

# Structural Change, Growth, and Evolution of Inequality and Poverty in African Economies:

## An Overview

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## Abstract

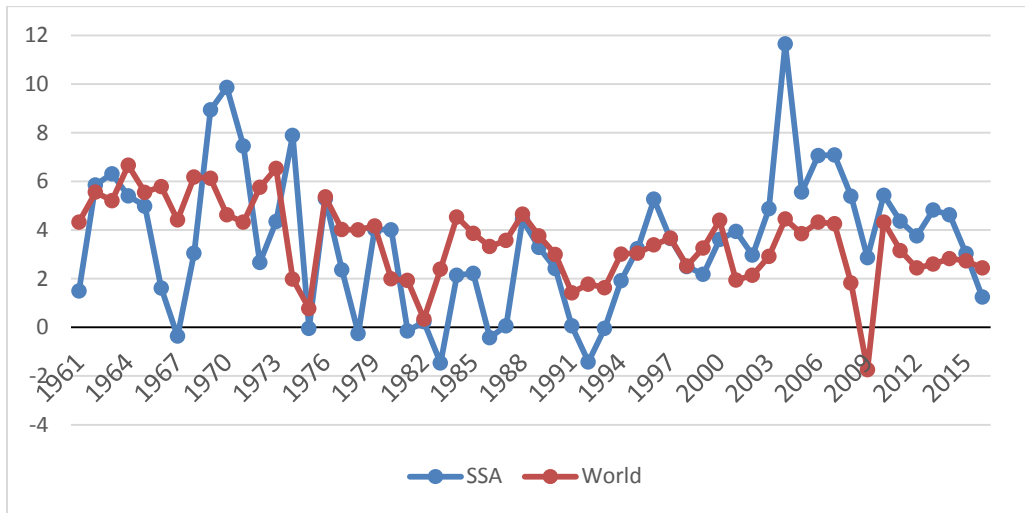
Is Africa experiencing a growth ‘miracle’? Rodrik (2018) seems skeptical, and provides evidence based on modern growth theory to support the skepticism: the recent relatively impressive growth does not seem sustainable. Related to the issue of sustainability is economic structure. Diao et al. (2018) find that accompanying the recent growth record has been improving agricultural labor productivity, a reduction of the agricultural labor share and increasing manufacturing employment, evidence that is consistent with that observed for industrialized economies. Thorbecke and Ouyang (2018) also find that while the efficacy of translating growth into poverty reduction remains lower for Africa than elsewhere, there is evidence of poverty convergence recently in Africa, contrary to that for developing countries generally. Fosu (2018) observes the dominant importance, on average, of growth for poverty reduction in Africa, but also underscores the critical role of inequality, especially for certain countries. Exploring why inequality is particularly high in Africa, Shimeles and Nabassaga (2018) uncover ethnic fractionalization, limited tertiary education, and poor governance as major culprits, and inequality of opportunity as the dominant component. Bigsten (2018) identifies the dual-economy nature of colonial arrangements as the genesis for Africa’s high inequality, and proposes an enhanced pro-poor Lewis-type *modern-sector enlargement* as a potential solution.

