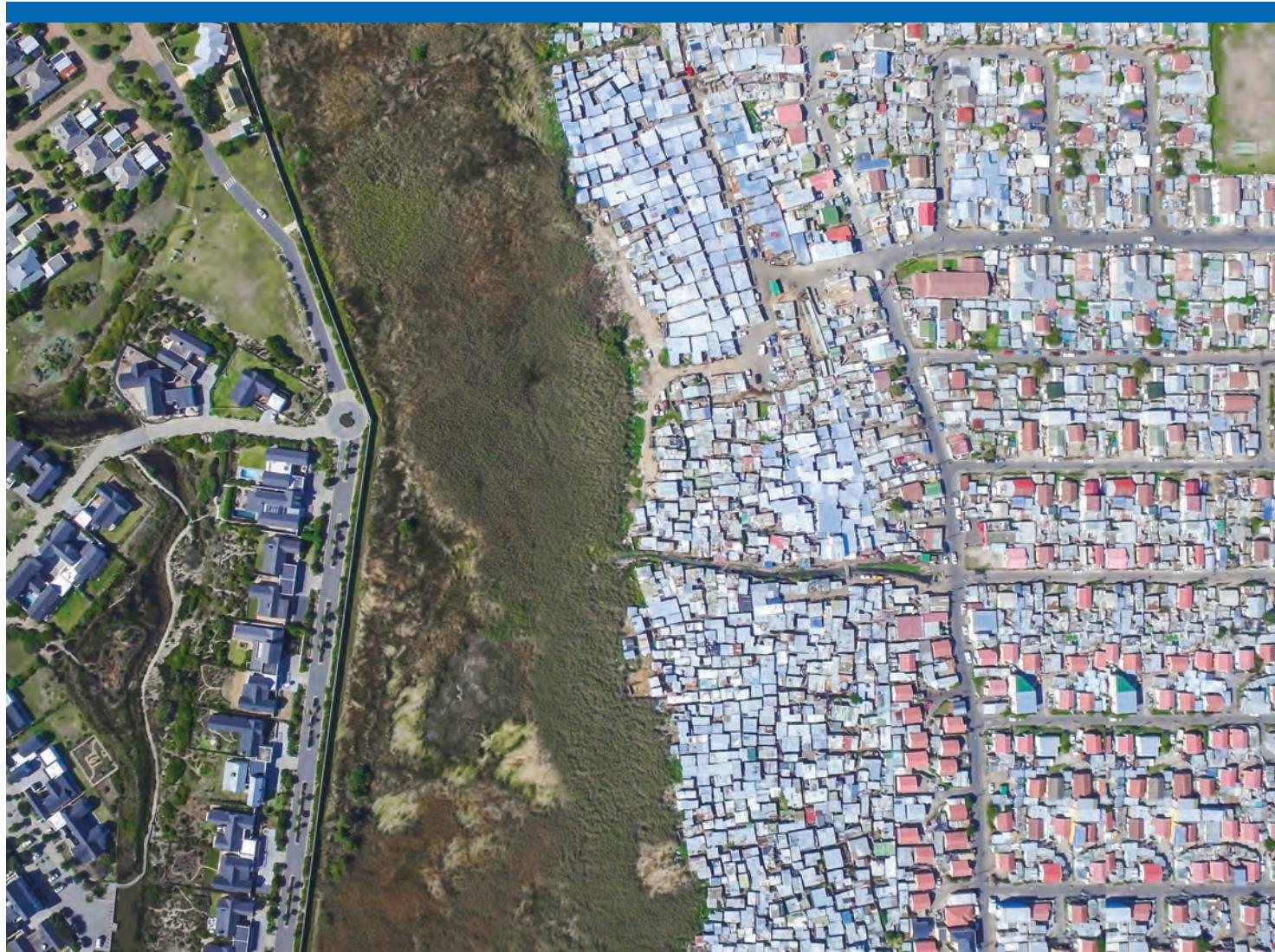




# Income Inequality Trends in sub-Saharan Africa

Divergence, Determinants and Consequences



Edited by

Ayodele Odusola, Giovanni Andrea Cornia, Haroon Bhorat and Pedro Conceição

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Cover: An aerial view of the gated community of Lake Michelle (left) which is located on the outskirts of Cape Town, South Africa, and is directly adjacent to Masiphumelele township (right).

Photography by Johnny Miller

# **Income Inequality Trends in sub-Saharan Africa**

Divergence, Determinants and Consequences



# Preface

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The September 2015 adoption of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) has drawn considerable attention to income inequality in sub-Saharan Africa (SSA). To achieve the goal of ‘leaving no one behind’ by 2030, the UNDP Regional Bureau for Africa feels very strongly that inequality levels, trends, determinants and consequences in the region must be documented properly. UNDP considers the 2030 Agenda to be an integrated and indivisible agenda; it must be understood that by addressing the challenge of equity, progress towards achieving the SDGs is accelerated. This book explores these issues systematically and draws relevant lessons that could help reduce inequality in SSA. To overcome problems caused by the scarcity and inconsistency of the data on inequality, this book also builds an Integrated Inequality Dataset for SSA (IID-SSA).

Although the average unweighted Gini for SSA declined by 3.4 percentage points between 1991 and 2011, SSA remains one of the most unequal regions globally. Indeed, 10 of the 19 most unequal countries globally are in SSA and seven outlier African countries are driving this inequality. Between 1991 and 2011, a clear bifurcation in inequality trends existed across countries in the region. Furthermore, 17 countries (predominantly agricultural economies from West Africa and a few from other regions) experienced declining inequality, whereas 12 countries, predominantly in Southern and Central Africa and economies characterised by an important oil and mining sector, recorded an inequality rise.

The basic structural drivers of inequality can be divided into three groups: (i) the highly dualistic economic structure, with limited employment of the labour elite in the government, multinational companies (MNCs) and the resource sector, whereas the majority of labour earns much lower incomes in the informal or subsistence sector; (ii) the high concentration of physical capital, human capital and land, especially in the economies of East and Southern Africa, in certain groups or regions; and (iii) the limited distributive capacity of the state, which often manifests in the ‘natural resource curse’, the urban bias of public policy and ethnic and gender inequalities. When growth occurs in sectors characterised by high asset concentration, high capital absorption and skilled-labour intensity, such as mining, finance, insurance and real estate (FIRE) and the public sector, overall inequality rises. By contrast, inequality falls or remains stable if growth takes place in labour-intensive manufacturing, construction and agriculture.

This book considers inequality as a byproduct of regressive taxes, unresponsive wage structures and inadequate investment in education, health and social protection for vulnerable and marginalised groups. Indeed, the distributional impact of fiscal policies in the region has eroded, with 29 of the 47 countries where data are available showing a decline in the distributional effectiveness of their fiscal policy. Although subsidies and transfers are mostly equalising, inequality-induced tax regressivity is a common phenomenon, where most countries with a revenue-to-GDP ratio of 20 per cent and above have Gini coefficients of 0.5 or more.

This book succinctly establishes equalising and disequalising factors. The key equalising factors include: (i) an improved distribution of human capital (particularly secondary education), which was found to encourage state authorities to use its increased supply to build a fairer society; (ii) increased direct

taxation and efficiency of tax administration, as well as increased well-targeted social expenditure, which reduced inequality; (iii) enhanced productivity in the agricultural sector, which is an important factor in labour reallocation to other sectors of the economy and has helped to reduce rural poverty, rural poverty gaps and inequality; and (iv) the process of structural transformation, which is path-dependent. A country's current productive capabilities embodied in its export structure influence the extent to which it can shift production toward increased manufacturing activity.

The most critical disequalising factors include: (i) rising foreign direct investments (FDI) in extractive industries and a surge of terms of trade in resource-rich countries, which polarize income disparities; (ii) a suboptimal structural transition of the economy from a low-inequality crop agriculture to high-inequality sectors such as livestock production, commerce, transport, and formal and informal services in both urban and rural areas, which drives inequality in a number of countries; and (iii) an unequal distribution of socioeconomic and physical facilities (e.g. roads, electricity, schools, hospitals, water and sanitation) between rural and urban areas and across regions, which drives income disparities.

