ONE

The Pursuit of Long-Run Economic Growth in Africa

An Overview of Key Challenges

Haroon Bhorat and Finn Tarp

H istorically, the African continent has been largely dismissed as a case of regional economic delinquency, with the levels of growth necessary to reduce poverty and inequality deemed to be consistently unattainable. In the last decade, however, significantly higher levels of economic growth have ushered in a new era to the region, suggesting it may, potentially, serve "as the final growth frontier with the last of the great untapped markets, ripe for rapid growth and development" (Bhorat and others 2015a). Data from *The Economist* and the International Monetary Fund (2011) support these assertions, as six of the fastest growing economies globally over the period 2001 to 2010 were in Sub-Saharan Africa (SSA hereafter): Angola, Nigeria, Ethiopia, Chad, Mozambique, and Rwanda. This volume specifically refers to the following six economics as the African Lions: Ethiopia, Ghana, Kenya, Mozambique, Nigeria, and South Africa.

Bhorat and Tarp

The 1980s is often referred to as the continent's lost decade. The combination of massive external economic shocks; governance failures; under-investment in vital social services; significant macroeconomic imbalances; poor infrastructure; and structural trade deficits (Devarajan and Fengler 2012; Collier and Gunning 1999) undermined the early progress achieved after independence from Africa's colonial masters. Orthodox stabilization and structural adjustment programs dominated the policy agenda (Tarp 1993, 2001) and stagnation continued well into the 1990s. The post-2000 African economic boom, in contrast, has been built around a composite of factors, including improved macroeconomic policy; high commodity prices; significant improvement in the quality of governance and institutions; technology (mobile phones in particular); demographic growth; urbanization and the rise of new, dynamic African cities; and, in some cases, better targeted social policy. In turn, these factors, regularly supported by substantial inflows of foreign aid (Tarp 2015), have enabled the growth momentum on the continent to be maintained.

Not surprising given where African countries found themselves in the mid-1990s, socioeconomic indicators-poverty, inequality, access to social services, institution development, and infrastructure levelsremain weak in Africa (see Arndt, McKay, and Tarp 2016) and typically lag behind developing nations in other regions of the world. There are also concerns related to the sustainability of recent economic performance and socioeconomic advance for various reasons. First, an important part of this growth has been driven by dependence on extractive resources, which are volatile and subject to exogenous factors. Further, being a capital-intensive sector, there remains limited scope to address the rapidly increasing supply of labor through resource-based development. Second, emerging labor trends indicate that agriculture's share of employment is diminishing, with the services sector absorbing a significant share of the labor force (Newman and others 2016a). However, due to low human capital levels, the majority of these workers are employed on the fringes of the economy, working mainly in informal low wage and low productivity jobs. The manufacturing sector in most of these countries is shrinking following a considerable decline in manufacturing value added between 1990 and 2000. Third, while inequality is notoriously difficult to capture, it does appear as if inequality indicators are widening through the continent, driven by wage differentials across sectors, differences in human capital levels, and urban and rural splits. Finally, many African countries are at different stages of demographic transition—shifts from a high fertility, high mortality phase to a low fertility, low mortality state—a state associated with dividends that should, ideally, contribute to economic growth and development, which does not, however, seem to be materializing (Oosthuizen 2015).

A BRIEF MACROECONOMIC OVERVIEW

Africa's postcolonial growth history may be divided into two distinct phases. The first, between 1965 and 1990, was characterized first by progress and then by dismal growth in the 1980s. More recently, growth has surged. This chapter presents a brief overview of key macroeconomic indicators for Africa broadly, and specifically for our sample of six African economies.

Table 1-1 presents an overview of inflation, exchange rates, and current and fiscal accounts, as well as external debt, for the various African subregions. It is evident that macroeconomic performance has significantly improved across SSA, as demonstrated by inflation, which dropped from exceptionally high rates in 1990–94 to single-digit values in the two subsequent periods.

Over this period, these economic regions experienced slight exchange rate depreciation against the US\$, but since then, the exchange rates have stabilized closer, possibly, to their equilibrium value. Despite significant currency depreciations, exports have not increased sufficiently to improve the current account balances. For example, Kenya experienced what has been termed a clogged "exports engine" (World Bank 2014) as the exports of goods as a percent of GDP declined in the period between the mid-2000s and 2014, while imports of goods continued to increase. However, over this period, Kimenyi and others (2015) note that Kenyan services exports continued to expand, although not sufficiently to offset the widening gap between exports and imports. Overall, however, current account deficits within the context of a developing

Macroeconomic indicator	Period averages	Central Africa	East Africaª	North Africa	Southern Africa ^b	West Africa
Inflation (%)	1990–94	923.05	17.58	11.21	78.5	11.43
	2000-04	28.59	4.43	2.04	21.55	4.77
	2010-13	3.15	4.57	4.94	7.25	5.44
Official exchange rate (LCU	1990–94	284.13	174.13	22.22	3.83	253.35
per US\$, period average) ^c	2000-04	596.83	411.55	36.6	22.06	648.79
	2010-13	553.94	552.12	61.17	243.12	933.39
Current account balance	2005-09	22.5	-6.67	7.95	-5.55	-7.21
(% of GDP) ^d	2010-12	-1.55	-7.86	0.78	-9.5	-11
Fiscal balance (% of GDP)	1990–94	-3.82	-3.29	2.78	-3.5	-0.66
	2000-04	1.98	-3.88	5.25	-2.02	-2.66
	2010-12	4.46	-2.55	2.74	-0.7	-2.65
External debt stocks	1990–94	113.36	86.51	92.58	111.12	116.91
(% of GNI)	2000-04	129.74	79.06	67.16	72.69	166.08
· ·	2010-13	24.02	45.75	36.87	32.48	43.51

 TABLE 1-1.
 Macroeconomic Overview for Africa, 1990–2013

Source: Bhorat and others (2015a) based on data obtained from World Bank Development Indicators, 2014, and International Money Fund Government Finance Statistics, 2014.

a. Somalia is excluded from East Africa for lack of data.

b. Zimbabwe is excluded from Southern Africa because of episodes of hyperinflation and economic crisis.

c. LCU = Local currency units relative to the US\$. Sao Tome and Principe and Madagascar are excluded from the exchange rate data due to rapidly depreciating currencies, which will result in distortions for the Southern Africa results.

d. There is no current account data for Africa before 2005.

nation do not indicate fiscal imprudence, as external funds (that is, especially aid) often supplement domestic resources.

Although the majority of the current fiscal accounts remain negative, they are within a narrow and sustainable range for the different regions. It is also apparent that external debt has been relatively well managed, as debt to Gross National Income (GNI) levels has fallen steadily since 1990 for all regions of the continent. This is in part due to debt relief, but is also partially a result of various African economies diversifying their output, resulting in a significant proportion of these states financing investment through (fast-expanding) domestic credit markets rather than through external debt. Growth within the African Lion states was often accompanied with significant welfare gains. In South Africa and Ethiopia, significant welfare gains were observed, as measured by increasing access to social services, improved housing and basic infrastructure, and a reduction in poverty levels. Overall, while table 1-1 paints a positive picture of the state of Africa's macroeconomic environment, risks arise from political instability, war and conflict, and external shocks such as changes to commodity prices, as well as the spread of disease (Bhorat and others 2015a).

STRUCTURAL ECONOMIC TRANSFORMATION AND INCLUSIVE GROWTH

Along with the rapid economic expansion across Africa in the post-2000 period, the continent experienced quickly rising average income levels, as well as shifts in the composition of output of the various economies. Tables 1-2 and 1-3 provide additional insight into these fundamental changes.

