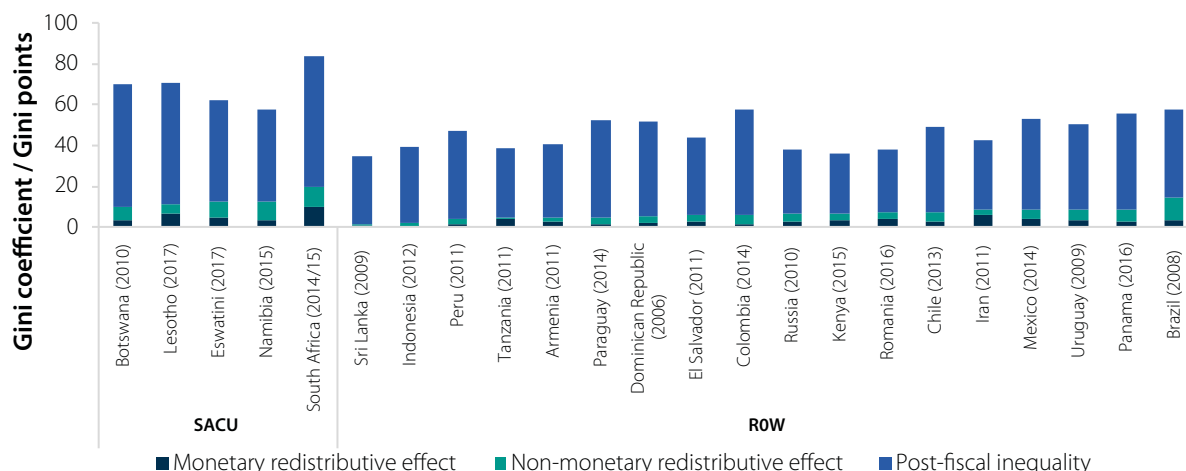
*Indirect subsidies* are used least. Botswana and Namibia<sup>1</sup> are the only two countries with indirect subsidies, and both spend less than 0.3 percent of GDP. Indirect subsidies are more popular in the comparator countries—five of the eight have them, and Indonesia and Russia spend as much as 4 percent of GDP on such subsidies.

Note: 1. As per section 5.2.3, subsidies in Namibia include two housing programs and a water subsidy. The value of the housing subsidies allocated in the Namibia CEQ assessments will not necessarily equal government spending on the same programs in the relevant fiscal year. For details, see individual CEQ assessment reports (World Bank 2017).

**SACU countries have some of the most redistributive fiscal systems in the world**, particularly through in-kind transfers. They achieve a higher redistributive impact than all other countries for which CEQ assessments are available, except for Brazil (only South Africa redistributes more than Brazil). Figure 5.9 shows the redistributive impact of social spending, both monetary and non-monetary components, and the post-fiscal level of inequality. The sum of the three

components is the pre-fiscal inequality level. The monetary redistributive effect is the impact of taxes, subsidies, and direct transfers; the non-monetary redistributive effect reflects in-kind transfers (social services). South Africa and Lesotho have the highest monetary redistributive impact among comparator countries. The other SACU countries also do relatively well in terms of redistributive impact, for both monetary and non-monetary impact.

**Figure 5.9. Redistributive impact and post-fiscal inequality, ranked by impact**



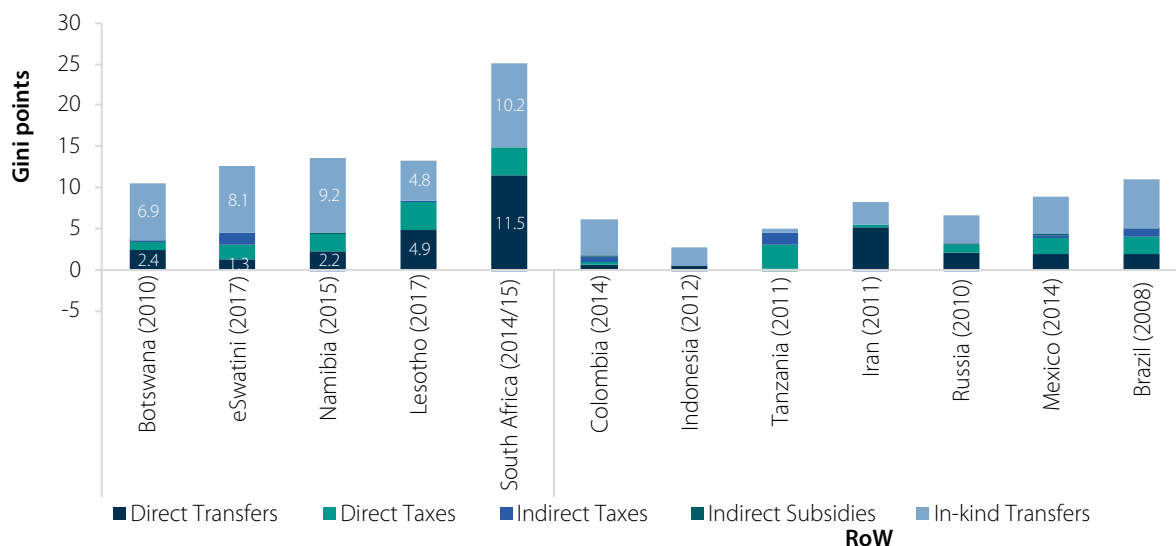
Sources: Armenia: Younger and others 2019; Botswana: Younger 2020; Brazil: Higgins and others 2019; Chile: Martinez-Aguilar and Ortiz-Juarez 2016; Colombia: Melendez and Martinez 2019; Egypt: Lara Ibarra and others 2019; Dominican Republic: Aristy-Escuder 2019; El Salvador: Oliva 2019; Eswatini: Renda and Goldman 2020; Indonesia: Afkar and others 2015; Iran: Enami and others 2017; Lesotho: Houts and Goldman 2019; Kenya: Pape 2018; Mexico: Scott and others 2017; Namibia: Jellema and Renda 2020; Panama: Martinez-Aguilar 2019; Paraguay: Gimenez and others 2017; Peru: Miguel 2019; Romania: Inchauste 2018; Russia: Popova 2019; South Africa: Goldman and others, forthcoming; Sri Lanka: Arunatilake and Abayasekara 2019; Tanzania: Younger 2019; Uruguay: Bucheli 2019.

Note: Non-monetary redistributive effect comes from in-kind transfers.

**South Africa achieves nearly double the income redistribution of other SACU countries.** Measuring the Gini coefficient after all fiscal interventions (social grants, direct and indirect taxes, subsidies, and health and education transfers) shows a reduction of 19.9 points in South Africa, 12.7 and 12.8 points in Namibia and Eswatini, 11.5 points Lesotho, and 10.3 points in Botswana. South Africa’s post-fiscal inequality drops to 0.538, still the highest in SACU but only just larger than Botswana at 0.530. The post-fiscal Gini coefficient is 0.500 in Namibia, 0.414 in Eswatini, and 0.398 in Lesotho.

**The relative contribution of the different fiscal instruments to income redistribution varies** among countries for which CEQ assessments have been conducted (Figure 5.10). For example, redistribution in Indonesia is primarily from health and education spending. Such spending is also significant in Mexico, Brazil, Russia, and Colombia. Direct taxes are important in Tanzania, Mexico, and Brazil. In Iran, direct transfers make the largest contribution to income redistribution. The relative importance of these fiscal instruments in SACU countries is discussed in more detail below.

**Figure 5.10. Marginal contributions to the redistributive effect**



Sources: Botswana: Younger 2020; Brazil: Higgins and others 2019; Colombia: Melendez and Martinez 2019; Eswatini: Renda and Goldman 2020; Indonesia: Afkar and others 2015; Iran: Enami and others 2017; Lesotho: Houts and Goldman 2019; Mexico: Scott and others 2017; Namibia: Jellema and Renda 2020; Russia: Popova 2019; South Africa: Goldman and others, forthcoming.

Note: Marginal contributions are apparent with regard to consumable income.

**In-kind transfers are the largest social expenditure in all SACU countries and make the largest marginal contribution to income redistribution**, except in Lesotho and South Africa. The in-kind impacts range from 10.2 Gini coefficient points in South Africa to only 4.8 points in Lesotho.

- *Spending on primary and secondary education makes an important marginal contribution to equality.* Primary education transfers reduce inequality the most in Namibia (6.9 Gini coefficient points) and the least in South Africa (2.1 Gini points) Secondary education transfers reduce inequality the most in South Africa (6.2 Gini points) and the least in Lesotho (1.4 Gini points).
- *However, tertiary education contributes to higher inequality.* The biggest increase in income inequality from tertiary transfers is in Eswatini (1.2 Gini points), and the smallest is in South Africa (near zero).
- *Primary healthcare is more effective at reducing inequality than hospital care.* South Africa reduces inequality most significantly through primary healthcare (2.2 Gini points) and Botswana the least (0.3 points). Hospital care has a relatively small impact but does reduce inequality across SACU, except in Lesotho, where its impact is large and increases inequality by 1.4 Gini points.
- *Except for tertiary education and hospitals, education and health spending are pro-poor—that is, per capita spending declines with income.*

**However, the efficiency of social spending can be improved.** The way spending is valued in a CEQ assessment does not consider differences in the quality of services. While a systematic analysis of health and education outcomes is beyond the scope of this report, evidence suggests the spending does not always translate into high-quality services.

- *In South Africa and Namibia, relatively more poor people than rich ones opt to access non-tertiary public education spending, possibly because the quality of these services is relatively poor or uneven.* Improving the quality of health and education outcomes will be critical for long-term poverty reduction, as good outcomes will help to lower unemployment and enhance growth.
- *In Eswatini and Lesotho, spending is less progressive, and facilitating access to secondary education is a challenge.* Reducing the education wage bill and implementing measures to strengthen the efficiency of expenditure (such as redirecting some of Lesotho’s spending from hospitals to primary healthcare) could both improve outcomes for poor people and reduce costs.
- *Botswana’s in-kind spending is relatively large and more equally distributed, which may contribute to good health and education outcomes.* Nevertheless, spending could be targeted better. In education, this could include charging fees for people who can afford it, redirecting some tertiary bursaries to vocational education, and shifting some of the sizable tertiary education budget toward primary and secondary education.