This book reveals issues requiring further investigation and priority attention. First, no clear link exists between resource dependence and inequality. There are, however, specific features of resource-dependent growth, which present obvious inequality risks, such as the risks of illicit outflows and weakening governance institutions that could lead to a classic case of the resource curse. Second, Africa lags behind other regions of the world with regard to the demographic transition. Although the relationship between poverty rate and population variables is positive, the relationship between population growth and inequality reduction creates a puzzle. Most countries with a fertility rate of 6.0 children per woman are associated with a low Gini (less than 0.44), while most countries classified as advanced in the demographic transition have Gini coefficients of 0.54 and above. Third, the intensity of multidimensional poverty tends to drive conflicts; yet contrary to expectation, the relationship between conflicts and inequality is negative. For instance, most countries with a poverty headcount of over 60 per cent are also experiencing intense conflicts (e.g. Burundi, Central African Republic and Democratic Republic of the Congo), while countries with the highest level of inequality (e.g. Botswana, South Africa and Namibia) are categorized as non-conflict-prone countries. This finding recalls the words of the famous British political scientist, Harold Laski, who wrote "A State divided into a small number of rich and a large number of poor will always develop a government manipulated by the rich to protect the amenities represented by their property."

The determinants of income inequality in SSA are multi-dimensional and complex; there is no one 'silver bullet' to address its challenge. Multiple responses are required. For instance, this innovative book has shown that education is key to social mobility but it cannot generate the quantum of jobs needed to tackle the 'time bomb' of the youth bulge without strong institutions and sound economic reforms that prioritize agricultural modernisation, national and regional value chains, and Industrialisation. Unequal distribution of national resources is an important factor driving inequality in Africa. In this regard, the view expressed by Nelson Mandela during his 1996 State of the Nation Address is fitting: "We must work together to ensure the equitable distribution of wealth, opportunity and power in our society." Promoting progressive taxation, addressing unequal access to land and enhancing the efficiency of social protection and distributional effectiveness of fiscal policies are vital to address income disparities in Africa.

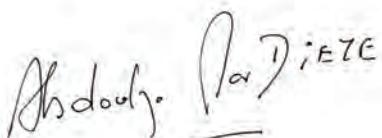
This book has also brought to the fore the relevance of Franklin D. Roosevelt's conclusion on the role of the state in addressing inequality: "The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little." When prosperity is generated through the market, hard-to-reach communities, excluded groups and marginalised individuals do not benefit from the growth process. Ensuring that these groups do benefit from the process is vital to promoting equity. Expanding and targeting equalising social protection mechanisms is a powerful tool to achieve Roosevelt's objective of providing enough to those who have too little. An important solution to the equity challenge is equal treatment of 'the unequal'. The unequal treatment of all regions, as well as urban and rural areas, is one of the causes of the rising trend of regional and spatial poverty and inequality. Equal treatment of the 'unequal' promotes prosperity, peace and sustained development.

Lessons learned from SSA have shown that policies that help reduce poverty are not necessarily the same as those that help reduce income inequality. For instance, quality education and enhanced productivity are potent tools for poverty reduction, yet if unaccompanied by progressive taxation and well-targeted social protection, they could accelerate income disparities. Promoting complementary policies that help address poverty and income inequality are vital to shifting the current trends of diverging inequality into converging trends of falling inequality across the region. The following are key to address income disparities: accompany demographic transition with strong social protection; adopt macroeconomic policies that reverse the emerging deindustrialisation; and increase the productivity of the informal sector. To ensure that policy design is increasingly evidence-based, African governments and international agencies need to invest massively in generating regular data on inequality, including gender, ethnic and regional disaggregated inequality.

Extreme inequality is detrimental to growth and development, as well as to peace and security. To achieve the SDGs, governments, private sector actors, civil society organisations and development partners must focus on rapidly reducing poverty and income disparities simultaneously.

I would like to conclude with a quote from former President Mandela:

*"As long as poverty, injustice and gross inequality persist in our world, none of us can truly rest."*

A handwritten signature in black ink, appearing to read "Abdoulaye Mar Dieye". The signature is fluid and cursive, with a prominent "A" at the beginning.

**Abdoulaye Mar Dieye**

Assistant Administrator and Director

UNDP Regional Bureau for Africa

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# Acronyms and abbreviations

AfDB	African Development Bank
CAADP	Comprehensive Africa Agriculture Development Programme
CPI	Consumer Price Index
CPIA	Country Policy and Institutional Assessment
CSO	Civil Society Organisation
DHS	Demographic and Health Survey
EITI	Extractive Industries Transparency Initiative
EU-SILC	EU Statistics on Income and Living Conditions
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
FIRE	Finance, Insurance, Real Estate
FPI	Food Price Index
GDP	Gross Domestic Product
GDP/c	Gross Domestic Product per capita
GFI	Global Financial Integrity
GII	Gender Inequality Index
GNI	Gross National Income
HBS	Household Budget Survey
HDI	Human Development Index
HDR	UNDP Human Development Report
HIPC	Heavily Indebted Poor Countries
I2D2	International Income Distribution Database
IDA	International Development Association
IHDI	Inequality-adjusted Human Development Index
IID-SSA	Integrated Inequality Dataset for SSA
ILO	International Labour Organisation
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
LDCs	Least Developed Countries
LICs	Low-Income Countries
LIS	Luxembourg Income Study
LSMS	Living Standard Measurement Studies
MDGs	Millennium Development Goals
MECOVI	Programme for Improvement of Surveys and Measurement of Living Conditions in Latin America and the Caribbean
MICs	Middle-Income Countries
MICS	Multiple Indicator Cluster Surveys
MNCs	Multinational Companies

MPI	Multidimensional Poverty Index
NSO	National Statistical Office
OBI	Open Budget Index
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PPP	Purchasing Power Parity
R&D	Research and Development
REER	Real Effective Exchange Rate
RNAA	Rural Non-Agricultural Activities
SAP	Structural Adjustment Programme
SDGs	Sustainable Development Goals
SEDLAC	Socio-Economic Database for Latin America and the Caribbean
SIGI	OECD's Social Institutions and Gender Index
SME	Small and Medium-sized Enterprises
SPL	Social Protection and Labour
SSA	Sub-Saharan Africa
SWIID	Standardized World Income Inequality Database
TFR	Total Fertility Rate
U5MR	Under-Five Mortality Rate
UNU-WIDER	United Nations University World Institute for Development Economics Research
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VAT	Value-added Tax
VIF	Variable Inflation Factor
WDI	World Development Indicators
WIID	World Income Inequality Dataset
WTID	World Top Incomes Database