Table 1-2 demonstrates that most regions experienced real annual GDP growth exceeding 4 percent over the 2000 to 2014 period, with the exception of Southern Africa, where growth dipped slightly below this threshold. South Africa, the most dominant economy, experienced contractions in overall growth. As already alluded to, growth accelerated relative to the previous decade in all regions, including countries such as Ghana and Mozambique. Lastly, we note an increasing trend in real per capita Gross Domestic Product (GDP), except in the North Africa region, which experienced economic and political turmoil following the social upheaval wrought by the Arab Spring.

While these economic indicators are promising, it is necessary to take a closer look to discuss the overall sustainability of Africa's economic expansion and assess whether this growth translates into the achievement of Africa's development objectives of equitable growth and is also reducing poverty. To understand whether growth is sustainable, it is important to come to grips with the drivers of growth. Economic theory and cross-country evidence suggest that a more diverse economic

					Annual a % cha	iverage inge
Region	Indicator	1990	2000	2014	1990–2000	2000–14
North Africa	Total GDP (US\$million)	180,909	282,313	383,649	4.6	2.2%
	Average GDP per capita (US\$)	1,470	2,576	2,588	5.8	0.00
West Africa	Total GDP (US\$million)	97,388	123,580	294,148	2.4	6.4
	Average GDP per capita (US\$)	481	545	713	1.3	1.9
East Africa	Total GDP (US\$million)	34,700	45,860	155,279	2.8	9.1
	Average GDP per capita (US\$)	453	367	1,933	-2.1	12.6
Central Africa	Total GDP (US\$million)	37,467	39,327	86,648	0.5	5.8
	Average GDP per capita (US\$)	1,731	2,070	3,233	1.8	3.2
Southern Africa	Total GDP (US\$million)	222,742	271,265	461,063	2.0	3.9
	Average GDP per capita (US\$)	2,230	2,653	2,387	1.8	-0.8

TABLE 1-2. Real GDP and GDP per Capita in Africa for 1990, 2000, and 2014

Source: Word Development Indicators, 2014, and based on updated figures from Bhorat and others (2015a).

base—achieved through structural transformation—increases the likelihood of sustained economic performance and growth. Such structural transformation involves the reallocation of labor from low- to high-productivity sectors, and the rate of such structural change can encourage growth significantly. Rodrik (2014) posits that rapid industrialization or structural change toward high-productivity sectors can help shift countries into middle or upper income status; this follows the notion that modern manufacturing industries exhibit unconditional convergence to the global productivity frontier.

Table 1-3 presents the contribution of the various sectors to GDP between 1990 and 2012. We see that the agricultural sector remains a dominant contributor to GDP, particularly in West, East, and Central Africa, although there has been an observable downward trend in agriculture in most regions. In the African case, where industrialization has taken place, it has generally been dominated by mining rather than manufacturing activities. In fact, in most regions and periods since the 1990s, manufacturing has declined substantially. This weakness in manufacturing represents a key indicator alluding to the vulnerability of the growth and development trajectory of many of Africa's economies. In contrast, the tertiary services sector has grown to be the largest contributor to GDP for most SSA nations.

Africa's growth dynamic thus far has been characterized, on average, by a move into resource-based production, with small gains spilling over into manufacturing output. Indeed, some of the highest growth has been recorded in low-skilled, low productivity jobs in the urban services sectors of these economies (see Newman and others 2016a). Africa's transition away from primary sector activities toward tertiary sector activities has, in other words, not resulted in a discernable shift toward a more sustainable growth path. Attempting to quantify the effect of this structural change, McMillan and others (2014) estimate that this restructuring made a sizeable negative contribution to overall economic growth between 1990 and 2005, by as much as 1.3 percent per annum on average.¹ In this sense, their estimates show that labor moved in the wrong direction, becoming less productive. In Nigeria, Ajakaiye and others (2015) also find that the manufacturing sector has become more capital-intensive over time, hampering the capacity of this sector to absorb significant volumes of labor. Rodrik (2014) characterizes this phenomenon as premature deindustrialization, where a significant proportion of the population is absorbed into low-productive, informal sector work. This begs the question whether Africa will be able to skip a stage of economic development that all other developing nations have gone through (namely moving from a core, vibrant manufacturing base

Percent of GDP								
Region	Sector	1990	2000	2010	2011	2012	1990–2000 % change	2000–12 % change
North Africa	Agriculture	21.46	18.81	14.18	14.33	14.95	-2.65	-3.87
	Industry ^a	31.83	34.40	35.59	35.65	35.69	2.58	1.29
	Manufacturing	15.17	14.28	13.87	13.93	12.89	0.89	-1.38
	Services	46.71	46.78	50.24	50.02	49.36	0.07	2.58
West Africa	Agriculture	34.97 21 82	34.47 73.41	31.27	29.54 74.47	28.83 70.18	-0.50 1 50	-5.64 5.77
	Manufacturing Services	9.56 9.56 43.21	8.91 42.12	6.00 6.00 47.26	5.87 5.87 47.12	5.99 5.99 43.08	-0.65 -1.10	-2.92 0.96
East Africa	Agriculture	39.91	32.74	32.63	32.92	35.95	-7.17	3.21
	Industry	16.60	16.58	18.45	18.65	17.06	-0.02	0.49
	Manufacturing	8.82	7.81	8.41	8.26	7.84	-1.01	0.03
	Services	43.49	50.68	48.92	48.43	46.99	7.19	-3.69
Central Africa	Agriculture	30.83	25.01	32.32	32.13	39.73	-5.83	14.72
	Industry	27.26	38.49	36.71	37.90	27.59	11.23	-10.90

TABLE 1-3. Sectoral Breakdown of Economic Activity in Africa (Regional Averages), 1990, 2000, and 2010–12

	Manufacturing ^b	10.97	7.05	4.06	4.13	4.35	-3.91	-2.71
	Services	41.91	36.51	30.97	29.97	32.68	-5.40	-3.83
Southern Africa (with South Africa)	Agriculture	18.44	14.68	12.15	11.78	9.15	-3.76	-5.54
	Industry	34.68	33.21	32.84	32.98	31.73	-1.47	-1.49
	Manufacturing	17.92	15.39	14.78	14.16	11.44	-2.53	-3.95
	Services	46.88	52.40	55.01	55.24	59.13	5.52	6.72
Southern Africa (without South Africa)	Agriculture	19.59	15.64	14.84	13.02	12.63	6.97	-3.96
	Industry	34.23	33.34	31.78	33.11	33.32	32.14	-0.89
	Manufacturing	17.44	15.09	14.71	14.83	14.28	-2.35	-0.81
	Services	46.18	51.26	53.38	53.86	54.05	57.89	5.08
Source: Bhorat and others (2015a) based on da	ata from the Word Dev	elopment Iı	ndicators, 2	2014.				

a. Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. b. Manufacturing and Services are subsets of Industry.

toward growth) and effectively reap the benefits of a mining- and servicesled growth path in the pursuit of long-run growth and employment creation. On current evidence, it would appear that a "manufacturingabsent" growth and development path is not a sustainable path to prosperity for the African continent.

