

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

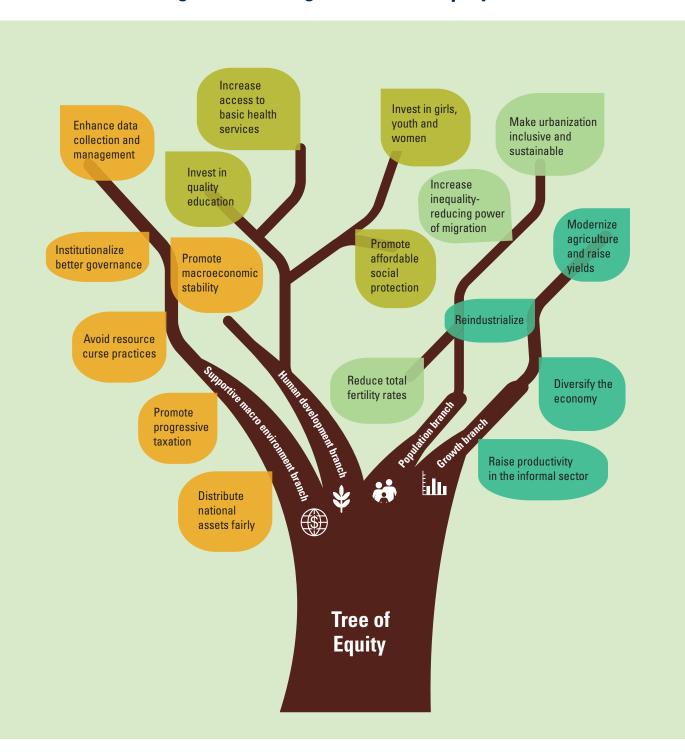
Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Planting and nurturing the seeds of equity in Africa



Conclusions and Policy Recommendations

GIOVANNI ANDREA CORNIA, AYODELE ODUSOLA, HAROON BHORAT AND PEDRO CONCEIÇÃO

17.1 Introduction

This book has shown that SSA has made a number of important improvements in the 15 years since the turn of the 20th century. GDP growth has accelerated after two and a half decades of stagnation, agricultural output has risen in some countries after a protracted decline, and internal and external macroeconomic equilibrium has been restored in much of the region. In addition, although difficult to define, democratic rule has spread across the region and, even more important, the number of conflicts was halved, although new episodes linked to violent extremism are occurring. The incidence of HIV/AIDS and its destabilising impact have declined slowly since the mid-2000s as a result of more extensive awareness campaigns and the increased supply of antiretrovirals. These and other health interventions, including action on malaria control, have led to a very rapid decline in the under-5 mortality rate (U5MR) and some improvements in overall health conditions. This has led to increased life expectancy at birth to 60 years for the region as a whole. Several other MDG targets were met, although less progress was achieved in reducing child malnutrition and maternal mortality. Furthermore, with the development of highly divisible technologies, the region has begun to catch up with other developing regions in the field of communications, internet banking, marketing and services. Finally, central to the topic of this book, over the last 20 years, inequality declined in more than half of the countries in sub-Saharan Africa. At the same time, several Asian countries (e.g. Bangladesh, China, Indonesia, Nepal and Sri Lanka), some economies in transition (Bosnia and Herzegovina, Georgia and Montenegro) and OECD countries (Australia, Canada, France and United States of America) experienced an upturn in inequality.

There is therefore much reason to rejoice, even if the situation varies substantially across the region. However, greater efforts are needed to achieve sustainable long-term growth, reduce income inequality in the countries where it is still too high and meet the aspirations of the 2030 Agenda for Sustainable Development (SDGs). Indeed, despite the recent decline in inequality in part of the region, the level remains very high in several SSA countries. This sharply reduces the poverty alleviation elasticity of growth to well below that of other regions (Beegle et al.,

2016) and will present problems in achieving other SDGs. Meeting such objectives over the next 15 years therefore requires a focus on reducing inequality, for both instrumental and intrinsic reasons (of tolerance and fairness), especially in countries where it rose or remained high for historical or institutional reasons. This must be addressed to achieve the 2030 Agenda.

Based on the evidence provided in the various innovative chapters, the main areas for priority policy actions over the next two decades are then analysed. They encompass both the 2030 Agenda period and the first 10-year implementation plan for the African Union Agenda 2063. The problems discussed below certainly vary to some extent within the region (e.g. between Southern Africa and the Sahel) but, with rare exceptions, such as Mauritius, the measures proposed below apply, in different degrees, to all of SSA. And all countries must address the challenges that inequality poses to achieving the SDGs. Finally, the problems and policy responses set forth below are closely intertwined, but for ease of exposition, they are discussed in clusters.

17.2 Modify the regional 'pattern of growth' followed between 1999 and 2015

The first problem that requires policy attention concerns the suboptimal evolution of economic output structure that has occurred over the last 20 years in most of the region. This problem has also affected Latin America to some degree (Ocampo, 2012). As noted by several authors (AfDB, OECD and UNDP, 2016; Beegle et al., 2016; McMillan, Rodrik and Verduzco-Gallo, 2014) and in several chapters of this book, particularly Chapters 2, 14 and 16, much of the region has experienced an output reprimarisation, deindustrialisation and informal tertiarisation. Reprimarisation was due to the increase in the value added share of the oil-mining sector, export crops, and agriculture, where rural modernisation failed and there was a 'retreat into subsistence', or where food crop and cash crop yields increased. Moreover, with the exception of three countries out of the 29 with inequality data analysed in Chapters 4, 15 and 16, the share of manufacturing output declined clearly, reflecting the 'manufacturing malaise' discussed in Chapter 5. Such decline stands in stark contrast to the sizeable increase in manufacturing output recorded in all low-income Asian countries during the same years. By around 2010, SSA as a whole was producing fewer manufactured goods than Bangladesh (Page, 2012:51).

To be clear, the intention here is not to promote a single development pattern focusing exclusively on manufacturing. Indeed, countries may follow many development paths. These depend on their factor endowments, location, market size, and other factors and it is normal to expect that different growth paths will evolve in SSA. However, it is difficult to expect that SSA as a whole will develop over the long term without creating a certain amount of critical mass in labour-intensive manufacturing and a modern services sector that can absorb the large-scale rural-urban migration and the increase in urban labour force that will unavoidably occur during the next two decades. Finally, with the growth pattern of the last two decades, the low-productivity informal sectors of many African cities were responsible for a large part of the employment increase in services. These sectors now include artisans, petty traders, personal service providers, food sellers and informal transport providers. In fact, in much of this informal services sector, the question is more an issue of 'livelihoods' and 'survival strategies' than of economic undertakings.

What can public policy do to correct this suboptimal structural transition? The main objective would be to increase the value added share of modern agriculture (discussed in the next point), rural non-

agricultural activities (RNAA), modern services, construction and public infrastructure. The positive but disequalising impact of oil-mining wealth must also be managed, together with its well-known problems, and value added creation in the urban informal sector must be increased. Given that unit labour costs are typically low, addressing the direct and indirect costs that industrial operations face in the continent puts African industrial firms at a huge disadvantage, both compared to imports or when pursuing outward-oriented industrialisation. This is essentially a problem of putting in place both the basic physical infrastructure (to supply power reliably and transport goods and information at a reasonable cost) and the minimal intangible infrastructure (predictable administrative procedures and reasonable regulatory requirements). The lack of competitiveness of African manufacturing firms derives from massive market and policy failures that impose excessive costs on industry, use up the value generated by manufacturers and prevent them from generating sufficiently high returns to continue to pay high wages and attract investments. When infrastructure receives priority, agriculture and the extractive sectors can easily become the linchpin of industrialisation in Africa.

17.2.1 Modernize agriculture and raise yields

As noted in Chapters 2, 4 and 17, the number of economies with a rising share of agricultural value added has risen, often due to a 'retreat into subsistence' when the development of other activities has run into problems, as in the Sahel. In these and other countries, 60-70 per cent of labour is employed in agriculture because of low land productivity, but it generates only 25-30 per cent of GDP. This highlights one of the two most dramatic challenges faced in many SSA countries — the limited diffusion of technology to drive the Green Revolution (UNDP, 2012 and Conceicao et al., 2016) and continuing high population growth, as articulated in Chapter 9 and further discussed below.

Indeed, countries experiencing low and, basically, stagnant yields and rising population growth today produce 30 per cent less food per person than in 1960s, although this trend improved moderately in the 2000s in part of SSA. Nevertheless, many countries – especially their urban areas and, to an even greater extent, their large coastal cities – are delinked from their country's agricultural hinterlands. They thus depend on food imports that cost as much as \$35.0 billion annually and still-substantial amounts of food aid. Long-term prospects are even more worrying since by 2050, Africa will have to produce 300 per cent more food to feed its fast-growing population, which will reach 2.4 billion in 2050. At the same time, the Intergovernmental Panel on Climate Change suggests that SSA is expected to be the most affected by adverse climatic changes (Ringler et al., 2011). According to their estimates, output of several crops is projected to fall by 3.2 per cent by 2050 despite a rise in cultivated land, as yields will fall by 4.6 per cent due to climate change. At the macro level, a one percentage point deterioration in climate change leads to a 0.67 percentage point decline in economic growth in Africa and as high as a 1.11 percentage point decline in the Democratic Republic of the Congo (Abidoye and Odusola, 2015). If nothing changes on this front, SSA may well fall into a Malthusian trap and face risks if it tries to escape by increasing food imports and food aid. Indeed, economic history does not offer any examples of successful overall development without a prior increase in agricultural yields. Some argue that countries with considerable mining and oil wealth are an exception, but as argued later, such countries tend to run into a 'slow, long-term growth trap'.

What explains the persistence of low land and labour productivity in agriculture? The main problem is the lack of modernised farming techniques. This, in turn, is due to the policy neglect of this sector, which has long been considered a reserve of labour, food, raw material and savings to be transferred to the urban sector. There are, however, examples of low-income countries that have overcome this

problem, including Bangladesh and Ethiopia. During the first 15 years after it gained independence in 1971, growth was driven by a rapid increase in land yield and food output, not by the export of ready-made garments and migrant remittances that have become important in the past two decades. This was made possible by a Green Revolution, involving improved rice seeds, expanded irrigation, enhanced fertilizer use and the shift from one to three crops per year. Indeed, over the periods 1974-1980 and 1981-1990, the Green Revolution and rapidly falling total fertility rates (TFRs) explained between 45 and 75 per cent of the growth of GDP per capita (Traverso, 2015). The contribution of remittances and garment exports began to be felt only in the 1990s. Ethiopia provides another encouraging example of a move towards agricultural modernisation in a very poor context. Between 2001 and 2012, its food production per capita increased by 70 per cent and between 2000 and 2015, it increased agricultural productivity per worker by 74.79 per cent, thus overcoming the past neglect of agriculture and prioritizing investments in agriculture under the Agricultural Development-Led Industrialisation strategy (Chapter 13). Given the absence of or incomplete markets for seeds and fertilizers, inadequate technical assistance and poor infrastructure prevailing in the country, this objective could not be reached through free-market policies alone, but required active state intervention.

Measures are needed to modernize agriculture. The first involves ensuring that most of the population has acceptably egalitarian access to land (regardless of the nature of land titles), to be accomplished via land reform, informal land titling by the national and local authorities, and other measures. While in some parts of Africa, particularly in the West, inequality in access to land is not significant, access is particularly unequal in several, although not all, Eastern and Southern African countries. Major investments are needed in land titling and registration. Efforts to reduce the current cost of land titling and registration, which averaged about 9.4 per cent of land value in Africa compared to 4.4 per cent in OECD countries, should be scaled up. The time needed to complete land registration and titling, which takes as long as 10 years in some countries, should be reduced drastically (Odusola, 2014). During the last 20 years, tenancy reforms and land titling programmes improved the security of tillers in some countries, but land concentration did not improve. In addition, over the period 2000–2010, land grabs occurred in at least 17 countries, including some with low land-man ratios. In fact, total land grabs in SSA between 2008 and 2010 were estimated to equal the entire landmass of Kenya (Odusola, 2014). While some claim that such actions can help accelerate agricultural growth in SSA, land grabs may also increase income inequality and land concentration.

Second, to ensure the spread of the Green Revolution in Africa, the use of improved seeds and modern inputs must be intensified. Where credit markets are absent, access to seeds and inputs may need to be subsidized. The wisdom of such a policy has been challenged frequently. However, these programmes are needed in countries such as Malawi (see Chapter 12) that are landlocked and characterised by high population density, declining farm size, rising costs of imported fertilizers, skewed access to credit and weak extension services. For example, the 1998 government-subsidized Starter Pack Programme, which provided free small packs of high-yielding maize and legume seeds and fertilizers for 0.1 hectare, increased average household maize production by 125-150 kg over the period 1998-2005 (World Bank, n.d.).

Third, indigenous capacities to develop and adapt new farming technologies should be strengthened because R&D on local food crops has lagged behind. Such a policy requires increasing public expenditure to promote the diffusion of new technologies, strengthen indigenous farming capacities, and develop road infrastructure and electricity for storage and output commercialisation. It also

entails restoring budgetary support to LDCs' agriculture, since this was eliminated during the 'get the prices right' era. International organisations such as the Alliance for a Green Revolution in Africa (AGRA), Consortium of International Agricultural Research Centers (CGIAR), International Fund for Agricultural Development (IFAD), and the Food and Agriculture Organisation of the United Nations (FAO) should promote research on African crops, support R&D in national research institutions and ensure that the improved seeds remain 'international public goods' and that their diffusion does not depend on seeds developed by MNCs, whose acquisition is often dominated by 'lock-in clauses'. Since the 2003 commitment in the Maputo Declaration on Agriculture and Food Security to allocate at least 10 per cent of national budgets to agriculture, nine countries have met the target. As of 2013, only seven of them – Burkina Faso, Ethiopia, Guinea, Malawi, Mali, Niger and Senegal – have done so consistently (Forty Chances and ONE, 2013). All African countries should reach this target to make accelerated progress in using agriculture to drive national development, as argued in Chapter 4.

Finally, the agricultural policy ambivalence of advanced and emerging countries on African agricultural products requires urgent attention. Agricultural LDCs may consider imposing countervailing duties on subsidized food imports from developed countries, which have led to declining food production and increased dependence on food imports in many African coastal cities, while lowering tariffs on seeds, fertilizers and transport equipment. There is an urgent need to address tariff and non-tariff barriers on agricultural and agribusiness products, improve market access in OECD countries by eliminating trade-disruptive subsidies and develop instruments to cope with price fluctuations of agricultural commodities (Chapter 4).

Climate change is likely to exacerbate challenges in Africa because it affects temperature and rainfall patterns. To the extent that vulnerable populations are already living in environmentally stressed areas, this can further accentuate exclusion and inequality. Agriculture remains the mainstay of the sub-Saharan economy, where 62.3 per cent of the population lives in rural areas, with up to more than 80.0 per cent in countries such as Burundi, Uganda, Malawi, Niger, South Sudan and Ethiopia, and 66.0 per cent of the active population (excluding South Africa) employed in agriculture (Chapter 4). Climate change, manifested in sea level rise, flooding and droughts, exacerbates vulnerabilities, leading to crop losses and failures as well as climate-induced migration and conflicts. This has a significant impact on poverty and inequality. However, Small Island Developing States and Landlocked Developing Countries, which are the most affected, lack the technical and financial capacity to cope with climate change. Proactive action is needed on climate change adaptation and mitigation to protect the incomes and livelihoods of the majority of Africans. In this regard, strategic efforts to promote climate change adaptation in terms of drought-resistant seedlings and climate-resistant animal breeding, as well as scaling up investments in agricultural R&D, are critical to moving forward.

17.2.2 Reindustrialise

The industrial take-off of China, Viet Nam, India and Bangladesh was preceded by increased land yields and agricultural output, driven by changes in institutions (e.g. equitable land reform in China and Viet Nam), domestic terms of trade and some subsidization of modern inputs (see above). Even assuming that such policies are implemented successfully in SSA, agriculture will likely employ less labour in the future. RNAA will absorb part of that labour, but much of the new employment will have to be created in manufacturing, construction, infrastructure development, and modern and upgraded services. This objective can be achieved in several ways. Countries with large domestic markets (that can achieve economies of scale in production) may choose an export-led industrialisation strategy or

rely on both domestic and export markets. For countries with a small domestic market, some degree of export specialization may be needed (as shown in Mauritius two decades ago). This will, however, be more difficult to achieve for landlocked nations.

What are the obstacles to industrial development in many SSA countries? The main obstacles are limited mobilisation of domestic savings, which are still low but could be increased (by following the example of the Asian Tigers in the 1950s and 1960s), low domestic investment, and still limited FDI due to low public investment in infrastructure and unstable political conditions. Others include an insufficient supply of semi-skilled and skilled labour, credit and financial services. As argued in Chapters 5 and 16, policies towards trade liberalisation and appreciated real exchange rates should also be reconsidered if the region seeks to reindustrialise.

How can capacity be expanded in this sector? To start, the supply of public goods, particularly human capital and public infrastructure (roads, markets, electrical grids, water systems and harbours/ airports), and access to digital infrastructure should be increased. The literature on the 'crowding in' impact of private investment driven by investments in public infrastructure strongly supports this recommendation, which is particularly relevant in SSA. The infrastructure developments undertaken during the last two decades by Seychelles, Mauritius, South Africa, Cabo Verde and Botswana are important, but need to be extended. Although ICTs have shown appreciable progress, the slow growth in the transport, power, and water and sanitation sectors constrain economic growth in Africa. The business climate should be improved and administrative barriers to export should be reduced. Access to credit and technology is also needed. Increasing private investments, especially in medium and large firms, is clearly the central issue. However, few private firms in SSA can self-finance their investments due to limited cash flow and expensive bank financing. The development of efficient and affordable credit systems may take a long time but is essential, as the literature has shown repeatedly. A strong regulatory framework and, if needed, capital controls are also needed to avoid a real effective exchange rate (REER) instability that may affect trade sector output.

FDI in labour-intensive sectors offers an opportunity to address inadequate domestic investment, foster structural change and technology transfer, and generate positive spillovers. Currently, much of the FDI in manufacturing focuses on low value added production such as textiles, clothing, leather and footwear, food processing, beverages, product assembling, metal products and printing (Chen, Geiger and Fu, 2015). The experience from Seychelles, Mauritius, South Africa, Cabo Verde and Botswana should be distilled and lessons drawn. It is important to identify the obstacles to greater FDI inflows from China and other emerging economies experiencing rising wages. The concentration in labour-intensive but low value added activities is useful in the short term and could be seen as a first step toward integrating African firms into global value chains. The introduction of tax-free export processing zones (as in Mauritius) may also help, as this would lead to the establishment of joint ventures if governance problems are solved. An additional key option is to promote small and medium-sized enterprises (SMEs), Chinese-type town and village enterprises, and RNAA. These comparatively smaller units specialize in producing a wide range of goods that can also be manufactured efficiently on a limited scale, are vertically integrated with the primary sector, produce goods that are consumed locally, or are heavy and, therefore, protected from foreign competition by high transport costs. This strategy entails facilitating the creation and financing of SMEs. In turn, there is a need to promote RNAA that produce livestock, fisheries, cottage industries and services

¹ See AfDB (2016) on how African countries perform on infrastructure development.

sectors, as demanded by local consumers. In China and Bangladesh, RNAA accounts for 40-50 per cent of rural employment, while in African LDCs, it is half that. The notion of building capabilities in product spaces, raised in Chapter 5, would be central to the approach that African policymakers should take in pursuit of more innovative industrial policy interventions.

A strategy that promotes manufacturing should be supported by an overall 'open-economy industrial policy' that does not revert to quotas and tariffs or 'murky protectionism'. Above all, such a policy should be supported by a macropolicy that, in addition to creating an export infrastructure, protects domestic substitutes from competing imports. Such protection can be provided by WTO-compatible tariffs (in the case of major threats to the balance of payments), a competitive and stable real exchange rate, and non-tariff barriers (such as norms on rules of origin that are used widely in industrialised countries). Attracting FDI and promoting private-public partnerships to produce new goods (as in Chile's very successful salmon production and export) is also an option. Greater regional integration may be another strategy, although past experience in this area has been unsatisfactory.

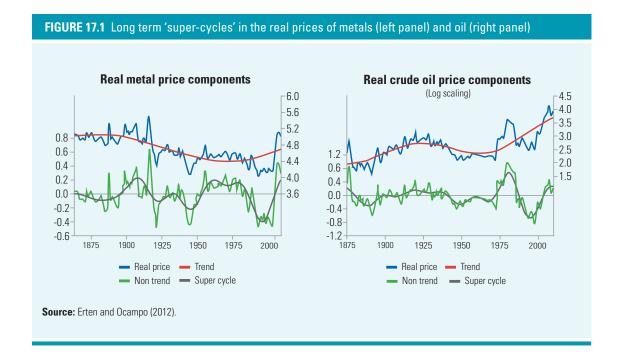
17.2.3 Manage resource bonanzas and promote diversification

As shown in various chapters in this book, the growth of the mining and oil sector observed in several countries has accelerated economic growth, but has been disequalising (Chapter 6). While an increase in mining wealth is welcome news, this bonanza should be managed carefully to minimize capital flight and avoid the 'natural resource curse' and increased poverty and inequality. To achieve this, it is important to create redistributive institutions (as in low-income mining economies, such as Bolivia and Peru), manage the macroeconomic effects of resource bonanzas and diversify the economy over the medium term.