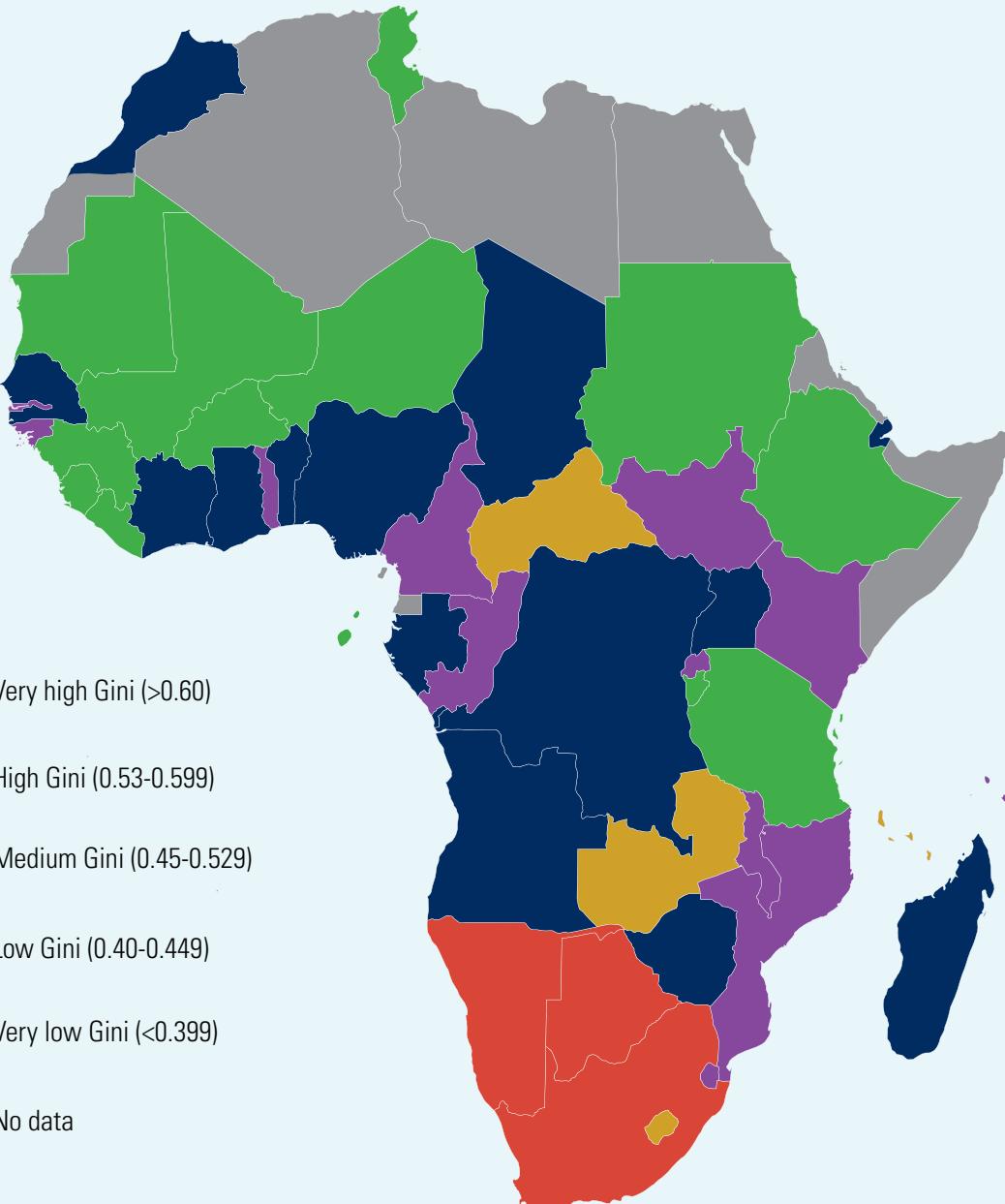




# **PART I**

## **Inequality Trends and their Interaction with Poverty and Growth**

# Mapping of income inequality in Africa



**Source:** World Bank (WDI), latest year as of December 2016

# 1

# Introduction, Motivation and Overview

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## 1.1 Introduction and motivation

Sub-Saharan Africa (SSA) recorded a remarkable economic performance in the first 15 years of the 21<sup>st</sup> Century. Such an encouraging trend, which reversed the stagnation or decline of the prior 25 years, was accompanied by a perceptible, modest, but uneven decline in aggregate poverty, together with substantial cross-country variation in the poverty-reducing power of growth. This is reflected in, and partially driven by, the variation of inequality levels and trends among the African countries. Proper documentation of inequality levels and trends in the region is therefore essential to better understand the slow and varying rate of decline of poverty reduction in the region. To this end, this book, an outcome of a comprehensive study of income inequality in SSA, documents the initial conditions and changes in income inequality that have taken place in the region since the early 1990s. It proposes hypotheses to account for this experience and draws relevant lessons that could help accelerate reduction in income disparities.

This book is timely and long overdue. Indeed, with rare exceptions (Anyanwu, Erhijakpor and Obi, 2016), as in the case of the typical debate on the 'rural-urban income gap', the inequality issue in SSA has received limited attention historically from a research, policy and political perspective. As elsewhere, in the early post-independence decades, the policy imperative was to modernize the economy and grow, whereas in the 1980s and 1990s, the focus shifted to managing the foreign debt and stabilising the macroeconomy. More recently, with the adoption of the Millennium Development Goals (MDGs) in 2000, priority shifted to reducing poverty and meeting the predominantly social MDGs. In addition, in September 2015, reducing poverty and inequality became the overarching goal of the 2030 Agenda for Sustainable Development.

Yet, interest in income and asset distribution increased gradually over the course of the 2000s, including in Africa, for a variety of reasons. What explains this change in focus for both research and policy design? First, the very trend of rising inequality deserved closer attention. The domestic and external liberalisation of the 1980s and 1990s led, in several cases, to a surge in inequality. This exacerbated the income polarisation that a number of African economies inherited upon independence.

Second, a growing body of theoretical and empirical literature has documented the detrimental effects of high and/or rising inequality on long-term growth (e.g. Voitchovsky, 2011; IMF, 2014); on the growth elasticity of poverty reduction (e.g. UNU-WIDER, 2011; Berardi and Marzo, 2015); and on political stability, violence and conflict (e.g. Stewart, 2010). In addition, when high income inequality is perpetuated across generations, it prevents equitable access to assets, education and opportunities for low-income people and marginalised ethnic groups. Thus, in the absence of vigorous reforms, intergenerational mobility among excluded and marginalised groups is severely constrained and has thus become a touchstone for internal country conflict and tension. The persistence of rapid population growth and the fact that Africa, on average, is only now entering its demographic transition are also factors that could help explain, far more than in the past, the dynamics of income disparities in the region.

Third, the gradual spread of democracy in most parts of the region has raised hopes for increased redistribution and a broader provision of ‘public goods’ rather than of ‘patronage goods’ typical of previous non-democratic and ethnically divided countries in the region (Gymah-Brempong, 2002).

Fourth, shifts in the international development debate have heightened the attention to inequality. This is most striking when comparing the MDG targets with the 2030 Agenda for Sustainable Development (also known as the Sustainable Development Goals or SDGs), with multiple references to inclusion and equity, and explicit targets linked to income distribution. This has de facto opened the door to a closer scrutiny of policy on the inequality-growth-poverty nexus. In particular, as shown *inter alia* by Bourguignon (2003), the growth elasticity of poverty reduction is closely related to the initial level of inequality and its change over time. As shown in Chapters 2, 3 and 14 of this book, SSA faces a major problem in reducing the incidence of poverty because growth often occurs in sectors characterised by low absorption of unskilled labour, high earnings inequality and a high capital share in total income. Thus, equitable and inclusive growth is not only desirable in itself, but it also has a strong instrumental value since reducing inequality has been shown to have a positive effect on growth, poverty reduction and the achievement of many social objectives.

Fifth, the rapid expansion of databases on inequality measures – such as Household Budget Surveys (HBSs), Living Standards Measurement Study Surveys (LSMSs), Demographic and Health Surveys (DHSs) and Multiple Indicator Cluster Surveys (MICSs) – and the development of international databases on income inequality have made the analysis of its levels, trends and determinants more feasible than in the past. Importantly, however, the ongoing limited availability of inequality (and related socioeconomic) data in the region calls for major efforts to generate and compile data. In addition, recent analyses of health and education inequality in UNDP human development reports<sup>1</sup> wealth distribution (Davies and Shorrocks, 2005) and trends in top incomes<sup>2</sup> allow researchers to better understand the interaction between wealth, income, education and health inequality, and hence, the drivers of MDGs and SDGs achievement.

Finally, as documented in various chapters of this book, the level and sources of inequality in SSA are highly heterogeneous due to historical factors, factor endowments and policy approaches. The inequality trends over 1991–2011 have also varied substantially (see below). One or two prototypical case studies cannot be relied upon to explain the diversity of factors and policies that underlie economic and social trends in the region. A comprehensive analysis of the levels, trends, sectoral and

<sup>1</sup> See UNDP Human Development Reports from 2010 for Multidimensional Poverty Index and the Inequality-adjusted Human Development Index.

<sup>2</sup> See the World Wealth & Income Database, <http://topincomes.g-mond.parisschoolofeconomics.eu>

social factors explaining this phenomenon and, possibly, its impacts is required. This is the ambitious objective of this innovative book.

This book is divided into five parts. Part 1 examines inequality trends and their interactions with poverty and growth, while Part 2 analyses challenges and issues in key sectors and their impact on inequality. Country case studies focusing on drivers of income inequalities in countries such as Burkina Faso, Ethiopia, Ghana, Malawi and United Republic of Tanzania are examined in Part 3. Part 4 provides measurement and an econometric investigation of determinants of inequality and Part 5 presents policy considerations and conclusions.

## 1.2 Inequality and progress towards achieving the Sustainable Development Goals (SDGs) in sub-Saharan Africa (SSA)

The publication of this book is particularly timely, given that a more detailed and in-depth analysis of inequality and its trends in SSA is fundamentally important to achieving the SDGs over the next 15 years. Indeed, an improved understanding of the drivers and determinants of inequality in the region remains essential to reduce its current high levels, particularly by focusing on reaching the various indicators set out in SDG 10 on reducing inequalities. But, as argued above, high or rising inequality levels within an economy affect the achievement of other SDGs. In fact, the 2030 Agenda is integrated and indivisible. Thus, meeting the challenge of high or growing inequality is best understood not as being SDG-specific but, rather, as an overall accelerator of the aspirations of the 2030 Agenda.

It is beyond the scope of this book to establish a comprehensive case that addressing inequality can accelerate progress across the SDGs. Indeed, this is difficult to establish in both abstract and general terms, and will need to be analysed in specific country contexts. Since the linkages between income and asset distribution and the SDGs are also dynamic, these relationships will have to be re-examined over time. But to illustrate the rationale of the book, two examples are presented in this section.

