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GROWTH STRATEGIES FOR AFRICA IN A CHANGING GLOBAL ENVIRONMENT:

Policy observations for sustainable and shared growth

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Abstract

Following decolonization, growth accelerated in the leading African economies with the emergence of industrial activity, the modernization of physical infrastructure, and the quickening of urbanization. However, by the mid-1970s this initial phase of catching up had run out of steam, and African countries entered a long economic twilight that extended through the mid-1990s. Since then, and for over a decade, Africa, has benefitted from a widely shared revival of economic activity. Some reasons for this revival are shared worldwide, including globalization, innovations triggered by the advent of the Internet and advances in semiconductor/digital technologies, expansionary monetary policies, and by the growth of Asian countries that accelerated industrialization and trade volume. Other causes are internal to Africa, such as greater stability, better-managed macroeconomic policy, more open economies, and improved human development indicators. But this new-found momentum cannot be taken for granted. In particular, the financial crisis of 2008-09 has weakened Africa's principal Western trading partners. Export-led growth is no longer the recipe for all seasons. This paper sketches a strategy for African late starters that identifies the key objectives and policy initiatives appropriate for a post-financial-crisis environment where South-South trade and capital flows are taking on a greater salience.

1. INTRODUCTION

Following decolonization in the 1950s and the 1960s, growth accelerated in several of the leading African economies with the flowering of long-delayed industrial activity, the modernization of physical infrastructure, and the quickening of urbanization. However, by the mid-1970s this initial phase of catching up had run out of steam, as countries fell prey to political turbulence, internal and cross-border conflicts, and economic distortions introduced by policy mismanagement and import-substituting industrialization. Problems internal to the continent were exacerbated by the weakening performance of Africa's main trading partners in the West. African countries entered a long economic twilight that extended through the mid-1990s;1 since then and for over a decade, Africa has benefitted from a widely shared revival of economic activity. Reasons for this revival include the spurt in growth worldwide that can be traced to globalization, the upsurge in innovations triggered by the advent of the Internet and advances in semiconductor/digital technologies, by expansionary monetary policies, and by the extraordinary economic prowess of China and other Asian countries that raised the tempo of industrialization and the volume of trade. Other causes for this resurgence are internal to Africa. On balance, there is greater stability and a democratization of politics, and macroeconomic policy is better managed, African economies are more open, and human development indicators have improved. Also, higher primary product prices have enhanced export earnings and increased the volume of FDI in resource-based sectors and linked infrastructures.2

With growth averaging over 5 percent per year during 2000 and 2011, both African policymakers and external observers are confident that that the continent has turned the corner and its long-term prospects are brighter than at any time in the recent past. But this newfound momentum cannot be taken for granted and sustaining or even improving on this performance will depend upon how effectively African countries, both individually and collectively, respond to a number of challenges—old and new. In particular, the financial crisis of 2008–09 has seriously weakened some of Africa's principal Western trading partners and suspended questions over the future contribution of industrialization, trade, and the flow of aid to Africa's growth. Aid fatigue, and doubts as to its efficacy,³ is compounded by the budgetary woes of

¹ Only two countries, Botswana and Mauritius, bucked the trend and grew strongly during this period. The former grew because political stability, sound governance, and the effective management of the production and export of diamonds yielded steady returns; the latter successfully used policy measures to attract FDI into the apparel industry and to capitalize on preferential access to European markets.

² See Miguel (2009).

³ Aid effectiveness is the subject of a recent meta-study by Doucouliagos and Paldam (2007) and a literature review by Roodman (2007). Both conclude that there is little evidence that aid raises investment and growth or reduces poverty. William Easterly (2009) has poured cold water on the efforts of Western countries to transform Africa instead of supporting dispersed and incremental efforts at home-grown improvement that are seen to yield results. However, aid has many supporters and one of the most articulate is Jeffrey Sachs (2005).

Western countries that are unlikely to be resolved during this decade. Moreover, the sources (and the future⁴) of growth are less easy to discern than was the case just five years ago. Exportled growth is no longer the recipe for all seasons with even the East Asian economies casting around for additional drivers of growth. The fragmentation of production and its offshoring from Western countries might have run its course. A sharp and sustained increase in capital investment, rapid technological advance, and innovation complemented by human capital deepening and a strengthening of governance institutions are plausible options, but all demand a commitment to long-term development strategies backed by the sort of sustained political resolve that has been in short supply in Africa.

So much is at stake that inaction is not a viable option. African countries will need to adopt a proactive approach and capitalize on both the newly gained confidence in the continent's future, but also the mineral and energy discoveries that have brightened the growth prospects of countries such as Mozambique, ⁵ Ghana, and Uganda, among others. Several attempts have been made to craft a strategic framework for African countries, ⁶ but the uncertainties injected by the lingering aftermath of the financial crisis have complicated the situation and made it harder to chart a course forward. While recent research offers a plethora of findings, these too add to the confusion because not infrequently their relevance for Africa and the practical policy implications are left unstated.

The purpose of this paper is to sketch a modern strategy for African late starters that identifies the key objectives and the mix of policy initiatives appropriate for a post-financial-crisis environment where South-South trade and capital flows are taking on a greater salience. In sketching this framework, the paper will draw upon the empirical work that is helping spell out the constants in growth economics and what our new knowledge suggests are the changes that need to be factored into policies. The paper is divided into three parts. Part 1 briefly reviews the performance of African economies over the past decade; it highlights the factors that enabled the continent to escape from a prolonged spell of stagnation. Part 2 notes the challenges for African countries and how these have been sharpened by the crisis and by other developments, such as the greatly enlarged role of China in both the global economy and in Africa. Part 3 defines a diversified strategy⁸ that could help African countries remain on their current growth paths while addressing challenges they cannot afford to sidestep.

⁴ See Rodrik (2011) and Rogoff (2012).