JEL classification: O11, O13, O14, O15, O47, O55

## 1. Introduction

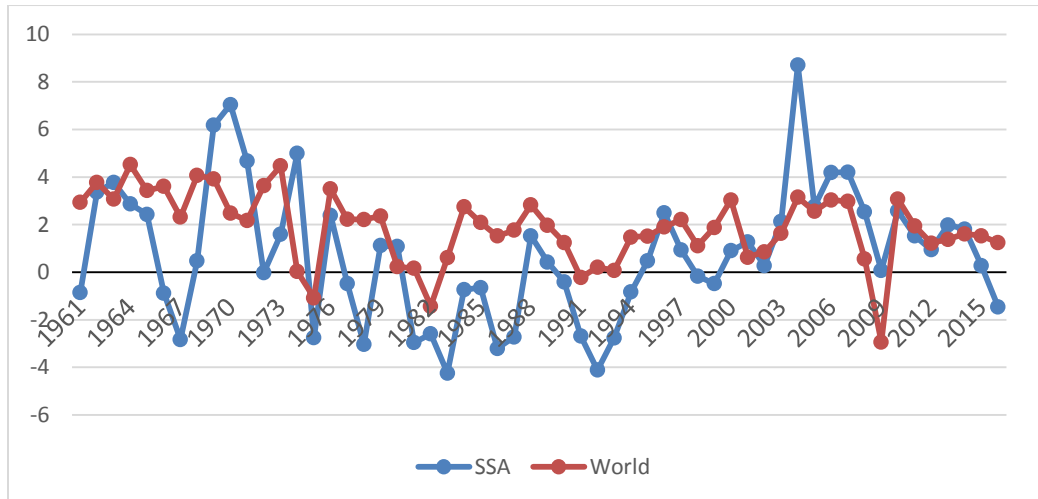
‘Africa rising’ seems to be gaining currency in the discourse on African economic development (Young, 2012). Since the dawn of the 21st century, Africa’s GDP growth has consistently surpassed that of the world as a whole (Figure 1), though not as impressively in per capita terms (Figure 2), suggesting a catching-up process consistent with neoclassical theory. Indeed, in the wake of the most recent global economic cum financial crisis beginning about 2007, the continent appears to have been quite resilient. This evidence led to the observation that: “Indeed, absolutely and relatively, SSA’s resilience seems to be the best, both temporally and spatially, this time around.” (Fosu, 2013a, p. 1102)

**Figure 1: GDP Annual Growth (%), Sub-Saharan Africa vs. World (1961-2016)**



Source: World Bank, 2017

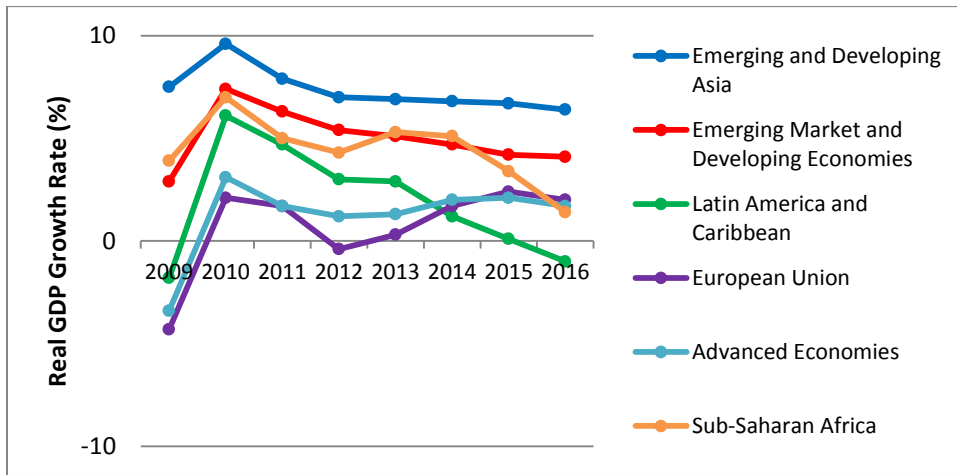
**Figure 2: Per Capita GDP Annual Growth (%), Sub-Saharan Africa (SSA) vs. World (1961-2016)**