**Although direct transfer spending is relatively smaller and makes a lower marginal contribution to income redistribution, it is the most progressive of the fiscal instruments.** The marginal contributions of direct transfers range from 1.3 points in Eswatini to 11.5 in South Africa. Transfers are the most efficiently targeted in South Africa, where they are means-tested. Other countries could improve the efficiency of transfers through better targeting of universal grants (such as old-age and child grants) and by strengthening administrative capacity (such as by improving the social registry in Botswana). Eswatini's direct transfers are relatively low; introducing child support grants or increasing old-age pensions could potentially have a substantial effect on poverty.

**Direct taxes are progressive and generally exceed indirect taxes (excluding SACU receipts) but have a smaller redistributive impact.** Direct taxes change the Gini coefficient by between 1.0 (Botswana) and 3.4 points (South Africa). Marginal improvements in the income distribution could be made by increasing the number of income tax brackets in Eswatini and increasing the top marginal rate or the size of the property tax in Botswana.

**Indirect taxes are largely neutral, ranging from slightly progressive in Eswatini to very slightly regressive in South Africa.** They reduce inequality in Eswatini by 1.3 points, in Lesotho by 0.3 points, and in Botswana by 0.1

points, and make a small, negative contribution in South Africa and Namibia (-0.1 and -0.2 points, respectively). Indirect taxes can have a sizeable effect on poverty; therefore, raising VAT rates is not recommended. However, reducing VAT exemptions and offsetting the impacts with cash transfers would not significantly increase poverty in the case of Eswatini. When considering this strategy, however, it is important to ensure that no one falls outside the safety net.

**Spending on indirect subsidies is small, and the impact of these subsidies on inequality is mostly neutral.** The exception is Namibia's water subsidies, which support rural areas and are pro-poor. The marginal contribution of Namibia's water subsidies to the income distribution is about 0.1 Gini points. Botswana's electricity subsidies provide more benefit to the wealthy; the authorities are considering gradually reducing these subsidies by increasing tariffs to reach cost recovery levels and offsetting any adverse effects on poor people with cash transfers.

**In summary, fiscal policy goes a long way toward redistribution in SACU.** Nevertheless, even after taxes and spending, poverty and inequality remain high. Spending, fiscal deficits, and debt indicators are already very high, suggesting limited fiscal space to spend more for greater redistribution. This underlines the importance of improving the efficiency of existing programs through better targeting.





# CHAPTER 6

## THE ROLE OF SHOCKS

*Droughts and floods are already a major challenge in SACU and are likely to worsen with climate change. Using standardized precipitation index data and the most recent household surveys, this chapter estimates the incidence and distribution of drought and floods in the 2015/16 El Niño phenomenon, when the widespread droughts in the region were considered the worst in several decades. It then estimates their impact on per capita household consumption. It finds that the consumption loss from a climate shock can be substantial—on average, affected people suffer a 11.7 percent loss in per capita consumption from a drought and a 13.2 percent loss from a flood. The average consumption loss varies across countries, depending on the size of the shock and of the affected population, but tend to be unequally distributed and generally affect poorer people more severely. Social protection programs can potentially offset these consumption losses; however, current systems cover only a fraction of climate-vulnerable households.*

*The SACU economies have been hit hard by the COVID-19 pandemic, as both lockdowns and health risks left people unable to work. Analysis based on micro-simulations finds that the poverty impact of the pandemic is unequally distributed. The estimated poverty impact is considerable—over 3.2 million people are expected to fall into poverty in SACU. Labor data from South Africa shows that low-wage workers suffered significantly more job losses than high-wage ones. Social protection programs could substantially offset this impact, but their size, scope, and targeting efficiency vary significantly across the region.*

**The existing challenges of poverty, inequality, and unemployment in SACU are exacerbated by many risks and (long-term) vulnerabilities**, some of which have regional and cross-border significance. For example, the economic prospects of mining operations in South Africa have a direct bearing on migrant workers from the region, including those from Lesotho. Previous shocks to mining had immediate, adverse consequences for these workers and their households through drastically reduced remittances. In addition, the region's governments rely heavily on fiscal resources from the customs union, and the instability of these receipts means that their revenues are volatile.<sup>32</sup> These risks and vulnerabilities significantly

affect governments' ability to provide critical services and assistance to households.

**Two newer sources of vulnerability—climate risks and the COVID-19 pandemic—have serious economic consequences and threaten to worsen inequality.**

- The reality of *climate risks* began to emerge around 2015. Countries in the region have been hit by droughts and floods, some of which have been considered the worst in 35 years. For example, Namibia experienced severe droughts during the El Niño phenomenon of 2015/16, followed by floods in mid-2017 and again by drought in 2018/19. Climate shocks have had

<sup>32</sup> Recent analysis suggests that volatile SACU receipts contribute to revenue volatility in the member countries, particularly the smaller economies of Lesotho and Eswatini (Honda and others 2017).

significant consequences for agricultural production, livestock, and food security, and ultimately the well-being of households. They have been unequally distributed, hitting some regions harder and more often than others. Such shocks are expected to worsen with climate change, occurring with increasing frequency and intensity.

- The *COVID-19 pandemic* brought about unprecedented socio-economic challenges across the world. In SACU, many workers have already lost several months of income, leading to rising poverty and rapidly deteriorating levels of well-being. Like climate shocks, income losses are unequally distributed across workers and households. The impacts vary depending on sector in which people are employed (such as whether the sector was exempted from lockdowns) and within these sectors, on the nature of the employment. Not all

households are covered by social protection programs nor are social protection systems equipped to deal with new shocks. People’s inability to cope with shocks can magnify existing economic disparities.

**This chapter simulates the economic impacts of climate and COVID-19 shocks and assesses their distribution.**

First, it combines geocoded data on precipitation with household surveys to understand the incidence and distribution of climate shocks. It then estimates the impact of climate shocks on consumption and how different groups might be affected. Second, it uses a framework from the ILO to identify the economic sectors worst hit by the pandemic. It then applies this framework to the latest household surveys to simulate the labor income shocks from COVID-19. Finally, the chapter explores the potential of existing social protection instruments to mitigate these shocks.

## 6.1 Climate shocks as a source of inequality

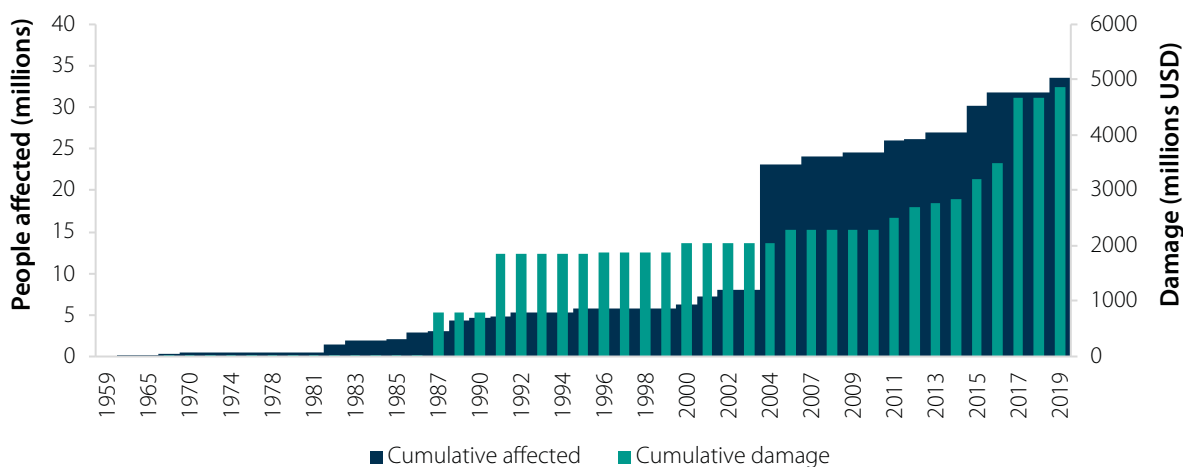
### 6.1.1 Climate change and the risk of droughts and floods

**Climate shocks pose major challenges to the region.**

Since 1959, more than 30 million people in southern Africa have been affected by drought and floods, which caused nearly \$5 billion in damages (Figure 6.1). Floods are the

most frequent natural disaster in the region, but droughts cause the most destruction and affect the largest share of the population (Davis and Vincent 2017; Guha-Sapir and others 2017). Droughts involve both observable costs (such as higher food prices and lower GDP) and unobservable costs (such as lower life satisfaction) (Logar and van den Bergh 2013).

**Figure 6.1. Impact of droughts and floods in SACU, 1959–2019**



Source: EMDAT ([https://www.emdat.be/emdat\\_db/](https://www.emdat.be/emdat_db/))

**These challenges may worsen with climate change,** which is likely to exacerbate the intensity and frequency of extreme weather events in SACU (Reid and others 2008).

The frequency of droughts lasting 4–6 months is projected to double or triple by 2100 and that of droughts lasting more than a year, almost unheard of previously, to increase

more than five times (Sheffield and Wood 2008). Local people are badly affected by climate change. In a recent Afrobarometer survey on climate change, 33–79 percent of respondents from SACU countries reported that climate change had worsened their agricultural conditions over the past decade; 37–79 percent believed droughts were severe over the past 10 years, and 14–64 percent believed the same about floods. Meanwhile, 61–88 percent believed climate change was making their lives worse or much worse. However, only 16–31 percent were what Afrobarometer refers to as “climate change literate,” meaning they have heard of climate change, believe it to be caused in part by human activity, and associate its effects with negative changes (Selormey and others 2019).

**The 2015/16 El Niño drought was the worst in recent history.** SACU has experienced several severe climate shocks, which crippled agricultural livelihoods. The 2015/16 El Niño drought, which began at the end of 2015, brought about food insecurity and poor health during the following season, and most intensely in December 2016 and March 2017 (UNICEF 2017). It was followed by floods, which

peaked in April 2017. Some have called it the worst drought in the region in 35 years, and October–December 2015 saw the most intense drought since measurements started 116 years ago (UNICEF 2017; Blamey and others 2018). Because the drought occurred at the beginning of the planting season, agricultural production suffered from both lower planting and lower production in the planted areas (Archer and others 2017).