The first relates to inequality and to meeting the objective of the 2030 Agenda to 'leave no one behind' and to give priority to reaching those further behind (the bottom 40 per cent of the population). This represents a marked and radical shift from the MDGs, whose objective was to halve the extreme poverty rate. Although many countries, both globally and individually, including in Africa, achieved this objective, millions were still left behind. The concept of 'poverty traps' contributed to an analytic perspective that was influential during the early stages of the MDGs. It was seen as especially relevant in Africa (Sachs et al., 2004). The policy implications derived from this perspective led to the recommendation for specific interventions in areas ranging from agricultural productivity to health and education, all of which mapped onto other MDGs and also help people to escape the poverty trap. In a sense, the entire MDG era can be understood as having been framed, even if only implicitly, by this perspective. And the pursuit of the MDGs was in line with increased investments in health, education and other social sectors that enhanced well-being and reduced poverty. Meeting the objective to leave no one behind implies understanding and addressing the 'last mile' of exclusion through a deeper understanding of the forces that cause people to fall into and remain in poverty. More sophisticated formulations of the 'poverty trap' are now dynamic and establish linkages with shocks, vulnerabilities and the ability of households to manage risk (Santos and Barrett, 2016).

But reaching the ‘last mile’ of exclusion also implies a focus on the deeply entrenched determinants of exclusion that are visible and reflected in persistent patterns of inequality in the distribution of assets and income. For instance, it is well documented that today’s patterns of land allocation and land tenure systems in Africa still largely reflect land settlement patterns dating to colonial times, with large-holding farmers in East and Southern Africa continuing to exclude large segments of the population (Lipton, 2009; UNDP, 2012). Persistent and high inequality interacts, through political economy channels, with decisions that hinder both growth (Birdsall, 2006; Alesina and Rodrik, 1994; Perotti, 1996) and policies that seek to reach the ‘last mile’ of exclusion. For instance, Rajan and Zingales (2006) explain the persistence of poverty as a result of incumbent elites’ opposition to reforms and education that benefit the poor. Even when the political economy is not as adverse, inequality can still interact with other characteristics of developing countries that perpetuate exclusion. For example, when capital markets are underdeveloped and imperfect, unequal income distribution limits access to credit, including for investments in human capital, and families remain in poverty (Banerjee and Newman, 1993; Galor and Zeira, 1993).

The second relates to the interactions between inequality, social cohesion and conflict. To the extent that violence and conflict induce income shocks that throw people into forced displacement or poverty, there is a direct link, as identified by Stewart (2010), caused by horizontal inequality. However, the 2030 Agenda incorporates aspirations for ‘peaceful and inclusive societies’, as captured in SDG 16. Recent work has expanded on the linkages between inequality and social cohesion, trust, and social capital (see IMF, 2016) and, in turn, on the relationship between social capital and well-being (see Hamilton, Helliwell and Woolcock, 2016). Microstudies that review interventions in post-conflict settings seeking to enhance social cohesion and trust also provide evidence. Randomized controlled trials of interventions, ranging from truth and reconciliation commissions to community-based development, show increased social cohesion in targeted settings (measured by the willingness to contribute to local public goods) (see Casey, Glennerster and Miguel, 2016; Blattman, Jamison and Sheridan, 2015). Thus, to the extent that inequality hinders social cohesion and trust, it can generate conditions that can trigger the outbreak or recurrence of conflict and violence, as observed in Chapter 10.

### 1.3 Methodological approaches

This book provides a systematic exploration of changes in inequality that have taken place in the region over the 1990s and 2000s. Given the complexity of the issue, as well as incomplete data availability, the book adopts complementary analytical approaches, including country case studies, analyses of key sectors and policy areas, microeconometric decompositions of country inequality changes over time, and econometric macro panel regressions. It also discusses income inequality in the region in broad terms and, hence, includes analyses of the inequality-inducing impact of non-economic factors such as political, ethnic and inter-state conflicts (Chapter 10) on the region over the last 30 years. In addition, Chapter 11 deals with the impact of inequality on non-income dimensions of well-being, i.e., human development.

The book systematically explores changes in inequality in a number of countries – Malawi, Ethiopia, Burkina Faso, Ghana and Tanzania – that are characterised by different economic structures, political regimes and inequality trends. Comparing these key characteristics and the policies followed by countries exhibiting different inequality trends can help disentangle the region’s recent divergence in patterns of inequality. The book also includes an analysis of how changes in key sectors and areas –

agriculture, manufacturing, mining, social protection, fiscal policy, redistribution, human development, population growth and conflict – have affected inequality. The role of agriculture is examined in Chapter 4, the impact of resource dependence is analysed in Chapter 6, the relationship between fiscal policies and income disparities is studied in Chapter 7, and the impact of a strong agriculture-led development in Ethiopia is the focus of Chapter 13. Several cross-cutting chapters examine the traditional causes of inequality in the region, the growth-inequality-poverty interaction, and an economy-wide econometric macro panel analysis of a long list of determinants responsible for the changes in inequality observed during the last 20 years. Given the weak informational base prevailing in the region, the book pays particular attention to statistical documentation of the inequality data and determinants of inequality over the last three decades. This is based on the Integrated Inequality Dataset (IID-SSA) and a database of macroeconomic indicators. These two databases were created explicitly to support the quantitative analyses included in the book. Given the book's emphasis on empirical analysis, Chapter 16 details the available inequality data and the construction of the IID-SSA dataset. Given the methodological problems encountered in measuring inequality, this chapter also discusses the main measurement pitfalls affecting available data and suggests ways to improve the empirical basis of future analyses of inequality in the region.

In terms of the book's causal approach to the analysis of the inequality changes, several chapters distinguish between the immediate causes of those levels and, in particular, changes over 1991–2011 and their underlying causes. These underlying causes are often the key determinants of the immediate causes, while in some cases they affect inequality directly. In SSA, the analysis of the immediate determinants first emphasises changes over time in 'between-sector' inequality (due to sectoral differences in factor intensity of production and intra-sectoral heterogeneities) and 'within-sector' inequality (focusing on the changing concentration of production factors such as land, human capital and physical capital within each sector). It then discusses the role of demographic factors (population growth and dependency rates). These underlying causes of inequality, which are particularly useful for framing policy responses, generally include exogenous policy changes (including taxation and social expenditure), changes in the global economic environment (terms of trade, remittances and FDI) and technological and health shocks. Finally, they also include democracy and governance, which affect the efficiency and equity of public policy.

## 1.4 Synopsis of the main findings

This book is the outcome of a comprehensive study of income inequality in SSA, conducted by the UNDP Regional Bureau for Africa (RBA) between 2015 and 2016. Its primary objectives are to examine the trends, causes and consequences of inequalities in the region since the 1990s and to draw relevant lessons for policy actions that will help achieve the 2030 Agenda for Sustainable Development in the region. The presentation of the findings is not sequential. Rather, Parts 2 and 4 are presented together and then followed by Parts 3 and 5. This provides a clearer understanding of the layout and the findings.

In Chapter 2, Cornia summarises the initial conditions of income inequality, i.e., the main drivers of inequality in SSA in the first two decades prior to 1990. In view of the high persistence of inequality and its path-dependent nature, these initial conditions must be understood clearly to explain more recent evolutions in inequality. The baseline structural drivers of inequality discussed in the chapter include the highly dualistic economic structure with a limited employment of the 'labour elite' in the government administration, multinational companies (MNCs) and the resource sector, while the

majority earned much lower incomes in the informal or subsistence sectors. Drivers also include: a high concentration of physical and human capital, and in the settler economies of East and Southern Africa, high land concentration; the ‘natural resource curse’; the urban bias of public policy; the limited redistributive role of the state; and ethnic and gender inequalities. As a second step, Chapter 2 reviews the changes that occurred between 1991 and 2011 in the distribution of household income. Except in two countries; this is proxied by the distribution of average household consumption per capita. To overcome the problems due to the scarcity and inconsistency of data on consumption inequality, the chapter illustrates the construction of the IID-SSA, which covers 29 African countries with at least four good-quality and well-spaced data points over the period 1991–2011. These countries account for 81.8 per cent of the region’s population and a greater share of its GDP. This dataset was built explicitly to support the analysis of this book and draws on and compares the main existing global inequality databases, i.e., WIDER’s WIIDv3, the World Bank’s POVCAL and International Income Distribution Database (I2D2), Milanovic’s All-Gini, and data from well-documented academic studies. Data from the SWIID were excluded deliberately when constructing IID-SSA, because the SWIID database includes more dataset points and four more countries, but these data are obtained by theoretical, opaque and arbitrary statistical imputations that risk, overall, generating an artificial picture of inequality in the region (Jenkins, 2014).

Analysis of the IID-SSA data trends shows that the average regional unweighted Gini of household consumption inequality per capita fell modestly over 1991–2011. Yet, this aggregate trend conceals more than it reveals as inequality trends showed a clear cross-country bifurcation. On the one hand, 17 countries (nine predominantly agricultural economies from West Africa, as well as a few from East Africa and other regions), which accounted for 40 per cent of the region’s population, experienced declining inequality, particularly in the 2000s; on the other hand, Southern and Central Africa and economies characterised by an important oil and mining sector showed rising inequality, especially beginning around 2003. Overall, most low-inequality nations experienced a decline, while high-inequality economies experienced a rise or stagnation at a high level. As a result, since 2000, while the average unweighted Gini for SSA declined, the standard deviation and coefficient of variation of the Gini distribution of the 29 IID-SSA countries rose. This suggests that the heterogeneity of inequality across countries, originally linked to land tenure and resource endowment, became more acute. Weighing the countries’ Ginis for population size does not change this result.