Data source: World Bank, 2017

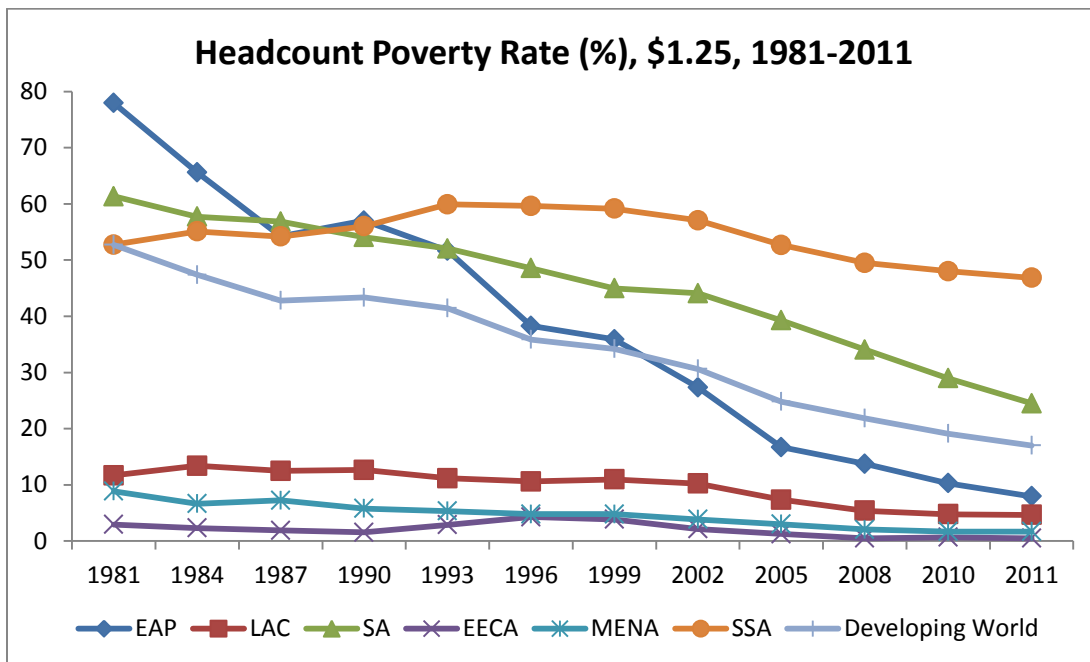
However, the record most recently provides some concern about the sustainability of the African growth relative to the rest of the world's. For instance, after recovering from the post-crisis declines, the GDP growth rate stabilized around 4.5 percent, but it has been declining steadily since 2014, hitting a low of about 1.4 percent in 2016, compared quite unfavorably with the 4.1 percent for the Emerging Market and Developing Economies, even though both country groups had exhibited similar immediate post-crisis growth resiliency (Figure 3).

**Figure 3. Global Growth Performance: Sub-Saharan Africa vs. Other Economic and Regional Groups, 2009-2016**



Data source: IMF, 2017

**Figure 4: Poverty Trends (\$1.25), Africa vs. Other Regions: Headcount (Incidence)**



**Notes:** EAP=East Asia and Pacific; LAC=Latin America and the Caribbean; SA=South Asia; EECA=Eastern Europe and Central Asia; MENA=Middle East and North Africa; SSA=Sub-Saharan Africa.

**Data source:** World Bank, 2015

Meanwhile, the translation of growth into poverty reduction in Africa is less than what one would expect globally, mainly because of relatively high inequality and low incomes in African countries

that tend to reduce the poverty-elasticity of growth (Fosu, 2017). Hence, despite improvements in the poverty picture for African countries generally, other developing countries have performed even better in this regard (Figure 4). Thus, understanding the structure of African economies, as well as the nature of economic growth and the roles of inequality in translating growth to poverty reduction, is critical. And so is the analysis of the underpinnings of both growth and inequality. The present special issue attempts to achieve these objectives in the following six articles.

## **2. An African Growth Miracle?**

According to Rodrik (2018), there is much to celebrate about Africa's recent economic performance. Given the continent's economic doldrums during much of the 1980s and 1990s, usually referred to as the 'lost decade', it is indeed refreshing that Africa's per capita growth after 2000 has jumped close to 3 percent annually. Although this performance was not as stellar as East and South Asia's, it is considerably better than what prevailed in Latin America (Rodrik, 2018, Figure 1). Not only has investment been revived, but also total factor productivity (TFP) growth has become positive for the first time since the early 1970s (Rodrik, 2018, Figure 2), with the role of TFP critical in explaining both the busts and booms of African economies (Fosu, 2013b). However, with some evidence pointing toward considerable growth benefits accruing to African countries from emerging economies, particularly China, the current slowdown of these economies does not bode well for Africa. Thus, one wonders if Africa's recent growth performance is sustainable.