While new discoveries and gains in terms of trade accelerate short-term growth, economic history shows that resource-rich countries face several problems, including slow growth over the long term and high income and asset concentration. One explanation of slow growth is that manna from heaven leads to laziness and sloth. Another suggests that growth of the resource sector does not lead to broad-based development, since mines and oil fields have small forward and backward linkages with the rest of the economy. Inequality and political stability are also affected. In extreme cases (as in Angola and Sierra Leone in the 1990s), competition for resource rents may cause 'greed wars' between factions seeking to capture them. Long-term fluctuations in the prices of metals, oil and export crops, as shown in figure 17.1 below, pose another problem. Such fluctuations, especially those due to the super-cycles documented by Erten and Ocampo (2012), threaten long-term growth stability, fiscal revenue and public expenditures. As noted by Ocampo (2013), the commodity price booms that lasted until 2013 are likely to continue only if China, India and other resource-poor developing countries are able to delink from the slow-growing OECD countries. At the moment, the prospects for such delinking are highly uncertain.

Another problem concerns the inability to diversify away from the resource sector over the long term. At the moment, this seems particularly urgent, given IMF projections that the price index of primary commodities will remain stagnant at the current low level until at least 2020.² Resource-rich countries also face more immediate problems: the Dutch disease, i.e., REER appreciation resulting

² See www.imf.org/external/np/res/commod/index.aspx



in declining manufacturing output, deindustrialisation and slow long-term growth once the mineral deposits are exhausted.

Strong institutions are vital to ensuring that revenue from primary commodities is spent wisely. This includes fighting corruption, regularly reviewing extractive companies' contracts and involving national and international transparency organisations in auditing extractive companies (UNDP, 2016a). Botswana offers a virtuous example of how resource-rich countries can solve these problems through policy action that avoided most political economy and corruption problems typical of rent economies, including management of the Pula Fund.

Promoting economic diversification and avoiding reprimarisation should be the first policy objective. Using local content policy in agriculture and the extractive industry to promote backward and forward linkages in the national economy is vital. Implementation of local content policy in adding value to diamonds (by polishing and sorting diamond locally) in Botswana provides a good example. A few mid-high income countries such as Chile, the Netherlands, and United Arab Emirates, managed to diversify their economies and increase the export of non-resource tradables characterised by positive, economy-wide, learning-by-doing externalities. The policy adopted in this regard included stabilising the real exchange rate to avoid Dutch disease effects. The same objective can also be achieved by 'sterilizing' the increase in money supply due to commodity bonanzas. Adopting an overall industrial policy will also help to achieve the objective of diversifying the economy. Policy measures can also moderate the impact on intra- and intergenerational inequality. For example, Chile introduced the Copper Stabilization Fund to reduce the impact of price volatility on government revenue and the exchange rate. During high-price years (relative to a long-term benchmark), excess dollar receipts are placed in an offshore Copper Stabilization Fund and thus do not affect the domestic macroeconomy. These monies are reinjected into the national budget during those years when copper prices are

low. In turn, intergenerational inequality improved in oil- and gas-producing Norway, where the government created an intergenerational Government Pension Fund that absorbs around 10 per cent of GDP annually, depending on the level of oil-gas prices. The interest accrued in this growing fund will be spent for future generations.

The 'fiscal laziness' of energy exporting countries should also be addressed. These countries often postpone *sine die* reforms to broaden the tax base. In years of low commodity prices, such fiscal laziness results in a sharp increase in the budget deficit or large deflationary and disequalising public expenditure cuts. Direct and value added taxes are needed and tax allowances and elusion should be eliminated during periods of bonanza. Finally, institutional reforms are needed to ensure transparency in managing public resource rents. The literature surveyed in Ndikumana (2014) indicates that at least 8 per cent of petroleum rents earned by oil-rich African countries with weak governance ends up in tax havens in advanced countries.

17.2.4 Raise productivity and reduce inequality in the urban informal sector and construction

The service sector is highly heterogeneous. On the one hand, it includes modern tradable and non-tradable services (banking, insurance, utilities, transport, tourism and public services) that are located mainly in urban areas. On the other, the low-productivity informal sector behaves like a sponge, absorbing surplus labour unable to find employment in the modern sector. Given the current very low rate of urbanisation and continued high population growth in many countries, rural-urban migration is likely to accelerate in the future and most new urban migrants will have to seek jobs in the informal sector.

Policy measures for this cluster should thus follow a three-pronged approach. First and foremost, preventive measures that sustain the modernisation of agriculture, construction and manufacturing should be taken (Chapters 5, 13 and 14). If these develop, fewer people will be engaged in informal sector 'livelihood activities'. Second, modern services should be developed. And third, governments and aid agencies should upgrade the productivity of informal activities, particularly if the two prior measures fail. The most important measure should focus on creating a de-repressed, accessible and, at the same time, properly regulated financial and insurance sector. In Japan, such reform helped increase savings deposits and credit to the production sectors. In turn, in the 2000s, Latin America introduced reforms that enhanced bank prudential regulation, capitalization, funding and supervision. These reforms also strengthened risk-assessment mechanisms in large banks, developed appropriate legal and accounting frameworks, and reduced currency mismatches (Rojas-Suarez, 2007). Reducing the current high lending rate in Africa and bridging the electricity deficit should receive priority.

The informal sector comprises micro-firms of one to five people, is characterised by low levels of technology and low productivity and employs unskilled labour, mostly women. Entry and exit in this sector are easy, but sectoral inequality is high. The main obstacles to its development are lack of credit, skills, technology, space, access to water, electricity and complicated administrative norms. Policy responses generally focus on formalizing the informal sector while preserving its job-creating and income-generating potential by investing in 'integrated urban local development' (ILO, 2007). This entails: investing in human capital formation (e.g. via apprenticeship courses); facilitating access to improved technology, digitalization and credit via bank-assisted credit unions and microcredit institutions, especially for women (as in Bangladesh by the BRAC Bank); titling public land used for

production; improving the supply of water and power; and implementing affirmative policies that enhance social protection for informal sector workers. To implement these measures, the informal sector needs to organize and consult with government to frame policies in its favour.

An important lesson emerging from Chapter 9 is that countries that succeeded in increasing per capita income by 2.0 per cent or less on an annual basis were able to reduce inequality. The converse holds true for those that increased per capita income by more than 2 per cent. By implication, the highest quintiles of the population tend to benefit more from growth when per capita income growth is higher than 2.0 per cent. This is not to say that countries should not increase per capita income quickly; rather, efforts to enhance tax progressivity and improve distributional effectiveness should be scaled up.

17.3 Tackle the 'population problem'

17.3.1 Accelerate the reduction of total fertility rates

Rapid declines in death rates, particularly among children under five, and persistently high TFRs have contributed to rapid population growth in much of SSA. Indeed, the TFR has declined, from 6.5 children per woman of fertile age in 1950–1955 to 5.4 in 2005–2010, as against a decline from 5.6 to 1.6 over the same period in East Asia. Compared to other regions, SSA is experiencing an extremely slow decline in fertility that raises young age-dependency ratios and poverty. Chapter 9 provides a detailed analysis of the trend.

However, the TFR in the region is highly heterogeneous. In Niger, Mali, Chad, Angola, Congo Democratic Republic and Burundi, TFRs have remained high, at above 6 based on the 2010-2015 average.³ As argued in Chapter 9, early child marriage is one of the factors driving high fertility rates in Africa. In another group of countries, including Kenya, fertility declined rapidly in the 1980s, but stalled after 1995 (Canning, Raja and Yazbeck, 2015). In still another group, including Ethiopia, fertility declined starting around 1995, while in South Africa, it fell rapidly throughout the period. As presented in Chapter 9, five countries have advanced in the demographic transition (Mauritius, Seychelles, Cabo Verde, Botswana and South Africa), while 25 countries are currently experiencing it and 15 remain at a nascent stage.

According to the UN Population Division medium variant projections, SSA population will more than double by 2050 (see Chapter 9, table 9.1), while a large proportion of the increase in the world's population from 7.4 billion in 2015 to 9.7 in 2050 will be generated by SSA. Rapid GDP growth per capita, food security, food self-reliance and lower poverty and inequality are unlikely to be achieved unless the TFR and population growth in the region are reduced rapidly.

Persistently high TFRs affect poverty, inequality, growth and political stability in several ways.⁴ Today, in the vast majority of the SSA countries, land-man ratios have already fallen to 0.1-0.2

³ See http://data.worldbank.org/indicator/SP.DYN.TFRT.IN

⁴Problems may also arise when TFRs are too low. In countries with weak collective institutions in healthcare, elder care, and pensions and with weak private transfers among members of the same family, a rapid population ageing generates disequalising effects, as the number of families with a high old-age-dependency rate (and lower earning than for those in the labour force) rises. This leads to an increase in intra-generational inequality. In some developing countries, this may be compensated by intra-family transfers. In the advanced economies, where it is low, the disequalising effect of ageing may be compensated by public pensions, which may or may not raise inter-generational inequality, depending on the level of social security contributions paid by members of the labour force. In addition, pensions often have a skewed distribution of benefits, as minimum or social pensions are often very low, so that intergenerational inequality may rise.

and landlessness has risen. Despite some recent subregional improvements, the region continues to depend on massive food imports and food aid. Indeed, food output per capita in 2011 remained well below its 1960-1965 level. High population growth also increases inequality due to mounting stress on global commons (a phenomenon that has the greatest impact on the weakest), higher emissions, rising food prices and declining soil fertility (unless strong agricultural policies are introduced) and forest cover. It will also cause the skill premium to increase, result in disequalising changes in the dependency rates of the poor in relation to that of the better-off, and lead to unequal access to fresh water, decent jobs and social services. Finally, political stability may be threatened.

Since the 1990s, the problem of land scarcity has risen in much of SSA due to rapid population growth, further increase in land values, conflicts between farmers and herders (as in the drylands of West and East Africa), the weakening of customary institutions, limited land reform programmes and land purchases by foreign investors. In addition, large migrations of competing ethnic groups seeking land for settlement has increased tensions. In Northern Kivu, this led, in 1993-1997, to the death of more than 70,000 people and the displacement of hundreds of thousands (Cotula et al., 2004). In Burundi and Rwanda, increasingly acute land scarcity has been the source of conflicts between herders and farmers and between different ethnic groups of farmers who previously coexisted peacefully. Epidemics may also increase, while internal and international migration will have a high human cost and, in several cases, disequalising effects. Thus, a 'stalled demographic transition' (Canning, Raja, and Yazbeck, 2015) leads to several problems, as well as to a delay in the onset of the demographic dividend.5

A key political economy question is whether the fertility decline in SSA can be accelerated. As noted in Chapters 9 and 16, some developing countries achieved a rapid fall in the TFR at low GDP per capita, including Morocco and the very poor countries of Bangladesh, Rwanda and Ethiopia. In Ethiopia, for example, the government identified the country's high population growth as a cause of underdevelopment and poverty. To reverse the adverse effect of high fertility rate, it set the objective of reaching a TFR of 4 by 2015.6 To achieve this objective, the government raised the marriage age from 15 to 18 years and required the registration of vital events. Other measures focused on keeping girls in school, employing them in the modern sector and SMEs and removing restrictions on their participation in economic activities. It also promoted responsible motherhood by delaying the age of first birth and increasing birth spacing. The government also expanded the distribution of female and male contraceptives, encouraged all government agencies and NGOs to tackle the population issue and created a National Population Council. The implementation of this family planning programme faced challenges, but the planned decline of the TFR was almost on track, falling to 4.5 by 2015.

The case of Bangladesh is also instructive. As noted in Asadullah, Savoia and Mahmud (2014), fertility began to decline as early as 1981-1985, with the rate of decline increasing in the 1990s. This was made possible through a combination of easy access to contraception, increases in female

⁵The potential of the demographic dividend is realized and economic growth follows automatically from it only if additional conditions are met. Indeed, the absorption of a large working-age population requires a similarly large increase in the demand for labour. This depends on an increase in capital accumulation, a change towards labour-intensive techniques and/or sectors, or a fall in the price of labour. Otherwise, the extra labour supply may become unemployed and underemployed, which can lead to political instability and higher crime. East Asia, Latin America and North Africa have both enjoyed substantial reductions in fertility and increases in the working-age share of their populations.

⁶ For more information on this policy, see https://cyber.harvard.edu/population/policies/ETHIOPIA.htm

education and massive social awareness campaigns run by a dense network of NGOs, including some foreign aid in family planning and reproductive health and with the blessing of the State and Islamic authorities. The demographic transition changed the age composition of the Bangladeshi population, affecting resource allocation at the household level and leading to a demographic dividend at the aggregate level.

Evidence from Chapter 9 shows that the relationship between poverty and population variables is clearly established as positive: high population growth worsens poverty. However, the relationship between population and inequality remains ambiguous. At the bivariate level, a negative and significant relationship was established with income inequality across the population variables; this is not the case at the multivariate level. All countries with total fertility rates of at least 6.0 children per woman (Niger, Mali, Burundi, United Republic of Tanzania, Republic of the Congo, Chad and Nigeria) are associated with low Ginis of below 0.44, while most countries that have advanced in the demographic transition (such as Botswana, South Africa, Namibia and Seychelles) are associated with Ginis above 0.55. Further research is needed to fully establish the transmission mechanism between population growth and income disparities in Africa and policies that should accompany demographic transition to accelerate reduction in income inequality.

17.3.2 Regional and international migration and the population problem

Some consider that intra-SSA and international migration may be a necessary solution to the excess labour supply problem affecting the region as TFRs are not reduced rapidly. It is argued that SSA outmigration may be a promising solution, given the population decline and ageing observed in Western and Eastern Europe, Central Asia, Japan, Republic of Korea and China. In addition, large permanent or circular migrations to Côte d'Ivoire, Southern Africa and other better-off parts of the continent are already occurring. The inequality and growth impact of emigration is, however, controversial. The International Monetary Fund (IMF, 2005) argues that it increases short-term growth and consumption but increases inequality and fails to prop up long-term growth. Evidence on inequality in Chapter 16 contradicts such conclusions, but simultaneously underscores the brain drain caused by the migration of skilled people. In addition, the political feasibility of mass migration to richer parts of the region or to advanced economies is dubious. Parallels with the European migrations to the Americas of the late 19th and early 20th century are inappropriate, because the Americas were extremely short of labour and finance but very wealthy in fertile land. Migration was also negotiated between the states.

As noted by Klasen (2015), a sort of 'contracted migration' (unlike the current, mostly irregular, migration) may be tried in regions with a demographic decline and rapid ageing. This may moderate the problem slightly, but its success depends on the migration regimes chosen by these countries that, while experiencing rapid ageing, still have high unemployment rates. To which countries would the SSA excess labour supply migrate? For historical reasons, Europe is a choice, but it is unlikely to make a large difference due to an already high migrant stock and the slow integration of people with different backgrounds. The rise of right-wing parties across Europe and North America could also pose a challenge for absorbing African migrants. Japan and, soon, China do need additional workers, but it is unclear whether cultural barriers will limit African migration in those countries. The need to import migrants will depend also on whether the 'Chinese diaspora' returns home.

17.3.4 Urbanisation and fertility reduction

Africa is urbanizing rapidly. Its urban population rose from 14.0 per cent in 1950 to 40.0 per cent in 2015 and is projected to rise to 56.0 per cent by 2050. Thus, what Africa achieved in 60 years took Europe 110 years to achieve - rising from 15.0 per cent in 1800 to 40.0 per cent in 1910. Africa's urbanisation rose 5.9 percentage points between 2000 and 2015, followed by Asia with 10.7 percentage points (AfDB, OECD, and UNDP, 2016). Relative to other developing regions, SSA has a low urbanisation rate, on average. Rural-urban migration is unavoidable, given very low high landman ratios and the limited development of RNAA in the region. However, migration to the cities tends to reduce, *ceteris paribus*, the incentives to have many children and facilitates population control programmes. As indicated in figure 17.2, all countries categorized as agrarian have a fertility rate of at least five.

How can Africa make urbanisation sustainable? Urban development policies must ensure inclusive structural transformation as well as poverty and inequality reduction. Such policies must promote sustainable livelihoods and access to public services such as transport, infrastructure, housing, water, sanitation and energy for the growing urban population. National institutions will have to address simultaneous environmental challenges, such as land, water and air pollution due to rapid urbanisation, including additional pressures from climate change. Investment will be required to develop urban connectivity to exploit economies of agglomeration for structural transformation. Finally, measures are needed to mitigate the impact of urban expansion into rural areas, which include changing land use patterns and skewed land distribution and promoting rural development (Chapter 11).

FIGURE 17.2 Urbanisation levels and total fertility rate by typology of African countries 9 8 7 Total fertility rate, 2010-15 TCO COD AGO UGA 6 M07 ZMB SSD COG 5 CMR MDG GAB 4 FGY 3 TUN 2 MUS Diversifiers 1 0 10 20 30 40 50 60 70 80 90 Urbanization level (%), 2015 Early urbanizers Late urbanizers
 Agrarians Natural resources-based Source: AfDB, OECD, and UNDP (2016). Note: Natural resources-based countries are not clustered in the figure because they are more scattered across the board. The history and ability of states to invest resource rents can have implications for their development.

17.4 Human development as a source of growth and equalization of opportunities and incomes

Progress on human development (education, health and nutrition) has been a major source of income equalization in many developed and developing countries. As noted, higher education among women helps reduce TFR and improve the inter-quintile TFR ratio, better-educated parents help reduce child morbidity and mortality, healthier and better nourished children perform better in schools. As shown during the last decade in Latin America, an increase in secondary (and, where possible, tertiary) enrolment rates among the children of the bottom 50-60 per cent of the population increases the supply of human capital. This, in turn, reduces skilled wages and the skill premium, while improving the distribution of human capital and, as a consequence, income inequality (Cornia, 2014). The increased schooling of poor children thus has two favourable labour market effects: a price effect and a distributional effect. These effects are even more important during periods of endogenous technological upgrading that generate a demand for skilled workers. This effect is evident, in particular, for skills that require secondary or tertiary education. The development of tertiary education has, however, been disequalising in many cases. Investing in the quality of education, technical schools and school feeding programmes generates more humane living conditions and welfare outcomes and lower medium-term income inequality. In SSA, the choice of language of instruction is also essential. Efforts to do away with the social norms that prevent or hamper access to education and welfare services are equally important.

SSA has witnessed impressive progress on human development since 2000. It has experienced more rapid growth in the Human Development Index (HDI) than any other region – 1.68 per cent from 2000 to 2010 and 0.94 per cent from 2010 to 2014. The rate of progress in some countries, including Rwanda, Ethiopia and Mozambique (Chapter 11), has been particularly remarkable. Realizing the human potential of all Africans requires attention to multidimensional inequalities, both income and non-income. In addition to lessons and policy actions on income inequality discussed above, accelerating access to non-income resources – including basic services such as health and education, political participation and access to landed property and financial resources – is critical if people are to achieve their full potential. Also some groups have less access, systematically to income and nonincome resources than others. Women and girls in particular are, on average, more deprived than men across all countries in the region. Ensuring equal access to opportunities and services for women and girls, as well as youth, would have significant positive implications for overall human development progress in SSA.

Inequality is a major obstacle to accelerating human development in SSA. Using the Inequalityadjusted HDI (IHDI), a composite index that accounts for inequality in the three dimensions of the HDI (the ability to live a long and healthy life, access to knowledge and a decent standard of living), the loss of human potential due to inequality is highest in SSA (33 per cent). In the Central African Republic, Comoros, Namibia and Sierra Leone, the IHDI is more than 40 per cent lower than the HDI; in 35 other countries, it is 30-40 per cent lower. Addressing inequality is therefore vital to achieving high human development in Africa. Focusing on promoting and financing human development is, thus, a central policy task that requires assigning more resources to these activities. Issues of affordability of social protection and benefit allocation and targeting will be also fundamental to the success of human development and redistribution.

17.5 Expanding equalising social protection or assistance

In SSA, informal, local-level household-family social security arrangements have dominated and still do. However, state-funded social security-assistance programmes have been shown to reduce income inequality substantially (up to three Gini points) in Latin America (Cornia, 2014). The potential exists to broaden and deepen the ongoing programmes in the region. Focusing on the right mix of donor and government funding is also necessary to ensure long-term sustainability of such schemes.

Social protection programmes that are well-targeted to the poorest quintiles of the population tend to be very effective in Africa. An increase in the unit value of transfers is significantly and positively correlated with a reduction in inequality (see Chapters 8 and 14). Evidence from Chapter 8 shows that a 1.0 per cent increase in coverage of the poorest quintile and a 1.0 per cent increase in average transfer amounts reduces the Gini by 0.03 per cent and 3.54 per cent, respectively. In addition, it has been observed that a reduction in Gini is positively correlated with GDP, but negatively correlated with GDP per capita and population size. In 2005, the implementation of social protection in South Africa reduced the Gini coefficient by 0.01 for the white and Asian population, compared to 0.04 and 0.01 for the coloured population and the African population, respectively (Bhorat et al., 2009). Ethiopia is known for the successful implementation of the Productive Safety Net Programmes (PSNPs) that covered 10 million people, or 11.0 per cent of the population (World Bank, 2015; Roelen, Sabates-Wheeler and Devereax, 2016). In Ethiopia, the joint distributional impact of tax and social welfare accounted for 2 percentage points in the Gini the coefficient (World Bank, 2015).

The foregoing suggests that better targeting, as well as increasing transfer amounts, is the most effective means of reducing inequality through social protection. While some pockets of positive social welfare provision do exist in the region, considerable progress must be made in terms of scaling up, ensuring adequate targeting and prioritizing social security expenditure to ensure that poverty and inequality are reduced substantially. As with the experience of other developing countries, it is evident that increased coverage, better targeting and high social transfer values can simultaneously improve living standards for the majority of Africans. As argued in UNDP (2016b), targeting social protection for women and children is likely to generate more impact on poverty and inequality reduction, as well as enhance human development in general.