Growth, Poverty, and Inequality Interactions in Africa

It is widely acknowledged that economic growth is essential for poverty reduction. Evidence suggests that the absolute value of the elasticity of poverty with respect to economic growth ranges between 1 and 5 (Ravallion and Chen 1997), meaning that a 1 percent increase in GDP will have the effect of lowering poverty by between 1 and 5 percentage points. This range suggests that economies differ in their ability to translate growth into poverty reduction, implying that economic growth is a necessary but insufficient condition for rapid poverty alleviation. As will be shown, African elasticity estimates tend to be lower than globally comparable averages in line with Arndt and others (2012), who compare Mozambique and Vietnam and point to the impact of initial structural characteristics.

Another major contributor to less poverty reduction following rapid economic growth is the level of inequality. High and increasing inequality weakens the effect of growth on poverty (Ravallion 1997; Fosu 2009). Evidence also suggests that the initial level of income inequality within an economy is important in predicting the overall impact of growth on poverty (Ravallion 1997, 2001), where, all else constant, higher levels of initial income inequality are associated with a lower impact of growth on poverty. Gini coefficients, which measure inequality and poverty, recorded for the African continent are high relative to the rest of the world, thus the distribution of income is of particular importance in our context. Finally, the structure and nature of an economy's growth path will further influence poverty and inequality outcomes. Evidence suggests, for example, that growth built on labor-intensive manufacturing is more poverty-reducing and less inequality-inducing than growth in capital-intensive sectors such as mining and financial services (Ravallion and Datt 1996; Khan 1999; Ravallion and Chen 2007).

This relationship is a cause for concern for the many African economies where "manufacturing-absent" growth, together with a significant emphasis on the natural resource sector, characterizes their growth trajectories.

The Growth-Poverty-Inequality Nexus in Africa

It follows from the previous section that Africa's improvement in macroeconomic performance has not translated into equally high-impact outcomes in poverty reduction levels. Figure 1-1 shows that, while extreme poverty has fallen in the region since the 1990s, almost 50 percent of SSA's population continues to live below the poverty line. Figure 1-1 also confirms that poverty in Africa is not falling as rapidly as in South and East Asia.

Figure 1-1 indicates that the proportion of the population living in extreme poverty in the African region, except for North Africa, is approximately 39 to 46 percent, which is noticeably higher than the poverty rates of all other developing regions of the world. Further, the depth of poverty in Africa is also more extreme than in other developing regions. For those living below the poverty line in Africa, the average consumption level is just 70 US cents a day, considerably below that of other regions, which are all close to attaining the US\$1 a day level (Africa Progress Panel 2014). Hence, excluding North Africa, about two thirds of the poverty.

The estimated growth elasticity of poverty, indicating the percentage change in poverty following a percentage change in growth, provides an indication of the poverty-reducing impact of Africa's growth. Figure 1-2 presents Africa's growth elasticity of poverty for the two decades since 1990. SSA had an elasticity of -0.7, indicating that growth of 1 percent was estimated to have reduced poverty by only 0.7 percent, as compared with an elasticity of approximately -2 in the rest of the world.

Several key factors help explain this difference in elasticity. In addition to higher population growth and the structural features referred to in Arndt and others (2012), three factors can be noted. First, the higher poverty levels and lower incomes in SSA mean that equal absolute changes in both these indicators translate into smaller and larger changes, respectively, which then arithmetically reduces the growth

FIGURE 1-1. Poverty Headcount Changes from 1981–2008



Percent of population in poverty

Source: PovcalNet (World Bank), 2014, based on Bhorat and others (2015a).

elasticity of poverty for SSA (World Bank 2013). Second, it has been shown that higher initial inequality hampers the poverty reducing power of growth. Fosu (2009) calculates the income–growth elasticities for thirty countries in SSA over the 1977 to 2004 period and reveals substantial variation in the estimates, from 0.63 in Namibia to 1.4 in Ethiopia. Many African countries exhibit high and increasing levels of inequality. In addition, aggregate evidence indicates that the average Gini coefficient for the African continent is 0.44, a value that is higher than that of the developing country average of 0.416 (Bhorat and others 2015a). Ultimately, then, the high initial levels of income inequality in many African economies will serve to reduce the estimated growth– poverty elasticities derived for the region.

Last, it is not only growth that matters, but also the pattern and structure of economic growth within individual economies. Cross-country

FIGURE 1-2. Growth Elasticity of Poverty by Region^a



Source: Bhorat and others (2015a).

a. Controls include initial consumption, inequality, and an indicator for a natural resource share

> 5 percent of GDP. Country fixed effects are controlled for in all results.

evidence makes it clear that growth in labor-intensive sectors such as agriculture or manufacturing are typically more poverty-reducing than growth in capital-intensive sectors such as mining (Khan 1999; Ravallion and Chen 2007; Loayza and Raddatz 2010). From the previous data analysis, it is evident that growth for a significant proportion of African economies is centered around capital-intensive sectors and many countries tend to exhibit a pattern of development where the largest contributions to GDP have moved from agriculture to activities in mining, construction, and services, with the notable absence of a manufacturing sector.

Labor Market Characteristics

In examining the inequality–growth relationship, labor demand responses during growth episodes within an economy will often shape and influence the private distributional impacts of growth. An example of this has been the shift toward the demand for highly skilled labor during periods of economic growth. This asymmetric response in occupational demand to growth is critical to understanding how economic growth can have distributional and poverty reduction effects. Bhorat and others (2015a) conclude that, in South Africa, for example, the secondary and tertiary sectors witnessed a rise in the proportion of high-skilled labor force between 2001 and 2012. At the same time, the primary and tertiary sectors saw declining proportions of unskilled labor, overall suggesting that firms in South Africa are investing in capital and skills, causing the shift away from unskilled labor.

The greatest degree of pressure within the labor market is likely to stem from the entry of young workers into the labor market. Figure 1-2 presents the projected increase in the size of the working-age population between 2010 and 2030. The magnitude of the expected growth to 2030 in Africa's youth population (15–24 years of age) is estimated at 2.5 times the growth in the youth population of Latin America, and over three times the growth in Asia. Lam and Leibbrandt (2013) provide an example from Africa's most highly populated country, Nigeria, to illustrate the extent of the youth bulge in Africa. They show that, while growth in the 15–24 age group in Nigeria has fallen from its mid-1990s peak, it is expected to remain above 2 percent until 2030, resulting in Nigerian youth continuing to make up a third of the labor force for the entire period (Bhorat and others 2015a).

The fact that Africa's working-age population is expected to grow so quickly, and particularly the working-age youth, highlights the fact that the continent is not as far along in its demographic transition as many other regions of the world, alluding to the increasing challenge of job creation for the continent (Bhorat and others 2015a).

Regarding the structure of the labor market, table 1-4 summarizes the global labor market, including Sub-Saharan Africa. A key defining feature of the African labor market is that an exceptionally high proportion—approximately 74 percent—of the SSA labor force is selfemployed, as opposed to being engaged in wage employment.² Income from self-employment, which is directly dependent on the profits of the enterprise/surplus of household activities, is historically more variable than wage employment. Also noteworthy is that the majority of the labor force (56 percent) is engaged in agricultural activities, while 77 percent of the self-employed workers find themselves in the agricultural sector, having a compounding effect on the volatility of household incomes.