**Inequality and the impact of climate shocks may become a vicious cycle.** Where poverty and inequality result in poor living conditions, such as urban slums, service providers may be unable to respond adequately to droughts, water shortages, and food insecurity (Davis and Vincent 2017; IARAN 2015). In SACU, poor people are disproportionately exposed to droughts and floods because of their location and their greater reliance on agriculture (Winsemius and others 2015). Their vulnerability could also exacerbate social tensions. In South Africa, for example, inequality in the distribution of drought support programs caused tensions among smallholder farmers (Manderson and others 2016).

## 6.1.2 Defining vulnerability to drought

**Drought** may refer to various phenomena.

- *Meteorological* definitions are based solely on measures of precipitation and the duration of dry periods, sometimes with reference to long-term averages. Although simple and objective, these measures have been criticized for not clearly defining the meaning of a drought in a specific context.
- Other *agricultural or socio-economic measures* incorporate some estimate of the gap between the precipitation that falls and the amount an area needs. Many of these measures are highly correlated with meteorological measures (AghaKouchak and others 2015).
- Some studies combine different types of measures into a *composite* measure (Bijaber and others 2018).

**Vulnerability to drought includes both climate shocks and local preparedness.** One common definition of climate vulnerability is based on the framework set out by the United Nations’ Intergovernmental Panel on Climate Change in their fifth Assessment Report (IPCC 2014), which identifies three key components of risk: hazard, exposure, and vulnerability. In this context, *hazard* refers to the existence of potentially damaging events such as natural disasters; *exposure* refers to the potential extent of damage (such as population density); and *vulnerability* refers to the sensitivity of the system or the likelihood of people experiencing damage.

**This section analyzes the distribution of climate vulnerability, using a measure of climate shock based on the average standardized precipitation index (SPI).** The consumption impact of a climate shock is estimated and the ability of countries to manage climate shocks assessed by reviewing the coverage and distribution of selected social protection instruments among households that experienced climate shocks. Box 6.1 discusses the methodology and data used in the analysis.

## Box 6.1. The impact of climate shocks: Data, methodology, and limitations

This analysis starts by assessing the *distribution of climate vulnerability* using a specific measure of climate shock based on the average SPI. Values of this index represent standard deviation units from long-run averages (Funk and others 2014; McKee and others 1993). The SPI for October–December 2015 is used to capture the lack of rainfall in October–December 2015 and the SPI for February–April 2016 to capture floods. Precipitation in these two 3-month periods is compared with the long-run average SPI for the same three months in the period 1981–2013. Droughts are proxied by SPI values 1.5 units below their long-run averages, while floods are defined as 2 units above their averages. Using administrative level-2 codes, the SPI results are then combined with household survey data collected around the time of the climate shocks. The combined data are used to understand how climate shocks and vulnerability are distributed across and within countries, as well as across regions, along the household consumption distribution and by selected household and individual characteristics.

The *consumption impact of a climate shock* is then estimated. Regression analysis is used to compare households in affected areas with those that were unaffected. The log of per capita household consumption is regressed on dummy variables representing households living in drought- or flood-affected areas. To get sufficient variability, the regression analysis uses household survey data pooled across countries. The household survey weights are rescaled, so that all the weights sum to one in each country, and in effect, each country is weighted equally. Per capita consumption is converted into PPP terms for comparability across countries. The regression model includes country fixed effects along with controls for urban/rural location, age, sex, household size, and whether the primary earner works in the agriculture sector. The coefficients of the flood and drought dummy variables can then be interpreted as estimates of the impact of a climate shock on consumption.

The results may be an underestimate and should be interpreted with caution:

- The impact of a climate shock potentially includes, along with the direct impact on consumption, a loss of labor income, a loss of assets, and health shocks, among other effects. These are not measured here.
- For the regional comparison, a uniform definition of a flood or a drought is used, and the same period is considered across all countries. If some households experienced the climate shock after this period, they would have been counted as unaffected, and the true impact of the climate shock would be understated.
- The observed consumption used in the regression analysis is already net of economic adjustments and reflects coping mechanisms and mitigating measures, including transfers (from government, family members abroad, and other households), borrowing, increased labor supply, and the like.

The *ability of countries to manage climate shocks* is determined by assessing the coverage and distribution of selected social protection instruments among households that experienced climate shocks. The analysis is based on available data on selected social transfers, which vary from country to country. Botswana could not be included in this analysis because social protection data were available for only a small fraction of the sample. In addition, as noted, data collected after the droughts and floods of 2015–16 may already represent some of the actual social protection responses to the climate shock.

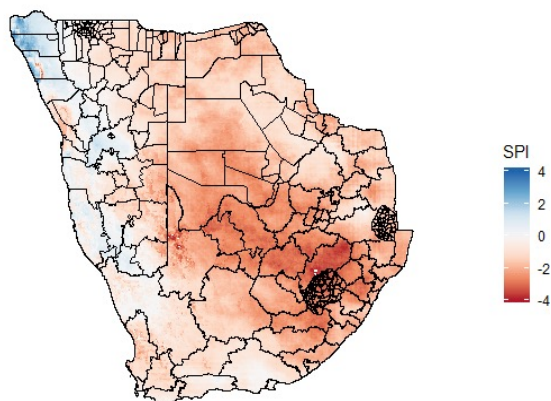
### 6.1.3 Quantifying the impact of climate shocks on inequality

**Although widespread, the 2016 drought was worse in the southeastern part of SACU, and South Africa and Lesotho were most affected** (Figure 6.2, panel a). The entire population of Lesotho and at least 78 percent of people in Botswana, Eswatini, and South Africa lived in areas affected by the drought or floods (Table 6.1). While the drought was intense in some parts of Namibia, it affected only 10.7 percent of the population.

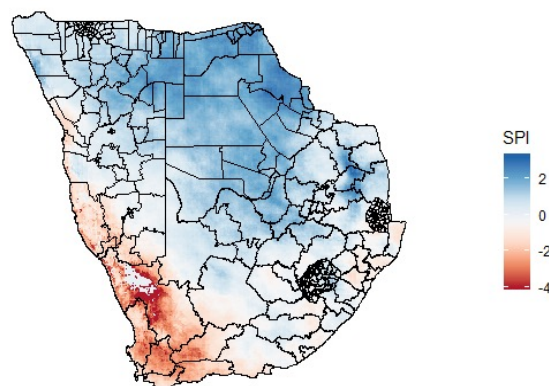
**By contrast, the ensuing floods were strongest in the northeast.** From February to April 2017, floods hit Botswana, Lesotho, and Namibia (Figure 6.2, panel b), affecting 23.8 percent, 3.1 percent, and 2.6 percent of the population, respectively. Although their extent was more limited, the floods were severe, with many areas receiving more than twice their average rainfall.

**Figure 6.2. Extent of climate shocks**

**a. Drought**



**b. Floods**



Source: World Bank calculations.

**Table 6.1. Share of population in areas affected by moderate drought or flooding**

Percentage shares	Botswana	Eswatini	Lesotho	Namibia	South Africa
<b>Sex</b>					
Male	79.3	78.9	100.0	10.8	78.2
Female	79.6	79.0	100.0	10.6	77.6
<b>Education</b>					
None	77.6	81.3	100.0	11.8	82.2
Primary	76.6	78.2	100.0	11.5	76.6
Secondary	80.5	77.7	100.0	8.8	77.2
Post-secondary	89.5	69.4	100.0	6.0	75.8
<b>Location</b>					
Urban	82.1	75.6	100.0	9.2	72.8
Rural	74.6	79.9	100.0	12.0	87.0
<b>Household size</b>					
1	83.0	85.7	100.0	5.2	79.4
2	85.3	82.0	100.0	6.9	75.9
3–5	82.1	78.3	100.0	11.1	76.5
6–9	79.2	79.3	100.0	11.8	78.7
More than 10	65.7	75.8	100.0	10.5	83.5
<b>Household composition</b>					
No children	84.2	79.9	100.0	7.4	75.3
Children	78.0	78.8	100.0	11.4	79.0
<b>Quintile</b>					
Q1 (poorest)	76.0	82.3	100.0	20.5	82.7
Q2	72.7	82.9	100.0	11.9	77.3
Q3	78.1	77.5	100.0	9.7	76.9
Q4	83.3	77.5	100.0	6.7	77.8
Q5 (wealthiest)	87.3	74.5	100.0	4.5	74.8
<b>Total</b>	<b>79.5</b>	<b>78.9</b>	<b>100.0</b>	<b>10.7</b>	<b>77.9</b>

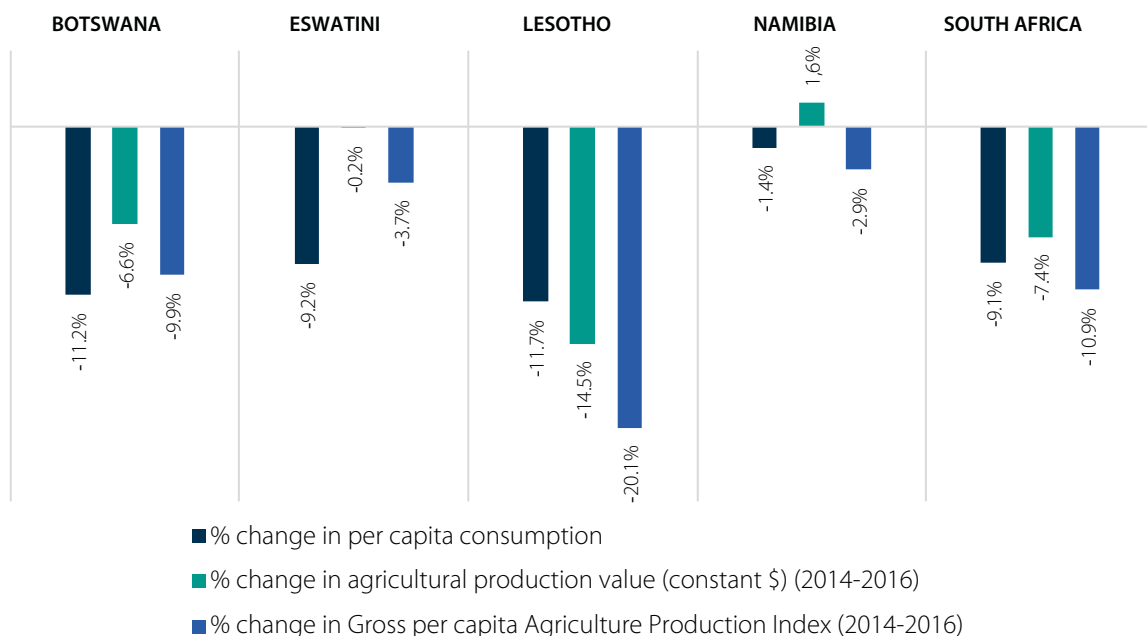
Source: World Bank calculations.