17.6 Reducing inequality to accelerate the achievement of the SDGs in poor countries

The 2030 Agenda includes the SDGs and targets that relate directly to inequality, in contrast to the MDGs, which did not consider distribution issues. This reflects the way in which the development debate evolved in the period leading up to the adoption of the 2030 Agenda in September 2015, including the influential consultations and inputs from citizens around the world. Those citizens delivered the clear message that they considered inequality to be intrinsic to their perceptions of well-being.

However, addressing inequality is also essential to make progress towards other SDGs, i.e., it has an instrumental value. This point has been illustrated across several issues in this chapter and in this book. The crucial importance of addressing inequality to meet the 2030 Agenda aspiration to leave no one behind should be emphasised.

Meeting this aspiration implies more than providing additional health or education services or deploying cash transfer schemes. It calls for an understanding of the deeply entrenched drivers of exclusion, which in some cases are deeply embedded in political and social structures and are manifested by persistently high or increasing levels of inequality. Thus, addressing inequality will accelerate the SDGs across the entirety of the 2030 Agenda, beyond contributing to the inequality-specific SDGs.

17.7 A supportive macro framework

In most cases, the policy debate on achieving more tolerable levels of inequality has emphasised state and international 'redistribution', and, to a much lesser degree, the fair distribution of market incomes. This approach is reductive: fiscal space is limited and redistributive institutions are underdeveloped. Appropriate macroeconomic policies can help reduce unequal distribution of market incomes; for instance, fiscal instruments, such as direct taxes and transfers, will boost disposable incomes of poor households.

It is obviously impossible to define a universal package of macroeconomic policies to expand production capacity in all SSA countries. However, some broad principles do apply generally (Rodrik, 2003). These focus on maintaining acceptable macro balances, orienting key policy tools (interest rates, exchange rates and financial regulation) to capacity expansion and preventing highly unequalising external and internal financial crises.

As a first step, SSA countries should seek, whenever possible, to reduce dependence on foreign savings, lower foreign indebtedness and mobilise domestic savings. The experience of the Asian Tigers in the 1950s and 1960s may be a source of inspiration. Capital accumulation thus needs to be funded increasingly with domestic savings. This requires strengthening and regulating national banking institutions and improving farmers' and firms' incentives to invest. In countries with low tax-GDP ratios, raising taxes and public savings is an option to increase public investment and capital accumulation and introduce measures to discourage the capital flight common in several resource-rich countries (Ndikumana, 2014). The increase in tax-to-GDP ratios in SSA between the late 1990s and 2011 (see Chapters 2 and 7) should be continued by broadening the tax base (i.e., by reducing tax holidays, exemptions and elusion) and improving tax administration.⁷

As discussed in various chapters of this book, FDI can help reindustrialise, expand capacity and skills, and reduce inequality, particularly when directed to industries with high-labour absorption. However, existing and new domestic investments in these sectors avoid a form of dependent development. In contrast, portfolio flows to the extractive sector often lead to financial traps and exchange rate instability; they must therefore be controlled as countries see fit.

The choice of exchange rate regime is crucial. Where possible, the exchange rate should aim at promoting exports while reducing currency crises. Countries may opt for a stable, competitive REER, which has been shown to be a key factor to kickstart growth and improve long-term performance (Rodrik, 2003). In addition, LDCs should aim at achieving a broadly defined, long-term equilibrium

⁷This commitment to equity project also covers eight SSA countries (see www.commitmentoequity.org).

of the current account balance. As argued above, the 'growth financed by foreign savings' paradigm should be reconsidered to avoid problems of dependence, indebtedness and the inability to control the exchange rate.

The free trade policies adopted in the 1990s were not reversed during the 2000s. As noted, they contributed to reprimarisation, deindustrialisation, informal tertiarisation and overall informalisation of the economy, which promoted increasing inequality in oil and mining economies. Declining tariffs have gone hand in hand with shrinking manufacturing. The trade liberalisation and exchange rate policy must thus be reconsidered to avoid a further collapse of the import-competing manufacturing sector, promote new industries, actively seek to diversify exports and rebalance trade asymmetries with China and other emerging economies (Ocampo, 2012). An appropriate exchange rate is also necessary to prevent coastal cities from becoming totally dependent on food imports, while being delinked from their agricultural hinterlands.

Unlike in the past, fiscal policy should adopt a countercyclical stance during both crises and booms. Chile's Copper Stabilization Fund is a good example of this policy, which can also be pursued by means of preannounced fiscal rules and fiscal responsibility laws. There must, therefore, be a shift away from Washington Consensus policies demanding quick budget cuts during crisis years because such cuts reduce growth, investments and tax revenue over the short term, leading to an 'illusory' fiscal adjustment. Similarly, resources should be set aside during a bonanza and fast growth period. In poor countries, budget support needs to be raised during extreme external shocks. While deficits certainly need to be reduced, this should be done gradually, e.g. by 1-1.5 per cent of GDP a year.

Tax policy needs to be strengthened and in countries with very low tax-to-GDP ratios, tax revenue must be increased, while dependence on resource rents and 'fiscal laziness' should be reduced. The moderate increases in revenue/GDP are encouraging but depend, in part, on high commodity prices. While inflation rates have declined over the last two decades, monetary policy can still play a role in expanding productive capacity. In countries affected by severe structural rigidities, driving inflation below 10 per cent may be difficult and does not produce perceptible growth benefits, while rapid disinflation generally causes a contraction of GDP and, due to the endogeneity of tax revenue to GDP, a widening of the fiscal deficit. Thus, high real interest rates should be avoided because they increase production costs and prices. While inflation control is sacrosanct, its target and the speed of its reduction must take into account the above considerations and be driven by flexible inflation targeting. Finally, central banks should provide liquidity more broadly and focus on countercyclical regulation to prevent asset price bubbles leading to systemic crises.

17.8 Promote political stability, democracy and better governance

As noted in the introduction and Chapter 10, the number of SSA countries affected by internal and external conflicts has declined. However, some 15 countries are still unstable and the rise of violent extremism poses new problems. Achieving SDGs and lower inequality under such critical conditions requires introducing ex ante measures to prevent the outbreak of conflicts and ex post measures to promote the country's pacification and reconstruction.

Key ex ante measures for conflict prevention include removing or reducing acute 'horizontal inequality', which is still a major problem in a region where ethnic or regional fractionalisation is used to accentuate those horizontal inequalities and for political purposes. As suggested by Kimenyi

(2006), the task is to improve the distribution of 'public goods' (and eliminate 'patronage goods'), land, assets, state jobs, higher education, top military and managerial positions, and social services among different ethnic, religious and regional groups. It should also seek to avoid the failure of the state and political institutions that mediate – with varying success – between the interests of competing social and ethnic groups. It is particularly important to avoid the collapse of core government functions by ensuring that sufficient revenue is available for the functioning of essential economic and social services. Finally, when conflicts are triggered by a protracted growth collapse, a country's 'exchange economy' is turned into an 'economy of scarcity' and then into an 'economy of expropriation' and conflict. Under these circumstances, it is in the international community's interest to intervene early with funds and legal assistance to prevent the much greater human and economic costs of conflicts and ensuing reconstruction. The recent case of South Sudan is a case in point. The literature on aid to countries at risk of conflict finds that in highly fragile contexts, States' growth would be 1.4 percentage points lower in the absence of aid (McGillivray and Feeny, 2008).

17.9 Enhance data collection for the formulation of policies aimed at reducing inequality

Documenting and analysing inequality and formulating policies to achieve SDG10 in the years ahead require a massive effort to strengthen data collection on various aspects of inequality and its determinants. Although the number of surveys has increased and improved since the 2000s, the region still suffers from a large information gap in relation to Latin America and Asia. If 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 must massively step up efforts in this area. Little data exists on income/consumption inequality and, despite the insights gained by developing the IID-SSA, greater efforts are needed. Data on gender, ethnicity, assets, and spatial and environmental inequality are barely available or are highly fragmentary. This biases causal analysis and policy design, leaving policymakers under a veil of ignorance or with too much discretionary power.

Additional data collection efforts are also needed for the explanatory variables (including food price index, tariff rates, social transfers, land distribution and remittances) that could be used as part of a more detailed analysis of inequality determinants. Given the still-dominant share of the rural population in most SSA, greater efforts at documenting the evolution in land distribution and titling systems cannot be postponed. Agricultural censuses must be revived and a rural cadastre should be rebuilt. This is essential to promote peace and acceptable levels of inequality. The lack of such data imposes very high costs.

For some of the most data-intensive topics, ad hoc sectoral studies are needed, as in the service sector, on rural non-agricultural activities and on the relationship between education, supply of skilled workers and skill premium. Finally, the conceptualization and, next, the quality and pertinence of variables measuring the degree of democracy and the political orientation of the ruling regimes must be improved so as to better understand the politics of policymaking and identify which measures are feasible, given existing political regimes. Addressing this challenge requires choosing the data to be collected or improved over the next two to three decades, using, as a compass, the results of this book's analysis and other analyses focusing on SDG 9 and its determinants. This also requires establishing a regional statistical research centre to centralize the collection and standardised manipulation of the previous data and to design new surveys.

REFERENCES

Abidoye, B.O. and A.F. Odusola. 2015. Climate change and economic growth in Africa: an econometric analysis. *Journal of African Economies* 24(2), 277-301.

AfDB (African Development Bank). 2016. The Africa Infrastructure Development Index. Abidjan. May 2016.

AfDB (African Development Bank), OECD (Organisation for Economic Co-operation and Development) and UNDP (United Nations Development Programme). 2016. African Economic Outlook 2016: Sustainable Cities and Structural Transformation.

African Union. 2006. Policies on Post- conflict Reconstruction and Development' Policy framework adopted in Banjul, The Gambia. www. peaceau.org/uploads/pcrd-policy-framwowork-eng.pdf

Asadullah, M.N, A. Savoia and W. Mahmud. 2014. Path to development: Is there a Bangladesh surprise? *World Development* 62, 138-154. **Beegle, K, L. Christiansen, A. Dabalen, and I. Gaddis.** 2016. Poverty in a rising Africa. Washington D.C., The World Bank Group, World Bank.

Bhorat. H., C. van der Westhuizen and T. Jacobs. 2009. Income and Non-income Inequality in Post-Apartheid South Africa: What are the Drivers and Possible Policy Interventions? Pretoria, Trade and Industrial Policy Strategies (TIPS), Development Policy Research Unit (DPRU).

Canning, D., S. Raja, and A.S. Yazbeck, eds. 2015. Africa's Demographic Transition: Dividend or Disaster? Africa Development Forum. Washington D.C., World Bank.

Chen, G., M. Geiger and M. Fu. 2015. Manufacturing FDI in sub-Saharan Africa: Trends, Impact, Determinants, and Impact. The World Bank Report. Washington D.C., World Bank.

Conceição, P., S. Levine, M. Lipton and A. Warren-Rodriguez. 2016. Toward a food security future. Food Policy 60, 1-9.

Cornia, G.A. 2014. Falling inequality in Latin America: policy changes and lessons. Oxford, Oxford University Press.

Cotula, L., C. Toulmin and C. Hesse. 2004. Land tenure and administration in Africa: lessons of experience and emerging issues. February 2004. London, International Institute for Environment and Development.

Erten, B. and J.A. Ocampo. 2012. Super-cycles of commodity prices since the mid-nineteenth century. DESA Working Paper 110.

Forty Chances and ONE. 2013. The Maputo Commitments and the 2014 African Union Year of Agriculture. October 2013. https://s3.amazonaws.com/one.org/images/131008_ONE_Maputo_FINAL.pdf

ILO (International Labour Organisation). 2007. Upgrading work and enterprises in the informal economy: Organizing for voice and participation. Geneva. www.ilo.org/wcmsp5/groups/public/---dgreports/--ntegration/documents/meetingdocument/wcms_084175.pdf

IMF (International Monetary Fund). 2005. World Economic Outlook. Washington D.C.

Kimenyi, M. 2006. Ethnicity, governance and the provision of public goods. Journal of African Economies, 15(1), 62–99.

Klasen, S. 2014. "Implications of an (uneven) global population implosion". PowerPoint presentation at the SITES Annual Conference, Florence, 11 September 2014.

McGillivray, M. and S. Feeny. 2008. Aid and growth in fragile states. UNU-WIDER Working Paper 2008/003. Helsinki.

McMillan, M., D. Rodrik and I. Verduzco-Gallo. 2014. Globalisation, structural change and productivity growth with an update on Africa. World Development 63, 11-32.

Ndikumana, Leonce. 2014. Capital flight and tax havens: impact on investment and growth in Africa. *Révue d'Economie du Developpement,* 2014/2.

Ocampo, J.A. 2012. The development implications of external integration in Latin America. *UNU-WIDER Working Papers* 2012/48. Helsinki, UNU-WIDER.

_____. 2013. Super cycles of commodity prices since the mid-nineteenth century. Presentation made at the International Monetary Fund, March 20.

Odusola, A.F. 2014. Land grab in Africa: a review of emerging issues and implications for policy options. *International Centre for Inclusive Growth's Working Paper Series* No 24.

Page, J. 2012. It's what you make, not how you make it: Why Africa needs a strategy for structural change. Old problems, new solutions: Harnessing technology and innovation in the fight against global poverty. The 2012 *Brookings Blum Roundtable Policy Briefs*. www.brookings. edu/wp-content/uploads/2016/06/10-blum-roundtable-full-report.pdf

Ringler, C., T. Zhu, X. Cai, J. Koo and D. Wang. 2010. Climate change impact on food security in sub-Saharan Africa: insights from comprehensive climate change scenarios. IFPRI, Working Paper No. 1042. Washington, D.C.

Rojas-Suarez L. 2010. The International Financial Crisis: Eight Lessons for and from Latin America. Centre for Global Development. Working Paper 202, January.

Rodrik, D. 2003. Growth strategies. NBER Working Paper 10050. Cambridge, MA, National Bureau of Economic Research.

Roelen, K., R. Sabates-Wheeler and S. Devereax. 2016. Social protection, inequality and social justice. World Social Science Report 2016. Paris, UNESCO and the ISSC. http://unesdoc.unesco.org/images/0024/002458/245877e.pdf

Traverso, S. 2015. Escaping from low level equilibrium poverty traps: the case of Bangladesh. University of Florence. PhD term paper.

UNDP (United Nations Development Programme). 2012. Africa Human Development Report 2012: Towards a Food Secure Future. New York, UNDP Regional Bureau for Africa.
2016a. Primary Commodity Booms and Busts: Emerging Lessons from Sub-Saharan Africa. New York, UNDP Regional Bureau for Africa.
2016b. Africa Human Development Report 2016: Accelerating Gender Equality and Women's empowerment in Africa. New York, UNDF Regional Bureau for Africa.
United Nations Population Division. 2015. World Population Prospects 2015. New York.
World Bank. 2015. Ethiopian Poverty Assessment. Addis Ababa.
n.d. Jump-starting maize production in Malawi through universal starter packs. www.worldbank.org/html/extdr/fertilizeruse/documentspdf/MalawiSP.pdf

Glossary

Accelerator principle. An economic concept that establishes a connection between output and capital investment. According to this principle, if demand for consumer goods increases, then the demand for machines and other inputs necessary to produce these goods will increase even more (and vice versa). See Chapter 7.

Backward linkage or integration. Integration refers to a company's acquisition of another business in its supply chain. Backward integration is a type of vertical integration in which a company seeks ownership or control of its raw materials supply system. A typical example is when a clothing company acquires a cotton plantation. The objective is to increase operational efficiency and cost saving. See Chapters 4, 12 and 17.

Beneficiation. Involves transforming a primary material (produced by mining, agriculture or any extraction process) to a more finished product, which has a higher export sales value. Also referred to as value-added processing. See Chapter 6.

Between-sector. Measures the inequality resulting from differences in average income between two or more sectors. An example is the difference in inequality between agricultural and non-agricultural sectors. When it is limited to two sectors, it is referred to as sector dualism. See Chapters 1, 2, and 16.

Capital flight. Large-scale departure of financial assets and capital from a nation due to events such as political or economic instability, currency devaluation, the imposition of capital controls or public health hazards. Capital flight may be legal, as when foreign investors repatriate capital back to their home country, or illegal, especially in countries where capital control is very stringent or through illicit financial flows. See Chapters 2, 6, 12, 15, 16 and 17.

Centre-periphery development model. A model of the spatial structure of development in which less-developed countries are defined by the dependence of a less-developed 'periphery' on a developed 'core' country or region. This deliberate colonial development model was based on extracting raw materials from low-income countries (periphery) in order to develop and sustain the economies of advanced nations (centre). It highlights the inequality in levels of development between the two. Also known as core-periphery development model. See Chapters 5, 10 and 12.

CFA zone. Composed of two monetary unions, the West African Monetary Union (WAEMU) and the Central African Economic and Monetary Community (CEMAC). The CFA franc is the name of two currencies (the West African CFA franc and the Central African CFA franc) used in Africa. Under the arrangement of this monetary union, each country is obliged to keep at least 65.0 per cent of its foreign exchange reserves with the French Treasury as well as another 20.0 per cent to cover financial liabilities. See Chapter 2.

Chenery norm. The share of manufacturing in a country's GDP; that is, the country's rate of industrialisation as predicted by its per capita income and population size. This term is associated with Professor Hollis B. Chenery. See Chapter 2.

Conditional cash transfer programmes. A tool of poverty reduction that provides money to households on the condition that they comply with certain pre-defined requirements. These requirements may include up-to-date vaccinations, regular visits to a health care facility, regular school attendance by children and compliance with health and nutrition promotion activities. See Chapters 8 and 12.

Demographic dividend. The accelerated economic growth or boost in productivity that may result from a decline in a country's mortality and fertility, and the subsequent change in the age structure of the population. Increased productivity arises from improved employment absorption capacity, increased national savings, enhanced healthy living and increased aggregate demand. See Chapters 2, 9, 14, 16 and 17.

Demographic transition. The change in population over time that results from high birth and death rates to lower birth and death rates as a country or region develops from a pre-industrial to an industrialised or more sophisticated economic system. See Chapters 1, 4, 9, 14 and 17.

Dependency rate. Measures the proportion of the total population outside the labour force (i.e., population of 14 years and below, and 65 years and above). It is intended to capture the influence of a population's age structure on the process of economic growth. See Chapters 1, 2, 9, 13, 14, 16 and 17.

Derived distributive channel. In this context, 'derived' is taken from the economics term, 'derived demand', which refers to a demand for a commodity or service that is a consequence of the demand for something else. It is used here in a political context to refer to a demand for votes or to avoid revolution by distributing national resources (either through distribution of infrastructure or better access to services and creating opportunities or providing cash transfers) to a large segment of the population. See Chapter 4.

Direct taxes. Taxes levied by a government on incomes of households and firms (for example, personal income tax or corporate tax). See Chapters 7, 9, 13, 14 and 16.

Distress migration. Movement from one's usual place of residence undertaken in conditions where the individual and/or family perceives that migration is the only option that will allow them to survive with dignity. An example is migration to urban areas or from a conflict zone to a peaceful zone. See Chapters 13 and 16.

Distress urbanisation. Urbanisation resulting from rural-urban migration under the conditions that lead to distress migration. Rising urbanisation associated with increased slum dwellers, rising urban poverty and a rising incidence of exploitative practices, such as child labour, are signs of distress urbanisation. See Chapter 16.

Distributive effects. The impact of the distribution of income gains, losses or both across individuals in the economy. It may also be viewed as the distributive impact of a shock or policy change across individuals or sectors of an economy. See Chapter 13.

Dutch disease. An economic term that refers to the negative consequences arising from large increases in the value of a country's currency. The term originated from the fears of deindustrialisation that gripped the Netherlands with the appreciation of the Dutch currency that followed the discovery of natural gas deposits in the 1960s. It is primarily associated with a natural resource discovery, but can also result from any large influx of foreign currency into a country, including foreign direct investment, foreign aid or a substantial increase in natural resource prices. See Chapters 2, 3, 6, 7, 16 and 17.

Economic complexity. A measure of the knowledge in a society that is translated into the products it makes. The most complex products are sophisticated chemicals and machinery; least complex products are raw materials or simple agricultural products. The economic complexity of a country is dependent on the complexity of the products it exports. Complexity is closely linked to a country's level of development and its future economic growth. See Chapter 5.

Eigenvector: An eigenvector is a non-zero vector whose direction does not change when a linear transformation is applied to it. See Chapter 5.

Elasticity of demand. The degree to which demand for a good or service varies with changes in its price. See Chapters 4 and 9.

Enclave sector. An industry or sector that does not have any links with local enterprises or other sectors of the economy that could provide production inputs or consume its products (backward/forward linkages). It is often used in the context of extractive industries that are detached from the rest of the economy. See Chapters 2, 7, 9 and 11.

Engel's Law. This is an economic theory propounded by Ernst Engel in 1857, which states that the proportion of income allocated to food purchases decreases as income rises, even if absolute expenditure on food rises. That is, as households' incomes rise, the percentage share of income spent on food falls while the percentage spent on non-food items rises. By implication, the income elasticity of demand of food is between 0 and 1. See Chapters 7, 9, 14.

Extractive industries. Those industries involved in extracting or exploiting oil, mining and gas resources. The activities of this sector are often characterised by social and environmental challenges, as well as transparency and reputational risks. See Chapters 1, 2, 3, 6, 7, 9, 14 and 17.

Factor endowment. The amount of labour, land, money and entrepreneurship that a country possesses and could exploit for productive activities. The differences in the development and utilization of these factors explain the variations in the country's productivity. See Chapters 1, 5, 13 and 16.

Factor intensity of production. A measure of those factors that are used in relatively greater quantities than other production factors. For example, oil refining is capital-intensive compared with clothing manufacture because oil refiners use a higher ratio of capital to labour than clothing producers. See Chapters 1 and 16.