Thus, the agricultural sector, as well as the rural labor market, is extremely important for the livelihood of citizens in the SSA region,

	Wage	Self-	Self-	2mployed			
Region	employment	employment	Agriculture	Non-agriculture	Employed	Unemployed	Labor force
SSA	61	236	181	55	297	23	320
	(0.19)	(0.74)	(0.56)	(0.17)	(0.93)	(0.07)	(1.00)
Other non-OECD	1,118	1,068	584	484	2,186	134	2,320
	(0.48)	(0.46)	(0.25)	(0.21)	(0.94)	(0.06)	(1.00)
OECD	333	50	7	43	383	32	415
	(0.80)	(0.12)	(0.02)	(0.10)	(0.92)	(0.08)	(1.00)
Global total	1,512	1,354	772	581	2,866	189	3,055
	(0.50)	(0.44)	(0.25)	(0.19)	(0.94)	(0.06)	(1.00)
Source: Bhorat and ot	thers (2015b). The d	ata are based on the ¹	World Bank's Inter	national Income Distr	ibution Database	e (I2D2) dataset, wh	ich is a

TABLE 1-4. The Global Labor Market at a Glance, 2010^a

Millions of people

harmonized set of household and labor force surveys drawn from a multitude of countries. a. Estimated percentage of regional labor force is shown in parenthesis.

acting as a potential conduit for poverty reduction and job creation. Working on the land in rural areas is generally low-income work and the sectors potential to help transition workers out of poverty must be developed.

The number of working poor in Africa—defined as those living in households earning less than US\$2 a day—currently at 193 million people, constitutes almost two-thirds of the total employed and is approximately eight times the number of unemployed in the region. The pattern of the changes in the number of the ultra-poor (those earning below US\$1.25 a day) is consistent and shows a distinct redistribution of the world's working poor from East Asia and South East Asia and the Pacific to South Asia and Africa, with almost a third of the world's working ultra-poor residing in SSA, up from 18 percent in 2000 (Bhorat 2013). Thus, while the proportion of the working poor to total employment in SSA has seen gradual improvement since 2000, the fundamental jobs challenge in the region remains the problem of the working poor.

Ultimately, then, policies targeting the working poor and, in particular, increasing the productivity and competitiveness of the sectors they are located in, remains crucial to reducing the high incidence of poverty in many African economies. As one example, transforming the informal sector to become a more sustainable employer with backward and forward linkages to formal sector firms provides another focus for equitable development. Finally, growing Africa's wage employment base must be a key element of a growth strategy for African policymakers. Expanding the manufacturing sector, as noted, is another element of a job-generating growth strategy, which has worked in the high-success economies of East Asia (Bhorat and others 2015a; Newman and others 2016a, 2016b).

A THREE-PART STORYLINE: EMERGING BARRIERS TO LONG-RUN GROWTH

The detailed country case studies that follow this chapter suggest at least three major common themes that serve, in part, to characterize the nature of the growth challenges and constraints in Africa, which, if unchecked, could reinforce a pattern of low growth accompanied with limited poverty-reducing impact. These themes are a resource-led growth path, an absent manufacturing sector, and the increasing informalization of the work force. In upcoming sections, we discuss each in turn and provide possible policy recommendations.

Resource-Led Growth

Numerous studies highlight the developmental benefit of the diversification of an economy's productive structure. Additionally, these studies also argue that the type of products the economy diversifies toward also matters significantly. One of the most influential studies in reviewing the relationship between resource-rich African countries and overall growth is the well-known cross-country regression finding by Sachs and Warner (2001). This paper finds a negative and statistically significant coefficient for the variable capturing resource dependence (primary product exports as a share of GDP), when controlling for other growth variables such as geography and institutions.

Bhorat, Steenkamp, and Rooney (forthcoming), test for this natural resource curse hypothesis in Figure 1-3 by showing the relationship between natural resource intensity (as measured by the amount of arable land) and the log of GDP per capita for a cohort of high, middle, and low income countries as well as some selected African countries. They observe a weak negative relationship between the two variables (0.11). More specifically, a country that has a high natural resource endowment is more likely to be poorer than those countries with a lower natural resource endowment, *ceterus paribus*. While this negative correlation suggests the potential presence of the natural resource curse, further interrogation remains necessary to better understand the country-specific dynamics as well as the influence of mineral resources on overall growth levels.

Proponents of the resource curse effect argue for a number of channels through which resources adversely impact economic development. First, the terms of trade argument posed by Prebisch (1959) argues that the price of commodities relative to manufactured goods is said to follow a downward trajectory over time and, thus, countries specializing

FIGURE 1-3. Resource Intensity Relative to per Capita GDP



Log of revealed natural resource intensity^a

Source: Bhorat, Steenkamp, and Rooney (forthcoming), using the BACI International Trade Database. a. The natural resource intensity associated with a country's export basket (2013) is constructed using data from the UNCTAD Revealed Factor Intensity Database developed by Shirotori, Tumurchudur, and Cado (2010). The construction of this measure follows the same technique that is applied by Hausmann, Hwang, and Rodrik (2007) when the use revealed technology content data (known as the PRODY measure) to construct a measure of the productivity level associated with a country's export basket (known as the EXPY measure). In essence, the measure is a weighted average of the revealed natural resource intensity for a country, using each exported product's share of a country's export portfolio as weights.

in resource-intensive activities will experience declining terms of trade over time. Second, Sachs and Warner (1995, 2001) argue that, following a commodity boom, the growth of the resource sector crowds out manufacturing activity. Third, a political economy-type argument contends that resource-abundant countries are less likely to develop sound institutions because of elites competing over resources rents. It is argued that countries characterized by weak institutions have a higher likelihood of armed conflict. Finally, commodity prices tend to exhibit high levels of volatility that, coupled with export concentration in natural resource– based exports, result in broader macroeconomic volatility.

However, there are, as well, other studies that contest the resource curse hypothesis. First, Mehlum, Moene, and Torvik (2006) propose a "conditional resource curse" whereby the quality of a country's institutions influences whether it is able to successfully exploit its natural resource abundance. They find that resource-rich countries with weak institutions are associated with low growth, whereas resource-rich countries with strong institutions are associated with high growth. Second, Bravo-Ortega and Gregorio (2007) highlight the importance of the country's human capital levels. Specifically, they argue that low levels of human capital and resource abundance are associated with low levels of growth, whereas high levels of human capital and resource abundance are associated with higher levels of economic growth. Finally, Maloney and Lederman (2008) find little evidence for the curse and, instead, propose a "curse of concentration," for countries that are overly dependent upon the exports of just a few natural resource–based products are associated with the negative growth effects.³

In summary, an abundance of mineral resources will not automatically limit a nation's economy to low levels of growth and development. Rather, any measurable developmental benefits will arise from the inclusion or the absence of a broader set of requirements for growth, such as the quality of institutions, human capital levels, and a sufficiently diversified economy. And in the final analysis, it is important to keep in mind that, if available resources are spent wisely, then growth is likely to ensue. The country chapters that follow will directly and indirectly attest to the challenges posed to the African growth agenda for African economies that find themselves heavily dependent on resource revenues to fuel fiscal revenue, economic growth, and employment generation.

An Absent African Manufacturing Sector

During the 1970s, manufacturing in Africa thrived due to importsubstitution industrialization. However, when economic liberalization and the privatization of state enterprises became rampant under stabilization and structural adjustment in the 1980s, African manufacturing went into secular decline, as the continent could not compete with lowwage Asian countries. Import competition led to the contraction of many domestic industries, resulting in labor moving toward less productive sectors. According to Page (2014), African countries were not





Source: World Development Indicators, 2015.

well prepared for import competition due to state-led import substitution creating high protection and heavy import dependency, but other factors, including bad luck, were also at play. Newman and others (2016b) provide a comprehensive set of comparative studies of industrial development in Africa and Emerging Asia.

Figure 1-4 shows a steady decline or flatlining in the contribution of manufacturing to economic output across five African regions, particularly from 1990. Since 2000, there has been a marginally upward trend for manufacturing in North and East Africa spurred on by the increasing incidence of light manufacturing and medium technology manufacturing, respectively.