Rodrik appears to attribute much of the African growth progress to the favorable external environment, particularly high commodity prices and low interest rates in the 2000s. If so, then reversals of these variables would not augur well for Africa. Within the framework of modern growth theory, the author argues that the African growth 'miracle' may simply be pre-mature. Unfortunately, the most recent evidence on growth that shows a substantial slide since 2012 (Figures 1 and 2) appears to support that view.

Nonetheless, there is some evidence that institutional improvements have played a significant positive role in the recent African growth resurgence, consistent with New Institutional Economics (Bates et al, 2013). If so, then pessimism about growth sustainability may also be pre-mature, unless of course institutions deteriorate in tandem with worsening economic growth. Hence, it is imperative that gains in institutional quality be fortified.

## **3. Agricultural Labor Productivity and Industrialization**

The issue of labor transfer from agriculture to industry as a structural development process remains an important subject in the literature. A la Arthur Lewis, the relatively low levels of productivity in the traditional (agricultural) sector provides an incentive for labor to migrate to the relatively high productive modern (industrial) sector, thus promoting structural change. There has been much skepticism about Africa's success in this regard (Thorbecke, 2013). As the GDP share of agriculture has decreased in many African countries, much of that shift often is into the low-productivity service sector, or into mining, which tends to be capital-intensive. Indeed, while this production shift has

occurred, there has not been a proportionate relocation of labor from agriculture into higher productive sectors, unlike in other regions of the world, particularly Asia (Thorbecke, 2013).

Diao et al. (2018) show that manufacturing employment, as well as its share in total employment, has recently been growing in a number of African countries. Furthermore, agricultural productivity has also been rising in much of Africa over the past two decades. Considering the global evidence, they find that in countries that have undergone successful industrialization, agricultural labor productivity growth and the manufacturing employment share are strongly positively correlated, up until the peak of the manufacturing employment share. In the case of Africa, they also uncover, since 1996, a positive association between agricultural labor productivity and the manufacturing employment share. Interestingly, this period coincides roughly with the growth resurgence in Africa (see Figures 1 and 2). Using case studies, Diao et al. uncover evidence in support of the view that agricultural productivity improvements have been accompanied by declines in the agricultural employment share, as well as by increases in income and the demand for locally produced manufactured products. This evidence, therefore, seems consistent with that observed for the industrialized countries globally (Diao et al., 2018).

#### **4. Is the Structure of Growth Different in Sub-Saharan Africa?**

That other regions of the world seem to have been more successful than Africa in reducing poverty raises the question of whether the structure of growth is different between Africa and the rest of the developing world. Indeed, Fosu (2009, 2010) observe that even for the same level of income growth, a considerably lower reduction in poverty would be expected in Africa, given the decidedly lower growth elasticity of poverty in the continent than elsewhere.

Thorbecke and Ouyang (2018) provide an anatomy of growth in sub-Saharan Africa (Africa) in comparison with that of the developing world since the early 1980s. They examine not only the impact of the pattern of growth on poverty and inequality (the G-I-P nexus), as is customarily done in the literature, but also the reverse causal link from poverty to inequality and growth (the P-I-G nexus). Consistent with previous findings for the G-I-P nexus, Thorbecke and Ouyang observe lower responsiveness of poverty reduction to income growth and improvements in inequality in Africa, than in the developing world as a whole, throughout the three-decade sample period. However, the authors also uncover that the responsiveness for the African sample has increased for the post-2007 period. For the P-I-G nexus, they again find that Africa differs from the rest of the developing world, in that African countries with higher initial poverty incidence appeared to grow subsequently faster -- leading to poverty convergence. Meanwhile, for the developing world as a whole, no such poverty convergence existed, consistent with Ravallion (2012). The authors conjecture that the main cause of poverty convergence in SSA (during 1978-2007) might be the anti-poverty interventions by governments and foreign public and private aid, which tend to be targeted at high levels of poverty.