While the IID-SSA includes the most carefully controlled and reliable Gini data selected on the basis of an explicit protocol among existing SSA inequality datasets, they still represent a lower bound estimate of the ‘true Gini’, just as in the case of the Gini from all other datasets. This is due to measurement problems that, although they cannot be solved immediately for the entire region, should be acknowledged when examining the data and deriving policy implications from them. Clear documentation of these measurement problems is even more critical when considering that policy formulation has become increasingly ‘evidenced-based’ over the last two decades. To document these kinds of problems, in Chapter 15, Cornia and Martorano consider the data problems encountered in measuring income and consumption inequality, and suggest possible corrections that will compute more accurate inequality figures. These problems, which are common to all developed and developing regions but are very acute in the region, concern, above all, the unit of observation; that is, average household income or consumption per capita. This concept implicitly assumes an egalitarian distribution of income among all family members. This widely used assumption is misleading in all countries since household income and consumption are distributed unequally among members,

penalizing primarily women, young children and the elderly, and favouring adult males. However, this bias is especially acute in SSA where, regardless of the provisions of legal systems, gender discrimination is acute and endemic (UNDP, 2016).

Other inequality measurement biases identified in Chapter 15 include differences across countries in survey design, definitions, level of disaggregation, income concept, timing and size of surveys, recall period and data processing conventions. These biases tend to reduce data comparability, which can be corrected by a subsequent harmonisation of surveys' micro data. Other problems involve the well-known under-sampling and under-reporting of top incomes. This bias can be addressed by combining HBS data with data derived from tax returns, which makes it possible to estimate the income share of the top 1.0 per cent or similar top percentiles. Three countries have adopted this approach and 14 others are pursuing it. This information will likely become widely available in a few years. Similar studies show that the true Gini is underestimated by 2.0 to 5.0 points, including in SSA. In addition, ignoring the income that accrues on assets held abroad (sometimes illegally acquired) by SSA nationals also contributes to the Gini underestimation. This phenomenon is particularly acute in countries with oil and mineral wealth. Chapter 15 estimates an average regional underestimation of 2.0-3.0 Gini points due to this phenomenon. This value is substantially higher in oil exporting countries. Another measurement bias concerns the unequalising impact of large increases in the Food Price Index relative to the Consumer Price Index (CPI), as occurred during the food crisis of the late 2000s and early 2010s. During years of high food prices, the real consumption of the poor (of which food represents 60.0-80.0 per cent) can increase the underestimate of the 'true Gini' by another 2-3 points. It is hoped that this review of Gini measurement biases will alert scholars engaged in the analysis of inequality in specific countries in the future.

Awareness of these measurement biases and the need to substantially improve them in future data generation and analysis informs the structure of Chapter 2. This chapter presents a theoretical framework by which a country's total Gini can be decomposed into 'between-sector inequality' and 'within-sector inequality', i.e., the consumption per capita differences existing between and within agriculture, oil and mining, construction, utilities, manufacturing, financial and insurance services, hotel and restaurants, commerce and public administration. Changes in the dynamics of the main sectors (e.g. agriculture, manufacturing, and oil and mining, which are discussed in detail in Chapters 4 to 6), the overall structure of the economy and each sector's income/consumption concentration do affect overall inequality, which is also affected by changes in demographic trends and labour participation, as discussed later. Chapter 2 then presents a series of theoretical conjectures inspired by the general literature and, specifically, on inequality in SSA, as well as by quantitative evidence of the causes of inequality. These conjectures concern the growth rate of GDP per capita and the growth pattern (i.e., the value added shares of agriculture, manufacturing and other services) that captures between-sector inequality and the sectoral distribution of factor endowment in urban and rural areas (that measure 'within-sector' inequality).

Chapter 2 argues that, given SSA's structural heterogeneity, the growth rate is less significant than the growth pattern (i.e., its composition). When growth occurs in sectors characterised by high asset concentration and high capital- and skilled-labour intensity, such as mining; finance, insurance, real estate (FIRE) and the public sector, overall inequality rises. In contrast, inequality falls or remains stable when growth occurs in labour-intensive manufacturing, construction and agriculture (except where land concentration is very high). In this regard, it must be noted that between 1990-2011, in nine countries already dominated in 1990 by agriculture, its share rose further, reflecting either an

increase in land yields, rising prices for cash crops, or a ‘retreat to subsistence’. In another ten countries, the unequalising mining sector surged quickly and in nine, an ‘informal tertiarisation’ occurred, with most of the value added and jobs created in sub-sectors exhibiting high informality, low value-added per capita and high inequality.

As in other regions, improved distribution of human capital (particularly secondary education) was found to affect inequality, thus encouraging state authorities to increase its supply to build a fairer society. The picture is less encouraging with respect to land concentration. While no complete time series are available, the literature suggests that it did not decline and may have worsened. Changes in global economic conditions had a mixed effect on inequality. While remittances and rising world agricultural prices appear to have been equalising, rising foreign direct investment (FDI) in extractive industries and surging terms of trade in resource-rich countries turned out, unsurprisingly, to be disequalising. Official development assistance (ODA) changes were statistically insignificant, although this point is controversial and deserves more detailed investigation. However, foreign debt cancellation in countries eligible for Heavily Indebted Poor Countries (HIPC) Initiative reduced Gini perceptibly by increasing the fiscal space. Also, domestic policy changes had a mixed effect. The rise of direct taxation in the total revenues observed in several countries reduced inequality, as did increases in well-targeted social expenditure in South Africa, Ethiopia and a few other nations. Considerable gains can be obtained if these programmes are expanded. Among the macropolicies, trade liberalisation appears to have raised inequality by reducing the value added share of fairly egalitarian manufacturing, while greater macroeconomic stability, reduced inflation (CPI) and a competitive real exchange rate were found to reduce income polarisation, although the situation in these areas requires continuous management. The impact of the food crisis on inequality that began in the late 2000s could not be assessed because of a lack of systematic Food Price Index data.

The exogenous shocks that affected the region during the period under investigation generated contrasting effects. After its sharp and unequalising increase in the 1990s, the modest recent decline in HIV/AIDS incidence reduced inequality, if modestly, and suggests that an accelerating decline in the incidence of HIV, malaria and tuberculosis will reduce it appreciably in the years ahead. Technological shocks (i.e., the diffusion of simple and highly divisible technologies) were not significant in the regression analysis since the impact on inequality is likely to be concave because these new technologies may be acquired initially only by the middle class. The decline in the number of conflicts affected growth and inequality favourably, as war-induced human losses, destruction of infrastructure and forced displacement ended, while black markets faded away, production and employment bounced back and state and international agencies started providing basic services again. By contrast, the econometric estimates of Chapter 16 do not find a significant distributive effect of democratisation, although this may depend on the specific ‘democratisation indices’ used in the regression model and, even more likely, on the complexity of capturing the effect of democratisation in multi-ethnic societies.

After discussing inequality trends, measurement problems and an econometric analysis of inequality determinants, in Chapter 3, Bhorat and Naidoo present a detailed discussion of the crucial interaction between growth, poverty and inequality in Africa. The descriptive statistics highlight the difficulty of drawing simple generalizations about the nature and pattern of inequality across Africa because both levels and changes over time vary significantly. However, a few key observations do emerge. First, on average, Africa has higher than average and median inequality than the rest of the developing region. Second, a notable feature of inequality on the continent is the presence of seven economies exhibiting

extremely high levels of inequality, the ‘African outliers’, which also drive this inequality differential with the rest of the developing world. Third, based on the available data, average levels of inequality have declined in Africa over time, driven mostly by the economies that are not classified as highly unequal. In addition, when estimating the relationship between growth and inequality in Africa, a stronger relationship appears between economic growth and inequality for countries with initially high levels of inequality, thus confirming the cross-country evidence outside of Africa.