An alternative approach to assessing manufacturing performance is to analyze the performance of manufacturing exports, as the ability to export and compete in global markets suggests a level of success and industrial strength. Following the poor performance in manufacturing output across most of Africa, the trends in export performance are equally disappointing. As illustrated in figure 1-4, West Africa's share of manufacturing in exports rose promisingly from 1995 levels to a peak of 24 percent in 2004 before declining back to 1995 levels in 2013, at just under 16 percent of GDP. An encouraging trend is emerging in East Africa, where, on average, manufacturing goods as a proportion of exports has risen from 17.2 percent in 1995 to 20.4 percent currently. Over time, manufacturing exports reached a peak of 27 percent of exports from the East African region in 2006, after which it gradually declined and has now stabilized.⁴

While this proportion varies significantly across the African Lions in focus here, the share of manufacturing as a proportion of GDP is highest in Kenya, Mozambique, and South Africa. Manufacturing in South Africa declined by almost 10 percent between 1994 and 2014. This contraction in South Africa followed the inability to compete in global manufacturing export markets, increased global competition, and volatile real exchange rates. Kenya has failed to capitalize on the manufacturing exports in spite of its location, the presence of a large and skilled labor force, and its market-focused orientation. Additionally, Kenya has significant resource endowment to enable agricultural industries to transform from small-scale downstream industries into expanded upstream manufacturing industries. This would serve a dual purpose of increasing growth and lowering unemployment.

Several trends are observed when focus shifts to the nature of manufacturing exports undertaken by African countries. First, as expected, exports typically consist of primary products. The volume of these exports continues to be high even when compared with developing country counterparts in South Asia, Latin America, and the Caribbean. Second, it is estimated that over half of these manufacturing exports are capital-intensive in nature and heavily resource-based. In Mozambique, for example, the economy remains dominated by agriculture (27 percent) and private and public services (51 percent), while manufacturing has grown more slowly than other sectors and has declined as a share of GDP (18 percent). Growth in the Mozambican manufacturing sector is driven entirely by investments in two aluminum smelters attracted to the country by its preferential tax structure. Smelting is, by nature, a capital-intensive activity, which limits its overall contribution to manufacturing jobs. Finally, manufacturing exports out of Africa have relatively low technology content. Despite the Ethiopian government designating the manufacturing sector as the conduit to achieving middle-income country status by 2025 and establishing various incentives to spur growth, growth remains low (estimated at 5 percent) and employment within this sector is miniscule in relation to the size of the employment challenge.

Positive results from the continent, however, indicate that most economies are in transition, as the share of agriculture relative to GDP has declined while the contribution of services has grown significantly. A closer look at the data reveals that growth in the intermediate sector has principally been driven by expansion of the mining sector, whereas the manufacturing sector has experienced stagnation. Furthermore, the share of manufacturing exports in manufacturing output has remained significantly low historically, which, as alluded to, begs the question of whether service-led growth can deliver a sufficient volume of jobs.

We now turn our attention to examining the possible range of constraints on manufacturing performance in Africa, as well as possible solutions. We briefly analyze the role of skills, capital accumulation, the regulatory environment, and various infrastructure costs.

Low Capital Accumulation

A positive relationship is observed in the relationship between capital accumulation and GDP. This is true for both human capital and physical capital. In general, an increase in wealth is associated with an increase in the use of human capital in exports. Most African countries are not capital abundant when compared to other low-income countries in other regions of the world. Nigeria and South Africa are two exceptions, as they have a similar level of capital stock and wealth compared to other middle-income countries. However, manufacturing in Nigeria has transformed to be more capital intensive amid a large and growing labor force. This is accompanied by a significant reduction in the proportion of workers in this sector, as well as an increasing demand for a more skilled labor force. Overall, however, this lack of both physical and human capital stock, and the intensity of its use in production, suggests that Africa will continue to struggle to industrialize.

FIGURE 1-5. African Lions' Atlas of Economic Complexity Rankings, 2013^a Ranking



Source: Atlas of Economic Complexity (2013). a. Total rankings, 124.

Using the Atlas of Economic Complexity toolkit developed by Hausmann and others (2007), one can explore the link between the sum of knowledge available within an economy to produce goods (the complexity) and connectedness to traded products and what this implies for structural transformation.⁵ Countries at lower levels of economic complexity, mainly African countries, have relatively disconnected productive structures and, thus, their ability to diversify and undergo structural transformation is constrained. In essence, the complexity index alludes to the fact that these marginalized countries do not possess the productive knowledge and capabilities needed to shift their production structure to more complex products, particularly manufactured products. The peripheral nature of their product space does not afford them opportunities to diversify and grow in complexity.

Japan and Switzerland are currently ranked first and second, respectively, on the Atlas of Economic Complexity out of 124 states for which

Bhorat and Tarp

information is available. The higher the ranking, the better the transformation and connectedness of that economy. Figure 1-5 summarizes the findings for the six African Lion states. The findings are instructive. They suggest that only South Africa and Kenya have some degree of economic complexity, as they are ranked somewhere in the middle of the distribution. The remaining four countries in our sample are ranked close to the bottom of the distribution in terms of economic complexity. Nigeria is second from last in global distribution of economic complexity, reinforcing the idea of the country's overreliance on crude oil. It is fair to argue, in addition, that the majority of low complexity economies in this sample are from Sub-Saharan Africa.

Governance, Infrastructure, and Unit Labor Costs

Despite extensive upgrades, Africa's business environment continues to be plagued by costly inefficiency and onerous bureaucratic requirements. Eifert, Gelb, and Ramachandran (2008) analyze the cost of doing business in Africa to conclude that the high indirect cost shares observed in firms in poorer African countries reflect underlying weak fundamentals, which, in turn, reduces the competitiveness of African firms relative to those in Asian and Latin American developing countries.

Figure 1-6 plots the World Bank's Ease of Doing Business rank for Africa, Latin America, and South Asia. The higher the rank, the less conducive the country is for business. Africa's average rank is 142, compared to Latin America's 98 and South Asia's 137. Elements of the business environment, such as the time it takes to set up a business and get electricity and access to credit, all remain critical areas that need reform. Finally, weaknesses in the rule of law and regulation mean that African firms pay higher bribes (as a proportion of sales) and lose a greater fraction of their sales value to crime and theft than firms in other developing countries (Eifert and Ramachandran 2004).

All these factors point toward an environment that is not fully conducive to the start up and operation of efficient small, micro, and medium sized enterprises (SMMEs), as well as a thriving informal sector. This is, no doubt, one of the contributory factors to the low productivity of the manufacturing sector in Africa. Furthermore, these business constraints may also limit the entry of formal, foreign manufacturing firms



FIGURE 1-6. Ease of Doing Business in Africa vs. Latin America and South Asia, 2015

Source: World Bank Doing Business Report, 2015.

into the market given that the business environment is a key cost factor for firms, in addition to the estimated return on investment.