Farm intensification. Refers to practices that boost agricultural productivity, allowing farmers to produce more food with existing land and water. These practices may include additional use of fertilizers and pesticides. See Chapter 4.

Fiscal decentralisation. The process of transferring budgetary authority from a central government to elected subnational governments in order to grant them power to make decisions regarding taxes and expenditures. See

Chapter 7.

Fiscal space. The room in a government's budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy. Fiscal space must exist or be created if extra resources are to be made available for worthwhile government spending. A government can create fiscal space by raising taxes, securing outside grants, cutting lower priority expenditure, borrowing resources (from citizens or foreign lenders) or borrowing from the banking system (and thereby expanding the money supply). See Chapters 7 and 9.

Food security. As defined by the United Nations' Committee on World Food Security, the condition in which all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. See Chapters 1, 2, 4, 6, 11, 12 and 17.

Forward linkage or integration. A business strategy that involves a form of vertical integration in which a company seeks control of the channels of distribution of its products or financing operations. This strategy allows a company to move down on its supply chains. An example would be a clothing company that acquires retailers that sell the clothes. See Chapters 4 and 17.

Gini index (coefficient or ratio). A measure of the deviation, from a perfectly equal distribution, of the distribution of income among individuals or households within a country. A value of 0 represents absolute equality, a value of 1 (or 100 per cent) stands for absolute inequality. See Chapters 1-17.

Green Revolution. The simultaneous development of new varieties of food plants and altered agricultural practices that greatly increase crop yields. Initiatives, which began in the 1960s, include the development of high-yielding varieties of grains, expansion of irrigation infrastructure, and distribution of hybridized seeds, synthetic fertilizers and pesticides. See Chapters 2, 4, 12, 13 and 17.

Growth elasticity of poverty. Measures how economic growth contributes to poverty reduction (otherwise known as the poverty-reducing power of economic growth). It is defined as the percentage reduction in the poverty rate associated with a percentage rise in economic growth. See Chapters 1-3, 7, 14 and 15.

Hump theory of migration. Refers to the short-term influx in migration induced by trade and economic policies (such as trade liberalisation, foreign direct investment and aid) as compared to the expected migration trend without such initiatives. The migration hump theory proposes that trade and migration are complementary in the short or medium term but are substitutes in the long term. See Chapters 1, 9, 14 and 16.

Income transfers. Benefits, both cash or in-kind (such as health care, a pension, or disability payments), intended to help people cope with a certain risk or to equalise the consumption of goods or services within a society. See Chapter

Index of fractionalisation. A measure of ethnic diversity (heterogeneity), or the degree to which a society is split into distinct groups. See Chapter 10.

Indirect taxes. Taxes imposed by a government on goods and services (for example, sales tax, service tax or excise duty). See Chapters 7, 9, 12, 13, 14, 15 and 16.

Kuznets' theory. As advanced by Simon Kuznets in the 1950s and '60s, it examines the relationship between economic inequality and income per capita over the course of economic development. It posits that as an economy develops, market forces first increase and then decrease overall economic inequality in a society. It is also called the inverted U-shape of the Kuznets curve or the trickle down effect. See Chapters 4, 7-10, 12 and 16.

Labour market flexibility. The willingness and ability of labour markets to respond to changes in market conditions, including the demand for labour and the wage rate. Flexible labour markets are characterised by factors such as a firm's ability to hire and fire workers, labour mobility (occupational and geographic), and regulation (firms' ability to set wages (i.e., no minimum wage) and change work hours). See Chapter 9.

Malthusian trap. A theory propounded by Thomas Robert Malthus in 1798 that proposed a relationship between growth in population and agricultural growth. He argued that because food supply expansion is linear while population growth is exponential, there must be a stage at which a food supply will become inadequate to feed a given population. However, the industrial and green revolutions of later years have obviated this trap, or catastrophe. Nevertheless, this theory has been expanded to other areas, such as the concern that human overpopulation may increase resource depletion, or environmental degradation, to a degree that is unsustainable. See Chapters 2 and 17.

Market-clearing wage. An equilibrium wage where the supply of labour equals the demand for it. It is a wage determined in the absence of excess supply of labour (unemployment) and absence of excess demand for it (labour shortage). See Chapter 4.

Natural resource rents. The difference between the extraction and production costs of and revenues from natural resource extraction. See Chapters 6 and 7.

Neoclassical theory. An economic theory built on these three basic assumptions: 1. People have rational preferences among outcomes; 2. Individuals maximize utility and firms maximize profits; and 3. People act independently on the basis of full and relevant information. It is often used to determine goods, outputs and income distributions in markets through supply and demand. See Chapters 5 and 10.

Opportunity value index. Measures the extent of productive opportunities associated with a country's export structure. For instance, countries with a high opportunity value have abundant products that can be produced given their current export basket, while the converse holds for countries with low opportunity value. The higher the opportunity value index, the greater the opportunities to develop new products and acquire the necessary missing capabilities and vice versa. See Chapter 5.

Parastatal. An agency or a company owned, controlled or partially controlled by governments. Those organisations are separate from governments but their activities often serve the state interest directly or indirectly. See Chapter 12.

Pay compression. The situation that arises when there is only a small difference in pay between employees,

regardless of their skills or experience. It is also referred to as salary or wage compression. Pay or wage compression ratio is the fraction of the lowest paid employee to the highest paid employee. See Chapters 7 and 14.

Poverty alleviation elasticity of growth. An alternative term for 'growth elasticity of poverty', which is the main reference terminology and means the poverty-reducing power of growth. See Chapter 2.

Poverty elasticity of agriculture. The extent to which agricultural growth can alleviate poverty (see growth elasticity of poverty). See Chapter 4.

Primarisation. Refers to a rising and higher proportion of primary products (such as unprocessed agricultural and mineral products) in the export mix. See Chapter 2.

Real effective exchange rate. The weighted average of a country's currency relative to an index or basket of other major currencies, adjusted for the effects of inflation. The weights are determined by comparing the relative trade balance of a country's currency against each country within the index. See Chapters 2, 12, 16 and 17.

Reprimarisation. The return to primary commodities as the main source of export revenues. See Chapter 17.

Resource curse. Refers to what happens when a country focuses all of its energies on a single sector, such as extractives, and neglects other major sectors. Despite natural resource wealth, such countries often suffer from a high level of poverty, a situation known as the 'paradox of plenty' or the 'resource curse'. Most countries that suffer from the resource curse are characterised by high poverty, poor governance and armed conflict. See Chapters 6, 16 and 17.

Resource-dependence. Resource-dependence theory (RDT) is the study of how organisations' external resources (inputs such as capital, energy, labour and materials) affect their behaviour. However, this concept is used here in the context of natural resources and refers to the export intensity of mineral products, energy products and crops. A country is resource-dependent if 25 per cent or more of its export revenue derives from natural resources. See Chapters 3, 6, 8 and 14.

Revenue mobilisation. Government efforts to raise money from internal or external sources to satisfy demands for public spending; for example, by borrowing from citizens or from abroad, through money creation, or through taxation. See Chapters 6, 7, 13 and 14.

Royalty rates. The share of oil and gas revenues that governments collect in exchange for the right, granted to companies, to extract natural resources, such as petroleum, natural gas and minerals, from government-owned lands and waters. See Chapter 6.

Sectoral dualism. The main assumptions of this concept are the existence of 'surplus labour', the lack of commercialisation and the presence of economically oppressive institutions in the 'backward' sector, leading to dualism between competitive and non-competitive sectors. See Chapter 4.

Skill premium. The difference between the wage of skilled labour and that of unskilled labour, usually measured, in developed countries, by the wage difference between college-educated and high-school educated workers. See Chapters 12, 16 and 17.

Social protection. The social safety net or the social insurance provided during old age, unemployment, sickness, invalidity, work injury and maternity through public and private sector initiatives. It takes the form of income or consumption transfers to the poor, protecting the vulnerable against livelihood risks and enhancing the social status and rights of the marginalised. The objective is to reduce the economic and social vulnerability of the poor and marginalised groups. See Chapters 1, 3, 4, 6-9, 12-14 and 16-17.

Structural adjustment programmes. Economic policies that countries must adopt to qualify for new World Bank and International Monetary Fund (IMF) loans, and to help them repay older debt owed to commercial banks, governments and the World Bank. They require borrowing countries to implement macroeconomic policy changes such as currency devaluation, privatization of public enterprises, elimination of subsidies to reduce expenditures and trade liberalisation. See Chapters 2, 4, 8 and 12.

Structural transformation. The reallocation of economic activity across three broad sectors (agriculture, manufacturing and services) that accompanies the process of modern economic growth. See Chapters 1, 3-5, 11-14, 16 and 17.

Subsistence agriculture. Form of farming in which nearly all crops or livestock raised are used to maintain the farmer and the farmer's family, leaving little, if any, surplus for sale or trade. See Chapters 2, 4, 12, 13 and 16.

Tariff escalation. The process of protecting a country's manufacturing industry by setting low tariffs on imported materials (raw or intermediate) used by that industry and higher tariffs on finished products to protect the goods that it produces. See Chapter 4.

Tariff peaks. Tariffs that remain high on a few products that governments consider to be sensitive (to protect domestic producers). Some affect exports from developing countries. See Chapter 4.

Tax handles. Refers to the tax base or sectors on which taxes can be levied with ease. See Chapter 7.

Tenancy reforms. An intervention to provide tenants with more secure and profitable land rights. Reforms may include rent regulation, security of tenure and conferring ownership on tenants. See Chapter 17.

Tertiary services sector. The economic sector that provides services, as opposed to the primary sector (raw materials) and the secondary sector (manufacturing). See Chapter 3.

Time series. An ordered sequence of values of a variable at equally spaced time intervals (e.g. monthly or annually); it is used for economic analysis and forecasting, among many other things. See Chapters 1, 3, 12 and 15.

Total factor productivity (TFP). The portion of output not explained by the amount of inputs (labour and capital) used

in production. It accounts for effects in total output growth relative to the growth in traditionally measured inputs of labour and capital. TFP is also referred to as multi-factor productivity or long term technological change. See Chapters 1, 4, 5 and 9.

Trade liberalisation. The removal or reduction of restrictions or barriers on the free exchange of goods between nations. This includes the removal or reduction of tariff obstacles, such as duties and surcharges, and nontariff obstacles, such as licensing rules, quotas and other requirements. It is intended to promote free trade. See Chapters 1, 2, 12, 16 and 17.

Value added creation. Creation of increased value of an article, exclusive of the initial costs. It applies to instances where a firm enhances its product or service before offering it to customers. In macroeconomics, it refers to the contribution of the factors of production (e.g. capital and labour) to raising the value of a product. See Chapter 13.

Variance inflation factor (VIF): Quantifies the severity of multicollinearity in an OLS regression analysis. It provides an index that measures how much the variance (the square of the estimate's standard deviation) of an estimated regression coefficient is increased because of collinearity. Generally defined as (1/(1-R2), the rule of thumb is that a VIF greater than 10 exhibits signs of serious multicollinearity and should be corrected. See Chapters 4, 8, and 10.

Wage compression. See 'pay compression'. See Chapter 7.

Within-sector inequality. The distribution of land, human capital and other production assets within the urban and rural economy. See Chapters 1, 2 and 16.

Figures

FIGURE 2.1	Trend over time in the number of conflicts per year	29
FIGURE 2.2	Trend in the average Gini coefficient of consumption expenditure per capita for 29 SSA countries, 1993-2011: unweighted data and population-weighted data	30
FIGURE 2.3	Trend in unweighted Gini coefficient of consumption expenditure per capita for four groups of countries, 1993-2011	31
FIGURE 2.4	Relation between the share of value added (VA) (x axis) in ten production sectors and the Gini coefficient (y axis) for 11 SSA countries, yearly values over 1980-2011	34
FIGURE 2.5	Phases of maize yields in Malawi and Zambia, 1961-2011	37
FIGURE 2.6	Remittances and other resource flows to sub-Saharan Africa, 1990-2010	42
FIGURE 2.7	Growth rate of real GDP and real GDP/capita, selected sub-periods	43
FIGURE 2.8	Enrolment rates of the poorest and richest quintiles of 15-19-year-olds who completed grade 6, late 2000s	47
FIGURE 3.1	Distribution of Gini coefficients: Africa and other developing economies	56
FIGURE 3.2	Movements in the Gini coefficient, 1990-2013	57
FIGURE 3.3	Rates of change in income inequality in Africa	58
FIGURE 3.4	Poverty rates across Africa, LAC and South Asia, 2010	60
FIGURE 3.5	Change in industry and manufacturing as shares of GDP, 2000-2010, (per cent)	63
FIGURE 4.1	Rural poverty in Africa	78
FIGURE 4.2	Sub-Saharan Africa: Agriculture, manufacturing and services value added (% of GDP), 1981-2015	80
FIGURE 4.3	Growth rates of agriculture by region	81
FIGURE 4.4	Fertilizer consumption per hectare of arable land, 2002-2013, by region	82
FIGURE 4.5	Agricultural productivity and value added in GDP	83
FIGURE 4.6	Impact of total factor productivity on inequality and rural poverty	95
FIGURE 4.7	Correlation between national poverty and total factor productivity	95
FIGURE 5.1	Economic Complexity Index and the log of GDP per capita by low-, middle- and high-income countries, 2013	107
FIGURE 5.2	Economic complexity and number of manufactured products exported, 2013	108
FIGURE 5.3	Product space: Ghana compared to Uganda, 2013	112
FIGURE 5.4	Uganda product space evolution, 2005-2013	113
FIGURE 5.5	Economic complexity and opportunity value, 2013	113
FIGURE 5.6	Opportunity value in 1995 pure manufactured exports, 2013	115
FIGURE 5.7	Growth in number of pure manufactured products by country in terms of increasing opportunity value, 1995	117
FIGURE 6.1	Level of resource dependence, 2008-2012	130
FIGURE 6.2	Oil, mineral and natural gas rents as a percentage of GDP, 2008-2012	131
FIGURE 6.3	GDP growth and level of resource dependence, 2008-2012	132
FIGURE 6.4	Resource dependence and inequality	133
FIGURE 6.5	Change in inequality (top 20%/bottom 20%), 1990s-2000s	134
FIGURE 6.6	Resource Governance Index: Composite scores, 2013	136

FIGURE 6.7	Resource dependence and social protection, 2012	137
FIGURE 6.8	Gross capital formation (annual % growth), 2008-2012	138
FIGURE 6.9	Illicit flows in selected African countries, 2000-2009	141
FIGURE 6.10	The structure of Mopani Copper Mine, Zambia	142
FIGURE 7.1	The 19 most unequal countries globally	157
FIGURE 7.2	Changes in Gini for the top 10 and the bottom 40 percentiles, 1990s-2000s	159
FIGURE 7.3	Income share of the bottom 40 percentiles in the top 10 percentiles	160
FIGURE 7.4	Correlation between the Gini coefficient and parliamentarians' pay as a ratio of their countries' GDP per capita	161
FIGURE 7.5	Tax revenues-to-GDP ratio by regions, 2006-2010	164
FIGURE 7.6	Effectiveness of fiscal distribution in Africa	169
FIGURE 7.7	Correlation between fiscal space and market Gini coefficients (averages)	173
FIGURE 8.1	Annualised GDP growth relative to public social protection expenditure growth, 2000-2011	181
FIGURE 8.2	Social protection expenditure as a percentage of GDP for SSA, 2010-2011	183
FIGURE 8.3	Ratio of the poorest quintiles to total coverage, latest year	184
FIGURE 8.4	Average transfer amount in SSA countries, latest year	185
FIGURE 8.5	Relationship between public social protection expenditure and the Mo Ibrahim Index, 2013	186
FIGURE 8.6	Public social protection expenditure by income classification, latest year	187
FIGURE 8.7	Public social protection expenditure by resource- and non-resource-dependent country, latest	188
FIGURE 8.8	Average annual growth rates of public social spending relative to change in the Gini index, 2000-2011	190
FIGURE 8.9	Social protection relative to poorest quintile coverage relative to change in the Gini index – SSA and other regions	192
FIGURE 8.10	Social protection transfer amount and Gini inequality reduction due to SPL, SSA and other developing regions	193
FIGURE 8.11	The Social Protection Index and Gini inequality reduction due to social protection – SSA and other developing regions	194
FIGURE 9.1	Average growth rate of population by regions	205
FIGURE 9.2	Population growth rate in Africa, by region	206
FIGURE 9.3	Fertility rates by region, 1970-2014	207
FIGURE 9.4	Correlation between fertility rate and early child marriage	208
FIGURE 9.5	Correlation between fertility rate and Gini	211
FIGURE 9.6	Correlation of population growth and economic growth with Gini, using deviation from regional averages	212
FIGURE 9.7	Correlation between change in Gini and faster than average regional growth rate, 2000-2015	213
FIGURE 9.8	Change in Gini and per capita income	214
FIGURE 10.1	Percentage change in poverty, by region, 2012	223
FIGURE 10.2	Income inequality trends in African countries	224
FIGURE 10.3	Top 20 countries with highest likelihood of conflict globally (Global Conflict Risk Index intensity)	225
FIGURE 10.4	Overview of Africa's performance in the 2016 Fragile States Index	226
FIGURE 10.5	Correlation between fragility and extreme poverty in Africa	228

FIGURE 11.1	Education disparities between rich and poor in SSA, 2010	248
FIGURE 11.2	Overall loss of HDI (%) due to inequalities	252
FIGURE 11.3	Change in health inequality 2010-2014, SSA	253
FIGURE 11.4	Change in education inequality 2010-2014, SSA	253
FIGURE 11.5	Change in income inequality 2010-2014, SSA	254
FIGURE 11.6	Trends in average annual change in HDI level in African countries, by development group	257
FIGURE 11.7	Human development change, by subregion	257
FIGURE 11.8	HDI change against HDI loss from inequality	258
FIGURE 11.9	Overall loss due to inequality, by human development group	259
FIGURE 11.10	Dimensions of inequality in human development, by human development group	259
FIGURE 11.11	Human development and gender inequality in Africa	261
FIGURE 12.1	Trend in the Gini coefficient of consumption expenditure per capita	274
FIGURE 12.2	Evolution of the net barter terms of trade index, 1967-2013	275
FIGURE 12.3	Trend in urea price in dollars and Malawian Kwacha	277
FIGURE 12.4	Index of maize and cash crops production per capita	277
FIGURE 12.5	Prevalence of HIV/AIDS in the 15-45 age group	280
FIGURE 12.6	Evolution of the shares of value added in the main sectors, 1970-2012	281
FIGURE 12.7	Trends in average tariff rate and manufacturing value added share, 1994-2011	285
FIGURE 12.8	Net attendance rate in primary education and secondary education, by income quintiles, 2000, 2004 and 2010, and growth rates, 2000-2010	288
FIGURE 12.9	The Farm Input Subsidy Programme as a percentage of the social protection budget and the agriculture budget	288
FIGURE 13.1	Trend in CPI, 1995-2014 and trend in the FPI/CPI ratio and food production index per capita, 2001-2013	298
FIGURE 13.2	Incidence of direct taxes as per cent of market income, 2011	311
FIGURE 14.1	Overall Gini for Burkina Faso, Ghana and Tanzania	319
FIGURE 14.2	Change in income shares of the highest 10% and lowest 40%	320
FIGURE 14.3	National, rural and urban poverty in Burkina Faso, Ghana and Tanzania (\$1.90, %)	321
FIGURE 14.4	Correlation index of inequality and fiscal distribution in Burkina Faso, Ghana and Tanzania	326
FIGURE 14.5	Wage compression ratio and income inequality in selected countries	329
FIGURE 15.1	Trend in the log of aggregate real GDP/capita in SSA, 1960-2012	346
FIGURE 15.2	Example of interpolation of the missing data points and choice of the best interpolated trend	350
FIGURE 15.3	Types of surveys in African countries, 2000-2011	353
FIGURE 15.4	Top 1% income share in Mauritius and South Africa, 1990-2011	354
FIGURE 15.5	Trend in the HBS-based Gini coefficient and the Gini corrected on the basis of tax returns data, South Africa, 1990-2010	356
FIGURE 15.6	Evolution over time in the labour share in selected SSA countries and years	357
FIGURE 15.7	Monthly consumer price of millet: 2005 vs. 2004 and average 2000-2004	359
FIGURE 15.8	Trends in the index number of the official poverty line, CPI and price of main staples, Burkina Faso	360