⁵ See Smith (2012).

⁶ See, for example, the New Partnership for Africa's Development (NEPAD), which defines a strategic framework covering six thematic areas and the Programme for Infrastructure Development (www.nepad.org).

⁷ See Growth Dialogue (2012).

⁸ Minerals and petroleum accounted for well over half of Africa's exports and are key to the prosperity of countries such as Botswana and South Africa. They also sustain the economies of others such as Ghana, Nigeria, the United Republic of Tanzania, and Zambia. Diversifying the sources of growth is a priority for all mineral exporters, a point driven home yet again by the crisis.

2. AFRICAN ECONOMIC PERFORMANCE, 1990–2011

The first half of the 1990s was a low point for growth in Sub-Saharan Africa—0.8 percent per year. In the latter half of the decade, growth rose to an average of 3.9 percent per year, well in excess of the 2.4 percent average of the 1980s,9 and it continued accelerating into the first decade of the twenty-first century.10 Growth between 2000 and 2010 averaged 5 percent per year and in spite of spreading gloom in the EU was 5.1 percent in 2011. In fact, 6 African countries11 were among the 10 fastest-growing economies in the world during 2011. This performance was supported by a rise in investment rates from an average of 18 percent in 1990 to 21.8 percent in 201112—not comparable to East Asian levels, but respectable nonetheless. Exports grew from just over 26 percent of GDP in 1990 to almost 30 percent in 2009.13 Several countries also improved their social and Doing Business indicators,14 and foreign investment in Africa rose from US\$9 billion in 2000 to US\$82 billion in 2011 (after peaking in 2008 at US\$88 billion)15 with African countries attracting 4.4 percent of all investment in developing countries between 2008 and 2011. Remittances also climbed to US\$41.6 billion in 2011.16 And African countries reduced their external debt in 2012 to 22 percent of GDP from 63 percent in 2000 (Severino and Debled 2012).

The stronger growth performance is reflected in further progress towards several Millennium Development Goals (MDGs). The African population living on less than US\$1.25 (in 2005 prices) a day fell from 56.5 percent in 1990 to 47.5 percent in 2008 (World Bank 2011a), and according to Pinkovsky and Sala-i-Martin (2010), Africa is en route to halving its poverty rate by 2017—missing the MDG target by just two years. In a recent paper, Alwyn Young (2012) goes further to claim that income statistics might be seriously underestimating the actual gains. By

⁹ See UNCTAD (2001).

¹⁰ See, for example, Radelet (2010).

¹¹ These included Ethiopia, Ghana, Mozambique, Rwanda, Liberia, and Equatorial Guinea.

¹² The investment rate was 22.9 percent excluding South Africa and Nigeria.

¹³ Some researchers (Gruber and Koutroumpis 2011) claim that the penetration of mobiles has contributed to innovation—such as the justly famous M-PESA mobile banking innovation in Kenya and Tanzania—and to growth, especially in the higher-income countries with greater mobile penetration. Annual growth in the higher-income countries has risen by 0.2 percent per year whereas in the lower-income countries it is up by 0.11 percent. Seventy-four percent of Kenyans now use a mobile phone (the average for SSA in 2012 was 60 percent) and a quiet digital revolution appears to be stirring in the country (*Economist* 2012a). M-PESA has facilitated bank transfers and encouraged users to put their money in banks rather than in rural credit co-ops. See Mbiti and Weil (2011).

¹⁴ Between 2000 and 2010, the time required to register property was almost halved to 65 days on average. Furthermore, time required to enforce contracts and to obtain construction permits were among the areas showing improvement.

¹⁵ FDI in Sub-Saharan Africa still amounts to only 5.5 percent of global FDI (see England 2012).

¹⁶ See IMF (2011) and African Economic Outlook (http://www.africaneconomicoutlook.org/en/outlook/financial_flows/remittances/). The African diaspora totals some 30.6 million people and their remittances account for a large part of the GDP of countries such as Lesotho (30 percent) and Cape Verde (10 percent).

using the Demographic and Health Surveys, which collect data on household ownership of durables, he concludes that household consumption has in fact been increasing by between 3.4 and 3.7 percent per year, which is 3–4 times the rate reported by international data sources. Declining rates of poverty have had positive spillover effects, with the percentage of underweight and malnourished children declining by 25 percent. Furthermore, primary school completion rates rose to 79 percent in 2009, with countries such as Burundi, Madagascar, and Rwanda achieving near-universal primary enrolment; child mortality dropped from 181 to 130 over the same period; and there was a significant slowing in the growth of new HIV infections (United Nations 2012).

Other indicators convey a less positive picture. Gross savings fell from an average of 24.6 percent in 2006 to 19.8 percent in 2011.17 Gross capital formation rose from 18 percent of GDP in 1995 to a still modest 22 percent in 2011, but private fixed investment was unchanged at 13.4 percent of GDP from 2006 to 2009, and the infrastructure deficit scarcely narrowed. 18 In a disturbing trend, the share of manufacturing in GDP for Africa as a whole declined from 13 percent in 2000 to 10.5 percent in 2008 (UNCTAD 2011). It was 9.7 percent in East Africa, 5 percent in West Africa, and 18.2 percent in Southern Africa.¹⁹ Moreover, most manufactures are resource-based with low domestic value added and they register limited productivity gains and spawn few linkages with the rest of the economy (UNCTAD 2011). Diversification of manufactured exports was correspondingly limited. The share of manufactured exports, which was 43 percent in 2000, fell to 39 percent in 2008 (UNCTAD 2011), and Africa was responsible for just 1.3 percent of global manufactured exports in 2008 (and 1.1 percent of global manufacturing value added in 2009), as against 1 percent in 2000 (and 1.2 percent of global manufacturing value added). The top exports of even the more industrialized African countries were resource based. For example, South Africa's top two exports were platinum and gold; Kenya's were tea and cut flowers; Ethiopia's were coffee and sesame seeds; Tanzania's were coffee and tobacco; and Ghana's were cocoa beans and manganese ores (World Bank 2011b). Exports as a share of GDP, which had risen to 41.8 percent in 2008, dropped to 37.9 percent in 2011, with commodities accounting for 80 percent of the total.