While the Doing Business Indicators have occupied a central place in the dialogue about enterprise development in Africa, it is, as argued in Newman and others (2016a, 2016b), critical to keep the overall context and constraints in mind in developing appropriate policy. Estimates suggest that poor infrastructure hampers economic growth in Africa by at least 2 percent each year and lowers private sector productivity by up to 40 percent (Kaberuka 2013). Poor infrastructure poses a fundamental threat to Africa's potential for growth arising from its manufacturing sector. Table 1-5 indicates that, while infrastructure provision in Africa has grown over the period under examination, current levels remain very low when compared with developing nations in other regions of the world. For example, the road density network as a proportion of land area is estimated at 24.3 in Africa, compared to an average of 54.2 for non-African developing countries. Furthermore, evidence points to the fact that roads in Africa—which are the main means

Region	Year	Electricity production (kWh per capita)	Improved sanitation facilities (% population with access)	Improved water source (% of population with access)	Road density (km of road per 100 sq km of land area)
Africa	1990 2010	514.24 762.91	41.60 49.45	63.66 75.06	n.a. n.a.
Africa excluding South Africa	1990 2010	457.13 705.86	41.23 48.93	63.35 74.77	n.a. 24.30
Non-African developing countries	1990 2010	1,515.15 1,889.98	67.57 78.58	83.27 90.48	n.a. 54.2

TABLE 1-5. Infrastructure Indicators, Africa versus Non-AfricanDeveloping Countries

Source: World Bank World Development Indicators, 2015. n.a. = not available.

of transporting freight—are unpaved and in poor condition (PricewaterhouseCoopers 2012). Transport costs are cripplingly high and electricity production remains low and unpredictable.

Inefficient logistics contribute significantly to the cost of doing business in Africa and weaken the ability to leverage a comparative advantage in, say, food processing industries, where perishables require short transit times. Rail infrastructure remains poor and out of date, with few upgrades by most African states. Ports, key to facilitating international trade, are in undersupply and often do not function efficiently, which, in turn, limits their overall ability to handle large volumes of traffic. A case in point is Kenya, which, through the port city of Mombasa, services five landlocked neighboring countries that are fairly resource-rich: Ethiopia, South Sudan, Uganda, Rwanda, and Burundi. To further benefit from this comparative advantage, it is necessary for Kenya to prioritize improvising ports and other transport networks and to develop transport nodes.

High unit labor costs in Africa are also cited as a reason for the poor performance of manufacturing in Africa. Ceglowski and others (2015) FIGURE 1-7. Annual Manufacturing Wages as a Percent of GDP per Capita, 2000 and 2010^a



Source: Ceglowski and others (2014), based on UNIDO INSTAT data, 2010. a. African countries are shown in gray.

find that high unit labor costs are a key explanatory factor as to why African manufactured exports remain globally uncompetitive. Figure 1-7 provides the authors' estimates of formal sector manufacturing wages in Africa. Wages in Sub-Saharan Africa have increased between 2000 and 2010 and are much higher than in Asian countries. In 2010, African countries occupied the highest seven positions with regard to manufacturing wages. Only Tunisia, Egypt, Mauritius, and, to a lesser extent, South Africa can match the Asian countries in terms of costs. However, and to be sure, wages are only one element hampering the progress of the manufacturing sector. The business environment further influences operational costs and, therefore, long-run returns on investment. Investors are willing to pay a wage premium in countries where there is good infrastructure and the population is well educated.

It is worth noting that manufacturing is a heterogeneous sector of an economy and encompasses a variety of industries and products. For instance, manufactured output varies according to the inputs that go into production, such as capital, labor, and natural resources. To capitalize on long-run growth opportunities, it is, thus, crucial for African economies to work on improving the quantity and quality of human capital, to ensure there is an enabling and efficient regulatory environment, and to improve overall infrastructure levels.

Informalization of Labor

The expansion of the African informal economy in the 1990s is often linked to trade liberalization and structural adjustment programs that resulted in civil service employees exiting the sector, as well as global competition that resulted in lowered staffing levels for previously protected industries (Verick 2006; Calvès and Schoumaker 2004). Despite limited data and studies in this area, the general consensus is that the informal sector plays an important role in Sub-Saharan Africa. A 2015 report by the African Development Bank reports that informal economic activities account for approximately 55 percent of GDP across the continent and as much as 70 percent of employment in the Sub-Saharan Africa region. Benjamin and Mbaye (2009) use household level data from the West African Economic and Monetary Union to conclude that in Benin, Burkina Faso, and Senegal, the informal sector has, on average, contributed 74 percent, 49 percent, and 54 percent, respectively, to GDP since 2000.

In Kenya, in a trend that might apply across the other African economies, weak relationships are observed between economic growth and reduction in unemployment. This might imply that a significant proportion of individuals are employed within the informal sector that is not as responsive to economic growth such that, while growth in wage employment closely tracks GDP, no such relationship is observed for the informal sector. In addition, Gelb and others (2009) observe a strong correlation between rising unemployment and the development of the informal sector, where this sector acts as an employer of last resort for those unable to find wage employment.⁶ Moreover, individuals employed in the informal sector have been observed to have, on average, lower levels of education relative to those in the formal sector, which requires a skilled and educated labor force (La Porta and Shleifer 2008).

An International Labor Organization (ILO) report published in 2013 shows that the SSA's working poor not only constitutes almost two-thirds of the total employed but is also approximately eight times the number of unemployed in the region. Unsurprisingly, then, evidence indicates that poverty is significantly higher among individuals employed in the informal sector (Benjamin and Mbaye 2009). Findings from Mozambique indicate the presence of a minority of workers earning a stable wage income, even in urban areas that provide more economic opportunities. Furthermore, wage differentials are prevalent depending on the aggregate economic sector where earnings are obtained. This is particularly true in Kenya, where various barriers exist to limit labor mobility between the informal and the higher-paying formal sector. A wage differential of US\$36 is calculated between Ethiopian workers in the formal and informal sectors while, in Ghana, earnings are presumed to be the lowest in the informal sector, with average daily earnings being estimated at 37.5 percent of public sector earnings and 32.1 percent of the average earnings in the private formal sector.

Within the informal economy, certain sectors are clearly dominant across the continent. Domestic work in the private homes of others, homebased work, and street vendors dominate the African informal sector (International Labor Organization 2013).⁷ The 2013 ILO report estimates that, in Africa, the number of domestic workers has increased from 4.2 million in 1995 to 5.3 million by 2010, where 73 percent are women. Further research has shown that informal sector firms are significantly less productive than formal firms (Gelb and others 2009; La Porta and Shleifer 2008). There is evidence from selected economies to indicate that retail trade and other non-tradables absorb the majority of informal sector workers (Verick 2006). South Africa, with a relatively smaller informal sector, indicates higher concentration in the retail trade, domestic work in private households, construction, and transport (Wills 2009).

In the case of the African Lions, labor mobility from agriculture to the services sector requires closer interrogation, as it often masks the fact that, despite increases in overall employment share, there is a decline in overall labor productivity. This implies that the bulk of these new workers are mainly located in the informal sector, often have low levels of education, and are undertaking risky or low-paying jobs. The Nigerian services sector is characterized as a low productivity sector, and any inflows of labor will have the effect of lowering overall per capita productivity, which diminishes any inter-sectoral shift effects. (It is similar in Ghana, which has an employment elasticity of 0.47. New jobs are being created in the informal sector generating a significant proportion of the working poor, estimated at 22 percent of the overall working population). The share of employment in Kenya's informal sector was estimated at 83 percent in 2014, following an average increase of 72 percent over a thirty-year period. The widespread growth of the Kenyan informal sector is largely attributable to the fact that the formal sector is not growing rapidly enough to absorb the growing labor force as a result of constraints to capital accumulation within this sector.