## **5. The Recent Growth Resurgence in Africa and Poverty Reduction: The Context and Evidence**

As heretofore observed in the introduction, while Africa's economic growth has resurged substantially since the mid-to-late 1990s (see Figures 1 and 2), the poverty-reduction outcome appears to be much less impressive, at least when compared with the other regions of the world (Figure 3). Using the latest 1985-2013 World Bank PovcalNet data, Fosu (2018) examines the transformation of the recent growth in Africa to poverty reduction, not only for the incidence of poverty but also in the cases of the 'spread' and 'depth' of poverty, as well as for both the \$1.25 and \$2.00 per-day poverty lines. The study additionally assesses the relative abilities of various panel-data methodologies to predict poverty changes based on income-inequality decompositions.

Based on the 'optimal' decomposition estimates, the study corroborates the hypothesis that income growth, on average, constitutes the main force behind poverty reduction in Africa (Fosu, 2015). This finding is in concert with the global view (Dollar and Kraay, 2002; Fosu, 2017). Nonetheless, the decomposition also reveals striking disparities, across countries and poverty measures, regarding the relative contributions of changes in income and in inequality to the recent progress in poverty among a large number of African countries. For example, for the \$1.25 poverty line and all the three FGT measures, changes in inequality rather than in income constituted the main contributor to poverty reduction in countries such as Angola, Botswana, Cape Verde, Guinea-Bissau, Namibia, Niger, Sierra Leone, and Tunisia. Such a country-decomposition framework, then, provides a guidepost for exploring the idiosyncratic characteristics of countries that could lead to optimal poverty-reduction policies in Africa.

## **6. Why is Inequality High in Africa?**

Given inequality's important role in particularly policy efforts to lower poverty, understanding why it is high in Africa is crucial. Computing and analyzing asset-based inequality, Shimeles and Nabassaga (2018) find that within-country inequality is positively correlated with the returns to higher education, a finding that is corroborated by further results showing a negative correlation between consumption-based inequality and the proportion of households that completed tertiary education. Countries with higher remittance flows also experienced lower inequality, whereas assets and goods market distortions tended to increase inequality in Africa.

Decomposing inequality, the authors uncover further that at least 30 percent of asset inequality was, on average, due to inequality of opportunity, with considerable differences across countries. In addition, the incidence of child mortality and disease burden of malaria and tuberculosis tended to rise with asset-based inequality of opportunity, which worsened with ethnic fractionalization but declined with improved governance.

## **7. Determinants of the Evolution of Inequality in Africa**

To further answer the above question of why inequality is high in Africa, Bigsten (2018) appeals to the colonial-origins school of thought that today's high level of inequality can be traced back to the

colonial era when a dual economic structure was created in most African countries. The author sketches a model showing that the nature of asset ownership is a major determinant of the level and evolution of (income) inequality. The effect depends on technical progress, international integration, as well as on changes in goods prices and the level of distortions or interventions. The study then reviews the empirical evidence to shed light on the explanatory capabilities of factors identified in the model.

A major conclusion emanating from the Bigsten study is that the pattern of structural change in Africa has meant that even a shift of labour out of agriculture would be unlikely to result in structural transformation or significant reductions in overall inequality, mainly because the shift would predominantly be into low-paying, often informal activities. In essence, the high initial level of inequality would likely persist over time.

Overcoming the persistence of inequality would require enhancing the resources of the poor, such as human capital and financial endowment, and a growth process that creates demand for the resources of the poor (Bigsten 2018). In this regard, decent-job generation would be vital, which would require that the modern sector be enlarged considerably. Hence, the cost of doing business, the most prominent of which are infrastructural impediments, must be reduced substantially, in order to improve manufacturing job creation (Fox and Oviedo, 2013). As Bigsten (2018) further argues, the future of inequality in Africa depends on what happens to structural transformation, while reducing inequality and poverty requires growth that generates labour demand outside traditional agriculture and the natural-resource sector.