¹⁷ See IMF (2012). Gross savings in East Asia reached 47 percent in 2009—a figure that is somewhat biased because of China's weight in the total and very high savings.

¹⁸ According to some estimates, the incremental capital output ratio (ICOR) for Sub-Saharan Africa during 1980–2010 averaged 5.23, which is high in comparison with East Asian countries during 1970–2000. See Kumo (2011).

¹⁹ Manufacturing accounted for 32 percent of GDP in East Asia in 2009.

3. CONTRIBUTING TO GLOBAL PUBLIC GOODS AND RAISING GROWTH POTENTIAL

The accumulated experience of more than half a century has substantially enhanced the developmental potential of the African continent. Technological advances and globalization have improved the growth prospects of late starters and opened up avenues for leapfrogging in areas such as telecommunications, banking, and power generation. Having internalized decades of lessons, it is now possible for African countries to pursue smart urban development and avoid the many missteps of countries at a more advanced stage of urbanization. Increased South-South trade and capital flows and Africa's diminishing reliance on its traditional trading partners reduces the continent's vulnerability to a prolonged stagnation of Western economies. In comparison to the 1970s, Africa is far better prepared to forge ahead and to sustain its regained growth momentum. But success continent-wide will rest on two factors. First, Africa must increase the supply of global public goods that have helped foster recent prosperity but are currently inadequate to sustain future growth. Second, African countries must take a strategic and methodical approach to transforming economic assets into innovative drivers of economic performance.

Africa faces a host of challenges and an exhaustive listing serves no useful purpose. However, a small subset of global public goods is likely to exert a profound influence on Africa's prospects. These include continued integration with the global trading environment in a manner that contributes to the diffusion of capital and ideas; continent-wide political stability; and a wide-ranging, multi-sectoral response to global climate change that minimizes economic costs while containing the increase in greenhouse gas emissions.

3.1. INCREASING THE PROVISION OF PUBLIC GOODS

Preserving globalization: The past decade has witnessed a sea change in international relations alongside a rebalancing of the global GDP. It appears that we are on the threshold of a multipolar world where a number of regional hegemons are likely to displace a single superpower. This could have political and economic consequences. On the political front, the risk of regional tensions leading to arms races and flaring into sharp and costly conflicts is greater. On the economic front, the stalemated Doha Round provides a foretaste of what a multipolar world may be like. There is risk of a slide back to a more protectionist environment, if countries are unable to correct trade imbalances, and if industrial hollowing and unemployment induce politicians to buy short-term relief by raising barriers to trade. The term "murky protectionism" has been coined to describe the creeping revival of trade impediments, which if not contained, could begin to eat into the gains from trade and the opportunities for export–led growth (Baldwin and Evenett 2009). The backlash following the financial crisis against international capital could result in "sudden stops" in flows to some countries when investors panic, the appreciation of exchange rates in others faced with a surge in inflows, and asset bubbles. Similarly, the backlash against financial innovations (including securitization and

exotic derivatives) could easily lead to the imposition of punitive taxes and regulations. These could curb not only the excesses of financial globalization, but also limit the benefits to developing countries in the form of productivity gains from financial development (Bekaert, Harvey, and Lundblad 2011), equity capital for industrialization, and sophisticated banking technologies that improve access of local businesses to capital and resource allocation.²⁰

Although its promoters²¹ can exaggerate the advantages of globalization and a tempering of certain trends may well be desirable,²² a reversal would not be in the interests of the community of nations. The world has lived through one such reversal in the early decades of the twentieth century and a recurrence is best avoided. But unless the widening cleavages between the interests of the advanced countries and developing countries can be bridged, there is great likelihood of a partial retreat from globalization and a weakening of the institutions that contribute to the benefits from closer integration. Africa cannot afford to remain a largely passive bystander, and the challenge for African countries is how to collectively work with and influence other nations to secure and improve the institutional underpinnings of globalization. This institutional infrastructure, painfully pieced together over the past several decades, is an enormous asset. It has its deficiencies; however, the priority should be to fix the problems so that the gains from economic globalization are more widely shared and there are effective procedures and for afor settling political differences. In an increasingly fractious world, the importance of the latter and its bearing on the former cannot be minimized. Africa will need to use "voice," diplomacy, and its growing economic clout to help safeguard the future of 'good' globalization.

Sustaining globalization and contributing to the public goods that will maximize its advantages must be complemented by continent-wide efforts at trade integration that could serve as an additional engine of growth. In particular, Africa's many small, landlocked countries stand to benefit from increased intra-African trade. This has risen more rapidly since 2000 than exports to the rest of the world, but still amounts to less than 10 percent of Africa's total trade, with the large countries accounting for the lion's share.²³ Intraregional trade confers an additional advantage on the smaller countries because it favors the exports of processed goods to partner countries in Africa as against the export of unprocessed goods overseas.²⁴ Regional institutions supporting trade liberalization, and backed by domestic policies

²⁰ Beck, Chen, Lin and Song (2012) present evidence on the links between financial innovation and growth and also the link between innovation and financial fragility.

²¹ See Bhagwati (2007) and Wolf (2004). See also review summaries of Wolf at http://www.complete-review.com/reviews/economic/wolfm.htm.

²² Sundaram, Schwank, and von Arnim (2011) claim that much of the FDI in Sub-Saharan Africa, courtesy of globalization, has gone into mineral extraction and that trade liberalization, by exposing infant African industries to competition, has stunted their development.