FIGURE 15.9	Impact on the Gini coefficient of changes in the FPI/CPI ratio, Malawi and South Africa	361
FIGURE 15.10	Impact on Gini coefficient of changes in the FPI/CPI ratio in Mali and Madagascar	362
FIGURE 15.11	Relationship between the first difference over time of the FPI-CPI ratio and the first difference of the Gini coefficient,18 SSA countries, 2000-2012	363
FIGURE 15.12	Impact of cash transfers and social spending on health and education, South Africa, 2006	364
FIGURE 16.1	Trends in unweighted average regional Gini, 1993-2010	370
FIGURE 16.2	Relationship between the growth rate of GDP/c and the growth rate of the Gini coefficient, 1991/3-2011	373
FIGURE 16.3	Trends in the average value added shares of 29 sample countries for manufacturing, mining-utilities and construction; and for agriculture and services, 1991-2011	374
FIGURE 16.4	Primary net enrolment rates and secondary enrolment rates	375
FIGURE 16.5	Primary net enrolment rates and secondary enrolment rates	376
FIGURE 16.6	Average regional tax/GDP ratio and direct taxes/GDP ratio	377
FIGURE 16.7	Evolution of public spending on health, education and social transfers as a share of GDP in relation to the Gini coefficient in countries with falling and inverted U-shaped Gini, and rising and U-shaped Gini	378
FIGURE 16.8	Trend in the external debt/GNI ratio, 1995-2011	379
FIGURE 16.9	Trends in the REER by country group, 1991-2011	380
FIGURE 16.10	Average regional tariff rate and average value added of the manufacturing sector	381
FIGURE 16.11	HIV/AIDS incidence in the adult population, SSA and its main regions	382
FIGURE 17.1	Long term 'super-cycles' in the real prices of metals and oil	406
FIGURE 17.2	Urbanisation levels and total fertility rate by typology of African countries	411
Tables		
TABLE 2.1	Average Gini coefficients of land concentration by type of land tenure system	25
TABLE 2.2	Ratio of average earnings in manufacturing and agriculture	26
TABLE 2.3	Ratio of average earnings in manufacturing and agriculture	28
TABLE 2.4	Benefit incidence analysis of public spending on education and health in the 1990s,	
	sub-Saharan Africa (unweighted averages of total sectoral spending)	28
TABLE 2.5	, , , ,	28 36
	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries	
TABLE 2.6	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data	36
TABLE 2.6 TABLE 2.7	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data Evolution of the percentage share of natural mining rents on GDP, 1990, 2000 and 2010	36 38
Table 2.6 Table 2.7 Table 2.8	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data Evolution of the percentage share of natural mining rents on GDP, 1990, 2000 and 2010 Trends in tax/GDP ratio and relative importance of tax instruments in Africa	36 38 39
TABLE 2.6 TABLE 2.7 TABLE 2.8 TABLE 2.9	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data Evolution of the percentage share of natural mining rents on GDP, 1990, 2000 and 2010 Trends in tax/GDP ratio and relative importance of tax instruments in Africa Non-contributory pension programmes in Southern Africa	36 38 39 39
TABLE 2.6 TABLE 2.7 TABLE 2.8 TABLE 2.9 TABLE 2.10	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data Evolution of the percentage share of natural mining rents on GDP, 1990, 2000 and 2010 Trends in tax/GDP ratio and relative importance of tax instruments in Africa Non-contributory pension programmes in Southern Africa Unit prices of main agricultural commodities exported by SSA	36 38 39 39 41
TABLE 2.6 TABLE 2.7 TABLE 2.8 TABLE 2.9 TABLE 2.10 TABLE 2.11	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data Evolution of the percentage share of natural mining rents on GDP, 1990, 2000 and 2010 Trends in tax/GDP ratio and relative importance of tax instruments in Africa Non-contributory pension programmes in Southern Africa Unit prices of main agricultural commodities exported by SSA Official grants/GDP in main aid receivers and in the aggregate	36 38 39 39 41 42
TABLE 2.5 TABLE 2.6 TABLE 2.7 TABLE 2.8 TABLE 2.9 TABLE 2.10 TABLE 2.11 TABLE 2.12 TABLE 2.13	sub-Saharan Africa (unweighted averages of total sectoral spending) Index of agricultural output per capita (2004-2006 = 100) for 26 of the 29 IID-SSA countries with inequality data Evolution of the percentage share of natural mining rents on GDP, 1990, 2000 and 2010 Trends in tax/GDP ratio and relative importance of tax instruments in Africa Non-contributory pension programmes in Southern Africa Unit prices of main agricultural commodities exported by SSA Official grants/GDP in main aid receivers and in the aggregate Trends in population growth rates by main sub-regions of SSA	36 38 39 39 41 42 44

TABLE 3	3.2	Sectoral breakdown of economic activity in Africa, 1990, 2000 and 2010-2012	62
TABLE 3	3.3	Enrolment rates in Africa, 2011	69
TABLE 4	l.1	Impact of agricultural productivity on total employment in SSA	91
TABLE 4	1.2	Correlation Index between variables of interest	92
TABLE 4	1.3	Impact on inequality and rural poverty in SSA	93
TABLE 5	5.1	Explaining manufacturing performance in Africa, 1995-2013: The neoclassical specification	120
TABLE 5	5.2	Explaining manufacturing performance over 1995-2013 period	121
TABLE 6	5.1	Fiscal incidence of scaled-up social protection programmes in Africa	146
TABLE 7	'.1	Fiscal revenue indicators in selected regions, 1991-2010 (% of current GDP)	163
TABLE 7	'.2	Tax revenue-to-GDP ratio (latest value, 2008-2013)	165
TABLE 7	'.3	Government expenditure in selected regions 1991-2010 (% of current GDP)	168
TABLE 7	'.4	Regression results using Gini coefficient as the dependent variable	174
TABLE 8	3.1	Social protection and inequality reduction: Econometric results, SSA	196
TABLE 9).1	Projected total population, 2015-2100	204
TABLE 9	1.2	Correlation Index between Gini and other variables of interest	215
TABLE 9	1.3	Regression results with Gini and population growth as dependent variables	216
TABLE 9).4	Income and population growth that is faster or slower than the regional average	217
TABLE 1	0.1	Improvements or worsening in the Fragile States Index, 2007-2016	227
TABLE 1	0.2	Correlation between inequality measures and conflict indicators	227
TABLE 1	0.3	Variables and summary statistics	234
TABLE 1	0.4	OLS-dependent variable: Cumulative conflict intensity	236
TABLE 1	0.5	OLS-dependent variable: Conflict intensity	237
TABLE 1	0.6	OLS-dependent variable: Conflict-related deaths	238
TABLE 1	0.7	Logit-dependent variable: cumulative conflict intensity	239
TABLE 1	1.1	Loss in human development due to inequality, by level of development	251
TABLE 1	1.2	African countries by region and level of human development	255
TABLE 1	2.1	Gini coefficients of the main economic sectors	273
TABLE 1	2.2	Female/male ratio for economic and social indicators	274
TABLE 1	2.3	Malawi's population dynamics, 1980-2010	279
TABLE 1	2.4	Rao decomposition of the increase in the Gini coefficient between 2004 and 2011	282
TABLE 1	2.5	Decomposition of the rise of the Gini index, by type of income, 2004-2011	284
TABLE 1	2.6	Main macroeconomic indicators, early 1990s-2012	286
TABLE 1	2.7	Trend in main government fiscal indicators, 2001-2012	287
TABLE 1	2.8	Malawi social protection programmes and expenditures	289
TABLE 1	3.1	Changes in the poverty headcount ratio (PHR) and in its drivers over 1996-2011	295
TABLE 1	3.2	Trend in Gini coefficient of consumption per capita	297
TABLE 1	3.3	Trends in the use of modern inputs and price incentives	299
TABLE 1	3.4	Trend in measures of road density and rural access	300
TABLE 1	3.5	Trend in main economic and agricultural aggregates	300
TABLE 1	3.6	Trends in poverty headcount ratio	302
			······································

TABLE 13.7	Regression-based decomposition of changes in rural consumption inequality, 1995-2011	303
TABLE 13.8	Decomposition of rural consumption inequality by sector of employment of the household's head	304
TABLE 13.9	Population growth, TFR, migration and young age-dependency rate, 1975-2015	305
TABLE 13.10	Evolution of the sectoral employment structure, 1995-2011	306
TABLE 13.11	Shares of value added and employment and their ratio in 2005	307
TABLE 13.12	Changes in urban per adult expenditure by percentiles, 1996-2011	307
TABLE 13.13	Regression-based inequality decomposition of the urban Gini of consumption inequality	308
TABLE 13.14	Decomposition of rural consumption inequality by sector of employment of the household's head	309
TABLE 13.15	Fiscal indicators in percentage of GDP	311
TABLE 13.16	Pro-poor public expenditure as a share of GDP	312
TABLE 14.1	Income shares among the various income groups in Burkina Faso, Ghana and Tanzania	319
TABLE 14.2	Recent inequality trends in Burkina Faso, Ghana and Tanzania (Gini coefficients)	322
TABLE 14.3	Growth-poverty-inequality nexus in Burkina Faso, Ghana and Tanzania	325
TABLE 14.4	Unemployment by educational category in Burkina Faso and Tanzania	327
TABLE 15.1	Number of data points on the distribution of consumption expenditure per capita for 29 countries with at least four well-spaced Gini data, 1991/3–2011	351
TABLE 15.2	Summary of the impact of changes in the FPI/CPI ratio on the Gini coefficient	361
TABLE 16.1	Gini coefficient mean and dispersion measures of household consumption per capita, 29 countries, 1993-2010	371
TABLE 16.2	Trends in the share of dependents (<15,>64), by area and consumption quintiles, Ethiopia	377
TABLE 16.3	Regression results, dependent variable Gini of household consumption/capita, 1985-2011	388
TABLE 16.4	Robustness check of the results of Model 2	389
Boxes		
BOX 5.1	Technical explanation for the measurement of economic complexity	106
BOX 5.2	Decoding the product space framework	110
30X 5.3	The opportunity value measure	114
30X 6.1	Ghana: Natural resource-driven growth can be more broadly inclusive	139
BOX 6.2	Fair taxation: The case of Niger and Areva	144
BOX 6.3	Ownership structures and inclusive growth: The cases of Chile and Zambia	147
BOX 6.4	Botswana: Effective use of its extractive wealth	149
Infographi	ics	
Chapter 1	Mapping of income inequality in Africa	2
Chapter 2	An overview of main changes in income inequality in SSA since the early 1990s	22
Chapter 3	Poverty-reducing power of growth is low in SSA	52
Chapter 4	Towards agriculture-induced accelerated reduction in rural poverty and income inequality in	SSA 76

Chapter 5	What accelerates African manufacturing performance?	102
Chapter 6	Towards a pro-equity based extractive sector strategy	128
Chapter 7	Towards a pro-equity fiscal policy in Africa	154
Chapter 8	Social protection is expanding in Africa, but coverage is too low to significantly reduce inequality	178
Chapter 9	Understanding the link between population and equity	202
Chapter 10	Inequality intensity and poverty drive conflicts in SSA	220
Chapter 11	Emerging facts on inequality and human development in Africa	244
Chapter 12	Facts about inequality in Malawi	270
Chapter 13	Ethiopia offers a good example of fast growth, rapid poverty reduction and stable inequality	294
Chapter 14	Country context matters in promoting equity: Drivers of inequality are heterogeneous in Burkina Faso, Ghana and Tanzania	316
Chapter 15	Seven measurement errors affecting the assessment of income inequality levels and trends	344
Chapter 16	What drives within-country inequality trends in SSA?	368
Chapter 17	Planting and nurturing the seeds of equity in Africa	398
Annexes		
ANNEX 5.1	Variable descriptions and sources	126
ANNEX 5.2	International Standards Organisation (ISO) Country Codes	127
ANNEX 8.1	Ranking of SSA countries by the Social Protection Index	200
ANNEX 8.2	ISO 3-digit alphabetic codes	201
ANNEX 14.1	Correlation index between Gini coefficient and variables of interest in Burkina Faso	340
ANNEX 14.2	Correlation index between Gini coefficient and variables of interest in Ghana	340
ANNEX 14.3	Correlation index between Gini coefficient and variables of interest in United Republic of Tanzania	341
ANNEX 16.1	Change of value added (VA) shares by sector between 1990 and 2011	393
ANNEX 16.2	Data description, measurement unit and sources	394
ANNEX 16.3	Matrix of bilateral correlation coefficients for the variables used in regression	395

Index

	Computable General Equilibrium analysis, 87, 170
2030 Agenda for Sustainable Development, 3-7, 156, 175,	comparative analysis, 16, 317-337
399-400, 413, 414	correlation analysis, 226, 228, 323
Abidoye, B.O., 401	cross-national analysis, 231
absolute deprivation, 229	country-level analysis, 190
accelerator principle, 157-158, 419	decomposition analysis, 88
Acemoglu, D., 64, 149, 272	descriptive analysis, 194, 197
ACLED, 231, 235	econometric analysis, 10, 13, 104, 123, 195, 197, 198,
ActionAid, 142	302, 390
affirmative action, 240	empirical analysis, 7, 180, 189
Affognon, H., 83, 84, 94	Kuznets-type analysis, 180
Africa Human Development Report 2016, 261	macro-panel analysis, 7, 370, 386, 390
Africa Progress Panel, 59, 141	multivariate analysis, 40, 91, 172
African Development Bank (AfDB), 103, 141, 160, 166,	'product space' analysis, 108, 123
167, 280, 284, 285, 287, 289, 310, 312, 400, 404, 411	regression analysis, 10, 196, 347, 349, 376
'African outliers' on inequality, 11, 58, 71	sensitivity analysis, 90, 171
African Post-Harvest Losses Information System (APHLIS),	structural analysis, 173
83	Anglo American, 138, 147
African Union Agenda 2063, 262, 400	Angola,
agglomeration, 263, 411	agricultural production, 35
Agricultural Development and Marketing Corporation	cash transfer system, 148
(ADMARC), 278, 285	conflict in, 231
agriculture, agricultural intensification, 96, 278	distributional impact of fiscal policy, 167
agricultural rinterisincation, 30, 270	fiscal policy, 167, 172, 189
agriculture-for-development agenda, 79, 95-97	human development in, 256
agriculture-led development model, 295-314	illicit flows, 138, 358
agriculture-led industrialisation, 294	inequality in, 55, 262, 365
subsistence, 25, 272	one of the fastest-growing economies in Africa, 53, 61
taxing, 286	progressive taxation, 172
Agricultural Development-Led Industrialisation (ADLI),	resource rents, 405
294, 295 (see Ethiopia)	share of mining in GDP, 62
Alaska,	total fertility rate, 408
transferring wealth from resource rents, 146	Ansar Dine, 226
Algeria,	antiretrovirals, 44, 399
	Anyanwu, J, C., 3, 249
agricultural employment, 79 agricultural productivity, 81	Appleton, S., 57
revenue-to-GDP ratio, 13, 165, 172. 324	Areva, 142-144
	Argentina,
Alkire, S., 251, 256	decline in top-bottom income inequality, 328
allocative efficiency, 155, 162, 167	true Gini, 355
Al-Shabaab, 226, 240	Arndt, C., 360
Alvaredo, F., 355	Asadullah, M.N., 409
American University, 273	·

analysis,

benefit incidence analysis, 28 bivariate analysis, 93, 171, 323, 330

assets held abroad, 344, 356, 358, 365	low income mining economy, 387, 405
Atkinson Inequality Index, 251	resource rent transfer to citizens, 146
Atkinson, A., 160, 273	rural landlessness, 89
Atlas of Economic Complexity, 104, 105, 108	, 110, 116, Bonini, A., 245
119, 123	Bosnia and Herzegovina,
Atlas of Social Protection-Indicators of Resil	aptairi iii iiioquaiitiji ooo
Equity (ASPIRE), 180, 184, 185, 192, 193,	194, 196, 200 Botswana,
Australia,	anti-corruption policies in, 406
upturn in inequality, 399	agriculture in, 79
autocorrelation, 386	demographic transition, 205, 213, 214, 408, 410
autocratic regimes, 40	education in, 46-47, 69
Autor, D.H., 249	effective use of extractive wealth, 148-150, 406
Auvinen, J., 229	growth and inequality, 258
Ayinde, O.E., 88	income share, 158, 160, 256
Backward linkage or integration, 87, 284, 41	g industrial development in, 404
Bandara, A., 221, 260	inequality and conflict, 235
Bangladesh, 70, 86, 291, 372, 399, 400-409	inequality and connect, 233
Bank of International Settlements, 145, 358	labour share, 356
Barrientos, A., 89, 182, 195	*
Barrows, W.L., 231	poverty in, 223
base erosion, 143	resource-dependence, 133, 148
Batool, Z., 170	social protection, 182, 184, 191, 193
Becker, G.S., 157	total factor productivity, 11, 94
Beegle, K., 103, 222, 223, 399, 400	Boulier, L.B., 209, 210, 214
behavioural model of conflict, 230, 233	Bourguignon, F., 4, 23, 41, 345, 369
Benfica, R., 87	bourgeoisie, 221
beneficiation, 137, 419	Boyce, J.K., 286, 357
Benin,	Bratton, M., 64
gender and agriculture, 79	Bravo-Ortega, C., 88
human development in, 258	Brazil, Bolsa Familia, 146, 283
inequality in, 191, 258	conditional cash transfer, 189
social protection, 191	
Berardi, N., 4	growth concentration on export-oriented sectors, 88 narrowing wage gap, 160, 328
between-sector, 7, 9, 32, 37, 40, 371	one of the 19 most unequal countries globally, 157
Bhatti, A.A., 170	parliamentarians' pay, 161
Bhorat, H., 3, 53, 67, 69, 103, 129, 179, 223,	224, 262, rural-urban income disparity, 88
323, 399, 413	· · · ·
Bigsten, A., 57, 65	top-performing emerging market, 108 Brookings Center for Universal Education's Africa Learning
Binswanger, H.P., 84	Barometer, 248
Bircan, C., 232	Brück, T., 232
bifurcation, 23, 32, 156, 369-395	Brunnschweiler, C.N., 135
bipartite, 105	Bulĭr, A., 334
Boko Haram, 226, 229-231, 240	Bulte, E.H., 65, 134, 135
Bolivia,	Burkina Faso,
avoiding natural resource curse, 387	
concentration of growth on export-oriente	agriculture in, 37, 78-79, 83, 329, 335, 403
- '	education and intergenerational poverty, 327

gender inequality in, 286, 325-326, 336	cash transfer schemes, 166, 414
health expenditure per capita in, 330	contributory cash transfer, 39
human development in, 256	impact of, 18, 148, 170, 189, 362
income inequality in, 16-17, 224, 318-332	in resource-dependent economies, 188
minimum wage, 160	in-kind cash transfer, 189
National Health Development Plan, 321, 336	means-tested cash transfer, 165
poverty reduction in, 246	quasi-cash transfers, 325
price dynamics, 360	social cash transfer, 146, 289, 290
rural-urban inequality, 321	unconditional cash transfers programme, 189, 289, 420
social protection programmes, 93, 200, 333-334	Cassim, A., 179
structural change in, 61	Cederman, L.E., 231
wage compression ratio, 161	centre-periphery development model, 272, 419
Burundi,	Center for Systemic Peace, 383
agriculture in, 24, 83, 403	Central African Republic,
source of conflict in, 409	conflict in, iv, 14, 225, 226, 229-234, 256
education average number of years of, 47	gender gap in political representation, 260
land security and agriculture in, 78, 79, 409	human development in, 256, 261
	Inequality-adjusted HDI (IHDI), 412
role of poverty in driving conflict, 14, 226	
rural population, 403	inequality in, 15, 55, 224, 251, 262
total fertility rate, 408, 410	Cevik, S., 167, 169, 171
Byerlee, D., 35, 77, 78, 80, 88, 89	CFA zone, 45, 46, 379, 419
Cabo Verde,	Chad,
agriculture in, 81	agriculture in, 77, 329
conflict in, 225	conflict in, 225, 226, 240
demographic transition in, 205, 213, 408	one of the fastest-growing economies in Africa, 53
education increasing equity in, 160, 252	gender equality, 15, 261
industrialisation in, 404	illicit outflows, 140
inequality in, 14, 210	inequality in, 224
Cameroon,	inequality and fertility, 14, 210, 213
agriculture in, 35, 79	structural change in, 61
capital flight, 358	total fertility rate, 408, 410
income share, 158	Chelwa, G., 12
output structure in, 33	Chenery norm, 26, 419
social protection, 183	Cheong, C., 35
Campante, F.R., 14, 209, 211	Chile,
Canada,	Copper Stabilization Fund, 406, 415
upturn in inequality, 399	economic diversification in, 406
Canagarajah, S., 57	example of resource wealth as a blessing, 143, 147
Canning, D., 408, 409	export diversification in, 123
capital,	inclusive growth in, 147
capital flight, 38, 140-144, 286, 290, 356-358, 378, 387,	inequality in human development, 251
405, 414, 419	National Copper Corporation of Chile, 147
capital incomes, 32, 283, 344, 353, 355	salmon production and export, 405
capital-intensity, 66, 128, 132	standardised mathematical and science tests in, 69
capital account, 45, 46, 356	China,
cash transfer,	agriculture and inequality, 79, 87-89
	agriculture and inequality, 70, 07-00

agriculture's impact on poverty reduction, 87, 88	Cooke, E., 318, 322, 323, 324
Chinese Diaspora, 410	Coordinating Committee of the Armed Forces, Police and
effectiveness of fiscal policy distribution in, 169	Territorial Army (DERG), 296
Gini coefficient in, 155	Copper Stabilization Fund, 406, 415
growth elasticity of poverty, 59	Cornia, G.A., 3, 19, 23, 25, 35, 40, 44, 47,156, 162, 223,
impact of land distribution on farm incomes, 89	224, 271, 272, 304, 308, 317, 320, 355, 359, 375, 412,
industrial take-off, 403	413
infrastructure development, 404	Correa-Caro, C., 167, 169, 171
lack of trickle-down effect on inequality, 155	correlation matrix, 196, 384
land reform in, 403	corruption, 17-19, 40, 48, 66, 76, 90-93, 96, 133, 136, 143,
population decline and aging, 410	148-150, 161, 162, 286, 290, 317, 322, 383, 406
rising inequality in, 399	Corruption Perception Index, 40, 286
RNAA is, 404	crowding out, 137
rural-urban income disparity, 88	Côte d'Ivoire,
smallholder agriculture in, 79	conflict in, 225, 240
SME's role in structural transformation in, 301	economic complexity, 107
top-performing emerging market, 108, 121	financial outflows, 138, 358
Chotikapanich, D., 30	inequality in, 31
Christiaensen, L., 37, 45, 87, 131, 323	poverty rate, 223
Christian Aid, 38	remittances from wealthier SSA countries, 40
Chuhan-Pole, P., 131, 323	social protection in, 182, 183
clientelistic policies, 40, 383	structural change in, 61
climate change, 22, 35, 37, 97, 263, 264, 401, 403, 411	Country Policy and Institutional Assessment, 139
climate change adaptation, 97	Cramer, C., 221, 223, 228-232
climate-resistant animal breeding, 97	currency mismatches, 407
Cold War, 40, 48	current account deficit, 357
Collier, P., 29, 221, 229, 231, 235	Damania, R., 65, 134
collective bargaining, 26, 328, 336	Dasgupta, P., 105, 122
collinearity, 196	database
commercial agriculture, 26, 27, 32, 162	BACI International Trade Database, 126
commodity / resource bonanza, 37, 405, 406, 407, 415	FAO Database, 90
Comoros,	ILO Social Security Inquiry Database, 180, 181, 183,
human development in, 412	186, 187, 190, 194, 200
inequality in, 15, 55, 224, 251, 262	The Land Matrix Database, 35
gender and political representation in, 260	Mo Ibrahim Foundation, 199
multidimensional poverty in, 256	RIGA Database, 271
social protection in, 184	SPEED Database, 394
Comprehensive Africa Agriculture Development	Socio-Economic Database for Latin America and the
Programme, 11, 83	Caribbean, 345 Standardized World Income Inequality Database
Computable General Equilibrium, 87, 170	(SWIID), 2, 8, 12, 161, 167, 169, 171, 233, 326, 346,
Conceição, P., 3, 399, 401	348, 448
conditional cash transfer programmes, 189, 420	UN Population Division's Database, 204, 205, 206, 210
conflict intensity, 220, 234, 235, 236, 237, 239	UN Statistical Division Database, 320
Consumer Price Index (CPI), 9, 298, 344, 360, 394	UNICEF Database, 171, 210
contingency and inherency theory, 228	UNIDO Database, 9
convergence, 61	World Bank International Income Distribution