Part 2 then examines in detail the changes that have occurred over the last two decades in the key economic sectors that were shown in Part 1 to have affected changes in income inequality over the last two decades. In Chapter 4, Odusola examines how agriculture affects rural poverty and inequality in SSA. He posits that agriculture plays a multidimensional role in the development process, which includes eliciting economic growth, providing foreign exchange earnings, generating employment opportunities, ensuring food security, contributing to value chains, reducing poverty, lowering income disparities and delivering environmental services, among others. Its neglect has hindered agriculture from performing these roles. For instance, in Africa, rural poverty affects more than 60 per cent of the population in 17 countries and between 50.0 and 60.0 per cent in 14 countries. It is particularly alarming in Zimbabwe and Madagascar, where it affects over 80 per cent. Yet, agriculture accounts for 66.0 per cent of total employment in SSA (excluding South Africa). Although agriculture’s share of GDP has decreased by about 6.4 percentage points, from 23.9 per cent in 1981 to 17.5 per cent in 2015, the structural transformation envisioned has yet to occur. During this period, the value added share of the manufacturing sector, which was to benefit from the decline in agriculture, also fell by 4.31 percentage points. Indeed, SSA is bypassing structural economic transformation, given the extent of informality in the services sector in the region. Agricultural growth in Africa has improved over the past two decades. However, this growth is not due to agricultural productivity associated with innovation and technological change, but rather, to land expansion and implementation of the fallowing system. Agricultural productivity per worker in SSA is the lowest across regions, with an annual average (2005–2015) of US\$1,109.30 compared to Organisation for Economic Co-operation and Development (OECD) members (\$19,540.80), Latin America and the Caribbean (\$11,820.80) and the Middle East and North Africa (\$5,394.90). Countries that succeeded in maintaining productivity per worker at \$3,000.00 or more per year also reduced their share of agricultural value added in GDP to less than 20 per cent and vice versa, with few exceptions.

At the bivariate level, agricultural productivity per worker tends to push labour out of the sector. Enhanced productivity in the agricultural sector is an important factor in labour reallocation to other sectors of the economy. In fact, a 1.0 per cent increase in the share of agriculture in total employment increases rural poverty by 0.14 per cent. This explains why the sector tends to employ a high proportion of poor people on the continent. In addition, a 1.0 per cent shift in labour from agriculture to other sectors leads to a 0.282 per cent reduction in the rural poverty gap. In addition, secondary education is a potent factor in reducing poverty and shifting labour away from the agricultural sector. Total factor productivity plays a similar role to education in reducing poverty. However, it has a positive relationship with inequality and explains about 13.0 per cent of the variation in income inequality. For instance, four of the seven countries with a total factor productivity index of greater than 0.40 (Seychelles, South Africa, Botswana and Namibia) had a Gini coefficient of more than 0.55. Poor agricultural performance is due to a number of factors, including low fertilizer usage, limited access to irrigational facilities, lack of accelerated access to improved seedlings, poor post-harvest management and under-investment in agriculture. For instance, in 2003, African governments adopted the Comprehensive Africa Agriculture Development Programme (CAADP), agreeing to allocate 10 per

cent of their national expenditure to agriculture. However, a decade after this declaration (2013), only seven governments had consistently kept pace with the target.

In Chapter 5, Bhorat, Rooney and Steenkamp investigate, in turn, the constraints facing the manufacturing sector in SSA, within the context of the decline of the share of manufacturing in value added mentioned in Part 1. Their chapter describes the economic complexity and product space analytical frameworks. Essentially, the analytical approach describes development and structural transformation at the country level as a process of accumulating productive capabilities that allow countries to produce increasingly complex products. Countries with more productive capabilities produce more complex products. Countries producing manufactured products – i.e., that are well-positioned within the product space and with a high opportunity value index – tend to be more complex. Their productive structures allow for easier diversification into other manufactured products. The analysis shows that, in general, African countries have not undergone manufacturing-led, growth-inducing structural transformation. Nevertheless, the analysis demonstrates heterogeneity in the African experience, with some African countries exhibiting growth in their manufacturing sectors. The analysis indicates that the process of structural transformation is path-dependent; i.e., a country's current productive capabilities embodied in its export structure influence the extent to which it can shift production toward increased manufacturing activity.

In Chapter 6, Bhorat, Chelwa, Naidoo and Stanwix consider the notion that natural resource wealth is associated with high levels of in-country inequality. They examine recent economic progress in Africa, specifically focused on extractive industries and inequality, with a view to exploring how countries that depend heavily on natural resource extraction may face risks of rising inequality. This is achieved by drawing on cross-country data and specific country case studies. The data suggest that, on aggregate, there is no clear link between resource dependence and inequality, using the standard, broad proxies. However, specific features of resource-dependent growth, as the chapter notes, do present obvious inequality risks. These are explored in more detail after reviewing the literature in this area. The chapter concludes that there are reasons to be concerned about the growth path and set of risks that dependence on extractives can engender.

In Chapter 7, Odusola analyses the extent to which fiscal policy and an enlarged redistributive programme may contribute to reducing inequality in the years ahead. The global inequality crisis – in which the richest one per cent of the world's population has more wealth than the rest of the world combined – calls into question the efficacy of fiscal policies, especially taxes and spending choices, in promoting economic efficiency and reducing income disparities simultaneously. This chapter argues that inequality is a by-product of regressive taxes, unresponsive wage structures and inadequate investment in education, health and social protection for vulnerable and marginalised groups. Some of the key findings are as follows:

- Africa remains one of the most unequal regions globally, with ten of the world's 19 most unequal countries in the region. Africa's high level of inequality poses a serious challenge to realizing the overarching goal of 'leaving no one behind' by 2030.
- Although levels of tax revenue as a share of GDP have been increasing over time, from 14.4 per cent in 1991–1995 to 16.4 per cent in 2006–2010, they remain low in Africa relative to those in developed and West Asian countries. This affects the amount of public resources available for redistributive programmes, such as social protection.
- Using data from the Standardized World Income Inequality Database (SWIID), many countries

experienced erosion of the distributional impact of their fiscal policies. For instance, of the 47 countries where data are available, 29 countries recorded declines in the distributional effectiveness of their fiscal policy.

- Taxes are generally regressive in Africa; the positive relationship between tax variable and the Gini coefficient is statistically significant.
- All countries with a revenue-to-GDP ratio of 20 per cent and above (except Algeria, Morocco and Seychelles) have income inequality (market and net Gini coefficients) greater than 0.5.
- The implementation of subsidies and transfers is equalising and its relationship with income inequalities is statistically established at 1.0 per cent level of significance.
- GDP growth also appears to be an equaliser. A one per cent rise in economic growth reduces inequality by 0.45 per cent – with higher impact from manufacturing and agriculture than services.
- The widening salary and wage compression ratio is an important driver of inequality across the continent. Promoting progressive taxation and enhancing the efficiency of social protection and distributional effectiveness of fiscal policies are vital to address income disparities in Africa.

Chapter 8 by Bhorat, Cassim, Ewinyu and Steenkamp complements the analysis of the previous chapter. It examines in detail the extent to which the current expansion of social assistance and, to a lesser degree, social insurance programmes that have generated large redistributive effects in the OECD and the Latin America countries can be expanded in economies with a large, difficult to reach, subsistence agricultural sector. The chapter shows that high GDP growth rates in Africa have not translated into increased social protection expenditure. The chapter empirically establishes a positive correlation between social protection expenditure and the presence of a democratic regime, suggesting that democratic governments may be more likely to increase their social protection expenditure outlays. Second, in terms of income, upper middle-income countries (MICs) in Africa spend the most on social protection relative to lower MICs and low income countries (LICs). Finally, the authors conclude that non resource-dependent countries spend more on social protection expenditure than resource-dependent countries. While the chapter concludes that the link between social protection expenditure and inequality reduction is unclear, a positive correlation can be observed between social protection and labour (SPL) coverage and inequality reduction. Additionally, the chapter estimates a social protection index for SSA by assimilating a variety of heterogeneous sub-indicators, aggregating social protection into a single measure. Greater gains can be observed in terms of inequality reduction for SSA countries compared to non-SSA countries. Hence, this index suggests that a broad array of SPL programmes is beneficial, as it has an overall inequality-reducing effect. Finally, an econometric analysis is undertaken that reiterates earlier findings regarding the importance of targeted coverage of the poor. In general, increased coverage of the poorest quintile of the population, together with an increase in the unit value of transfers, has been shown to be significantly and positively correlated with reduced inequality.

The last three chapters of Part 2 discuss the problems that are highly specific to the SSA region and that have an impact on inequality, i.e., the impact of unabated rapid population growth, the impact of a declining but still high number of ethnic conflicts and the role of human development in explaining the dynamics of income inequality in SSA.