A rising informal sector is also significant because workers within this sector are often excluded from contributory social insurance schemes that require an employment relationship. Therefore, raising the productivity of the informal sector becomes an important policy objective. This implies, first, addressing issues surrounding the business regulatory environment that need to be addressed to develop this sector, including improving access to credit and provision of insurance products. Second, investment in basic infrastructure such as electricity, road networks, and information technology is fundamental. Third, wage differentials resulting from the proportion of unskilled labor in the informal sector necessitates the upgrading of skills for individuals within this sector. This has a dual effect, as it may help generate viable firms as well as contributing to overall sectoral productivity. Last, policy strategies and programs should be put in place to make the informal sector more dynamic and formal, to deliver quality employment opportunities.

CONCLUSION

The analysis presented in this chapter suggests that, despite significant advances in terms of macroeconomic stability, it is evident that the structure of the African region's growth remains of concern. The pattern of growth that is resource-dominant and manufacturing-absent would not seem to be the standard economic development path followed by all economies that have successfully transitioned from low- to high-income country status. The dominance of resources in production and exports and services and agriculture in employment would, in turn, not appear to be the most appropriate strategy for long-term and sustained povertyreducing growth. This lack of complexity in production, underpinned by constraints in infrastructure, a poor regulatory and governance framework, and high unit labor costs serve to reinforce challenges to growth, development, and employment generation strategies of this continent. In the chapters that follow, we hope to elucidate, at the country level, how these challenges are being played out in six African economies.

NOTES

The authors would like to thank Arabo Ewinyo and Kirsten van der Zee for their outstanding and invaluable research assistance.

1. A similar result is observed for Latin America, with Asia being the only one of the three regions where the contribution of structural change to economic growth over this period was positive.

2. According to the International Labor Organization (ILO) (1993), wage employment refers to jobs "where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration" in the form of wages. Self-employment is defined as "jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where consumption is considered to be part of profits)."

3. A case study analysis of Scandinavian countries by Blomstrom and Kokko (2007) argues that the current diverse high-tech manufacturing industries in these countries were developed upon the foundation of knowledge- and technology-intensive natural resource industries. For example, the high-tech telecom company, Nokia, emerged from a forestry company.

4. This aggregate positive trend is driven primarily by increasing growth in Burundi, Tanzania, and Uganda.

5. See this atlas at http://atlas.cid.harvard.edu/media/atlas/pdf/Harvard MIT_AtlasOfEconomicComplexity.pdf.

6. Maloney (2004) is a key proponent for the role that the informal sector could play in advancing better outcomes for entrepreneurs relative to employment within the formal sector. However, he also acknowledges the difficulties faced by workers in this sector, namely restrictive access to formal credit markets and weaker property rights.

7. Home-based work relates to own-account workers and subcontracted workers that carry out remunerated work in or very near their own homes. These types of jobs include the manufacturing of crafts and related trade, the operation of small convenience stores or informal pubs, or brick-makers and construction workers. Street vendors also make up a considerable portion of urban informal work in Africa (12 to 24 percent). Street vendors include those who sell goods at flea markets, street-side hairdressers, and those who sell fruit, vegetables, and other food on city streets (International Labor Organization 2013).

REFERENCES

- Addison, Tony, Finn Tarp, and Saurabh Singhal. 2015. "Aid to Africa: The Changing Context." In *The Oxford Handbook of Africa and Economics*, *Volume II: Policies and Practices*, edited by J. Lin and C. Monga (Oxford University Press), pp. 698–710.
- Africa Progress Panel (APP). 2014. "Grain Fish Money: Financing Africa's Green and Blue Revolutions." Africa Progress Report 2014. ISBN 978-2-9700821-4-9 http://app-cdn.acwupload.co.uk/wp-content/uploads/2014 /05/APP_APR2014_24june.pdf
- Ajakaiye, Olu, Afeikhena T. Jerome, Olufunke A. Alaba, and David Nabena. 2015. Understanding The Relationship between Growth and Employment in Nigeria (2015/124. Helsinki: UNU-WIDER).
- Arndt, Channing, Andres Garcia, Finn Tarp, and James Thurlow. 2012. "Poverty Reduction and Economic Structure: Comparative Path Analysis for Mozambique and Vietnam." *Review of Income and Wealth* 58, no. 4, pp. 742–63.

- Arndt, Channing, Andy McKay, and Finn Tarp, eds. 2016. Growth and Poverty in Sub-Saharan Africa (Oxford University Press).
- Aryeetey, Ernest, and William Baah-Boateng. 2015. Understanding Ghana's Growth Success Story and Job Creation Challenges (2015/140. Helsinki: UNU-WIDER).
- Benjamin, Nancy, and Ahmadou Aly Mbaye. 2009. The Informal Sector in Francophone Africa: Firm Size, Productivity, and Institutions (Washington, D.C.: World Bank).
- Bhorat, Haroon. 2013. The Challenge of Job Creation: Input to the Post-2015 HLP Agenda (Unpublished Mimeograph. Cape Town: Development Policy Research Unit, University of Cape Town).
- Bhorat, Haroon, Francois Steenkamp, and Christopher Rooney. Forthcoming 2016. *Africa's Manufacturing Malaise* (Unpublished Mimeograph. Cape Town: Development Policy Research Unit, University of Cape Town).
- Bhorat, Haroon, Karmen Naidoo, and Kavisha Pillay. 2015a. "Aspiring Africa: Overcoming Development Challenges to Meet Its Long-Term Vision." Mimeograph presented at Developmental States Conference (Pretoria).
- 2015b. "Growth, Poverty, and Inequality Interactions in Africa: An Overview of Key Issues" (Helsinki: Mapping the Future of Development Economics [Anniversary Conference], September 17–19).
- Blomstrom, Magnus, and Ari Kokko. 2007. "From Natural Resources to High-Tech Production: The Evolution of Industrial Competitiveness in Sweden and Finland." In *Natural Resources: Neither Curse nor Destiny*, edited by Daniel Lederman and William Maloney (Washington, D.C.: World Bank), pp. 213–46.
- Bravo-Ortega, Claudio, and José Gregorio. 2007. "The Relative Richness of the Poor? Natural Resources, Human Capital and Economic Growth," Working Paper (Washington, D.C.: World Bank Group).
- Calvès, Anne-Emmanuèle, and Bruno Schoumaker. 2004. "Deteriorating Economic Context and Changing Patterns of Youth Unemployment in Urban Burkina Faso: 1980–2000." World Development, Elsevier, vol. 32, Aug., pp. 1341–54.
- Ceglowski, Janet, Stephen Golub, Ahmadou Aly Mbaye, and Varun Prasad. 2015. "Can Africa Compete with China in Manufacturing? The Role of Relative Unit Labor Costs," Working Paper 201504 (Cape Town: Development Policy Research Unit).
- Collier, Paul, and Jan Willem Gunning. 1999. "The IMF'S Role in Structural Adjustment." *The Economic Journal* 109, no. 459, pp. 634–51.
- Devarajan, Shantayanan, and Wolfgang Fengler. 2012. "Is Africa's Recent Economic Growth Sustainable?" (*Institut français des relations internationals* (*Ifri*), Notte de l'Ifri, October 2012. Programme Moyen-Orient/Maghreb).
- The Economist and IMF. 2011. "Africa's Impressive Growth." Retrieved from The Economist: www.economist.com/blogs/dailychart/2011/01/daily_chart