Database, 8, 67, 347	transition, 4, 14, 17, 88, 202, 204-205, 208, 210-214,
World Bank POVCAL database, 8, 347, 348, 349, 351	332-333, 408-410, 420
World Bank World Development Indicators Database,	trends, 9, 204
134, 157, 173, 213, 214, 319, 320, 321, 326	Demombynes, G., 57
World Income Inequality Database, 346	Deotti, L., 19, 25, 276, 277, 278, 285, 359
World Inequality Database on Education, 233	decolonisation, 29
World Top Incomes Database (WTID), 354	dependency,
World Wealth and Inequality Database, 3	age-dependency ratio, 332, 408
dataset	old age-dependency rate, 408
Atlas of Social Protection-Indicators of Resilience and Equity dataset, 180, 194	rate, 32, 43, 210-211, 294, 303-305, 308, 313, 332, 370, 371, 375-376, 383, 385, 420
Economic Freedom Dataset, 46	ratio, 208, 209, 210, 302, 305, 309, 313, 328, 390
Integrated Inequality Dataset for SSA (IID-SSA), 7, 24,	'derived' distribution channels, 209
30, 345, 346, 348, 350, 363, 364, 369, 383	Devarajan, S., 145, 148
Major Episodes of Political Violence dataset, 382	Dhliwayo, R., 221, 317
Milanovic's All the Ginis Dataset, 8, 348	Diarra, B., 221
Szolt's SWIID dataset (see SWIID)	discriminatory,
Uppsala Conflict Data Program (UCDP/PRIO) Armed	distress urbanisation, 390
Conflict Dataset, 233	gender practices, 317
World Atrocities Dataset, 233	social institutions, 260, 261
Datt, G., 59, 86, 132	social norms, 244, 249
de Janvry, A., 80, 88, 89	distribution,
De la Croix, D., 14, 207, 209, 332	asset, 3, 5, 6, 24
Deacon, R.T., 65, 134	cross-country, 118
Deaton, A.S., 14, 208, 354	decile, 347, 348
Democratic Republic of the Congo,	egalitarian land, 16, 19, 33, 272, 275, 296, 303
agriculture in, 401	equitable, 60, 104, 254
conflict in, 14, 226, 231	fiscal, 154, 167, 171-175, 324, 326, 334, 337
extractive industries, 138	interpersonal, 29, 48, 320, 413
fiscal space in, 164, 167, 172	non-ethnic-based, 48
gender and political representation in, 260	quintile, 297, 347, 360, 361, 362
human development in, 256, 258	polarised, 26
illicit flows, 138	progressive, 169
income share as measure of inequality in, 158	regressive state, 28
inequality in, 15, 55	sectoral, 9, 32
poverty level, 59	skewed, 244, 263, 290, 408
social protection in, 193	unequal or inequitable, 18, 47, 229, 230, 260, 320
deindustrialisation, 27, 45, 48, 80, 372, 389, 391, 400,	wage, 63
405, 415	wealth, 4, 23, 358
demographic,	within-sector, 32
changes, 66, 67, 386	Distributive Analysis Stata Package (DASP), 282
dividend, 48, 202, 205, 213, 215, 336, 376, 390, 409,	distributive effects, 13, 16, 48, 279, 296, 374, 420
410, 420	diversification, 111
factors, 7, 186, 332, 371	crop, 16, 296
growth, 53	risk, 27
pressures, 316	economic. 61. 63. 78. 406

export, 102, 122	eigenvector, 106, 421
sectoral, 335	elasticity of demand, 96, 211, 421
portfolio, 356	enclave sector, 215, 263, 421
Do, Q., 14, 209, 211	endogeneity, 234, 237, 384, 386, 415
Doepke, M., 14, 207, 209, 332	Engel's Law, 158, 211, 212, 334
domestic resource mobilisation, 145, 263	Enhanced Structural Adjustment Facility (ESAF), 284
Dominican Republic,	Equatorial Guinea,
wage compression ratio, 161	agricultural value added, 393
dualism,	demographic transition, 205
dualistic economy, 271	one of the fastest-growing economies in Africa, 53
generalised dualism, 88	human development in, 256
sectoral dualism, 88, 90, 93-94, 424	inequality in, 365
Dutch disease, 45, 65, 128, 136, 137, 154, 172, 379, 405,	natural resource-dependence, 256
406, 421	natural resource revenue, 147, 148
early child marriage, 207, 210, 212, 213, 408	natural resources, 161, 256, 365, 372
East Africa Rift Valley, 135	unequalising mining sector, 372
Easterly, W., 148, 158, 230	Eritrea,
econometric, 5, 6, 7, 10, 13, 88, 104, 118, 123, 195, 196,	conflict in, 225
197, 198, 301, 302, 313, 343, 350, 352, 369, 370, 390,	government spending, 166
392	Erten, B., 405, 406
economic complexity, 107-108, 133	Esteban, J., 230, 233, 235
Economies of Scale, 45, 387, 403	Ethiopia,
Economic Research and Social Foundation, 326	Agricultural Development-Led Industrialisation (ADLI),
Economist Democracy Index, 249	7, 35, 294, 295, 296, 299-301
Education Inequality Index, 233, 234	agriculture, 24, 77, 79, 83, 93, 401-403, 406, 295-313
education,	Central Statistical Agency of Ethiopia, 296
formal, 27	domestic policy changes, 45, 49, 290, 296, 300, 310
higher education system, 69	one of the fastest-growing economies in Africa, 53
lower secondary, 174	Foreign Direct Investment, 42
maternal, 219	Grand Ethiopian Renaissance Dam, 337
paternal, 249	human development in, 15, 245, 256, 258, 412
post-primary, 68, 83	inequality in, 16, 160, 224, 252, 295
post-secondary, 97, 170, 174	land distribution, 35, 48, 299, , 375, 379
primary, 46, 70, 246, 287, 309, 312, 327, 328, 375	National Population Council, 305, 409
Net secondary enrolment (NSEf), 340	poverty rate, 59, 222, 246
secondary, 10, 11, 16, 46, 47, 49, 71, 90, 93, 94, 154,	Productive Safety Net Programme (PSNP), 145, 156,
209-213, 270, 283, 287, 290, 303, 304, 312, 325, 327,	166, 299, 301, 318, 419
332, 375, 383, 387, 390	remittances, 41, 337, 381
tertiary, 28, 160, 167, 213, 280, 287, 304, 307-312, 335,	rural inequality in, 298-304
368, 374, 383, 411, 412	social protection expenditure, 10, 93, 145, 160, 166,
technical, 71 effective social spending, 368	180, 182, 413
	total fertility rate, 43, 376, 390, 409
egalitarian land distribution, (see distribution)	urban inequality in, 306, 313
Egypt,	Welfare Monitoring Survey, 296
economic complexity, 107	Ethiopia Poverty Assessment 2014, 302
manufacturing in, 111, 116, 117 government spending, 167, 174	Ethiopian People's Revolutionary Democratic Front
governinent spending, 107, 174	

(EPRDF), 296	mismanagement, 139
Ethnic Polarisation Index, 234	overall fiscal balance, 311
Eurobonds, 132	policy, 6, 7, 12, 13, 45, 65, 66, 134, 143, 146, 154, 155,
Ewinyu, A., 179	156, 162, 167-175, 168, 215, 221, 286, 296, 310, 313,
extractive industries, 9, 12, 41, 59, 64-66, 128-139, 143-	324, 325, 326, 335, 378, 415, 422
150, 179, 272, 406, 421	effectiveness of, 154, 169, 170
and fiscal policies, 324, 336	policy mix, 154, 170, 175
Extractive Industries Transparency Initiative (EITI), 139,	puzzle, 336
142, 143	progressive fiscal policy, 128, 316
extension services, 25, 35, 86, 96, 278, 313, 330, 402	rules, 415
factor endowment, 4, 9, 109, 118, 119, 123, 297, 372, 383, 400, 421	space, 10, 39, 48, 49, 162, 164, 166, 171-173, 175, 215, 286, 290, 324, 336, 378, 379, 390, 414, 422
factor intensity of production, 7, 421	transfers, 145, 180
Famine, 179, 182, 276, 278, 285, 296, 311	fixed effects estimator, 118, 122, 195, 233-239, 384
Fan, S., 87	Food and Agriculture Organisation (FAO), 15, 83, 90, 273,
farm intensification, 80, 421	403
Feeny, S., 416	food prices, 9, 79, 85, 87, 285, 295, 344, 358-360
Fei, J.C.H., 85, 92, 295, 387	Food Price Index (FPI), 9, 10, 298, 360, 365, 379, 416
female-headed households, 18, 32, 87, 274, 294, 309, 312, 313, 314	food security, 11, 36, 77, 81, 86, 93, 145, 264, 276, 278, 408, 422
Ferreira, F., 47, 53, 72, 185, 245, 246, 269, 390	formal sector, 26-28, 37, 43
fertility,	foreign direct investments (FDI), 7, 10, 16, 22, 40, 41, 42,
adolescent fertility rate, 92, 332, 336, 340, 341	46, 48, 120, 147, 285, 285, 290, 307, 357, 368, 371, 380, 385, 386, 388, 389, 391, 394, 404, 405, 414
and inequality, 14, 43, 78, 206-211, 213-214, 305, 309,	forward linkage / integration, 88, 91, 406, 422
325, 332, 408-409	Foster, A.D., 86, 87, 251
and urbanisation,417-418	Foster, J.E., 251
average fertility rate, 13, 14, 202, 206	Fosu, A.K., 30, 54, 59, 132, 323
population replacement fertility rate, 206, 214	Fragile States Index, 225-227
soil fertility, 279	France,
total fertility rate (TFR), 22, 43, 279, 328, 331, 332, 336,	major provider of aid to Niger, 144
340, 341, 332, 398, 402, 408, 410 , 411	wage compression, 160
Fields, G.S., 302	Freedom House, 66
Firebaugh, G., 209, 211	Gabon,
Financing for Development, 156	financial flows, 358
FIRE (finance, investment, real estate), 9, 33, 282, 283,	fiscal policy, 167
304, 306, 307, 310, 313, 372, 374	human development, 257
fiscal, citizenship, 172, 175	illicit outflows, 140
decentralisation, 167, 171, 172, 310, 324, 421	multidimensional poverty, 256
deficit, 45, 285, 287, 415	natural resource revenue redistribution, 148, 161
distribution, 154, 167, 173, 175, 324, 334, 336	Gambia, The,
fiscal responsibility laws, 415	conflict in, 225
incentives, 215	multidimensional poverty, 256
incidence, 145, 146, 173	poverty levels, 246
instruments, 169, 170, 175, 215	social protection, 184, 193,
laziness, 407, 415	Gebeyehu, Z.H., 27, 301, 306
.32330, 107, 110	gender inequality, 15, 18, 29, 70, 79, 208, 224, 244, 245,

258, 271, 174, 197, 325	accountable and transparent governance, 128
Gender Inequality Index (GII), 70, 259, 261, 325, 326	agricultural sector, 96
gender inequality and women's empowerment, 244, 261,	challenges, 66
262, 264	growth-poverty-inequality relationship, 54
accelerating gender equality and women's	impact of international aid, 41
empowerment, 261, 264	impact of resource dependence on, 139
Generalised Method of Moment (GMM), 234, 237, 384,	land governance, 35
386, 388	Granger causality test, 234
Ghana,	Green Revolution, 35, 86, 290, 401-402, 422
access to education, 248	Griffin, K., 89
agriculture in, 83, 337	Grimm, M., 23, 37, 278, 298, 323, 334, 345, 352, 360
cash transfer in, 337	gross capital formation, 137, 138
drivers of income inequality in, 5, 16, 316-337	growth,
fiscal distributional effectiveness in, 17, 164	African growth miracle, 104
income inequality in, 17, 23, 26, 31, 42, 318-320	acceleration, 22, 42, 296
Livelihood Empowerment Against Poverty, 325	agricultural growth, 80, 86, 87, 88, 299, 300, 335, 375,
national poverty rate in, 16, 223, 256	423
product space in, 110-112	demographic growth, 53
remittances in, 41	entrepreneurship growth, 202
National Health Insurance Scheme, 331	equalising growth, 77, 89
natural resources in, 135, 139-140, 148, 150	equitable and inclusive growth, 4, 68, 85, 143, 145,
power-sharing formula, 240	147, 150, 190, 202, 215, 256, 262, 316, 335
rural-urban inequality, 320	exclusionary growth, 45
social policies in, 46, 93, 180, 182, 249-250	growth branch, 398
social protection programmes, 93, 180, 182, 333	growth divergence, 212
structural change, 61	growth elasticity of inequality, 323, 324
taxation-inequality nexus, 38	growth elasticity of poverty, 4, 23, 59, 131, 156, 158,
Ghana Statistical Service (GSS), 320	323, 324, 325, 387, 422, 423
Gini coefficient, 11, 13, 15, 24-34, 54-58, 65, 67, 71, 90, 94, 103, 139, 161, 166, 167, 170-174, 189-191, 195-	growth-inducing structural transformation, 12, 104, 119
197, 202, 203-217, 220-240, 252, 262, 273, 275-290,	growth-poverty-inequality nexus, 4, 23, 53, 54, 57, 59,
294-314, 316-341, 345-365, 371, 413, 422	61, 66, 323, 324, 325
Gini index, 30, 133, 156, 190, 192, 195, 262, 284, 298,	growth-social protection elasticity, 182
308, 313, 321, 358, 371, 378, 384, 422	heterogeneity of growth patterns, 372
population-weighted, 30, 31, 32, 56, 65	industrial growth, 77, 89
residual Gini, 386	inequality-population growth nexus, 208
unobservable Gini, 369	interactions, 54, 66 job growth, 103
unweighted, 8, 30, 350, 371	job-rich growth, 155, 175, 240, 316
Glencore, 138, 142	linkages, 53, 54
Mopani Copper Mine (MCM), 141, 142	long-term growth, 4, 23, 48, 70, 104, 158, 175, 399,
transfer pricing, 142	401, 405, 410
global financial crisis,	manufacturing growth, 119, 122, 123
impact of, 256	path, 12, 59, 143, 148, 190
globalisation, 140	pattern of growth, 9, 54, 61, 368, 371, 372, 374, 383,
Goesling, B., 209, 211	385, 387, 389, 400
Gollin, D., 77, 78, 79, 85, 90	poverty-reducing power of growth, 3, 17, 33, 43, 52,
governance, 128	53 59 423

productivity, 37, 328	126
relationship, 54	Higgins, S., 310-313, 439
resource-dependent growth, 12, 135, 139, 143, 147	HIV/AIDS, 10, 22, 44, 48, 149, 179, 247, 279-280, 289-290,
rural growth, 87	382, 385, 386, 388, 391,
short-term growth, 41, 405	Hoeffler, A.D., 29, 221, 229, 231, 235
source of growth, 57, 59, 412	Hoogeveen, J.G.M., 57
typology of growth, 61	horizontal inequalities, 6, 28, 40, 89, 229, 230, 231, 415
urban growth, 87	Household Budget Surveys (HBSs), 4, 9, 344, 345, 347,
wage growth, 328	352, 354, 355, 356, 365, 370
Guerriero, M., 355, 356, 357	Household Income and Consumption Expenditure Surveys
Gugerty, M.K., 65	(HICES), 295-298, 301-4, 307-309
Guinea,	Huber, J.D., 231, 232
agricultural employment, 79	Hulme, D., 182, 189
agriculture in, 77, 79	human capital accumulation, 14, 60, 70, 104, 169, 207
agriculture value added, 393	human development, 14, 67, 70, 224, 246, 249, 250, 251,
demographic transition, 204	252, 254, 258
implementing Maputo Declaration, 83, 403	and inequality, 14 barriers to human development, 325
intensity of income inequality, 160	·
land gini, 25	financing human development, 412 human development and gender equality, 15
poverty reduction in, 222	human development and social cohesion, 158
progress on human development, 256	human development branch, 398
proportion of women employed in agriculture, 77	Human Development Index (HDI), 15, 144, 244, 245,
resource-rich / dependent economy, 61, 130	246, 249-258, 260, 412
Guinea-Bissau,	human development paradigm, 245, 246
agricultural value added, 393	Human Development Report (HDR), 246, 250, 261
demographic transition, 205	Inequality-adjusted (IHDI), 4, 15, 245, 250-252, 258,
fragility index, 225	412
poverty in, 225	sustainable human development, 247, 263, 264
rise in poverty, 223	hump theory of migration, 331, 381, 422
severity index, 158	income transfers, 145, 146, 422
Günther, I., 298, 323, 334, 352, 360	idiosyncratic error term, 384
Gurr, T.R., 229, 231	illicit financial flows, 66, 129, 137, 138, 140, 141, 142, 336
Gyimah-Brempong, K., 40, 385	effect of, 138, 141
Hague, S., 318, 322, 323, 324	Index of African Governance (IIAG), 180
Harris-Todaro model, 27	index of fractionalisation, 230, 422
Harris, J.R., 27	India,
Hassan, M.K., 208	agriculture-industrial linkage, 87
Haughton, J.H., 170, 185	agriculture-poverty reduction impact, 86-88
Hausmann, 104, 105, 106, 108, 109, 110, 111, 114, 116,	distributional impact of growth, 86
118, 119, 121, 122	FDI, 284
Hazell, P.B.R., 86,87	Gender Inequality Index, 70
Heavily Indebted Poor Countries (HIPC) initiative, 10, 45, 166, 286, 290, 379, 381, 391	index of goods from, 280, 284
Heckscher-Ohlin model, 109	industrial take-off, 403
Herault, N., 87	National Rural Employment Guarantee Act, 146 179
Hidalgo, C.A., 105, 107, 108, 109, 110, 113, 115, 117, 122,	Smallholders in commercialisation of agriculture, 79
Tindango, 0.7 t., 100, 107, 100, 100, 110, 110, 110, 117, 122,	inequality,

and conflict, 221-240	International Labour Organisation (ILO), 28, 38, 67, 68, 70,
between-sector inequality, 7, 9, 32, 33, 37, 40, 371	103, 160, 180, 181, 183, 186, 187, 188, 190, 194, 196, 200, 260, 328, 334, 407
bifurcation, 369, 384 (see bifurcation)	Social Security Inquiry database, 180
consumption inequality, 8, 15, 18, 30, 32, 272, 275,	International Monetary Fund (IMF), 4, 6, 37, 38, 40-43, 53,
296, 297, 302-304, 308, 309, 364, 372, 379, 399, 416 effect of social protection policies on, 178-197	103, 130, 139, 140, 142, 145, 166, 169-173, 204-210,
effects of HIV/AIDS, 44	286, 310, 311, 331, 381, 405, 410, 425
and natural resources, 65	International Parliamentary Union (IPU), 260
effect of fiscal policy on, 45, 155, 175	international poverty line, 185, 222, 318
gender (see gender inequality)	International Telecommunication Union (ITU), 247
horizontal, 229	intra-household income distribution, 370
inequality intensity, 226	Isham, J., 137
inequality-population growth nexus, 208 inter-generational, 408	inverted U-shape (∩), 16, 31, 32, 85, 93, 317, 318, 348, 349, 350,
Integrated Inequality Dataset (IID-SSA), 345 (see	Japan,
dataset)	aging population, 410
multidimensional, 412	financial sector reform, 407
spatial inequality, 38, 300, 322	parliamentarians' pay, 161
synthetic inequality statistics, 347	population decline, 410
'true inequality', 365	regulated financial and insurance sectors, 407
within-country inequality, 368	Jenkins, S.P., 8, 348
vertical, 229	Jensen, N., 134, 135, 189
infant mortality rate, 207, 213,	Jones, N., 312
infinitely elastic, 26, 40	Jones, S., 360
informal sector, 16, 17, 22, 26, 27, 37, 62, 68, 71, 80, 87,	Juma, C., 84
172, 180, 183, 260, 281, 286, 296, 310, 314, 335, 354,	Kamwendo, E., 245
376, 398, 400, 407	Kaplinsky, R., 45
urban 22, 26, 37, 290, 387, 390, 401, 407	Karshenas, M., 82
informalisation	Kenya,
job, 26	agriculture in, 79
of the economy, 415	conflict in, 226, 240
of the labour market, 48, 276	economic complexity, 107
urban, 33, 48	education in, 64
infrastructure development, 263, 335, 403, 404	fiscal decentralisation in, 167
Institute for Economics and Peace (IEP), 231, 235	Free Primary Education (FPE) Programme, 249
Integrated Household Surveys (IHSs), 273	gender inequality, 29, 79
Integrated Inequality Dataset for SSA (IID-SSA), 10, 25, 37, 347, 351, 369, 423 (see dataset)	human development, 256 inequality and labour share, 356
integration,	inequality in, 31
market, 24, 45, 48, 419, 422	land redistribution, 35
backward/forward, 88	natural resources in, 135
regional, 263-264	poverty rate, 223
inter-generational mobility, 4, 23, 249, 320,	productive structure, 111
inter-generational poverty, 169	social protection, 182-184
Inter-governmental Panel on Climate Change, 37, 401	taxation-inequality nexus, 38
International Fund for Agricultural Development (IFAD),	total fertility rate, 408
403	wage gaps, 161