Chapter 9 by Odusola, Mugisha, Workie and Reeves examines the relationship between population growth and inequality. Africa's population is expected to nearly quadruple by 2100, from about 1.19 billion in 2015 to 4.39 billion. It will therefore account for 39.12 per cent of the world's population

by 2100, against 16.14 per cent in 2015. While most parts of the world have experienced a fertility transition, Africa has not. Between 2000 and 2014, its average fertility rate was 5.4, compared to 1.6 in Europe and Central Asia, and 1.7 in East Asia and Pacific. Even if fertility is at the replacement level, at an average of 2.0 children per woman, the population will continue to grow, due to the rising number of young people. The combination of high population growth in the context of high income inequality and, to some extent, the declining trend in inequality, calls for a thorough analysis of the linkage between population and income inequality. De la Croix and Doepke (2002) argue that poor families tend to have many children and are more inclined to invest very little in their children's education. The fertility rate through human capital accumulation is one of the transmission mechanisms linking inequality with growth. The 'hump-shape' inequality-population growth nexus lends credence to the relationship between inequality, population and economic growth. However, using a life cycle theory, Deaton and Paxson (1997) argue that decreases in population growth rates redistribute the population towards older, more unequal cohorts and can increase national inequality. In an unconventional manner, Campante and Do (2006) argue that populous countries tend to be less unequal. From both measures of inequality (Gini and the share of income held by the bottom 40 per cent), countries with higher fertility rates tend to have lower levels of inequality. For instance, all countries where data are available and that recorded a fertility rate of 6.0 children per woman (Niger, Mali, Burundi, United Republic of Tanzania, Republic of the Congo, Chad and Nigeria) are associated with a low Gini of less than 0.44. However, most countries classified as advanced in demographic transition in SSA (e.g. Botswana, South Africa, Namibia and Seychelles) have Ginis of more than 0.6, while only Cabo Verde and Mauritius recorded Ginis equivalent to those of high-fertility countries. The correlation between poverty rate and population variables is positive.

The relationship between inequalities and conflict in Africa is the focus of Chapter 10, authored by Odusola, Bandara, Dhliwayo and Diarra. Inequalities and poverty are important drivers of social exclusion, while conflict, social unrest and instability are its manifestation. Inequality and conflict create a vicious cycle that tends to perpetuate itself and further propagates underdevelopment. The risk of conflict is higher in poor and unequal countries than in rich and less unequal ones. Africa is one of the continents that has been the most prone to conflicts over the past decades, but the intensity of conflict is falling. SSA accounted for 55 per cent of the world's conflicts in 2002, but this figure declined to 24 per cent in 2011. Still, 11 of the top 20 countries with the highest likelihood of conflicts are in Africa. Inequality intensity, depicted by the income share of the lowest 10 per cent in the highest 10 per cent of the population, tends to be related positively to the various indicators of conflicts, especially group grievances. Population in multidimensional poverty, intensity of multidimensional poverty and population in severe multidimensional deprivation also tend to drive the various measures of conflicts. Most countries with a poverty headcount of over 60 per cent are also experiencing serious or intense conflicts, such as Burundi, Central African Republic, Democratic Republic of the Congo and Nigeria. Gini has a significant but negative effect on conflict, as measured by death per capita, but is insignificant for the log of deaths. Democracy also indicates a significant negative effect on conflict. GDP per capita now has a significant but negative effect on conflict when deaths per capita is used as the dependent variable, but not when deaths is used. This finding confirms the conclusion from Odusola (2015) that all countries whose lowest quintile's share of their national incomes during the 1980s-2000s was below 4.00 per cent are particularly from non-conflict-prone countries in Southern Africa (Botswana, South Africa, Lesotho, Namibia, Seychelles and Zambia).

Chapter 11 by Mukherjee, Lusigi, Kamwendo and Bonini reviews the two-way relationship between human development and inequality. As discussed in Part 1, improvements in health and education

among the poor are not only desirable per se, but have also been shown in many cases to help reduce income and consumption inequality. Conversely, a rise in income/consumption inequality makes human development more problematic, as the low-income segments of the population cannot bear the private costs of accessing the health care and education systems, and obtain access to decent water, sanitation and housing. SSA has witnessed more rapid growth in the Human Development Index (HDI) than any other region since 2000 – with a growth rate of 1.68 per cent from 2000 to 2010, and 0.94 per cent from 2010 to 2014. The rate of progress in some countries has been particularly remarkable, as in Rwanda, Ethiopia and Mozambique. This implies that people are living longer, healthier and more creative lives, are more knowledgeable, and have access to the resources needed to support a decent standard of living. However, significant differences exist in the human development of women and men. Health and education deprivation is higher in rural than in urban areas, and inequalities also exist in access to information and technology. At the same time, progress has been uneven between countries and various socioeconomic groups, and serious human deprivation still remains.

Income inequality can reinforce inequalities in health and education as well as in work, political participation and security. These overlapping inequalities perpetuate exclusion and deprivation throughout the course of life and across generations. In SSA, loss of human potential due to inequality is 33 per cent. In South Asia and the Arab States, it is over 25.0 per cent. In four countries (Central African Republic, Comoros, Namibia and Sierra Leone) the Inequality-adjusted HDI (IHDI) is more than 40 per cent lower than the HDI; in 35 other countries, it is 30.0-40.0 per cent lower. Inequalities in education are highest, at 27.0 per cent, followed by income at 24.0 per cent and health at 17.0 per cent. The underlying drivers of inequality in human capabilities include: unequal participation in political and economic life; unequal access to economic, financial and natural resources; lack of human security and rights; and inequitable outcomes and opportunities for women and men. There is a negative relationship between human development and gender inequality in Africa. Countries with overall low levels of gender inequality (e.g. Libya, Tunisia and Mauritius) tend to have higher levels of human development, while those with high levels of gender inequality (e.g. Niger, Chad, Central African Republic, Mali and the Democratic Republic of the Congo) tend to have lower levels of human development.

Part 3 presents the results of country cases on the evolution of inequality over 1991-2011 (or similar periods). In Chapter 12, Cornia and Martorano analyse the evolution of inequality and its determinants in the highly dualistic agrarian economy of Malawi through a series of decompositions of the change over time in the Gini of total household consumption per capita by main production sectors (agriculture, manufacturing and others), as well as the new dataset from the Food and Agriculture Organisation of the United Nations (FAO) and the World Bank. They also use data from various national and international sources. Inequality rose between 1968 and the late 1980s, due to the agricultural export-led development model adopted by the Banda regime, which privileged the estate sector and medium-sized farms, and thus created a ‘dualism within the dualism’ that exacerbated the inequality inherited from the colonial era. In contrast, between the early 1990s and the mid-2000s, inequality declined as a result of, *inter alia*, the adoption of the Starter Pack Programme, which provided all smallholders, including the poorest, a pack of highly subsidized seeds and fertilizers. This programme was eventually replaced by a less well-targeted one, while inequality rose between 2004 and 2011. By applying a micro-decomposition of the overall change in the Gini coefficient, the chapter shows that a key driver of the recent inequality rise has been the suboptimal

structural transition of the economy from low-inequality crop agriculture to high-inequality sectors, such as livestock production, commerce, transport, and formal services located in both urban and rural areas. The inequality increase was also due to the decline of the value added share of labour-intensive manufacturing in total output that was induced *inter alia* by trade liberalisation and the related decline in the average tariff rate.

Cornia and Martorano discuss the evolution of inequality in Ethiopia over 1991-2011 in Chapter 13. Between 1996 and 2011, Ethiopia recorded rapid GDP growth, a six per cent surge in agricultural production, low stable inequality and falling poverty. A key ingredient of Ethiopia's success was the 1995 adoption of an agricultural development-led Industrialisation that defines increasing land yields as a precondition for successful Industrialisation, urbanisation and development and, given the country's egalitarian land distribution, favourable distributive effects. The Government promoted a market-led, state-assisted and regionally decentralised agricultural-led model of development that modernised rural institutions, enhanced the diffusion of inputs, promoted crop diversification, adopted progressive tax and expenditure policies, and launched the rural Productive Safety Net Programme. This reduced rural poverty by two percentage points while urban public works and housing construction programmes created 1.1 million jobs. Despite these gains, during the last two decades, the production structure evolved slowly, while the people exiting agriculture found work mainly in non-tradeable, skill-intensive services or in the unequal informal sector. Until 2011, employment in manufacturing increased slowly, although there are indications that it increased over 2012-2014 due to a rise in FDI in this sector. As a result, the urban Gini rose by 10 points between 1995-2005. The results of the micro-decompositions of the Gini changes suggest that over 2005-2011, public investments in education gradually raised the supply of qualified workers and reduced the skill premium that, together with the launch of large urban public work programmes, helped reduce inequality by six points.

In contrast, the rural Gini fluctuated around 0.26-0.28 for the entire period. The country faces a crucial dilemma, however, as farm size is already too small to support a family and new entrants in the labour force. Despite a two-point drop in TFR over the last 20 years, a slowly declining population growth rate remains a challenge. It calls for implementing additional measures to reduce fertility as migration to cities and abroad will not alleviate the land shortage problem. The microeconomic decompositions carried out in Chapter 13 show that the risk of rural poverty is influenced by: the employment of the household head in public administration; commerce and rural manufacturing; the low dependency rate; the ownership of land and livestock; and primary and secondary education of the household head. Considerable progress is still needed in all of these areas. Despite the important limitations illustrated above, the Ethiopian development experience over 1995-2011 is an example of how quickly growth can occur in a poor country with low and stable inequality and rapidly falling poverty.