²³ See Broadman (2007)' for a detailed account of Africa's trade prospects with Asia and the trade facilitation issues that dog the growth of trade.

²⁴ See Douillet and Pauw (2012). Severino and Debled (2012) cite a higher figure – 15 percent.

promoting export-oriented development, will contribute to greater integration, as would investment in infrastructure to close the wide remaining gaps, and removal of other behind-the-border impediments to the flow of trade.²⁵

Political stability and institutions: It is a commonplace to note that political stability and conflict avoidance are critical for growth to be sustainable. Africa has had its share of local conflicts²⁶ and has experienced their destructiveness.²⁷ With the spread of democratic and more inclusive regimes, the continent is enjoying a period of relative respite. But the threat of renewed instability has not disappeared. Internal conflicts continue to smolder in Côte d'Ivoire, Sudan, Uganda, Mali, and in the Democratic Republic of Congo. Democratic rules of government appear to be widely applied throughout the region with all countries except Eritrea holding elections, but both the Mo Ibrahim Index and the Freedom House Index point to a decline in "full electoral democracy" and in political participation since 2007. Only Mauritius can be classified as a "full democracy." 28 However, as the Economist (2012a) notes, there are grounds for optimism in the blurring of ideological fault lines, the increasing numbers of young voters, the information and media access made possible by information and communication technology, and more carefully supervised elections in some countries. Nevertheless, Africa's political institutions are at the embryonic stage and the recent progress seems tentative and precarious. There is unabated need for continuing national and Pan-African efforts to secure the gains achieved and create the political milieu conducive to inclusive growth. How to minimize economic instability, political tensions, corruption, and violent conflict will be a continuing test for many African countries.29

Climate change: The third most pressing challenge, which is entwined with preserving globalization, is climate change. Many African countries are at the epicenter of the changes to come that will result in higher temperatures, desiccation, worsening water scarcities,³⁰ extreme

²⁵ The defragmenting of African markets would be a boon for Africa's exporters, especially smaller firms (see Brenton and Isik 2012). Also helpful would be progress at strengthening road and rail infrastructures and reduced delays at customs and border checkpoints (see Rippel 2011). Infrastructure gaps in Sub-Saharan Africa are spelled out in World Bank (2011). Closing these by 2020 could require as much as US\$93 billion. Maintaining the infrastructure, another major issue in Africa, would demand adequate budgetary provisioning thereafter (see AfDB 2010).

²⁶ Some of these conflicts were the result of interventions by the superpowers and were in effect proxy wars fought in Africa. See Hironaka (2005), Shah (2012), and Gettleman (2010).

²⁷ According to Paul Collier (2003), the "conflict trap" is one of the causes of stalled development in many African countries. Some others are reliance on natural resources, being landlocked, and bad governance.

²⁸ See the *Economist* (2012a).

²⁹ Acemoglu and Robinson (2012) refer to the failure of countries "not with a bang but with a whimper" because they are "ruled by extractive economic institutions, which destroy incentives, discourage innovation, and sap the talent of their citizens by creating a tilted playing field and robbing them of opportunities."

³⁰ On water stress in Africa, see Tatlock (2006).

weather events, and coastal flooding.³¹ Adaptation will undoubtedly provide partial relief, and as Africa becomes more prosperous, the continent will find it easier to absorb the additional costs. But early and concerted efforts to mitigate climate change would ease the burden on later generations. In this regard, the challenge for Africa is to play a proactive role in international negotiations-because it has so much at stake-and for Africa's leaders to make an early commitment to greening growth. With the advanced economies preoccupied with their fiscal and employment problems, by default the baton is for developing countries to grasp. They should engage in bold commitments followed by determined efforts at implementing difficult and initially unpopular policies. With so much urbanization, industrialization, and transport development ahead, Africa could embark on a path that tightly constrains the growth of energy, water, and resource utilization. Similarly, Africa could constrain increasing greenhouse gases emissions caused by deforestation by preserving carbon-sequestering forests. This step would help Africa avoid becoming locked into less resource-frugal technologies and forms of urbanization. It would also protect the continent's wealth of biodiversity (Steiner 2010). The policies and technologies to achieve these objectives are well known, if governments can muster the political will and the administrative capacities to put them into effect. In the long run, such green policies are likely to prove much more inclusive than current strategies, which will entail costly adjustments that could destabilize societies and be especially hard on the poor.³²

In part, growing sustainably will depend upon global developments, which Africa can influence—if it tries. Successful intervention would require a joint and unified approach predicated on an alignment of key objectives among African countries, using existing Pan-African institutions; making common cause with other developing nations; and articulating the approach forcefully in international bodies such as the G-20, which have the capacity to affect the direction of global change.

3.2. RAISING AFRICA'S GROWTH POTENTIAL

How Africa mobilizes its own resources and enlarges its economic potential will largely determine its future. The potential differs significantly among countries, which range in size from Nigeria, with a population of 150 million, to the Comoros and Cape Verde, with populations of just half a million, and will evolve at differing rates. Moreover, natural resource endowments differ widely among countries. Hence strategies and policy options will vary and need to be country specific. These country characteristics will affect how countries respond to trends and harness their factor endowments. Nevertheless, broadly speaking, growth potential is likely to be keyed to the following conditions.

Natural resources: Africa's growth spurt is closely tied to the export of mineral

³¹ Cities at risk in Africa include Abidjan, Accra, Dakar, Dar es-Salaam, Durban, Maputo, Mombasa, and Port Elizabeth. See the figure "African cities at risk due to sea-level rise" in UH-HABITAT (2008).