## **8. Conclusion**

Is Africa experiencing a growth ‘miracle’? The answer depends on if the growth is sustainable enough to be transformed to human development such as poverty reduction. Rodrik (2018) seems skeptical, grounded in his belief that the growth is driven primarily by the external environment of high commodity prices and low interest rates. Based on modern growth theory, he argues that the global environment is likely to become less favorable, and so will the African growth.

Diao et al. (2018) present evidence in favor of a possible structural change in Africa. If so, then it could constitute the crucible for sustaining the recent relatively impressive growth. But how robust are these results, especially when the evidence on the mechanisms identified by the study is based primarily on micro data derived from just a couple of African countries? Further analyses involving many other countries would seem warranted.

The evidence by Thorbecke and Ouyang (2018) suggesting converging poverty in Africa seems encouraging. However, such convergence appears to critically hinge on the sustainability of externally supported poverty-reduction programs. But is that support itself sustainable?

Meanwhile, the finding by Fosu (2018) that income growth constitutes the main engine for poverty reduction in Africa suggests that, on average, more efforts should be focused on growth-enhancing strategies. Thus, attention must be geared toward accentuating the incidence of ‘syndrome-free’

regimes<sup>1</sup> (Ndulu et al., 2008a, 2008b). In this regard, reducing the power of the executive branch of government would be a step in the right direction (Fosu, 2013b). Yet, in certain countries, it is inequality that appears to really matter in terms of poverty reduction (Fosu, 2018). The implied road map based on poverty decomposition into contributions by income and inequality should prove useful toward designing optimal poverty-reduction strategies for Africa.

Given the high importance of income distribution for at least poverty reduction, and the observation that inequality is high in Africa, it is imperative that the determinants of inequality be properly understood. Shimeles and Nabassaga (2018) provide support for the view that expanding higher education would reduce inequality. And so would policies that blunt the tendency of ethnic fractionalization to exacerbate inequality through migrant remittances. The additional result by Shimeles and Nabassaga that improved governance would lower inequality, coupled with the extant findings in the literature that such improvements also enhance growth, provides a powerful policy instrument for both increasing growth and reducing inequality. For example, higher levels of constraints on the executive branch of government could mitigate the potentially pernicious growth-inhibiting effect of ethnicity in Africa (Fosu, 2013b); furthermore, consistent with Shimeles and Nabassaga, greater restraint on the executive could also attenuate inequality via limiting ‘adverse redistribution’ based on ethnicity.<sup>2</sup>

Meanwhile, the observation by Bigsten (2018) that creating employment beyond the agricultural sector with emphasis on enhancing both resource transfers to the poor and derived demand of the poor’s labor, should be the way forward if inequality is to be sufficiently reduced. The implied mode of development under the Bigsten proposition is a Lewis-type *modern-sector enlargement* (Fields, 1980, pp. 46-56), but with the inequality indeterminacy resolved by a focus on the poor. Under this pro-poor enhanced framework, therefore, not only would poverty decline but so would the level of inequality.

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<sup>1</sup> A ‘syndrome-free’ regime is one with a ‘combination of political stability with reasonably market-friendly policies’ (Fosu and O’Connell, 2006: 54).

<sup>2</sup> By ‘adverse redistribution’ it is meant “a situation, where redistributive policies favour the constituencies of the respective government leaders, usually regional in nature and with ethnic undertones, resulting in polarization.” (Fosu, 2018b, p.530)