Chapter 14, by Odusola, Lal, Dhliwayo, Sabo and Neuhaus, examines a comparative analysis of the drivers of income inequality in Burkina Faso, Ghana and Tanzania. Each of the three countries offers a unique inequality trend: rising inequality (Ghana); falling inequality (Burkina Faso); and inverted U-shaped ( $\cap$ ) inequality (Tanzania). Comparing the experience of countries across inequality categories offers opportunities to capture peculiarities and contexts pertaining to these groups. The three countries have reduced poverty considerably relative to other SSA countries, but only Ghana was able to meet the MDG target of halving poverty by 2015 (based on the international poverty line of US\$1.90 per day). Ghana was able to reduce its national poverty rate by 57.2 per cent between 1992 and 2012, three years ahead of the deadline. This was followed by Burkina Faso (47.4 per

cent, 1994-2014) and Tanzania (33.8 per cent, 1991-2011). By SSA standards, the three countries performed well in reducing poverty. Burkina Faso remains one of the very few African countries that succeeded in reducing income inequality for approximately two consecutive decades; in 2007, in Tanzania, it began falling whereas since 1987, in Ghana, it has risen. The income of the bottom 40 per cent as a share of that of the top 10.0 per cent of the population is also highest in Burkina Faso, followed by Tanzania and Ghana.

The dichotomy between rural and urban economies, as well as across regions, and in the distribution of socioeconomic and physical facilities (e.g. electricity, water and sanitation, health centres and schools) drive disparity in these three countries. Three factors explain the low poverty-reducing power of growth in Burkina Faso: growth based on sectors with low job-creating capacity; low per-worker productivity in the primary sector; and population increases of more than 3.0 per cent per year. In Ghana, there was a shift out of agriculture (the equalising sector) and a significant expansion of the service sector (the unequalising sector), which by 2014 constituted more than 50.0 per cent of GDP. Indeed, fiscal policies in Burkina Faso are progressive, which explains why its fiscal distributional effectiveness is strongest, and it has a lower (and declining) Gini than Ghana and Tanzania, where fiscal policies are considered regressive. In Ghana, education is helping to bridge the inequality gap, especially female secondary school enrolment. Wage compression ratio alone accounts for 33.6 per cent of the variations in income inequality among the nine selected countries (including Burkina Faso, Ghana and Tanzania).<sup>3</sup> Increased agricultural productivity plays a critical role in reducing inequality, and demographic transition seems to be associated with higher inequality in the three countries. The role of remittances and ODA varies from country to country; it is strongest in Burkina Faso. Other factors explaining the variation include: joblessness; level of development of the private sector; the extent of corruption and state capture by the elites; level of access to social services; disparity in access to land; and gender disparity in economic and social opportunities.

In Chapter 17, the book's editors present conclusions, policy recommendations and suggestions for further work. The chapter notes that if the SDG poverty and inequality objectives are to be achieved, and if policy design is to become increasingly evidence-based, then national statistical offices and international agencies need to massively increase their efforts to generate information on inequality, including gender and ethnic inequalities. Indeed, the informational base for policy formulation remains substantially weaker than in other developing regions. The chapter also discusses key policy issues, including those related to: the modernisation of agriculture, such as accelerating yield and productivity per worker; the promotion of value chains using agriculture and the extractive sector as the linchpin of Industrialisation; the use of resources from the primary commodity price boom to diversify the economy; the need to provide strong social protection in tandem with the demographic transition, increase human capital and improve its distribution; and the adoption of macroeconomic policies that reverse the deindustrialisation experienced during the last two decades. Raising productivity, improving working conditions within the informal sector, and ensuring that socioeconomic and physical resources are distributed fairly across regions and between urban and rural areas are vital to addressing income disparities. Expanding equalising social protection interventions to the excluded and marginalised groups is vital to accelerating progress on SDGs and equality. Finally, the chapter notes that, as in other regions, to obtain a better grasp of inequality trends, understanding must be improved of political movements leading to genuine democracy and reduced corruption, the 'politics of distributive policies' and their impact on inequality.

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<sup>3</sup> Other countries are Benin, Côte d'Ivoire, Niger, Nigeria, Mozambique and Togo.

## 1.5 Issues requiring further attention

As noted earlier, this book may represent the first attempt to document the levels of, and trends in, average household consumption inequality per capita in the entire region. It also makes important contributions in its detailed discussion of the weaknesses of existing cross-country comparable inequality data, its proposals of strategies to deal with these weaknesses and its suggestions regarding improving data quality on inequality. A large group of UNDP and external experts (including UNDP Regional Bureau for Africa's team of economists) with complementary expertise have been involved in preparing this book, which has made it possible to address a significant number of the issues that are part of the region's inequality problem. This alone is an important achievement. However, it must be complemented by further analytical work in the years ahead. While many key insights that may inspire policy formulation have been discussed in the book, a number of issues remain that need to be investigated further. These issues were not covered adequately in our analysis due to a lack of sufficient time series data, because economic and social theory in these areas is still in its infancy, or because the relationships at hand vary substantially across subregions.

The issues that require further attention when more data become available include: the impact of food prices on inequality and a more detailed analysis of the impact of various types of ODA and cash transfers on inequality and SDG achievement. In addition, a more detailed disaggregation is needed of the impact of a shift in economic structure towards industrialisation and some services subsectors as well as a more explicit analytical framework showing how addressing inequality can accelerate SDG achievement, building on the suggestive discussion included in this chapter. Many of these issues were included in the narrative of this book and treated quantitatively, but it is difficult to make inferences because it is impossible to test some of the hypotheses econometrically due to data limitations.

Other essential aspects of inequality and their impact on well-being were discussed only marginally. The first concerns gender inequality, which, as mentioned above, is a key source of polarisation in well-being that is not captured by the standard (and dominant) Household Income and Expenditure Budget Surveys. While there are many microstudies that examine the gender bias in specific contexts and for small samples, there are few sufficiently broad databases on income inequality by income receivers or of consumption by gender and age. Administrative records with information on access to, among others, health, education and political representation fill part of this vacuum and show that gender discrimination has generally declined in terms of access to basic services. However, as noted in Chapters 12-14 on Malawi, Ethiopia, Burkina Faso, Ghana and Tanzania, the available hard evidence (including the influence on well-being of female-headed households in inequality micro-decompositions) also shows that economic discrimination has not changed much and may have increased. Therefore, while the broad effects of gender discrimination are clear and have been included in the analysis, data problems have precluded a clear documentation of the evolution of gender inequality over time.

A second set of determinants of inequality that has not been treated adequately in this book concerns the circular relationship between population growth, environmental sustainability and income inequality. This is due, again, to the lack of compiled datasets on the distribution of environmental resources, but also to thorny theoretical issues. Indeed, the impact of environmental degradation due to overpopulation or an unequal distribution of resources often tends to manifest fully with long time lags. This makes it difficult to measure the quantitative effect of the impact of population growth

on environmental degradation and inequality precisely over the long term. Several case studies have documented this relationship, as in Niger (Cornia and Deotti, 2014) and other extreme cases, but capturing this relationship precisely for SSA as a whole remains problematic and requires a well-articulated analysis.

Finally, unlike in analyses of the changes in inequality that have occurred in other regions (see Cornia 2014 on the sharp inequality decline under the Latin American's New Left regimes since 2002), here, the discussion of the policy changes introduced since 1991 lacks a detailed analysis of the features of the political regimes and the political orientation of the governments that have introduced progressive policy reforms. While several chapters in this book emphasise the decline in conflicts and the spread of democracy since 1995, other studies (Stewart, 2014) suggest that ethnic-based patronage has not declined. In addition, a 2015 report on 28 countries of the region, conducted by Transparency International in cooperation with Afrobarometer, estimates that at least 75 million people paid bribes, including to access state-provided basic services, and that there was a widespread perception that corruption was on the rise. In brief, an analysis is still lacking on whether the process of democratisation has improved the basic rights of citizens and has led to the election of less ethnic-centred and more universalistic and progressive governments in the region. This book does not have a clear picture of the politics and political economy of recent policy changes in countries that introduced more progressive taxation, cash transfers, improved social services, infrastructure and support to agricultural modernisation in a context of an acceptably egalitarian land distribution, and other distributionally progressive measures. Additional work in these areas is therefore needed, including through the contribution of political scientists who are well-acquainted with the African political systems.

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