³² The desirability of greening urbanization and in the process making it more inclusive is discussed in ADB (2012) and McKinsey Global Institute (2010).

resources and to the higher prices these now command. Looking ahead, the abundance of natural resources will be a major determinant of future potential. Therefore, it will be vital to accurately assess the magnitude of resources; adopt a rate of exploitation that maximizes long-term benefit streams, while taking account of absorptivity; and carefully choose options for investing the proceeds from the mineral wealth.³³ Furthermore, augmenting resources through discovery³⁴ and with the help of technological advances will further contribute to the potential. Arable land and water resources are no less important. Both are scarce in a number of countries and their efficient utilization can be enhanced with the help of new technologies that minimize the wastage of water and the degradation of arable land through erosion. More fortunate countries, such as Zambia, by effectively managing their water resources,³⁵ can benefit from the food security and agricultural exports that could derive from an abundance of cultivable land.

Population and the youth dividend: Demographics will have a large hand in the fortunes of African countries, all of which have growing populations. Between 1950 and the end of the century, Africa's population ballooned from 230 million to 811 million and by 2010 had passed the 1 billion mark (Deen 2011). At current trend rates of growth of 2.2 percent per year it will approach 2.3 billion by 2050. There is scope for reaping a demographic dividend because more than one half of Africa's population is under the age of 20 (Fine 2012); and Africa will add 122 million people to its workforce between 2010 and 2020. Whether the dividend, which offers a window of opportunity,³⁶ is realized will depend upon the quality of education provided,³⁷ measures to secure the health of the population, and investment that generates jobs.³⁸

Export-oriented industrialization: The development of productive activities, mainly by the private sector, and their composition, will decisively affect growth potential and employment. How these evolve is a function of entrepreneurship (including from the large African diaspora), investment, and technological change. As noted above, investment in productive assets and in infrastructure has been low. No African country has a manufacturing base or export-oriented services—other than tourism—comparable to the East Asian countries. Perhaps more damaging to export performance is the fact that, with the exception of South Africa, African countries host very small numbers of companies employing more than 100

³³ An assessment of Africa's mineral resource potential can be found in Custers and Matthysen (2009).

³⁴ Gelb, Kaiser, and Viñuela (2011) show that new discoveries have substantially replenished mineral resources and contributed to national wealth.

³⁵ World Bank (2009b).

³⁶ In the form of lower dependency rates, higher savings, a more elastic labor supply, and increased entrepreneurial energy.

³⁷ About 42 percent of the 20–24 year olds have some secondary education.

³⁸ See AfDB et al. (2012). The official unemployment rate for the continent is 9 percent. However, only 28 percent of the workforce has stable and well-paid jobs and the safety net is nonexistent in most countries (McKinsey Global Institute 2012).

people,³⁹ the sort of companies likely to venture into overseas markets. Moreover, as evident from the Boston Consulting Group's report on Africa's new challengers, the vast majority of the larger firms are in services (such as banking, telecommunications, transport and construction) (Ndulu *et al.* 2007). Strengthening and diversifying the base of tradable products, not only in urban areas but also in the agricultural sector, will ultimately determine if Africa can reap the advantages of globalization. It will also determine whether African firms can integrate with global value chains, especially those that will tighten Africa's links with markets in developing countries where demand is likely to be growing faster.

Rural economy: The demographic center of most African economies is in the rural sector. In Sub-Saharan Africa, 63 percent of the population was rural in 2009, although on average, agriculture generated just 13 percent of the GDP. Nevertheless, the unexploited agricultural potential is large (60 percent of the world's uncultivated cropland is in Africa⁴⁰) and as global population grows and food security becomes an issue, some African countries could emerge as major exporters. In 2008, arable land per 100 people amounted to over 24 hectares—well above the average for low- and middle-income countries. Moreover, because of the neglect of agricultural R&D, fertilizer inputs, irrigation infrastructure, and better tillage practices, agricultural productivity is the lowest in the world. Yield increases have contributed 34 percent to the increase in production since 1960 as against 80 percent in South Asia (Smith *et al.* 2010). The opportunities for catching up are considerable and with climate change, the development of drought and disease resistant crop strains and lean irrigation techniques is rapidly becoming a priority.

Technology, innovation, and FDI: Africa has gained relatively little from the huge advances in industrial, agricultural, and services-based technologies, although mobile telephone has made substantial inroads. There is a wealth of opportunity for late starters if they can mobilize skills and capital. For Africa, the shorter route to growth could be via human capital deepening and determined efforts at raising its quality so that it can harness the technologies now available. Once a pool of human capital initiates a virtuous spiral, the supply of capital can follow from local sources and overseas. Casual empiricism suggests that there is no shortage of capital globally that is searching for profitable opportunities. Over the medium term, FDI could substitute for domestic savings if the business climate is propitious and foreigners can perceive the market opportunities. In addition to capital, FDI can be a source of much-needed technologies and it can help stimulate local innovation. For Africa, the benefits of plugging into the global innovation system will increase commensurately as innovation becomes a bigger source of growth.

Demand as a driver: There is a limited likelihood that Africa's growth will be constrained by a dearth in the demand for its mineral resources. However, that alone might not be enough for the continent as a whole to sustain the growth and to create the jobs that it needs

³⁹ The UNCTAD (2011) report observes that small firms dominate African manufacturing. See also Mckenzie (2011)."

⁴⁰ See Fine and Lund (2012).

to. Agro-industrial development and a robust services economy are sources of tradables that the rest of the world demands, and they will to varying degrees figure in the strategies of all countries. However, as seen in the case of South Africa, rich in resources, stable in politics, and large in size, the development of new industries, especially manufacturing, has been limited (Yusuf 2011). Africa will need to derive a substantial boost from the growth of its own middle classes eager to raise their own consumption standards—especially the younger elements (Fine 2012). By 2020, this class is projected to number 130 million, which will generate a large demand for consumer goods (Fine and Lund 2012). This potential source of future growth must be facilitated and factored into any calculation of longer-term growth prospects.