Khan, H., 59, 132	82, 161, 165, 171, 203, 214, 252, 254, 345
Khandker, S.R., 170, 185	Learning Barometer of the Brookings Institution, 69, 248
Kharas, H., 61	Least Square Dummy Variable (LSDV), 384
Kimenyi, M., 28, 415	Lederman, D., 88, 123
King, R.G., 334	Leite, P.G., 43, 307, 308, 309
Kirkpatrick, C., 89	Lele, U., 272, 276, 278
Klasen, S., 44, 352, 410	Lesotho,
Klinger, B., 105, 108, 109, 123	agriculture in, 79
Kohli, H., 61	fiscal space in, 165
Kolmogorov-Smirmov tests, 56	gender, 79
Kuznets theory/curve, 85, 93, 155, 180, 214, 221, 229, 275,	inequality and conflict, 235
372, 423	inequality in, 88, 158, 224
Kuznets, S., 180, 214	labour share, 356
Kwengwere, P., 272, 275, 280, 284	progressive taxation, 172
labour,	remittances in, 40
absorption, 48, 371	social protection, 166, 182
agricultural, 79, 85, 88-97, 299, 401, 403	Lewis, W.A., 85, 89, 92
conflict and, 230, 235, 240	Liberia,
demographic changes and, 66, 67	agriculture in, 35
education and, 327, 328, 332, 412	human development, 256
gender equality and, 70, 71, 208, 246, 247, 259, 260,	land concentration, 44
274, 326, 407	social protection expenditure, 182-184
informalisation, 276	Libya,
family labour, 24	conflict in, 225
landless labourers, 25	gender inequality, 15, 70, 260
labour force participation, 9, 208, 305	Lichbach, M.V., 221, 230
labour-intensive sectors, 33, 42, 45, 48, 59, 63, 104,	Ligon, E., 88
132, 173, 214, 262, 281, 283, 307, 372, 378, 380, 400,	Lin, L., 86
404	Lindert, P.H., 90
labour market adjustments, 209, 214	Lipton, D., 162, 320
labour market flexibility, 202, 214, 423	Lipton, M., 6, 37, 84, 89
labour productivity, 88, 91, 208, 209, 281, 335, 405	Living Standard Measurement Surveys, 345
population growth and, 390	Logit, 234
proletarisation, 272, 276	Lopez-Calva, L.F., 251
skilled labour, 43, 372	Low-Income Country (LIC), 16, 122, 182, 183, 188, 197
surplus, 61, 85, 89, 90, 92, 407	Lusigi, A., 245
unskilled labour, 4, 43. 69, 137, 167, 209	Lustig, 310-313
urban informal sector, 26	Luxembourg Income Study (LIS), 345, 348
Lal, R., 317	macroeconomic equilibrium, 399
Lambert, S., 249	macroeconomic policies, 45, 96, 162, 215, 263, 284-5, 310,
land,	378, 390, 414
land grabs, 33, 35, 48, 402	macroeconomic shocks, 284
land tenure systems, 6, 8, 24, 224, 272, 298, 371	macroeconomic stability, 10, 45, 155, 156, 158, 162, 263,
landed gentry, 24	405
Laski, Harold, iv, 237	Madagascar,
Latin America and Asia, 67, 89, 189, 391, 416	agricultural employment, 78, 79
Latin America and the Caribbean (LAC), 11, 59, 79, 80, 81.	- ' '

conflict and poverty, 231	education in, 47
expenditure on agriculture, 83	expenditure on agriculture, 87
inequality in, 32, 360	gender equality, 15, 79, 250, 261
land irrigation in, 81	index of agricultural output per capita, 36, 398
manufacturing in / productive structure, 116-117	inequality in, 360
output structure, changes in, 33	land Gini in, 25
poverty in, 11, 78, 223	Maputo Declaration implementation, 403
social protection expenditure, 182, 183, 185, 190, 193	minimum wage adoption, 160
Mahmud, W., 409	progress on human development, 256
Maize Breeding Programme, 35	proportion of rural population, 77
Malawi,	severity index of inequality, 157, 158
agriculture, 25, 35-37	tax-GDP ratio, 165
agricultural subsidies in, 287	total fertility rate in, 14, 210, 213, 408, 410
agriculture-led development model, 275	unpaid work in, 250
Agricultural Development and Marketing Cooperation,	Malthusian trap, 37, 401, 423
278	manufacturing frontier economy, 111
dualistic agrarian economy, 15	market access, 83-84, 97, 403
Farm Input Subsidy Programme (FISP), 278, 289	market failures, 162, 167, 336
fiscal policy, 286	Martorano, B., 23, 224, 271, 272, 282, 295, 304, 308, 345,
gender inequality index, 70	383, 384, 385
Government Public Pension Scheme, 289	Marzo, F., 4
Green Revolution in, 290, 402	Mauritania,
income inequality in, 33-34, 224, 360	Household Budget Survey designs, 352
Malawi RIGA project, 271	inequality in, 160
Malawi Third Integrated Household Survey, 357	poverty reduction in, 222
Maputo Declaration implementation, 83, 403	Mauritius,
output per worker, 78	agriculture in, 79
poverty in, 223, 246, 256	agricultural employment, 79
proportion of rural population, 77, 403	conflict in, 225
public spending on education, 287	demographic transition in, 205, 210, 213, 408
School Feeding Programme, 289	economic complexity, 107
Social Cash Transfer Scheme (SCTS) in, 182, 289	fertility rate, 14
social protection programmes, 93, 289	free basic health services, 160, 167, 174
Starter Pack Programme, 270	gender equality, 15, 70
Structural Adjustment Programmes (SAPs), 276, 278,	income inequality in, 33, 158
284, 289, 293	land irrigation in, 81
taxation-inequality nexus, 38	manufacturing in / productive structure, 111, 116, 403,
Third Integrated Household Survey, 353	404
wage compression ratio, 161	social protection, 39, 166, 182, 185, 187, 191, 193
Malawian Economic Justice Network, 142	total factor productivity, 94
Malaysia,	Mayoral, L., 231, 232
Resource Governance Index, 136	McCall, L., 160
top-performing emerging market, 108	McGillivray, M., 416
Mali,	McKay, A., 318, 322, 323, 324
agriculture in, 83, 403	McMillan, M., 62, 103, 104, 400
conflict in, 225-227, 229	means-tested cash transfers, 165, 171
demographic transition in, 205	

Mehlum, H., 134	Morocco,
Mellor, J.W., 85, 90	agriculture, 81
Mensah, E.J., 323	economic complexity, 107
Method of Reflections, 105	education in, 69
Mexico,	fiscal policy effect on inequality in, 174, 324
conditional cash transfer programme, 189	fiscal space, 172
high likelihood of conflict, 220, 225	income inequality in, 13
narrowing wage gap, 161	manufacturing in, 111
opportunidades, 146	poverty in, 223
Resource Governance Index, 136	total fertility rate, 409
top-performing emerging market, 108	Movement for Unity and Jihad in West Africa, 226
Middle class, 41, 43, 44, 45, 48, 61, 157, 158, 175, 212, 328, 382	Mozambique, agriculture, 77, 79, 87
Middle-Income Country (MIC), 116, 123, 182, 187, 188,	conflict in, 225
197	distributional impact of fiscal policy, 167
Middle East and North Africa (MENA), 11, 81, 190, 222,	one of the fastest-growing economies in Africa, 53
migration, 381, 409	Foreign Direct Investment, 42
climate change and, 403	gender and political representation in, 260
contracted, 410	gender equality, 70, 77
distress, 306, 313, 387, 390, 420	human development, 15, 256, 258, 412
Green revolution and, 86	income inequality in, 32, 252, 360
hump theory of, 331, 381	natural resources in, 135
international, 410, 415	resource-dependence, 131
intra-SSA, 415	structural change, 61
land ownership and, 301, 409	wage compression rates, 329
remittances and, 41, 280, 381	Mugisha, F., 203
rural poverty and, 88	Mukherjee, S., 245
rural-urban, 27, 31, 275, 279, 280, 296, 301, 305, 306,	multicollinearity, 91, 234, 235, 376, 384
313, 336, 375, 400, 407, 410, 411, 416	multiculturalism, 240
urbanisation and, 48, 411	multidimensional deprivation, 14, 227
Milanovic's All the Ginis Dataset, 348 (see dataset)	multidimensional poverty, 226
Millennium Development Goals (MDGs), 142, 262, 363,	Multidimensional Poverty Index, 256
378, 413	Murphy, K.M., 157
Min, B., 231	Mussa, R., 278, 280, 285, 287, 359
Mincer equation, 353	Myanmar,
mineral rents, 32, 131	high likelihood of conflict, 220, 225
mining enclaves, 37, 48	Resource Governance Index, 136
Mo Ibrahim Index, 186, 187, 195	share of manufacturing, 372
Moene, K., 134	Nafziger, E., 229
Møller, N.M., 41	Naidoo, K., 53, 67, 129, 223, 323
Mongolia,	Namibia,
Resource Governance Index, 136	agriculture in, 79
resource rent transfer to citizens, 146	cash transfers, 166
Montalvo, J.G., 233	conflict in, 235
monopolistic market structures, 135, 383	demographic transition, 14, 214, 410
Montenegro, 399	education in, 69
Morduch, J., 302	
446 / Income Inequality Trends in sub-Saharan Africa: Diverg	ence, determinants and consequences

fiscal space, 164	demographic changes in, 67
gender equality, 79	effectiveness of education, 69
growth-poverty-inequality nexus, 59	exchange rate policy, 415
human development, 15, 251, 412	one of the fastest-growing economies in Africa, 53
inequality in, 24, 55, 160, 210, 224, 262	fertility rate, 210, 214
poverty in, 222	fiscal space, 164
progressive taxation, 172	gender gap in political representation, 260
social protection, 166, 184, 191	illicit outflows, 138
total factor productivity, 11, 94	inequality in, 23, 33, 55, 214, 224
Naqvi, H.A., 170	mining and utilities in, 61, 172
National Academies Press (NAP), 209, 210, 214	oil-dependent economies, 188, 358
National Agricultural Research Systems, 35	poverty levels, 59
National Bureau of Statistics (NBS), 320, 372	remittances, 41
National Rural Employment Guarantee Act (NREGA), 179	rural-urban inequality in, 88, 90, 93, 97, 415
natural resource rents, 135, 423	share of mining in GDP, 62
natural resources,	social protection programmes, 180, 182
as drivers of economic growth, 25, 131, 132	taxation-inequality nexus, 38
impacts on inequality, 15, 65, 66, 71	total fertility rate in, 14, 410
dependence on, 54, 63, 65, 69, 72, 129, 130, 161	U-shaped inequality trend, 32
management, 86, 96, 98, 134-136, 148, 150	wage gaps, 161
taxation of, 38, 45	Nikiemea, A., 37
Ndikumana, L., 38, 42, 141, 142, 286, 357, 358, 407, 414	non-governmental organisations, 179, 305, 409
Ndulu, B.J., 45	non-linear effect, 123
neoclassical economic theory, 26, 108, 118, 119, 120, 228,	non-tillage farming, 97, 98
229, 423	Nordman, C., 29
Nepal, 399	Norway,
Neuhaus, J., 317	government pension fund, 406
Niger,	oil- and gas-producing, 406
agriculture in, 78, 79, 83, 359, 403	parliamentarians' pay, 161
bad harvests in, 25	Resource Governance Index, 136, 140
conflict in, 231	Ocampo, J.A., 391, 400, 405, 406, 415
education in, 47	Odusola, A., 3, 77, 79, 80, 81, 94, 155, 160, 161, 164, 166,
fertility rate, 14, 43, 206, 210, 213	167, 172, 203, 212, 221, 235, 317, 324, 327, 329, 330,
food price seasonality, 359	369, 399, 401, 402
human development, 256	Official Development Assistance (ODA) 10, 17-18, 162,
human development and gender inequality, 15, 260	166, 263, 286, 331-332, 337, 381, 385-386, 391
income inequality, 160	oligopolistic market structures, 135
population living on less than \$1.0/\$2.0 per day, 144	one-way error component model, 384
poverty reduction in, 246	One Village One Product, 170
rural population, 77	Open Budget Index (OBI), 164
social insurance, 39	opportunity value index, 12, 104, 111, 114, 423
total fertility rate in, 376, 408, 410	Ordinary Least Squares (OLS), 171, 195, 209, 334
Nigeria,	Organisation for Economic Co-operation and Development
agriculture in, 79, 82	(OECD), 13, 84, 97, 115, 122, 141, 161, 183, 188, 261,
capital flight, 358	309, 310, 312, 347, 399, 402, 403, 405, 411
conflict in, 229, 231, 234, 240	action plans on base erosion and profit shifting, 143
	adverse trade regimes of, 84, 97, 403

agricultural contribution to GDP, 79	disposable income per capita, 349
agricultural productivity per worker, 11, 81	health expenditure per capita, 171, 174, 320, 330, 331,
cash transfers in, 170	332, 340, 341
cost of land titling and registration, 402	household consumption per capita, 8, 9, 15, 211, 273,
export structures, 122	281, 282, 296, 302, 303, 349, 351, 353, 370, 383
impact of social insurance programme, 13	GDP / income/output per capita, 9, 14, 24, 27, 29, 43,
income share, 170	48, 89-94, 106, 107, 139, 146, 149, 161, 195, 197, 207,
legislators' salaries, 161	217, 221, 231, 234, 237, 251, 273, 275, 286, 297, 300, 340, 341, 344, 346, 365, 371, 372, 383, 402, 409, 422
OECD's Social Institutions and Gender Index (SIGI), 261	land per capita, 27
product space, 115	ODA per capita, 340, 341
social protection, 183, 188	transfer amount per capita, 185, 191, 192, 193
transfer pricing guidelines for multinational enterprises	value-added per capita, 10, 371
and tax administrations, 141	Percheski, C., 160
wage compression ratio, 161	periphery-centred development continuum, 229
OECD Transfer Pricing Guidelines for Multinational	
Enterprises and Tax Administrations, 141	Peru,
Osei-Assibey, E., 323, 325, 333	avoiding natural resource curse, 387, 405 growth concentration on export-oriented sectors, 88
Østby, G., 230, 231	rural-urban income disparity, 88
Ouedraogo, S., 322, 328, 332	Philippines,
Oxfam, 140, 144, 145, 149, 155	moving people out of poverty, 86
Oyejide, T.A., 84	Piesse, J., 86
Pakistan,	Piketty, T., 70, 155, 160
fiscal policy impact, 170	Pillay, K., 179, 223, 224, 323
Gender Equality Index, 70	Pingali, P., 85, 87, 96
Green Revolution, 86	political repression, 29
high likelihood of conflict, 220, 225	Political Instability Task Force (PITF), 233
use of sales tax / transfers, 170	population,
parastatal, 278, 423	adult population, 382
path-dependent, 7, 12, 24, 54, 58, 109, 110, 116, 272	age-population dependency, 331, 332, 408
patrimonialism, 64, 317	aging population, 203, 205
Pauw, K., 285, 287	agricultural populations, 88, 329
Paxson, C.H., 14, 208	bottom 40 percent, 5
pay compression, 161, 328, 423 (see wage compression)	dependency ratio, 210
Pay As You Earn (PAYE), 325	discriminated population, 234, 237
Pension,	dynamics, 203, 206, 279
old-age pensions, 39	economic growth and, 14
non-contributing pensions, 39	economically inclusive population, 43, 77, 329, 330,
universal pension, 116	403
public pension funds / schemes, 183, 289	excluded population, 234, 238, 240
social pensions, 188, 378, 408	growth rate,4, 7, 13-18, 21, 24, 27, 33, 35, 37, 43, 44,
per capita,	49, 67, 202-217, 270, 276, 279, 280, 290, 294, 296,
agricultural output per capita, 33, 35, 36	301, 305, 313, 370, 375, 376, 390, 390, 401, 407-410
cash crop / maize production per capita, 277, 278, 289	inequality-population nexus, 14, 208
consumption expenditure per capita, 30, 273, 274, 348,	net population change, 204
349	overpopulation, 18
consumption inequality, 8, 18, 296, 304	poorest quintile of the, 13, 170

population branch, 398	primary products, 109, 110, 111, 123
population control, 411	Product Complexity Index, 105, 114
population density, 82, 84, 209, 271, 278, 402	product space, 12, 108-111, 114, 115, 116, 118, 123, 405
population growth and inequality, 13, 14	productive capabilities, 12, 105, 106, 108-112, 115-119,
population in severe multidimensional deprivation, 14,	122, 123
226, 227	productivity,
population living below poverty line, 59, 301	agricultural, 5, 11, 17, 33, 80, 81, 82, 83, 85, 87-88, 91,
population policy, 313	96-98, 279, 313, 329, 330, 335, 402
population pressure, 48, 49, 280, 306, 313	capital, 306
population-weighted Gini, 30, 31, 32, 56, 65	global productivity frontier, 61, 85
powerless population, 234, 235	high productivity sector, 61, 63, 69, 85, 103
replacement fertility rate, 206, 214	informal sector, 400, 407
rural population, 47, 92, 301, 320, 321, 375, 383, 385,	labour, 87, 88, 208, 209, 281, 401
388, 390, 416	land, 279, 299, 401
slum population, 247	low productivity farming, 78, 85
structure, 205, 206	per worker, 11, 17, 81, 82, 91, 97, 323, 327, 402
targeted population, 178, 189	productivity gap, 78
urban population, 27, 79, 92, 247, 279, 305, 306, 320,	productivity revolution, 86
321, 276, 388, 394, 411	remittances, 40, 41, 48, 280, 285, 331, 332, 337, 357,
virtuous population policy, 390 vulnerable population, 403	371, 381, 385, 391, 402, 416
working-age population, 39, 67, 103, 202, 205, 208-	total factor productivity, 11, 90-91, 94, 97, 119, 120,
210, 212, 214, 331, 394, 409	425
youngest / youthful population, 202, 203, 336	profit sharing, 143
Post-2015 Development Agenda (see Sustainable	profit shifting, 143
Development Goals)	proletariat, 221,
post-harvest assessment and management, 97	propensity to save, 157
PovcalNet (see database)	pro-poor public spending, 378 proportional representation, 240
poverty alleviation elasticity of growth, 22, 33, 43, 387,	proportional representation, 240 prudential regulation, 407
399, 423	Pryor, F., 272, 273, 275, 276, 277
poverty elasticity of agriculture, 87, 424	public goods, 4, 6, 29, 64, 65, 137, 158, 162, 404, 416
poverty-reducing power of growth, 17, 53, 59, 323, 324	Public-Private-Partnership, 149
premature tertiarisation, 48	Purchasing Power Parity (PPP), 60, 120, 121, 126, 139,
price	144, 185, 193, 222, 246, 321
agricultural prices, 10	quid pro quo, 172
benchmark prices, 141	race to the bottom, 142, 145
cash-crop prices, 40	Rangarajan, C., 87
constant prices, 83	Ranis, G., 85, 92, 295
Consumer Price Index (CPI), 9, 298, 358, 360, 394	Ranis-Fei model, 387
export prices, 40	Rao, V.M., 281, 282, 283, 302, 304, 309
Food Price Index (FPI), 9, 10, 298, 360, 365, 379, 416,	Ratha, D., 40, 41, 42, 381
price-distorting subsidies, 84	rational action theory, 228, 229, 235
primary commodity price / boom, 17, 136, 148, 164,	Ravallion, M., 53, 59, 80, 86, 87, 131, 132, 249, 355
172, 405	Ray, D., 230, 233, 235
seasonal prices, 359	real effective exchange rate (REER), 37, 45, 378, 380, 388-
tradable / non-tradable price ratio, 37	390, 404, 405, 414, 424
primarisation, 423 (see reprimarisation)	Reeves, W., 203