**Climate shocks are unequally distributed, and poorer people are generally worse affected** by climate events. This pattern holds in Eswatini, Lesotho, Namibia, and South Africa for both floods and droughts, but not for droughts in Botswana. In Eswatini, for example, 82 percent of people in the poorest quintile were affected by the drought, as against 75 percent in the richest quintile. In Namibia, the figures were 20 percent and only 4 percent, respectively (Table 6.1). Except for Botswana and Lesotho (where the entire population was affected), climate shocks affected a larger share of rural residents than urban ones, and less-educated people more than better-educated ones.

**Climate shocks are associated with substantial consumption losses.** Controlling for observable

characteristics, SACU households in areas affected by droughts on average experienced a 11.7 percent loss in per capita consumption relative to their unaffected peers. Among households affected by floods, per capita consumption was 13.2 percent lower. At country level, this amounts to overall average losses ranging from 1.4 percent in Namibia to 11.7 percent in Lesotho (Figure 6.3). The figures reflect the patterns of loss in agricultural production using Food and Agriculture Organization (FAO) data: Lesotho saw agricultural production per capita falling by 20 percent and an overall consumption loss of 11.7 percent; the corresponding reductions for Namibia were 2.9 percent and a 1.4 percent respectively.<sup>33</sup>

**Figure 6.3. Aggregate impacts**



Source: World Bank calculations.

Note: Change in per capita consumption from simulation. Data are from the FAOSTAT database, FOA (Food and Agriculture Organization of the United Nations), Rome, <http://www.fao.org/faostat/en/#data>.

**Crop failures may have been substantial.** Considering the total value of crops grown in areas affected by the drought and floods, losses from drought may amount to 25 billion international dollars and those from floods to 13 billion international dollars. Moreover, estimates of water availability relative to the needs of the vegetation suggest that large crop areas in Botswana, Namibia, and South Africa

did not receive enough water during the affected season, with many crops receiving less than 50 percent of the water needed.<sup>34</sup> Maize production in South Africa may have fallen by as much as 40 percent because of the drought (Archer and others 2017).

33 Although the estimated decreases in consumption generally track the patterns of agricultural production losses in the region, Eswatini appears to be an exception. One possible explanation is that 2014 (the base year for the FAO data) is also considered a drought year in existing studies (such as Mlenga and Jordaan 2019).

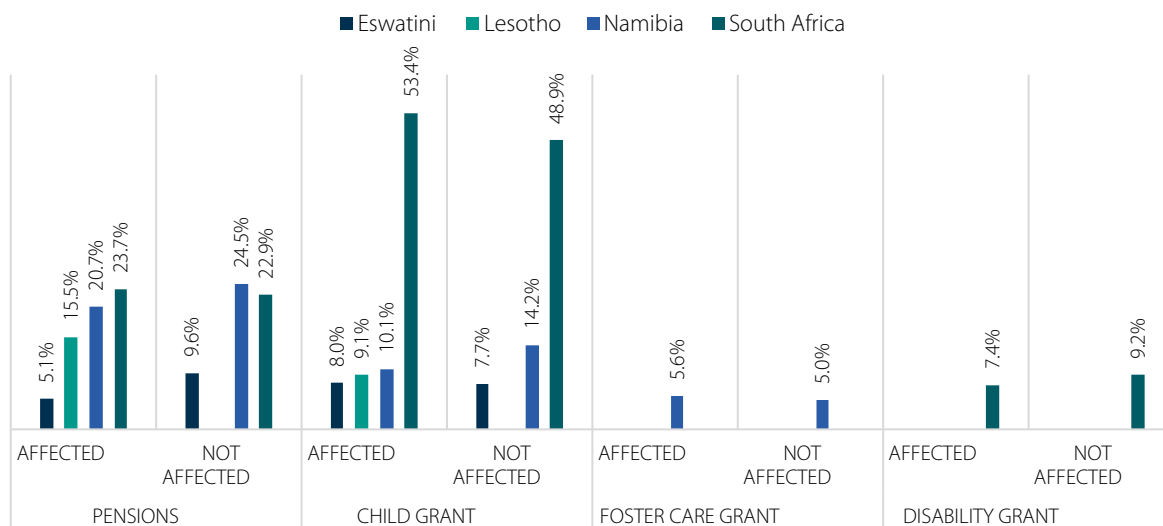
34 See <https://earlywarning.usgs.gov/fews/product/128>.

The *international dollar* is a unit of currency with a purchasing power equal to that of a United States dollar: 1 international dollar would be able to purchase the same goods as 1 US dollar in the same year. This unit of measurement does not depend on simple exchange rates between the US dollar and other currencies.

**The potential for existing social protection programs to mitigate the welfare impact of climate shocks is limited.** The cross-country comparison is hampered by the lack of comparable (or any) data on the distribution of social protection programs across households. Where they exist, pensions and relevant grants cover only a fraction (5–

25 percent) of households vulnerable to climate risks (Figure 6.4). One exception is the child grant in South Africa, which covers about half the affected population. Even this best case, however, still leaves the other half of the population vulnerable to devastating welfare losses.

**Figure 6.4. Share of households receiving social protection**



Source: World Bank calculations.

## 6.2 The role of COVID-19

**SACU countries have been severely affected by the COVID-19 pandemic**, as both lockdowns and health risks left people unable to work for long periods. Given the context of high inequality, poverty, and unemployment even before the pandemic, the adverse consequences of the pandemic are likely to be substantial. This section simulates the poverty impact of COVID-19 via a labor income shock. As explained in Box 6.2, the labor income

shock is assumed to depend on the sector in which workers are employed, whether they work in the formal or informal sector, whether they are wage earners or self-employed, and the size of their firms. It is then assumed that the labor income (or wage) shock is passed through to per capita household consumption, and the new poverty rate is calculated accordingly.



## Box 6.2. The COVID-19 pandemic: Data, methodology, and limitations

### Data

This simulation uses data from the most recent household surveys. National poverty lines are used to replicate the latest available poverty numbers (as a share of the population) before COVID-19. Unless otherwise noted, the upper-bound poverty line is used. To calculate the expected rise in poverty in absolute terms, the latest available data on total population from the World Bank's World Development Indicators database is used. Unless otherwise indicated, the simulated decreases in per capita consumption are compared with macroeconomic forecasts from the International Monetary Fund's (IMF) October 2020 and January 2021 *World Economic Outlook* (IMF, 2020c, 2021).

### Methodology

The poverty simulation of economic shocks typically follows a top-down approach by assuming that the projected GDP contraction is fully passed on to a contraction of consumption among households, while also assuming distribution neutrality (see, for example, Mahler and others 2020). This analysis instead starts with unequal labor income shocks experienced by workers at a sectoral level, then assumes a passthrough to household consumption, and aggregates upwards. The simulation adopts a regional framework, but is adjusted to country specifics, as follows:<sup>1</sup>

- The ILO framework (IMF 2021) is used to identify sectors worst affected by the pandemic. Depending on people's employment sector and their formal and informal status, they are assumed to lose their monthly income for six months. For Lesotho<sup>2</sup> and South Africa (Ramaphosa 2020), their specific lockdown guidelines and exemptions of essential services (such as groceries) are incorporated.
- For workers in the affected sectors, it is assumed that self-employed, informal, and some formal sector workers will be more vulnerable to labor market shocks, at least in the short run. Where there is information on the size of the firm, it is assumed that formal sector workers in small and microenterprises are more vulnerable. For workers in medium or large firms, it is assumed that about 30 percent are vulnerable in sectors labeled "high risk" in the ILO framework.<sup>3</sup> For sectors with only a fraction of workers exempted, the probability of a shock for all workers in the sector (corresponding to 1 minus the share of exempt workers) is simulated using 100 random draws, and the resulting wage shock faced by households is then averaged.<sup>4</sup>
- The labor income or wage shock experienced by a worker is assumed to fully pass through to their households—from a percentage reduction in aggregate household income (including wage income and all other sources of income) to a percentage reduction in aggregate household consumption, shared equally among household members. The reduction in aggregate household income depends on the wage share of income. In countries without (credible) data on aggregate household income, regression analysis is used to estimate the relationship between wages and consumption, and the estimated wage elasticity of consumption is used to simulate the subsequent fall in consumption.<sup>5</sup>
- The percentage point change in poverty rates is estimated by comparing the pre-COVID poverty rates (as a share of the population) with the new ones. The poverty impact of a six-month lockdown is simulated. Both the overall poverty impact and the impact by selected individual and household characteristics are reported.
- Where data allow, the poverty-reducing potential of selected social protection programs is simulated.

### Limitations

Although an attempt is made to apply a common framework, data quality necessitates some variations between countries. Also, the reported poverty impacts are likely to be an underestimate, as the analysis only includes a consumption shock stemming from a reduction in direct labor income. It is not currently possible to model indirect labor income shocks (such as to workers in exempt sectors facing lower consumer demand) or to include shocks to other sources of income (such as public and private transfers). The impact of health shocks on household resources can also not yet be captured. Finally, it is assumed that governments have sufficient fiscal resources to fund the transfers, even though government revenues are likely to decline in the pandemic.

Notes: 1. See country notes for more country-specific information on the methodology and data.

2. Lesotho Government Gazette (Accessed May 27, 2020), <https://www.gov.ls/wp-content/uploads/2020/03/Lockdown-Gazette-Lesotho.pdf>.

3. Eswatini and Botswana do not have information on firm sizes. In Eswatini, a 30 percent shock among all formal sector workers in high-risk sectors is assumed. In Botswana, all workers with limited-term contracts are considered vulnerable, as are 30 percent of those in high-risk sectors with unlimited contracts.

4. Some versions were tested using 1000 draws; the results were essentially identical to versions using 100 draws.

5. When the sum of wage income from all household members is less than consumption, the analysis assumes the direct impact of the wage loss on consumption; that is, it assumes post-COVID consumption is equal to pre-COVID consumption minus the loss in wage income. Where household wage income exceeds consumption, post-COVID-19 consumption is assumed equal to pre-COVID-19 consumption multiplied by (1 minus the percentage change in consumption), where the percentage change in consumption is equal to the percentage change in wage income multiplied by the elasticity. The elasticity is estimated with a regression of the log of household consumption on the log of household wage earnings. The estimated elasticity is 0.25 in Botswana and 0.23 in Lesotho.