4. A FRAMEWORK FOR SUSTAINABLE GROWTH

A two-pronged strategy straddling the global and the local is central to the achievement of sustainable economic growth; African economies will have to conduct policy on both registers depending on their international salience and capabilities. Here we will focus on how countries might go about augmenting and realizing their growth potential starting with the minimum objectives for sustainable and inclusive growth: the rate of increase of GDP; employment opportunities for the vast majority of the workforce; the avoidance of wide income disparities without eliminating "good inequality" that sharpens incentives; and containing of the ecological/resource footprint.

A growth rate averaging 7 percent per year would bring Africa to the level reached by the Republic of Korea at the end of the twentieth century.⁴¹ Although higher than what most African countries have registered during the past decade, it is a desirable target for a number of reasons. Africa's current low per capita income and large technological gaps permit an acceleration of growth, and also present well-charted opportunities for catching up. The current overhang of unemployment, which exceeds 20 percent of the workforce in countries such as South Africa, and the anticipated increase in the labor force,⁴² cannot be accommodated except through growth in excess of current levels. Technological change that is capital-intensive and unskilled labor–displacing is also reducing the elasticity of labor demand in manufacturing and in services (and at least in the advanced countries, resulting in jobless growth) (Kapsos 2005). Therefore, absorbing Africa's growing pool of workers will call for faster growth than in the past, even if most of the jobs are in light industry and services. Ensuring an acceptable sharing of the fruits of growth will be a challenge, but one that could be manageable if more of the growth derives from (i) labor-intensive manufacturing (some of it shifting from East and South East Asia to Africa), (ii) relatively labor-intensive tradables, and (iii) labor-intensive services.

⁴¹ The *Growth Report* (Commission on Growth and Development 2008) also recommended a growth target of 7 percent.

⁴² Africa's population is expected to grow at 2.4 percent per year during 2009–15, and although the rate is likely to slow further down the road, reaching replacement-level fertility by 2050, the United Nations (2004) projects that the African population will exceed 1.8 billion by mid-century.

Finally, green growth (which encapsulates some of the messages embedded in "sustainable") will be a function of price signals that encourage conservation and changing life styles. But it equally will be influenced by regulatory policies; government procurement; by standards (for vehicles, equipment, and durables, among others) and their enforcement; by technological change; and by the pace of absorption of new ideas into equipment and in production practices.

Looking forward, we elaborate the five elements of a strategic framework for sustainable growth in Africa: (i) the political system; (ii) state policy making, regulatory, and implementation capacities; (iii) resource mobilization, investment, and total factor productivity (TFP); (iv) learning and innovation systems; and (v) management of the urban system. Although many of these elements are not new, the global situation in which economic growth is proving more difficult for all economies makes this a necessary list of priorities in our view to propel Africa's future growth.

4.1. POLITICAL SYSTEM

There has never been much doubt that economic policies are almost always freighted with myriad political concerns. They leave an imprint on policy design, affect implementation, and influence both the outcomes and how the public perceives them. The varied, and in many instances, partial and halting responses to the financial crisis across the world have brought home once again the far-reaching role of politics and of political institutions in how countries respond to crises and how they struggle to arrive at a consensus on longer-term strategies.⁴³

What kind of a political system delivers the better economic results has been endlessly debated and accumulating experience subjected to rigorous testing. A prior belief in the efficacy of democracy and the enlightened resilience of democratic institutions has been challenged by the superior economic performance of a handful of countries all in East Asia; they achieved outstanding results under autocratic regimes and without the benefit of institutions that credibly protected individual rights to speech and to property against the grasping hand of the state. With two exceptions, China and Vietnam, all of the East Asian star performers have embraced democracy and the two African countries that vied with East Asian ones with regard to economic performance—Botswana and Mauritius—managed to grow rapidly under democratic regimes. But the belief lingers that the wise and far-seeing autocrat, who can create an effective bureaucratic machinery, is more likely to deliver the prosperity that developing countries are seeking. The empirical research suggests, however, that the prior belief in democracy has considerable merit (Radelet 2010). At worst, democracy does not impede growth, and for developing countries that are taking the democratic road, the direct and

⁴³ The political economy of Botswana's growth and stability is analyzed by Acemoglu, Johnson, and Robinson (2001). Acemoglu and Robinson (2010, p. 22) claim in another paper that "the main reasons why African nations are poor today is that their citizens have very bad interlocking economic and political institutions."

⁴⁴ Easterly (2011) finds that on balance, the occasional and temporarily benevolent autocrat does not promote long-term economic growth.

indirect benefits of democracy can be large. Pereira and Teles (2010) state that political institutions supporting a more pluralitarian electoral system are important determinants of growth in incipient democracies, but political institutions have a weaker bearing on growth in consolidated democracies that have already internalized their effects. Indirect benefits of democracy derive from increased stability; a higher degree of accountability; lower rates of inflation; the greater protection afforded to property rights; and the responsiveness to popular demands for education, health care, and a safety net.⁴⁵

In a globalized world, countries are more exposed to external shocks, and will require collective action and sacrifices if a liberal multilateral trade regime is to be sustained and climate change curbed. Under such conditions, democracies are better placed to win the support of the majority and to more equitably distribute rewards or burdens. For African countries that have embraced democracy (and the majority have), the priority is to continue the process of building institutions and strengthening those already in place. African democracies have been buoyed by good economic times, but the danger of slippage has by no means passed. A precondition of future sustained and inclusive growth is surely the commitment of governments and of the public to making democracies work better. To this end, Africa's democracies should use the political leverage of representative government to craft long-term growth strategies.