Regassa, N., 301	agricultural employment, 24, 35, 43, 77, 78, 79, 301
regional integration, 88, 263, 264, 405	education, average number of years of, 47
relative deprivation theory, 228, 229	one of the fastest-growing economies in Africa, 53
Religious Polarisation Index, 234	gender and political representation in, 260
remittances, 7, 10, 17, 40-48, 275, 280, 285, 331, 332,	human development, 15, 245, 256, 412
337, 357, 371, 381, 385, 391, 402, 416	inequality in, 155, 258
remittance inflow discrepancy (RID), 357	land scarcity in, 409
reprimarisation, 33, 45, 48, 372, 390, 391, 400, 405, 406,	population policies, 390
415, 424	social protection programmes, 93, 184
Republic of the Congo,	Rybczynski theorem, 109
agriculture in, 79	Sabo, I., 317
illicit outflows, 138, 140	Sachs, J.D., 5, 25
fertility rate and inequality, 14, 210, 213	Sadoulet, E., 80, 88, 89
human development in, 258	Sala-i-Martin, X., 30, 130
Maputo Declaration implementation in, 83	Salotti, S., 168, 170, 171
tax revenue-to-GDP ratio, 164	Salvucci, V., 360
total fertility rate, 410	Sanchez, A., 43, 307, 308, 309
resource-dependence, 131, 133, 134, 148, 256, 424	Sanchez, B., 208
research and development (R&D), 86, 87, 96-98, 402, 403	Sanoh, A., 131, 323
resource curse, 8, 129, 143, 149, 387, 405, 424	Sao Tome and Principe,
resource enclave, 25, 27, 32, 33	inequality in, 160
Resource Governance Index, 136, 140	Sargan test of over identification, 386, 388
Reuters, 143, 144	Sassi, M., 276, 277, 278, 285
revenue mobilisation, 136, 140, 310, 424	Savoia, A., 409
Reynal-Querol, M., 233	Schultz, T.P., 209
Ringler, C., 37, 401	Schultz, T.W., 85, 89
Rio Tinto, 138	Second World War, 129
Robinson, J.A., 64, 134, 135, 149, 272	sectoral dualism, (see dualism)
Rodrik, D., 6, 61, 62, 103, 104, 141, 372, 400, 414	sectoral value added, 374
Rojas-Suarez, L., 407	secondary sector, 61
rotating credit, 170	self-employment, 68, 71
Rooney, C., 103	Senegal,
Rosenzweig, M.R., 86, 87	agriculture, 35, 78, 83, 87, 403
Rostow's theory on the stages of economic	conflict in, 225
development, 372	labour share, 356
royalty rates, 424	land concentration, 44
Ruggeri Laderchi, C., 43, 307, 308, 309	gender and political representation in, 260
rural,	impact of parents' education on inequality, 249
education, 108	inequality in, 33
Rural Income Generating Activities (RIGA), 271, 273, 353, 364	remittances in, 40, 41, 52 social protection in, 93, 106, 160, 164
rural non-agricultural activities (RNAA), 27, 33, 279, 280, 290, 301, 313, 400, 403, 404, 411	seven sins of inequality measurement, 345-366
rural-urban migration, 27, 279, 280, 296, 305, 313, 336, 375, 400, 407, 411	Seychelles, agriculture, 79, 81
rural poverty gap, 11, 90-94, 106	conflict in, 225, 225, 235
Rwanda,	demographic transition, 14, 205, 210, 213, 214, 408,

410	fertility rate, 206
fiscal policies in, 324	fiscal space, 166
Foreign Direct Investment, 404	South Africa,
gender and political representation in, 260	agriculture in, 81, 87
human development in, 257	capital flight, 358
tax revenue-to-GDP ratio, 165, 172	cash transfers, 363, 364, 365
total factor productivity, 11, 94	commodity boom and inequality, 65
Shimeles, A., 40, 41, 42, 57, 65, 311, 381	conflict in, 231, 235
shocks,	demographic transition, 14, 205, 210, 213, 214
exogenous, 10, 48, 63, 278, 383, 415	education, average number of years of, 46
health, 7, 371, 382	education, quality of, 69
income, 6	ethnic inequality, 29
internal, 182	fertility rate, 408
macroeconomic, 284, 323	fiscal space, 164
political, 382	Foreign Direct Investment, 41, 42
poverty, 189	HIV/AIDS, 247
technological, 7, 10, 45, 382	human development in, 257
weather, 278	illicit financial flows, 138
Sicular, T., 302	inequality in, 23, 31, 33, 55, 65, 133, 157, 160, 224,
Sierra Leone,	249, 262, 360, 410
agriculture in, 77, 329	land distribution in, 89
human development, 15, 251, 256	manufacturing in, 107, 111
inequality in, 160, 224, 252	migration, 280
resource rents, 405, 412	opportunity value index, 116
social protection expenditure, 182, 190, 195	poverty reduction in, 223, 225, 256
skill premium, 283, 287, 290, 374, 376, 390, 391, 409, 412,	progressive taxation, 172
416, 424	reindustrialise, 404
skill-intensive services, 16, 33	remittances in, 40
slave trade, 64	resource dependence and inequality, 135
Smidt, M., 225, 235	social protection, 10, 47, 93, 145, 166, 167, 180, 182,
social accountability matrix, 167	184, 189, 191, 193, 365, 413
Social Accounting Matrix, 392	structural transformation, 79
social exclusion, 14, 221, 336	taxation-inequality nexus, 38
Social Institutions and Gender Index, 261	tax revenue-to-GDP ratio, 165
social protection, 7, 12-13, 17, 66, 93, 94, 97, 136-137,	total factor productivity, 11, 94
145, 148, 155, 156, 160, 162, 166, 167, 169, 174, 175,	wage gaps, 161
179-198, 286, 288-289, 311, 328, 333-336, 378, 408,	South Sudan,
412-413, 425	agriculture, 77, 403
and fiscal policy, 162, 166, 167, 169	conflict in, 229, 256, 416
expenditure and inequality, 193	Sri Lanka, 399
expenditure and resource dependence, 136, 192	Ssewanyana, N.S., 51
in Africa, 178-198	Standardized Industrial Trade Classification (SITC), 110
Social Protection and Labour, 13, 180, 183	Standardized World Income Inequality Database (SWIID)
Solt, F., 167	(see database)
Somalia,	statistical assumptions, 344, 352
conflict in, 220, 225, 226, 229, 240	Stanwix, B., 12, 129

Steenkamp, F., 103, 179	income inequality in, 224
Stewart, F., 4, 6, 19, 28, 40, 64, 89, 229, 230, 232, 250	inequality in, 33, 55
Stiglitz, J., 155, 157, 158	manufacturing, 116, 117
Structural Adjustment Programmes (SAPs), 26, 33, 38, 83,	poverty rate, 17, 59
179, 273, 276, 278, 284, 289, 425	Productive Social Safety Net Programme, 333
impact of, 37	remittances in, 337
structural effect, 282	resources (natural gas) in, 135
structural heterogeneity, 9, 372, 385	rural-urban inequality, 320
structural transformation, 11, 12, 54, 60, 61, 63, 65, 79,	social protection programmes, 333-334
80, 82, 103, 104, 109, 111, 112, 115, 116, 119, 123,	tariff,
133, 205, 262, 263, 290, 301, 306, 313, 317, 324, 374,	Average tariff rate, 16, 285, 380, 381
390, 411, 425	import tariff, 45, 84, 284, 391
Subramanian, A., 130	tariff and non-tariff barriers, 84, 97, 403
subsistence,	tariff escalation, 84, 425
agriculture, 24-27, 32, 47, 85, 272, 276, 387, 390, 425	tariff peaks, 84, 425
farms/farming, 63, 84, 92, 262, 270, 271, 276	tax,
sector, 8, 13	agricultural, 84, 98, 313
Sudan,	avoidance, 138, 143, 354
agriculture in, 77, 403	breaks, 143
capital flight, 358	burden, 169, 310, 316, 336
conflict in, 229, 256, 416	direct, 310, 313, 355, 377, 385, 386, 420
fiscal space, 166	discretionary tax waivers, 168
Sundberg, M., 41	evasion, 65, 137, 143, 164, 167, 354
supply-side economics, 157	GDP ratio, 38, 165, 170-172, 175, 215, 286, 310, 377,
Suriname, 157, 161	414, 415
Surplus labour, 61, 85, 89, 90, 92, 407	handles, 172, 175
survey design, 9, 344, 352, 353	havens, 42, 142, 357, 358, 407
Sustainable Development Goals (SDGs), 5, 23, 79, 142,	holidays, 142, 164, 175, 414
156, 203, 262, 263, 264, 320, 369, 387, 399, 400, 413-5	incentives, 137, 142, 145
Swaziland,	income, 28, 38, 142, 145, 162, 165, 169, 170, 171, 172
education in, 252	174, 215, 310, 311, 313, 314
gender gap in political representation, 260	indirect, 162, 165, 168, 215, 286, 310, 311, 313, 325,
poverty reduction in, 223, 246	377, 422
social protection, 166, 182, 184	law, 143
Swearingen, M., 232	liabilities, 142, 143
SYS-GMM estimator, 384-388	marginal tax rate, 154, 172, 175, 202
Szekely, M., 251	multinational companies, 137, 142
Taffa, N., 247	non-tax revenue, 28, 162
Tanzania,	policy, 38, 145, 415
agriculture in, 330	progressive, 13, 16, 19, 65, 66, 145, 162, 168, 169, 172
drivers of inequality, 316-337	296, 324, 336
fertility rate, 14, 210, 213, 410	redistributive effect of, 165, 287, 296, 363, 365, 385
fiscal incidence, 173	regressive, 12,13, 28, 38, 145, 155, 172, 174, 175, 311
gender inequality in, 250	revenues, 12, 28, 145, 146, 150, 162, 164, 165, 172,
health services in, 249, 250	187, 215, 276, 310, 377, 378, 415
human development, 256, 257	rules, 143

sales, 170	Trends in International Mathematics and Science Study
value added (see VAT)	(TIMSS), 69
Technical Vocational Education and Training (TVET), 69	true Gini coefficient, 355
technology,	Tschirley, D.L., 87
impact of, 61, 386	Tsukada, R., 381
information and technology, 45, 247	Tunisia,
science-based technology, 85	agriculture in, 81
technology adoption / diffusion, 94, 96, 102, 400	economic complexity, 107
technology-based agricultural facilities, 81	education, quality of, 69
technology transfer, 404	free basic health services, 160, 164, 167, 168, 174
tenancy reforms, 35, 48, 375, 402, 425	gender inequality, 15, 70, 260
Teorell, J., 286, 394	manufacturing, 111, 116, 117
terms of trade, 52, 84, 273, 275, 276, 290, 374, 380, 385-	poverty rate, 222
387, 391, 403, 405	social protection in, 191, 197
tertiary services sector, 61, 425	total factor productivity, 94
tertiarisation, 33, 372, 390, 400, 415	Turkey, 69
informal tertiarisation, 372	two-way error component model, 384
Thailand,	U-shaped,
fiscal instruments-induced income distribution, 169	development-inequality relationship, 85, 93
rural distributive policy, 169	groups / countries, 31, 32, 348, 351
standardised mathematics and science tests, 69	inequality / Gini, 16, 22, 31, 378
Thailand Village and Urban Revolving Fund, 170	inverted U-shaped inequality, 22, 318, 348, 349, 350
top-performing emerging markets, 108	pattern, 350
Thomas, S., 57	trends, 32, 317, 318
Thorat, S., 87	Uganda,
Thurlow, J., 87	agriculture, 79, 403
time-series data, 54, 425	effectiveness of education, 69, 76
Todaro, M.R., 27	impact of liberalisation, 45
Togo,	inequality in, 31
agriculture in, 79	manufacturing in, 107, 111, 117
human development, 252, 257	population growth, 44
inequality in, 167, 224	product space in, 110, 112-113
social protection, 182	remittances in, 41
wage compression, 329	rural population, 77, 78
Torvik, R., 134, 135	social protection expenditure, 182, 190
total factor productivity, 90, 91, 94, 97, 119, 120, 205, 425	unbalanced panel data, 234
Townsend, R.F., 84	United Nations (UN), 60, 67, 141, 156, 206, 207, 422
trade liberalisation, 33, 38, 48, 278, 280, 283, 284, 290,	United Nations Children's Fund (UNICEF), 171, 210
374, 378, 380, 391, 404, 415, 422, 426	United Nations Conference on Trade and Development
trade mispricing, 66, 137, 138, 141, 143	(UNCTAD), 28, 41
transfers,	United Nations Department of Economic and Social
regressive, 28	Affairs (UN DESA), 251, 254, 271, 274, 279, 280, 295, 305, 351
social insurance, 28	United Nations Development Programme (UNDP), 6, 7, 9
transmission mechanisms channels, 169, 207, 260, 330, 379, 390	70, 71, 79, 81, 158, 162, 204, 245-259, 261, 289, 310, 312, 325, 326, 327, 369, 400, 401, 406, 411, 413
Trecroci, C., 168, 170, 171	012, 020, 020, 021, 000, 400, 401, 400, 411, 410

Addis Ababa, 295 vertical inequality, 40, 64, 230, 231, 235 Gender Equality Index, 70, 259, 261 vicious circle, 221 Human Development Report, 4, 250, 266 Viet Nam, 88, 136, 301 RBA-Economists, 18, 23 industrialisation in, 403 RBA-Working Paper, 346, 349, 350 land redistribution, 89 UNDP-World Bank Workshop on Inequality in sub-Vigdor, J.L., 65 Saharan Africa, 369 violent extremism, 226, 240, 264, 399, 415 United Nations Development Programme Ethiopia (UNDP), Voitchovsky, S., 4 295, 297, 310 Vothknecht, M., 232 United Nations Development Programme Regional Bureau Wabiri, N., 247 for Africa (RBA), 7, 18, 23, 346, 349, 350 wage, United Nations Economic Commission for Africa (UNECA), compression ratio, 13, 17, 155, 160, 161, 329, 336, 423, 246 United Nations Educational, Scientific and Cultural demographic transition impact on, 332 Organisation (UNESCO), 144, 327, 328 differential, 209 UNESCO Institute for Statistics, 68 distribution, 63, 328 United Nations General Assembly, 156 employment, 63, 67-68, 70-71, 283 United Nations Industrial Development Organisations equilibrium, 85 (UNIDO), 90 gaps, 161 United Nations Population Division, 28, 43, 44, 204-210, growth, 328 271, 274, 279, 280, 305, 351, 376, 408 inequality, 49, 67, 328 United Nations Settlement Programme (UN Habitat), 247 low wage rate, 89 United Nations University - WIDER (UNU-WIDER), 4, 8, 55, market-clearing wage, 423 56, 57, 58, 347 minimum, 328, 336 WIDER's WIIDv3.0b database, 8, 56, 346-349, 360, 361, non-farm, 82, 283 362 natural resource sector, 136 United Republic of Tanzania (see Tanzania) United States of America (USA), 41, 120, 121, 136, 140, nominal, 85 policy, 328 161, 272, 399 Inequality-adjusted Human Development Index (IHDI), preferential, 26 15, 245, 250-252, 412 premium, 47, 140 remittances in, 41 real wage, 85, 328 wage inequality and job losses in, 328 rural, 24, 85, 96, 275, 277 University of Illinois (USA), 233 skilled, 412 urban bias, 8, 24, 32, 38, 47, 48, 83, 97, 335, 336 social, 363 Uruguay, 355 structure, 12, 321 value added creation, 282, 283, 401, 426 unskilled, 209, 279, 374 value added tax, 28, 165, 169, 175 urban, 275 value chains, 11, 17, 77, 83, 97, 330, 335-336, 404 wage rate, 328 variance inflation factor, 91, 196, 235, 426 wage compression, 13, 17, 155, 160, 161, 329, 336, 423, Van de Walle, D., 249 426 (see pay compression) Van de Walle, N., 64, 65 Wantchekon, L., 189 van der Geest, W., 26 war intensity, 368, 383, 385, 386 Warner, A.M., 25 van der Hoeven, R., 26 Vanhanen, T., 383, 394 Washington Consensus, 155, 415 Verdier, T., 134, 135 Wetta, C., 37 Verduzco-Gallo, I., 62, 103, 400 Williamson, J.G., 90

```
Wimmer, A., 231
                                                                social protection expenditure, 180, 182, 185
within-sector inequality, 9, 32, 33, 37, 48, 390, 426
                                                                taxation-inequality nexus, 38
Woldehanna, T., 297, 298, 312
                                                                U-shaped inequality trend, 350
Wolff, F.C., 29
                                                                Zambian Consolidated Copper Mines, 147
Wolman, A.L., 334
                                                             Zimbabwe.
Workie, Y., 203
                                                                agriculture in, 83
World Bank, 15, 33, 37, 45-63, 77-104, 132, 139, 145, 146,
                                                                compulsory acquisition of land, 35
   149, 167, 179-191, 222, 231-235, 252, 273-289, 295,
                                                                education, average number of years increased, 46
   297, 300-302, 307, 312, 313, 318-320, 323, 326, 334,
                                                                expenditure on agriculture, 87
   364, 369, 387, 390, 402, 413, 425
                                                                gender gap in political representation, 266
   International Income Distribution Database (I2D2), (see
                                                                illicit financial flows, 138
   database)
                                                                manufacturing, 116
   PovcalNet, (see database)
                                                                rural poverty, 11, 78, 79
   standard poverty line, 185
                                                                taxation-inequality nexus, 38
World Development Indicators (WDI), (see database)
                                                             Zucman, G., 138
World Economic Forum, 203
World Governance Indicators (WGI), 149
World Income Inequality Database (WIID), (see database)
World Trade Organisation (WTO), 290, 405
xenophobia, 280
Youth.
   iobless youth, 203
   youth bulge, iv, 67, 103, 229
   youth dependency ratio, 208
   youth empowerment, 264
   youth literacy rate, 139
   youthful population, 203, 235
   youth working-age, 67
   youth unemployment, 103
Yu, J., 208
Zagonari, F., 44, 382
Zahler, A., 123
Zambia,
   access to healthcare, 247
   agriculture in, 33, 35, 83, 90
   child grant programme, 146
   conflict and, 14
   economic complexity, 112
   gender inequality, 70
   human development, 256
   inequality in, 158, 224, 262
   manufacturing, 108
   minimum wages in, 160
   mining and utilities in, 33, 132, 137, 138, 141-142, 143
   poverty rate, 223
```

resource wealth, 61, 147-148

SUSTAINABLE GOALS







































United Nations Development Programme Regional Bureau for Africa One United Nations Plaza New York, NY 10017

africa.undp.org

Sub-Saharan Africa (SSA) recorded a remarkable economic performance in the first 15 years of the 21st century, which reversed the decline of the prior 25 years. This achievement was accompanied by a perceptible, modest, but uneven decline in aggregate poverty driven by, the variation of inequality levels and trends among the African countries. This book, an outcome of a comprehensive study of income inequality in SSA, provides a thorough documentation of inequality levels and trends in the region in order to better understand the slow and varying rate of poverty reduction. It proposes hypotheses to account for this experience and draws relevant lessons that could help accelerate reduction in income disparities.

The book proposes an equity pathway built on four pillars: promoting inclusive growth pattern such as raising productivity in the informal sector, diversifying the economy, re-industrializing and modernize agriculture, and raising yields, which is central to reducing income disparity; addressing population pressure (promote virtuous population policies, increase inequality-reducing power of migration and make urbanization inclusive) is key; accelerating human development including investing in quality education, increasing access to basic health service, and investing in girls, youth and women; and finally, institutionalizing a supportive macro-economic environment, especially fair distribution of national assets, promoting progressive taxation, avoiding the resource curse, institutionalizing better governance and enhancing data collection and management.

The quotations below from selected African and the United Nations leadership provide the value addition of this book.

"As long as poverty, injustice and gross inequality persist in our world, none of us can truly rest...... We must work together to ensure the equitable distribution of wealth, opportunity, and power in our society." – Nelson Mandela, former President of South Africa

"There remain huge disparities between and within countries. Within countries, rural poverty remains unacceptably high while urban poverty is extensive, growing, and underreported by traditional indicators"..."Inequality can be tackled. Public spending on high-quality education and health care reduces inequality." – Uhuru Kenyatta, President of Kenya

"A lack of viable institutions, the lack of diversity in economies, the lack of mature political institutions, the lack of equity in many of the societies, managing endowment of natural resources well. All of these create the inequalities in society that leads to the descent, and could lead to a breakdown in the social order." – Ellen Johnson-Sirleaf, President of Liberia

"Fighting poverty and social inequalities also means ensuring national solidarity to support those among us who are most in need, and to improve access to health care for all." – Macky Sall, President of Senegal

"Globalization and technological progress fostered extraordinary economic growth and created conditions for unparalleled reduction of extreme poverty and generalized improvement of living standards. But their unbalanced nature led to high income concentration and extreme inequality, and made exclusion even more intolerable." – António Guterres, Secretary-General of the United Nations

"It is critical that, across the world, we focus on those furthest behind first. Because in all regions, the rising tide of optimism and empowerment, has not yet reached everyone." – Amina Mohammed, United Nations Deputy Secretary-General

"When women are able to live in a safe and secure environment, they can participate effectively in the economy and society. This helps overcome poverty, reduces inequalities and is beneficial for children's nutrition, health and school attendance. Every woman and girl has the right to live in safety in her home and community." – Helen Clark, former UNDP Administrator

"Two decades of underinvestment in agriculture, growing competition for land and water, rising fuel and fertilizer prices, and climate change have left smallholders less able to escape poverty." – Achim Steiner, UNDP Administrator

"As remarkable as economic growth has proven to be in Africa, the effectiveness of growth in reducing poverty in Africa has been historically low, as initial income distribution plays a dramatic role on the impact of growth on poverty reduction. Slow productivity growth in the rural sector – where the majority of the labour force in the region still works – is a key factor of the lack of diversification and limited impact of growth on poverty." – Tegegnework Gettu, UNDP Associate Administrator

"Extreme inequality is detrimental to growth and development, as well as to peace and security. To achieve the 2030 Agenda, governments, private sector actors, civil society organizations and development partners must focus on rapidly reducing poverty and income disparities simultaneously." – Abdoulaye Mar Dieye, UNDP Assistant Administrator and Director, Regional Bureau for Africa

"Inequality is the defining issue of our time. When people are treated unequally in terms of their rights, capabilities and opportunities, human rights are violated, human development is shrunk and human potentials are stunted. In the ultimate analysis, inequality is an issue of social justice." – Selim Jahan, Director, UNDP Human Development Report Office

ISBN: 978-92-1-126424-1