- Eifert, Ben, Alan Gelb, and Vijaya Ramachandran. 2008. "The Cost of Doing Business in Africa: Evidence from Enterprise Survey Data." World Development 36, no. 9, pp. 1531–46.
- Eifert, Ben, and Vijaya Ramachandran. 2004. "Competitiveness and Private Sector Development in Africa: Crosscountry Evidence from the World Bank's Investment Climate Data," Occasional Paper series (Cornell University: Institute for African Studies).
- Fosu, Augustin K. 2009. "Inequality and the Impact of Growth on Poverty: Comparative Evidence for Sub-Saharan Africa." *Journal of Development Studies* 45, no. 5, pp. 726–45.
- Gelb, Alan, Taye Mengistae, Vijaya Ramachandran, and Manju KediaShah. 2009. "To Formalize or Not to Formalize? Comparisons of Microenterprise Data from Southern and East Africa," Working Paper 175 (Washington, D.C.: Center for Global Development).
- Hausmann, Ricardo, César A. Hidalgo, Sebastián Bustos, Michele Coscia, Sarah Chung, Juan Jimenez, Alexander Simoes, Muhammed A. Yıldırım. 2007. "The Atlas of Economic Complexity: Mappying Paths to Prosperity" (Harvard's Center for International Development (CID)).
- Hausmann, Ricardo, Jason Hwang, and Dani Rodrik, 2007. "What You Export Matters," *Journal of Economic Growth*, Springer, vol. 12, pp. 1–25.
- International Labor Organization (ILO). 1993. Fifteenth International Conference of Labour Statisticians, Report of the Conference. (Geneva: ICLS/15/D.6 (Rev. 1) International Labour Office).
 - . 2013. Women and Men in the Informal Economy: A Statistical Picture, 2nd ed.
- International Monetary Fund (IMF). 2011. Regional Economic Outlook: Sub-Saharan Africa Recovery and New Risks (Washington, D.C.: International Monetary Fund).
- Kaberuka, Donald. 2013. "Sustaining Africa's Economic Growth: The Challenges of Inclusion and Financing Infrastructure." (Speech by the President of the African Development Bank at the AACB Symposium on Financial Inclusion. AfDB, October). http://www.afdb.org/en/news-and -events/article/sustaining-africas-economic-growth-the-challenges-of -inclusion-and-financing-infrastructure-afdb-president-donald-kaberuka -12215/
- Khan, Haider. 1999. "Sectoral Growth and Poverty-Alleviation: A Multiplier Decomposition Technique Applied to South Africa." World Development 27, no. 3, pp. 521–30.
- Kimenyi, Mwangi S., Francis M. Mwega, and Njuguna S. Ndung'u. 2015. *The African Lions: Kenya Country Case Study* (2015/134. Helsinki: UNU-WIDER).

- La Porta, Rafael, and Andrei Shleifer. 2008. "The Unofficial Economy and Economic Development." *Brookings Papers on Economic Activity 2*, (Brookings), pp. 275–364.
- Lam, David, and Murray Leibbrandt. 2013. *Global Demographic Trends and Their Implications for Employment*. Paper prepared as background research for the Post-2015 UN MDG Development Agenda on Employment and Employment Growth. http://www.post2015hlp.org/wp-content /uploads/2013/05/Lam-Leibbrandt_Global-Demographic-Trends-and -their-Implications-for-Employment.pdf
- Loayza, Norman, and Claudio Raddatz. 2010."The Composition of Growth Matters for Poverty Alleviation." *Journal of Development Economics* 93, no. 1, pp. 137–51.
- Maloney, William. 2004. "Informality Revisited." World Development 32, no. 7, pp. 1159–78.
- Maloney, William F., and Daniel Lederman. 2008. "In Search of the Missing Resource Curse." *Economía: Journal of the Latin American and Caribbean Economic Association*, vol. 9, no. 1.
- McMillan, Margaret, Dani Rodrik, and Ignio Verduzco-Gallo. 2014. "Globalization, Structural Change, and Productivity Growth with an Update on Africa." World Development 63, pp. 11–32.
- Mehlum, Halvor, Karl Moene, and Ragnar Torvik. 2006. "Institutions and the Resource Curse." *Economic Journal*, vol. 116, issue 508, pp. 1–20.
- Newman, Carol, John Page, John Rand, Abebe Shimeles, Måns Söderbom, and Finn Tarp. 2016a. *Made in Africa: A New Industrial Strategy* (Brookings).
- ——, eds. 2016b. *Manufacturing Transformation: Comparative Studies of Industrial Development in Africa and Emerging Asia* (Oxford University Press).
- Oosthuizen, Morne. 2015. "Bonus or Mirage? South Africa's Demographic Dividend." *Journal of the Economics of Ageing* 5, April, pp. 14–22.
- Page, John. 2014. "Africa's Failure to Industrialize: Bad Luck or Bad Policy?" Africa in Focus (Brookings).
- Prebisch, Raúl. 1959. "Commercial Policy in the Underdeveloped Countries." American Economic Review 49, pp. 251–73.
- PricewaterhouseCoopers. 2012. Africa Gearing Up: Future Prospects in Africa for the Transportation and Logistics Industry (Johannesburg).
- Ravallion, Martin. 1997. "Can High-Inequality Developing Countries Escape Absolute Poverty?" *Economics Letters* 56, pp. 51–57.
 - —. 2001. "Growth, Inequality, and Poverty: Looking Beyond Averages." World Development 29, no. 11, pp. 1803–15.
- Ravallion, Martin, and Shaohua Chen. 1997. "What Can New Survey Data Tell Us about Recent Changes in Poverty and Distribution?" World Bank Economic Review 11, no. 2, pp. 357–82

——. 2007. "China's (Uneven) Progress Against Poverty." Journal of Development Economics 82, pp. 1–42.

- Ravallion, Martin, and Gaurav Datt. 1996. "How Important to India's Poor Is the Sectoral Composition of Economic Growth?" World Bank Economic Review 10, no. 1, pp. 1–25.
- Rodrik, Dani. 2014. An African Growth Miracle? (Princeton: NBER Working Paper No. 20188, Institute for Advanced Study).
- Sachs, Jeffrey D., and Andrew M. Warner. 1995. *Natural Resource Abundance and Economic Growth* (NBER Working Paper No. 5398, December).
- ——. 2001. "The Curse of Natural Resources." Natural Resources and Economic Development 45, pp. 827–38.
- Shirotori, M., Cadot, O., and Tumurchudur, B. 2010. Revealed Factor Intensity Indices at the Product Level (Policy Issues in International Trade and Commodities No. 44). New York: United Nations Conference on Trade and Development.
- Tarp, Finn. 1993. Stabilization and Structural Adjustment: Macroeconomic Frameworks for Analysing the Crisis in Sub-Saharan Africa (London and New York: Routledge).
- 2001. "Aid and Reform in Africa.' Review of World Bank volume by S. Devarajan, D. R. Dollar and T. Holmgren." *Journal of African Economies* 10, no. 4, pp. 341–53.
- ------. 2015. Aid Effectiveness (United Nations Development Group (UNDG)). https://undg.org/wp-content/uploads/2015/01/Background -Study-on-Aid-Effectiveness.pdf
- Verick, Sher D. 2006. The Impact of Globalization on the Informal Sector in Africa (Berlin: Economic and Social Policy Division, UNECA, and Institute for the Study of Labor). http://www.iza.org/conference_files /worldb2006/verick_s872.pdf
- Wills, Gabrielle. 2009. South Africa's Informal Economy: A Statistical Profile (WIEGO Working Paper (Urban Policies), No. 6, April 2009). ISBN 978-92-95095-08-3.
- World Bank. 2013. Africa's Pulse: An Analysis of Issues Shaping Africa's Economic Future (Washington, D.C.), p. 7.
 - —. 2014. "Kenya: A Sleeping Lion or Speedy Lioness?" *Country Economic Memorandum* (Washington, D.C.).