4.2. STATE CAPACITY

Democratic institutions can serve as the foundation of growth, but absent state capacity to frame and implement policies derived from an overarching strategy, progress is unlikely. For example, East Asian economies notably have delivered good economic results under both autocratic and democratic regimes, and have performed credibly on the international stage. To be successful, they all have relied on the capacity of the state's bureaucratic machinery to efficiently conduct wide-ranging development activities—including long-range planning policies to develop comparative advantage—and to steadily build the market and regulatory institutions that determine how well or poorly an economy functions. Weak state governing and policymaking capacities have been the bane of many African countries. These deficiencies should be remedied through public sector reforms that address problems with recruitment, culture, incentives, accountability, and the motivations to serve the public and to deliver results. A reformed public sector is the necessary complement to a development strategy aimed at prolonging the recent growth spurt and tackling the challenge of sustainability.

State capacity might be even more vital in the future because the financial crisis has stirred doubts and forced a rethinking of neoliberal policies.⁴⁶ The retreat of the state in

⁴⁵ See Doucouliagos and Ulubasoglu (2010); Feng (2003); Gerring et al. (2005); Knutsen (2009); Pereira and Teles (2010); and Rock (2009).

⁴⁶ Among the expressions of doubt that have surfaced since the crisis, see Turner (2011).

developing economies (if such a retreat was ongoing or in the offing) is over, for the time being at least. A number of countries—including some advanced economies—are taking a second look at updated variants of industrial policies practiced by China⁴⁷ (and earlier by the Republic of Korea; Taiwan, China; and other Asian "tigers"). There is also a renewed push to fashion policies compatible with World Trade Organization rules to stimulate industrialization.⁴⁸ Widening income inequality compounded by structural unemployment might also demand a more active role in creating jobs (as is currently the case in the Middle East and a number of African countries). However, for industrial, active labor market, and redistributive polices to succeed, state policy making and implementation capacity must be up to the task. Thus far, only a tiny handful of African countries can claim to have reached the requisite level of public sector efficiency and transparency needed to accomplish the task.⁴⁹

4.3. RESOURCE MOBILIZATION, INVESTMENT, AND TFP

Capital investment in infrastructure,⁵⁰ housing, and productive assets is critical in the earlier stages of industrialization. However, as countries develop, more of the growth is derived from total factor productivity (TFP), which reflects embodied and disembodied technological change, innovation, tacit knowledge and gains in efficiency from a variety of sources. Income gaps and the slow speed of income convergence among countries are associated with slowness in assimilating technologies and persisting technology gaps.⁵¹ When technology gaps are wide, as in most African countries at an early stage of industrialization, more of the TFP accrues from investment in fixed assets and linked processes embodying the latest technologies. Jorgenson and Vu (2007) estimate that between 1989 and 1995, capital accounted for 41 percent of growth, and TFP accounted for 22 percent of growth in 110 countries analyzed. By 2000–04, the share of capital had declined to 34 percent, while that of TFP had risen to 37 percent. In developing Asia, the share of TFP was 39 percent, while that of capital was 35 percent. In other words, between 70 percent and 74 percent of growth is from these interlinked sources. For African countries, during 2000–04, capital contributed 21 percent of growth and TFP 23 percent. Much of the growth in Africa came from labor inputs, with quantity prevailing over quality gains. Ndulu *et*

⁴⁷ See the championing of the Chinese approach by Justin Yifu Lin (in Chandra et al. 2012), who is of the view that as China vacates certain industries as its costs rise, African countries could move in.

⁴⁸ See Aghion, Boulanger and Cohen (2011); Leipziger (2012); Yusuf (2011).

⁴⁹ See the World Bank's Public Expenditure and Financial Accountability Assessment Reports (PEFA) for African countries. http://web.worldbank.org/WBSITE/EXTERNAL/PEFA/0,,contentMDK: 22687152~menuPK:7313203~pagePK:7313176~piPK:7327442~theSitePK:7327438,00.html

⁵⁰ The recent adoption of the Programme for Infrastructure Development in Africa is a step toward a regionally coordinated approach that responds to the anticipated growth in demand.

⁵¹ See Parente and Prescott (2000) and Comin and Hobijn (2010). Francesco Caselli (2005) shows that an equalization of physical and human capital across all countries would explain only 37 percent of the differences in GDP per capita. The balance is due to productivity differences arising from technology of all kinds.

al. (2007) point to the low or negative contribution of physical capital and TFP to growth in Africa between 1990 and 2003. However, recovery in the late 1990s was substantially aided by improved TFP.

If African countries want to follow the path of other industrializing economies over the next couple of decades, particularly East Asian economies, then they may need to invest heavily to generate growth and make up for infrastructure deficits in the agricultural and urban sectors, and also widen and deepen the productive base. Further down the road, TFP could move into the lead once incomes are considerably higher. For this reason, measures to raise investment in specific areas with the highest growth potential deserve priority. These are likely to differ from ones that have been the principal sources of recent growth. A third of Africa's growth in the past decade was from the exploitation of natural resources; the balance was from development of wholesale and retail activities (13 percent), transport and telecommunications (10 percent), real estate and construction (10 percent), financial intermediation (6 percent) and public administration (6 percent). The real sectors—manufacturing and agriculture—contributed 9 percent and 12 percent, respectively.⁵² In contrast, over the same period these latter subsectors were the main sources of growth and employment in East Asia, and arguably will play a vital role in enabling Africa to grow at higher and sustainable rates.

The markedly small share of manufacturing in African economies is responsible for weaknesses in the export mix. Abdon and Felipe (2011), using the product space methodology⁵³ devised by Hidalgo and Hausmann (2009), show that the export structure of resource-rich African countries barely changed between 1962 and 2007. They remained exporters of a narrow range of products, almost all lying on the edges of the product space (although it should be noted that exports from Ghana, Kenya, and South Africa are dominated by manufactures). A few landlocked countries added exports to their portfolio that were closer to the networked interior of the product space, while coastal countries revealed a comparative advantage in more networked products, particularly garments. But the results for African coastal economies were dominated by South Africa, which has the most products in the core of the product space. Abdon and Felipe observe that Africa's poorly diversified productive structure and the high proportion of standardized ubiquitous (peripheral) products exported by many countries seriously compromise their export prospects. Especially for the smaller countries that need external markets to generate sufficient demand for rapid growth, export diversification and upgrading is a must.