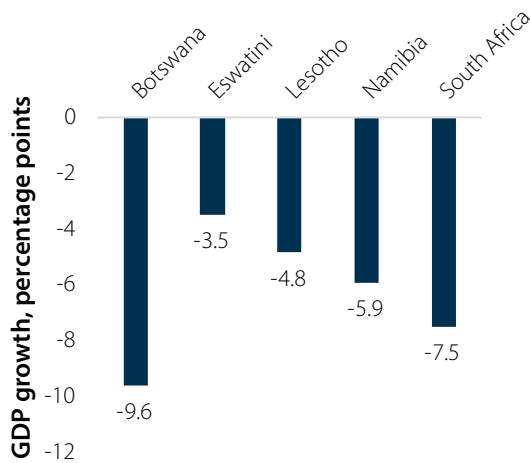
### The poverty impact of COVID-19 has been substantial.

SACU's poverty rates are estimated to increase by an average of 5 percentage points because of the pandemic and the lockdowns, which suggests nearly 3.2 million people falling into poverty. Botswana is at the low end of this distribution at 2.5 percentage points (Figure 6.5, panel

b). At the higher end of this distribution are Eswatini (5.9 percentage points) and Namibia (6.6 percentage points). Southern Africa has relatively low capacity to cushion the poverty impacts of shocks such as COVID-19 because of its low degree of financial resilience (Box 6.3).

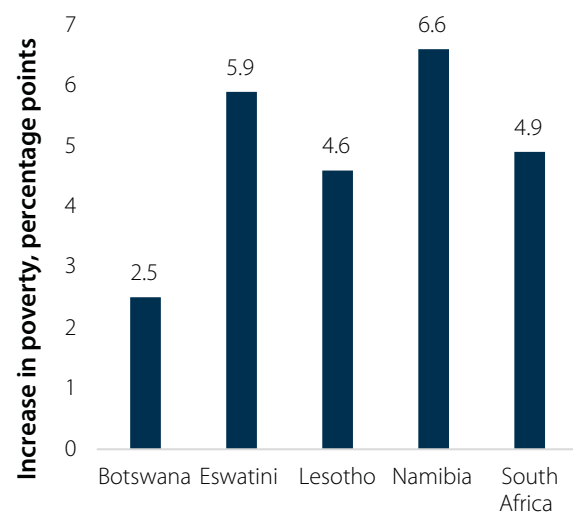
**Figure 6.5. Growth and poverty impact of COVID-19**

#### a. Loss of GDP



Source: World Economic Outlook, January 2021 for South Africa (IMF 2021), October 2020 for others (IMF 2020c).

#### b. Poverty impact



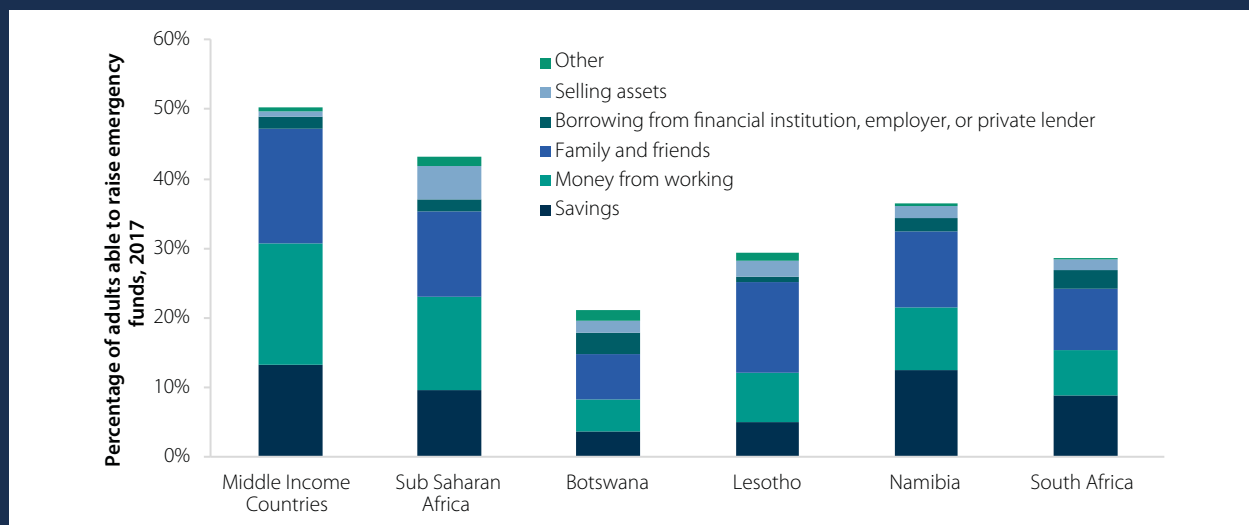
Source: World Bank projections.

## Box 6.3. COVID-19 preparedness: Financial resilience in southern Africa

Financial resilience refers to a person's ability cope with the financial implication of an emergency, such as illness or job loss. The Global Findex measures financial resilience by asking survey respondents if they could come up with the equivalent to 5 percent of gross national income per capita within the next month.

Financial resilience is relatively low in southern Africa. In developing economies, about 50 percent of adults say they could come up with emergency funds, but the figures are only 21 percent in Botswana and 29 percent in Lesotho and South Africa (Figure B6.3.1). Many people who say they could raise emergency funds depend on potentially unreliable financing sources. In most southern Africa economies, over a fifth of these adults would get the money by picking up extra shifts at work or borrowing money from an employer. The numbers illustrate the economic insecurity of adults in the region and highlight the importance of strong safety nets to protect people from sudden expenses.

**Figure B6.3.1. Low financial resilience in southern Africa**



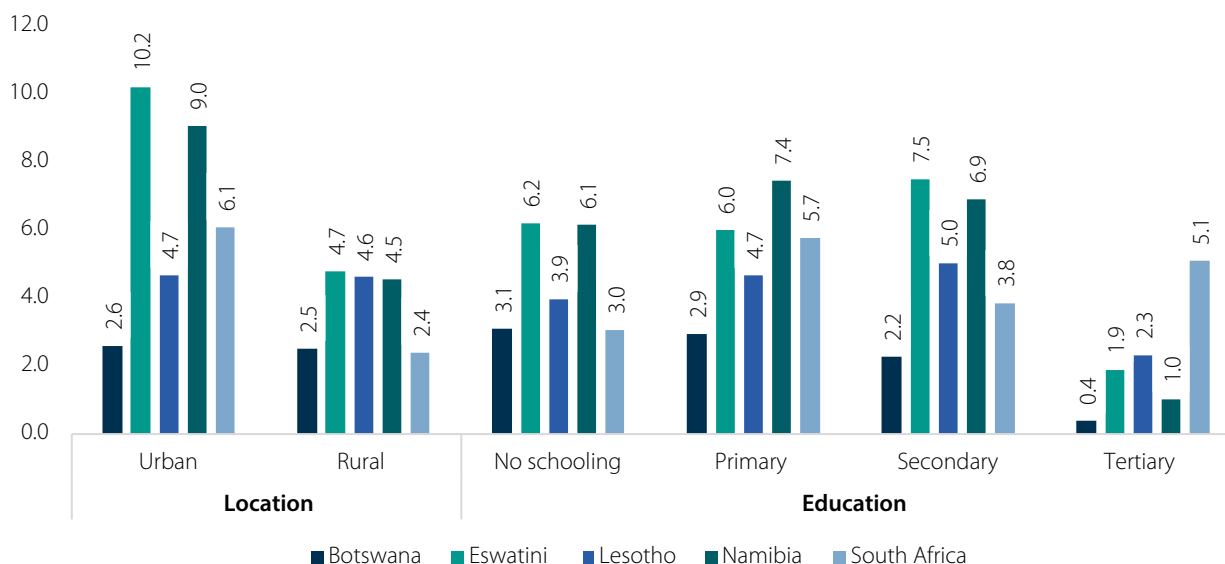
Source: The Global Findex database 2017, World Bank, Washington, DC, <https://globalfindex.worldbank.org/>.

Note: Sub-Saharan Africa and middle-income country averages are weighted by population.

**The poverty impacts of the pandemic are unequally distributed and tend to be more pronounced in urban areas** (Figure 6.6). In South Africa, for example, the percentage point increase in poverty is more than 2.5 times

larger in urban than in rural areas. In Botswana, on the other hand, urban and rural impacts are similar. In general, less-educated workers are more adversely affected, while workers with tertiary education are the least affected.

**Figure 6.6. Poverty impacts by group**



Source: World Bank calculations.

Note: This refers to the case of a six-month loss because of the lockdown.

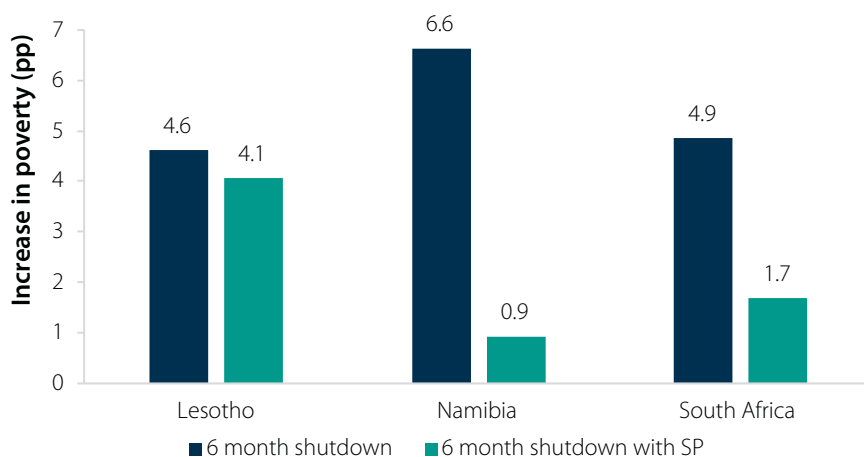
**Low-wage workers in South Africa suffered almost four times more job losses than high-wage workers (World Bank 2021b).** Data from South Africa’s Labor Force Survey is used to complement the results from micro-simulations. These data show that the COVID-19 crisis is widening inequality by contributing to severe and unequal job losses. Comparing 2020-Q4 to pre-crisis 2020-Q1 shows that workers in bottom 20 percent of the wage distribution experienced almost four times more job losses that workers in the top 20 percent.