## References

- Bates, R. H., S. A. Block, G. Fayad, and A. Hoeffler A. (2013), 'The New Institutionalism and Africa,' *Journal of African Economies*, 22 (4): 499-522.
- Bigsten, A. (2018), 'Determinants of the Evolution of Inequality in Africa,' *Journal of African Economies*, vol. 27, no. 1.
- Diao, X., McMillan, M., and S. Wangwe (2018), 'Agricultural labor productivity and industrialization: Lessons for Africa,' *Journal of African Economies*, vol. 27, no. 1.
- Dollar, D. and A. Kraay (2002), "Growth is Good for the Poor," *Journal of Economic Growth*, 7(3), 195-225.
- Fields, Gary S. (1980). *Poverty, Inequality and Development*, Cambridge: Cambridge University Press.
- Fosu, A. K. (2009), 'Inequality and the Impact of Growth on Poverty: Comparative Evidence for Sub-Saharan Africa,' *Journal of Development Studies*, 45(5): 726-745.
- Fosu, A. K. (2010), 'Inequality, Income, and Poverty: Comparative Global Evidence,' *Social Science Quarterly*, 91(5): 1432-1446.
- Fosu, A. K. (2013a), 'Impact of the Global Financial and Economic Crisis on Development: Whither Africa?' *Journal of International Development*, 25(8): 1085-1104.
- Fosu, A. K. (2013b), 'African Economic Growth: Productivity, Policy Syndromes and the Importance of Institutions,' *Journal of African Economies*, 22(4): 523-551.
- Fosu, A. K. (2015), 'Growth, Inequality and Poverty in Sub-Saharan Africa: Recent Progress in a Global Context,' *Oxford Development Studies* 43 (1): 44–59.
- Fosu, A. K. (2017), 'Growth, inequality, and poverty reduction in developing countries: Recent global evidence', *Research in Economics*, Volume 71, Issue 2, Pages 306-336.
- Fosu, A. K. (2018), 'The Recent growth resurgence in Africa and poverty reduction: The context and evidence', *Journal of African Economies*, vol. 27, no. 1.
- Fosu, A. K., and O'Connell, S. A. (2006), 'Explaining African Economic Growth: The Role of Anti-growth Syndromes', in Bourguignon F, Pleskovic B (eds), *Annual Bank Conference on Development Economics*, World Bank: Washington, DC; 31–66.
- Fox, L. and A. M. Oviedo (2013) 'Institutions and Job Growth in African Manufacturing: Does Employment Protection Regulation Matter?', *Journal of African Economies*, 22 (4): 616–50.

International Monetary Fund, IMF (2017), "Gaining Momentum", *World Economic Outlook*, April 2017. Available at: [www.imf.org/~media/Files/Publications/WEO/2017/April/pdf/text.ashx](http://www.imf.org/~media/Files/Publications/WEO/2017/April/pdf/text.ashx)

Ndulu, B., S. O'Connell, R. Bates, P. Collier and C. Soludo (2008a), eds., *The Political Economy of Economic Growth in Africa 1960-2000*, Vol. 1, Cambridge: Cambridge University Press.

Ndulu, B., S. O'Connell, J-P Azam, R. H. Bates, A. K. Fosu, J. W. Gunning, D. Njinkeu (2008b), eds., *The Political Economy of Economic Growth in Africa 1960-2000, Vol. 2, Country Case Studies*, Cambridge: Cambridge University Press.

Ravallion, M. (2012), "Why Don't We See Poverty Convergence?" *American Economic Review*, 102(1): 504-23.

Rodrik, D. (2018), 'An African growth miracle?', *Journal of African Economies*, vol. 27, no. 1.

Shimeles, A., and T. Nabassaga (2018), 'Why is inequality high in Africa?' *Journal of African Economies*, vol. 27, no. 1.

Thorbecke, E. (2013), "The Interrelationship Linking Growth, Inequality and Poverty in Sub-Saharan Africa," *Journal of African Economies*, 22, Supplement 1, pp. i15-i48.

Thorbecke, E., and Y. Ouyang (2018), 'Is the structure of growth different in sub-Saharan Africa?', *Journal of African Economies*, vol. 27, no. 1.

World Bank (2015), *POVCALNET 2015*. <http://iresearch.worldbank.org/PovcalNet/index.htm>

World Bank (2017), *World Development Indicators Online*: Available at <http://data.worldbank.org/data-catalog/world-development-indicators>

Young, A. (2012), 'The African Growth Miracle', *Journal of Political Economy*, 120: 696-739.