**Social protection programs could significantly mitigate the poverty impacts of the COVID-19 pandemic.** Data on Botswana and Eswatini are not available, but examples of selected programs in Lesotho, Namibia, and South Africa are simulated here. The results show that such social programs have significant potential to support people adversely affected by the pandemic. Two caveats must be noted, however: social protection still does not cover many

affected households, and the poverty-reducing impact of social protection varies across countries, reflecting differences in program size, coverage, and targeting efficiency. Namibia appears to be an exception, but the simulation is predicated on the ability of the Namibian government to perfectly identify those who have lost their jobs and provide them with income grants.<sup>35</sup> Box 6.4 discusses the COVID-19 social protection schemes in Lesotho, Namibia, and South Africa. Social protection programs can help reduce the increase in poverty by half a percentage point in Lesotho (to 4.1 instead of 4.6 percentage points), by 5.7 points in Namibia (0.9 instead of 6.6 points), and by 3.2 points in South Africa (1.7 instead of 4.9 points) (Figure 6.7). These results suggest that nearly 2 million people can be protected from poverty by social assistance, with South Africa accounting for most of the gains because of the size of its population and the scope and the effectiveness of its programs.

35 The simulation assumes that in Namibia, the proposed employment income grant can perfectly identify affected workers in both the formal and informal sectors. In the other SACU countries, the poverty-reducing impact of social protection depends on benefit size and actual benefit incidence; this includes the under-coverage and leakage of existing programs, because the social protection response considered in this simulation has largely been the horizontal expansion of these programs.

**Figure 6.7. Mitigating impact of social protection**



Source: World Bank calculations.

### Box 6.4. COVID-19: The distributional impact and social protection responses

The COVID-19 pandemic affects each country differently, and they have responded with different forms of social protection:

**Botswana.** The disruption in trade significantly affected the export industry and resulted a large contraction in GDP (9.6 percent). However, the impact on poverty is expected to be relatively smaller (a 2.5 percentage point increase), as only a small proportion of the labor force is directly employed in the diamond export industry. Similarly, average per capita consumption may decrease by only 3.8 percent. The government's COVID-19 Relief Fund offers a three-month wage subsidy for employers continuing to pay their workers.<sup>1</sup> It also offers loan guarantees and other benefits to businesses.<sup>2</sup>

**Eswatini.** Business shutdowns may cause a 5.9 percentage point increase in poverty, and average per capita consumption may fall by 10.6 percent. The government offers food assistance to people affected by pandemic-related job losses. As of June 5, 2020, this assistance had reached 113,000 people.<sup>3</sup>

**Lesotho.** The shutdown of non-essential businesses may bring a 4.6 percentage point increase in poverty, and per capita consumption may decrease by 8.7 percent. The government has offered additional benefits to workers who participate in the Social Security Scheme through June.<sup>4</sup> The simulation considers the impact of doubling the amount disbursed in old-age pensions, school meals, the orphans and vulnerable children grant, child grants, and other grants for the duration of the lockdown period. Doubling the value of old-age pensions is found to be the most effective in mitigating the poverty impacts of COVID-19.<sup>5</sup>

**Namibia.** Lockdowns may result in a 6.6 percentage point increase in poverty and a 17.8 percent fall in per capita consumption, slightly higher than but consistent with forecasts of GDP declines of 5.9 percent by the *World Economic Outlook* and 7.8 percent by PSG Namibia (Nhongo 2020; XinhuaNet 2020). Proposed social protection programs may substantially lower the poverty impact. The government has announced the Economic and Stimulus Relief Package, which includes income grants to unemployed people and wage subsidies in certain sectors.<sup>6</sup> The Emergency Income Grant is distributed equally to all unemployed people. It aims to distribute N\$562 million to individuals who have lost their jobs. The National Employment and Salary Protection Scheme also offers protection of 50 percent of wage income for formal and informal sector workers in the construction, aviation, and tourism sectors. The potential impacts of both programs are simulated in this section.

**South Africa.** The pandemic and the resulting lockdowns may cause a 4.8 percentage point increase in poverty, and per capita consumption may fall by as much as 10 percent, consistent with the January 2021 *World Economic Outlook* forecast of a 7.5 percent GDP loss (IMF 2021). However, the social protection package may cushion two-thirds of this impact, protecting 1.8 million people from falling into poverty. The government has announced several social protection schemes, simulated in this analysis. The simulations include: (a) unemployment benefits for three months to replace wage income for those who have lost jobs because of the pandemic, with a minimum benefit of R 3,500 per month and a maximum of R 6,730 per month; (2) grant top-ups of R 250 for disability grants and state pensions, for the duration of the lockdown, as well as child grant top-ups of R 300 for one month and R 500 for the remainder of the lockdown; (3) Social Relief of Distress grants of R 350 per month for those who lost their jobs because of the pandemic but do not receive any of the benefits outlined above.<sup>7</sup>

Notes: 1. See the IMF's COVID-19 Policy Tracker (Accessed June 9, 2020), <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#B>. See also Republic of Botswana COVID19 Task Force, COVID-19 Relief Fund (Accessed June 9, 2020), <https://covid19portal.gov.bw/COVID-19-relief-fund>.

2. Republic of Botswana COVID19 Task Force, Assistance for Businesses (Accessed June 9, 2020), <https://covid19portal.gov.bw/assistance-businesses>.

3. Government of the Kingdom of Eswatini, COVID-19 Partial Lockdown Update (Accessed June 9, 2020), <http://www.gov.sz/images/CORONA/PM-statement-5-June-2020-final.pdf>.

4. See the IMF's COVID-19 Policy Tracker (Accessed June 9, 2020), <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#B>.

5. For an overview of these social protection measures before COVID, see UNICEF Lesotho (Accessed June 9, 2020), <https://www.unicef.org/esaro/UNICEF-Lesotho-2018-Social-Protection-Budget-Brief.pdf>.

6. See the IMF's COVID-19 Policy Tracker (Accessed June 9, 2020), <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#B>.

7. [http://www.gpwnline.co.za/Gazettes/Gazettes/43301\\_9-5\\_HomeAffairs.pdf](http://www.gpwnline.co.za/Gazettes/Gazettes/43301_9-5_HomeAffairs.pdf).







## CHAPTER 7

### ADDRESSING INEQUALITY IN SACU: A POLICY DISCUSSION

**The high and persistent inequality in SACU stems from both historical and economic sources.** Notable among these is the region's history of racial and spatial segregation, which is directly associated with high inequality of opportunity. Differences in people's circumstances at birth result in differences in their access to and use of economic opportunities, which in turn contribute to inequalities in the income distribution, even before they enter and interact with markets. When they do, the situation is compounded by the highly skewed distribution of access and returns to productive assets (such as capital, labor, and land), which results in high inequality in primary income. Poor people's growing vulnerability to natural disasters and economic shocks also exacerbates the inequality challenge, largely because they tend to have few strategies to cope with shocks.

**SACU governments have used fiscal policy as a primary tool to reduce inequality,** with relatively high public spending on social protection, in-kind transfers (largely education and health), and indirect subsidies. While fiscal policy has kept inequality in check, this report argues that its impact can be enhanced by improving its efficiency and effectiveness and reducing people's vulnerability to natural disasters and economic shocks. Also, the structural

causes of inequality (including inequality of opportunities, segmented labor markets, and high concentrations of wealth and land) have not been addressed.

**This chapter highlights four policy areas for accelerating the reduction in inequality in SACU:** (a) promoting equality of opportunity, (b) addressing the highly skewed distribution of productive assets, (c) enhancing the impact of fiscal policy on inequality by improving the equity and efficiency of social spending, and (d) strengthening resilience to climate change risks and economic vulnerability.

**While the analysis has not prioritized and sequenced the broad policy areas, addressing inequality of opportunity, a legacy of racial and spatial segregation, should clearly be at the center of policy efforts** to reduce inequality. Furthermore, although the proposed policy areas are relevant for all SACU countries, their relative importance differ across countries. The next step, therefore, is to build on the analysis in this report to develop country-specific policy discussions that explore the elements and prioritization of the proposed broad policy areas to accelerate the reduction of inequality in every SACU country.



## 7.1 Promoting equality of opportunity

**The report presented a strong case for reducing inequality of opportunity, both for the sake of fairness and to help reduce income inequality.** High inequality of opportunity tends to reduce social mobility, which in turn contributes to the persistence of income inequality and slower economic growth.<sup>36</sup> This is because societies with higher social mobility are likely to match resources more optimally with the ability to develop and utilize human capital and may therefore better realize people's potential. In economies with high inequality of opportunity (unequal access to basic services, jobs, markets, and capital), people whose access to opportunities is constrained are likely to be more affected. As households in disadvantaged groups suffer larger, longer-lasting shocks, they are also more prone to adopting coping mechanisms that lead to a loss of productivity and lower consumption in the longer run (Hill and others 2019). These include incurring debt at high interest rates, reducing food consumption, selling productive assets, and interrupting their children's education. This may increase inequality in the accumulation of human and physical capital, causing social mobility and economic growth to decline and income inequality to worsen over time, unless policies are put in place to mitigate the long-lasting impacts of the crisis.

**To promote equality of opportunity in SACU, three broad policy areas are identified.** These include (a) ensuring efficient and inclusive delivery of public services, (b) strengthening the provision of early childhood development services, and (c) supporting regional development and agglomeration.

### 7.1.1 Ensuring efficient and inclusive delivery of public services

**Closing gaps in access to public services would help equalize opportunities.** Although SACU has made progress in increasing access to basic public services, gaps remain. These gaps differ from country to country, but spatial disparities are a common theme—rural areas tend to lag in all countries. Even in urban areas, pockets of poor public service delivery result in enclaves of deep poverty. In South Africa, for example, urban townships and informal settlements<sup>37</sup> are associated with lower access to basic public services, such as education, improved sanitation, safe water, and health insurance. These spatial disparities mean that the places where people live affect their opportunities.

Poor access to water and sanitation undermines health outcomes and contributes to high levels of stunting in all SACU countries. Infrastructure gaps for electricity, internet connectivity, and roads are worse in rural areas. But most poor people live in rural areas, which raises challenges around affordability. Improving public service delivery in a way that addresses the spatial gaps would help give to poor people more opportunities. One option might be using technology to improve service delivery and reach remote areas.

### 7.1.2 Strengthening the provision of early childhood development services

**Improving access to and the quality of early childhood care and development is central to reducing inequality of opportunity.** Early childhood care and development is a cost-effective strategy for reducing inequality and substantially improving people's long-term health outcomes. Children who benefit from quality early care perform better in primary school, repeat grades less often, and drop out less frequently. Giving rural residents and poor people the opportunity to access quality early childhood care and development will improve not only the quality of education but also the cost-efficiency of the system. Increasing the supply and quality of early childhood education would accelerate the flow through primary school, with more children entering junior secondary education with a solid knowledge base. This is an important policy area, given that access to early childhood services is limited among disadvantaged groups (mainly rural residents and poor people) in SACU. For example, Eswatini's gross enrollment ratio in early childhood care and development was only 29 percent in 2014. Further, early childhood services are typically provided through a range of models, with uneven quality and standards. Efforts are needed to address the challenge around enrollment data, the number of centers, nutrition and healthcare services, the early childhood curriculum, caregiver training, and play and instructional resources. These need to be complemented by improvements in the access to and quality of primary and secondary education.

**Sustaining the gains in early childhood education requires developing benchmarks to measure quality and integrating within formal education systems the**

<sup>36</sup> See Narayan and others, Chapter 1 (2018) for a review of the evidence.

<sup>37</sup> Townships are areas that were formerly officially designated for black occupation by apartheid legislation. Informal settlements are areas containing unregulated and unplanned dwellings, where inhabitants are likely to lack both secure tenure and access to adequate basic services before government intervention.

content, budget, and capacity of providers in preschool programs. Ensuring access to foundational (basic and compulsory) education of equal quality is also critical in narrowing inequality of opportunity. Many students in disadvantaged regions and from various sociodemographic groups still leave school without the skills they need to lead productive lives. This perpetuates the inequality of opportunity across generations.

**Policies and initiatives to improve child health outcomes, including reducing malnutrition, are critical.**

Evidence suggests that the first 1,000 days of a child's life are critical in the development of the neural connections that serve as building blocks for their future. During these first days the child develops linguistic, cognitive, and socio-emotional capacities that will affect their welfare (and labor market outcomes) later in life. Malnutrition places children at risk of stunted cognitive and physical development. Addressing malnutrition in the first years of life enhances their survival rates, early childhood development, learning abilities, and educational outcomes in school, with long-term benefits for both productivity and economic development. Actions to improve child health outcomes include: (a) initiating early breastfeeding in hospitals and home deliveries; (b) promoting exclusive breastfeeding for 180 days; (c) introducing timely complementary feeding (at 6–8 months) with continued breastfeeding; (d) improving the quality of complementary foods and feeding practices in children ages 6–24 months; (e) supplementing micronutrients (iron, Vitamin A, and micronutrient powders) and deworming; (f) feeding sick children during and after illness; and (g) managing moderately and severely malnourished children.

**Despite rising spending on health, poor health outcomes are evident particularly among children, women, and low-income groups.** High rates of HIV and tuberculosis are major concerns in SACU. To help reduce inequality, policies are needed to address poor health outcomes and remove barriers to inclusion among these groups. This includes improving nutrition during pregnancy and lactation. Policies are also needed to reduce mortality

## 7.2 Addressing the highly skewed distribution of productive assets

**The skew distribution of access and returns to productive assets (capital, labor, and land) entrenches inequality in SACU.** For instance, significant gaps between people in high-productivity, well-paying jobs in the services sectors and those in low-productivity, low-paying jobs in traditional sectors such as agriculture manifest in

and improve productivity through, for example, dietary management of noncommunicable diseases, along with appropriate medication. Closing gaps in access to health-related infrastructure in rural areas is important, especially for water, sanitation, and hygiene.

### 7.1.3 Supporting regional development and agglomeration

**Many people in SACU still live far from job opportunities and have poor access to basic services, because of both the legacy of apartheid and poor spatial planning and development.** This results in disparities in access to economic opportunities in different areas. In Namibia and South Africa, for example, economic disparities are evident in township and informal settlements. Access to basic services and resources remains much weaker in remote and rural areas, as well as in historically disadvantaged communities. Equalizing people's opportunities would require appropriate spatially targeted interventions.

**Migration has long been an avenue for people to access economic opportunities;** historically, migration flows have been from rural areas to cities in pursuit of jobs. Namibia, for example, has one of the fastest rates of migration in the world—the share of the urban population increased from one-quarter to half in the past three decades. However, rural population growth sometimes exceeds the rate of migration, and many people remain in unproductive rural areas.

**If well managed, urbanization that increases productivity can help sustain growth and reduce inequality.** Spatial planning and development, with a focus on sustainably and strategically densifying cities, are vital. Building cities that are inclusive, safe, resilient, and sustainable requires sound policy coordination and investment choices, as well as an approach that is coordinated across national and local governments. Strong and coherent institutions across the region would be key to laying a firm foundation for sustainable urbanization.

income polarization and high inequality in wages.<sup>38</sup> Both the likelihood of having a job and having better earnings depend crucially on education, two channels through which human capital disparities fuel inequality via the labor markets.

<sup>38</sup> The dual nature of SACU's labor markets is due to the presence of formal and informal sectors, urban and rural labor markets, and a "good jobs" sector and a "bad jobs" sector (Mongardini and others 2013).

**With wealth concentrated among a relatively small group of people, wealth inequality is high.** This challenge is acute in Namibia and South Africa, where the highly skewed distribution of land and productive assets is a historical source of inequality. Inequality hampers both rural development and entrepreneurship and is a major source of policy uncertainty. In Botswana, Lesotho, and Eswatini, agricultural land tenure is not well secured, and land markets are not well developed.

**Other SACU countries rely heavily on South Africa's product markets, which have high barriers to entry; this exacerbates polarization and inequality.** For example, South African banks dominate the financial sector in SACU; they tend to cater to large formal companies, contributing to market segmentation and lower productivity. Because of this, firms lose opportunities to tap into high-value-added global markets and grow through technology transfers. The prevalence of generally inefficient state-owned enterprises also reduces competitiveness. Limited competition and poor integration into global and regional value chains deter growth and job creation and contribute to high inequality in earnings. The relatively thin competition in SACU is exacerbated by relatively low entrepreneurship rates, partly because of limited access to finance by small and medium enterprises.

### 7.2.1 Generating jobs and addressing labor market segmentation

**Removing barriers to self-employment and entrepreneurship and strengthening programs to boost employability will help alleviate the lack of job opportunities,** as a complement to the structural reform agenda. Relaxing regulatory constraints and simplifying legislation could help boost entrepreneurship, self-employment, and small businesses, all sectors with untapped potential in the region. This could help get people working, as it does in other developing countries, instead of staying unemployed, becoming discouraged, and depreciating their human capital. To enhance the inequality-reducing impact of this alternative, low-skilled entrepreneurs could be supported with business skills, socio-emotional competencies, and grant financing to address constraints that go beyond the regulatory framework. Nigeria is a recent example of the benefits of such interventions (McKenzie 2017).

**Improving rural productivity while supporting internal migration and agglomeration will help reduce inequality.** Many poor people rely on subsistence agriculture; thus, increasing the productivity of smallholder farming households and microenterprises is important for addressing inequality in primary income. Raising rural

incomes appears to have played a fundamental role in reducing poverty and inequality in Botswana, Namibia, and Lesotho over the past decade. However, the sector relies heavily on government subsidies and is vulnerable to fluctuations in the climate and the availability of water (especially for livestock). The recent drought in Lesotho nearly erased decade-long income gains in rural areas. Unless productivity can be improved, smallholder agriculture may not realize its potential role in reducing poverty and inequality, and many people will remain at risk of falling back into poverty. Climate-smart agriculture can help improve productivity and increase agricultural incomes. This would help develop a more vibrant rural economy, which in turn would reduce inequality.

**Along with improving rural productivity, creating more and better jobs requires broad economic transformation,** such as moving workers from lower- to higher-productivity activities and from rural to urban areas. Most rural workers have limited education and tend to engage in informal work. Usable technologies to help them both learn more and earn more would have good potential for raising productivity. Likewise, digital technologies could potentially help people with low educational levels and limited opportunities build their skills.

**Better governance of migration between South Africa and other SACU countries would enhance access to jobs,** especially for Eswatini and Lesotho. This could include a regional strategy to control irregular migration, promote legal migration and mobility, and ultimately enhance synergies between migration and development. It is important to manage irregular migration to South Africa by strengthening cross-border safety and legal migration. Lower costs would facilitate remittances; this can be achieved through financial sector development, including by encouraging more entrants into the remittances market in Eswatini and Lesotho.

### 7.2.2 Improving land distribution and productivity

**In the legal and regulatory framework, a focus on consistent interpretation and implementation is central to extending and protecting land rights.** The effort should include customary tenure systems and the associated sociocultural values of land. All SACU countries are democratic, cohesive societies, with strong consultative traditions. However, some groups—most notably women and some ethnic minorities—face limitations on their voice and participation in society, especially in the policy environment. In certain cases, the parallel existence of tradition and modern legal systems creates inconsistencies in the interpretation and application of the law. In Eswatini,

for example, customary law treats women as legal dependents of their husbands or other next-of-kin males in virtually all matters. In Lesotho, a disconnect between national and local governments means policies and bills to protect women are not fully implemented at the local level. This means that contradictions between custom and law remain unaddressed, and people are excluded from access to land and inheritance despite the equity embodied in laws and bills. Protecting land rights requires both creating an enabling legal and regulatory framework and addressing implementation challenges. This includes strengthening mediation processes, giving people the means to negotiate their differences before they drain their resources on litigation or resort to violent conflict. These steps are vital because African economies have become more tightly integrated into global markets, and informal social safety nets have become increasingly frayed.

**Promoting a more equal distribution of land should be accompanied by efforts to enhance land productivity.**

These would include sustainable land management practices, which help mitigate the impact of the region's worsening water scarcity. In this context, investments in climate-smart agriculture create the potential for a transition

to a more productive, climate-resilient, and low-emissions agricultural sector. The effective scaling up of climate-smart agriculture will require several adoption barriers to be addressed, including limited implementation capacity, insufficient access to inputs and credits, and insufficient agricultural research. There is an urgent need to strengthen research and establish partnerships with international research institutes to develop high-yield, stress-tolerant, and climate-ready crop varieties. Agricultural extension services should be upgraded to catalyze agricultural innovation; facilitate access to information, knowledge, and expertise on climate-smart agriculture; and provide technical advice to farmers. An important component of boosting land productivity is increasing the use of productivity-enhancing agricultural inputs and strengthening linkages between farmers and buyers, including with support for local agro-dealers and extension services. Commercialization could enhance land productivity and can be prioritized largely in the lowlands and foothills; the highlands would benefit from the creation of resilient landscapes, afforestation, and farmer-managed natural regeneration to restore less-fertile land.

## 7.3 Enhancing the impact of social spending

**SACU governments use fiscal policy as a primary tool to reduce inequality.** Although this has helped to restrain inequality, the impact of fiscal policy can be enhanced by improving its efficiency and effectiveness, particularly for social spending.

### 7.3.1 Improving equity and efficiency of social protection

#### *Closing gaps in implementation capacity for social protection*

**Removing administrative duplication and inefficiencies would improve the implementation of social protection and enhance its role in reducing inequality.**

A possible solution is to establish a unified web-based platform for the application and delivery of benefits, which would simplify applications and enable cross-sharing of information. Currently, multiple ministries or departments administer safety net programs, with limited coordination at policy and administrative level. Evidence from Namibia suggests that those applying for multiple benefits need to visit the offices of each ministry separately with the

required documentation. In addition, for several programs, automation is limited to payment systems; application processes are mainly paper based; and eligibility is determined manually. In Lesotho, for instance, paper-based application processes for some programs (such as the Public Assistance program and the old-age pension) are lengthy and result in unnecessary costs and delays. Each ministry involved has its own application process to determine eligibility, register beneficiaries, and manage information. This results in administrative duplication, inefficiencies, and lengthy approval times.

**Integrated social registries and modernized social protection systems would improve efficiency and policy coordination.**<sup>39</sup> A policy priority for Botswana, Eswatini, and Namibia is modernizing social protection systems and improving policy coordination among different ministries. An integrated social registry with automated databases and better service delivery should help address some implementation challenges. A better targeting mechanism, with support from the social registry, would improve targeting outcomes and enhance the effective use of resources.

<sup>39</sup> Proposed activities include standardizing end-to-end processes, supporting eligibility and eligibility functions, calculating benefit levels, validating information collected through different methods and sources, assessing potential demand for interventions, planning and costing interventions depending on projected coverage rates, and monitoring and evaluating outcomes.

## Addressing social protection targeting gaps

**Better targeting of social protection, especially in Botswana, Eswatini, and Lesotho, would help ensure that benefits reach the intended beneficiaries.** A significant share of benefits accrues to people who are not poor; this suggests weaknesses in the means tests used to identify beneficiaries, whether gaps in the tests or limited capacity for administering them. Implementing a better, integrated targeting system to identify poor people and grant them benefits would improve both coverage and benefit incidence. In Lesotho, for example, only child grants are means-tested. For other programs, eligibility criteria and information are difficult to verify, adding a subjective element to eligibility. An important improvement would involve a good targeting mechanism, based on means tests and linked across programs.

**Light targeting of old-age pensions could enhance the overall impact of the social protection system.** In Namibia, pension testing (that is, restricting pensioners to one government pension) would provide a relatively easy way to target the old-age pension and free resources for spending on vulnerable children.

**Some SACU countries could reduce poverty and inequality in a budget-neutral way by allocating a greater share of social protection resources to children.** Increasing the coverage and raising the value of child benefits could be achieved using resources saved by pension-testing the old-age pension. However, child grants should also be targeted better; this would need a social registry. Stronger means-testing procedures would also be required, along with a reallocation of resources, as would regular increases in child grants to maintain their value in real terms. For example, Lesotho's child grants are low relative to its social pensions.

**A cost-effective way to address absolute poverty could involve a family support grant to provide cash benefits to destitute families,** identified through a targeting system based on a proxy means test. To address nutrition and early childhood needs, the focus could include pregnant and lactating women. Special emphasis could be placed on children from conception to age 5. Family support grants could be considered in Botswana and other countries without specific programs for poverty eradication. The impact of such programs could be enhanced by linking access to benefits with desirable behavioral changes, such as investing in children's human capital. In many countries, behavior-changing programs have emerged as a proven strategy for increasing opportunities for poor people, breaking the intergenerational transmission of poverty, and reducing inequality. Integrated social registries would also facilitate incentive-compatible safety net systems, help social workers manage their cases more effectively, and link

beneficiaries or applicants to education, health, and labor market programs.

## Strengthening the links between social protection and human capital development

**Social protection can help build human capital, linking children from poor households to early childhood development services.** For example, Namibia invests in child grants and early childhood development services but could enhance synergies between these critical investments. The goals should include improving the ability of parents and caregivers to provide stimulating, quality interactions by linking them to parenting information, including on topics such as nutrition and cognitive stimulation. A similar recommendation could be made for Botswana.

**Beneficiaries of child grants could be linked to youth employment programs when they reach the age of employment.** An integrated social registry could provide better case management, leveraging health and education investments by increasing the use of these services by the most disadvantaged people.

## Boosting analysis of the impact of social protection on inequality

**In some countries, deeper analysis is needed to assess the impact of the social protection system on inequality.** In Eswatini, enhancing the impact of social protection programs on poverty and inequality would require assessing coverage gaps and the types and levels of benefits provided. Such an assessment should be twofold, aiming to identify any shortcomings in current design parameters along with any current design and implementation gaps. The assessment should extend beyond the programs examined in this report to holistically cover the government's social protection portfolio across ministries and agencies. In Lesotho, programs are hardly evaluated on impacts and processes, and investments are needed to understand how they can be improved.

### 7.3.2 Improving targeting and efficiency of spending on education and health

**Public spending in SACU countries is among the world's most redistributive, but quality is not commensurate with spending, particularly in education and health.** In-kind transfers are the largest social expenditure in national budgets and make the largest marginal contribution to income redistribution but do not always translate into quality services. Spending on pre-tertiary education and

basic health is pro-poor and highly progressive. However, despite the region's high spending levels, human capital development is relatively poor. Although access to education is growing, the system does not necessarily create the skills demanded by the labor market, and skills mismatches are widespread. Shortages of skilled labor limit countries' capacity to apply knowledge and technology, reduces productivity growth, lowers both profitability and returns on investment, and reduces international competitiveness.

**Investments to improve both quality and equity in the education sector would help reduce inequality.**

The focus should remain on enhancing early childhood development and education programs and improving basic education at all levels. Opportunities to develop skills should

be substantially broadened to generate human capital for economic modernization, while making investments to enhance the quality, relevance, and efficiency of skills training. Early childhood development and basic education programs should be redesigned to cater for the poorest sections of society. Technical and vocational education and training and the higher education system also need reform. In general, improving quality and equity in education and skills development and closing gaps in access to infrastructure in rural areas are vital.

**Improvements are also needed in the functioning of key markets,**

such as finance, labor, land, and housing, to ensure greater inclusion of vulnerable groups, particularly women and young people.

## 7.4 Strengthening resilience to climate risks and economic shocks

**Adaptive social protection programs will be critical to mitigate the impact of climate change and economic shocks**

and reduce their effect on inequality. The region is bracing for shocks that might be increasing in frequency and intensity but remain highly uncertain in occurrence and distribution. Countries need social protection programs that can be adapted to the nature of the shocks and their distribution. Where the impact of a crisis is centered on the middle class and not necessarily on the chronic poor, social protection programs should be expanded to include the transient poor. Where a crisis disproportionately affects the poorest households, an immediate increase in existing grants will be necessary. Programs will need to be nimble enough and fiscally sound enough to allow for both *vertical* expansion (higher benefits) and *horizontal* expansion (more beneficiaries, to cover the people affected by the shock) as needed.<sup>40</sup> Adaptive social protection also means building resilience among poor and vulnerable households to help them withstand economic shocks and natural disasters.

**Some countries already demonstrate the potential for adaptive social protection.**

During the COVID pandemic, South Africa, for example, increased existing social assistance grants and designed a new program to include affected workers who were not covered by these existing benefits. Namibia's proposed employment income grant covers both formal and informal workers.

**This report emphasizes the need for a menu of social protection instruments, including social assistance and unemployment insurance.**

As seen in several countries, because of the labor income transmission channel, the worst-affected people during the COVID-19 pandemic might not necessarily be the poorest households, as their ties to the labor market are weak. Along with social assistance, unemployment insurance will be critical, as South Africa's experience has shown.

<sup>40</sup> See, in particular, "The Emergence of Adaptive Social Protection" in World Bank (2018b).

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The Southern African Customs Union (SACU) is the most unequal region in the world. While there has been some progress in recent years, inequality has remained almost stagnant in the most unequal countries. Using an innovative framework, this report provides a systematic and comprehensive analysis of inequality in the region.

The main conclusions are as follows: First, inherited circumstances over which an individual has little or no control (i.e., inequality of opportunity) drive overall inequality, and their contribution has increased in recent years. This is an important concern particularly because this type of inequality is not the result of people's efforts. Second, lack of access to jobs and means of production (education, skills, land, among others) by disadvantaged populations slows progress towards a more equitable income distribution. In a context where jobs are scarce, having post-secondary or tertiary education is key to both accessing jobs, and obtaining better wages once employed. Third, fiscal policy helps reduce inequality through the use of targeted transfers, social spending, and progressive taxation, but results are below expectation given the level of spending. Fourth, vulnerability to climate risks and economic shocks makes any gains towards a more equal society fragile.

Looking ahead, accelerating inequality reduction will require concerted action in three policy areas: (a) Expanding coverage and quality of education, health, and basic services across subregions and disadvantaged populations to reduce inequality of opportunity; (b) Strengthening access to and availability of private sector jobs. It is important to accompany structural reforms with measures that facilitate entrepreneurship and skills acquisition of disadvantaged populations, and to improve land distribution and productivity in rural areas; (c) Investing in adaptive social protection systems to increase resilience to climate risks and economic vulnerability, while enhancing targeting of safety net programs for more efficient use of fiscal resources.