Moreover, as Easterly and Reshef (2010) note, the desired growth outcomes will depend upon achieving "big hits," that is, large exports of a few products to a single market or a limited number of markets.⁵⁴ They claim that a disproportionate share of export earnings derives from

⁵² See McKinsey & Company (2010). See also UNCTAD (2011).

⁵³ The product space refers to a network that brings out the interrelationships between products traded in the global marketplace. See http://www.chidalgo.com/productspace/.

⁵⁴ See also Lederman and Maloney (2010).

big hits that are difficult to anticipate, and in addition the composition of the big hit is itself subject to churning.⁵⁵ The winning recipe, discerned from the experience of leading export nations, consists of conditions facilitating the entry and maturing of companies that can opportunistically become exporters of diverse products. Creating these export-friendly conditions requires a long-term strategy to stimulate domestic and foreign investment (supported by domestic saving) by improving the business climate and access to financing at reasonable cost,⁵⁶ and through incentives for entrepreneurs. The strategy can be supported by investments in infrastructure that ease troublesome logistics constraints for businesses, but infrastructure-building by itself will not alone lead to a crowding in of industrial investment needed to deepen and diversify the industrial sector. For that, some form of state-led industrial policy based inducements might be required as well, and East Asia is replete with such examples.

4.4. LEARNING AND INNOVATION SYSTEM

If growth is sustained, domestic public and private savings could rise and help finance increased investment. However, it is unlikely that Africa will be able to realize East Asian levels of resource mobilization; if so, increased TFP will be an asset. The road to higher TFP winds through the learning and innovation system, which is a weak point for all African countries, even South Africa. But it is a weakness that can and must be addressed.

The research of Hanushek and others⁵⁷ suggests that such a growth path will require improving and deepening human capital with the help of education and related health policy reforms. If African economies can substantially raise the quality of their workers, and if this in turn makes it possible for businesses to step up the pace of technology absorption, research, and development and innovation, then it is possible to envisage a shift to a sustainable high-growth path less reliant on capital accumulation. In fact, the quality of the labor force affects economic performance through multiple channels. Human capital is key to the building of research infrastructure, the production of ideas, and their commercialization. And human capital, suitably motivated, will influence the vigor of entrepreneurship. The difficult part—a difficulty underscored by the Glewwe *et al.* (2011) review—is actually identifying and implementing the policies that will produce results within the space of 5 or 10 years,⁵⁸ and then translating the gains in human capital quality into growth performance. No country has found a durable recipe, although small countries such as Finland and Singapore can claim a measure of

⁵⁵ The composition of the Republic of Korea's exports changed from one decade to the next. Garments, steel, and footwear in the 1980s were displaced by semiconductors, computers, and autos in the 2000s, and semiconductors, vessels, and autos in the 2010s.

⁵⁶ The cost of financing and limited access is frequently blamed for the slow entry growth and lagging export capacity of firms in Africa. See Venables (2010).

⁵⁷ http://hanushek.stanford.edu.

⁵⁸ On recipes and progress to date in Africa, see World Bank (2009a).

success.59

For health policies, Africa's disease burden and epidemiological profile raise the challenge for policymakers by an order of magnitude. The widespread prevalence of debilitating infectious diseases and helminthic infections erodes efforts at building human capital, but these have been joined by the spread of chronic diseases arising from changing lifestyles and eating habits associated with urbanization and rising incomes (Aikins *et al.* 2010). As with education, there is some low-hanging fruit to harvest with the help of policy changes, the harnessing of appropriate technologies, and foreign assistance. But the key to success again lies with implementation, monitoring of results followed by policy adjustment as needed, and persistence.⁶⁰

Development thinking buttressed by the experience of East Asian countries has given most attention to manufacturing and tradable services. However, for decades ahead, Africa's growth and export prospects will also hinge upon the productivity and diversification of the agricultural economy. In almost every African country, agriculture is the largest employer, especially of women; and given Africa's reserves of unused arable land, agriculture is a potentially large source of exports.⁶¹ Africa has lagged behind in agricultural research, and as a result labor and land productivity is well below levels elsewhere (Paarlberg 2008). African researchers are making limited progress in developing disease-resistant and drought-resistant strains of the crops most vital for farmers.⁶² Compounding the problem is increasing water scarcity in a number of countries, particularly in the north and the east of the continent. This is likely to become more acute as populations expand, industrial and urban demand increases, and global warming leads to worsening desertification that is already apparent in Ethiopia and Kenya. Both rural and urban dwellers will need to come to terms with water scarcity in the coming decades,63 and the risk is that difficulties in agreeing on a fair sharing of water resources could lead to tensions between riparian nations. A combination of pricing, conservation, and many technological fixes will be part and parcel of development strategies, but recent history offers scant encouragement. Evidence of shrinking freshwater resources has been growing, but African countries have yet to take the needed initiatives to manage their water resources, which will be a key to sustainable growth. Whether independently or in conjunction with agricultural

⁵⁹ See Yusuf and Nabeshima (2012).

⁶⁰ Glewwe and Kremer (2005) present the findings from research on initiatives in the area of education and deworming of school children in Africa.

⁶¹ See Klaus Deininger and Derek Byerlee (2011). They note that of the 10 countries with large stocks of potentially cultivable land, 5 are in Africa. Globally there are 446 million hectares of such unutilized land that is unforested, uncultivated, and with less than 25 people per square kilometre. Of this stock, 201 million are in Africa. Chad, the Democratic Republic of the Congo, Mozambique, the Sudan, and Zambia head the list.

⁶² The breakthrough will come from replacing annuals with equivalent perennials so as to reduce erosion and enable soils to hold on to nutrients.

⁶³ See UNEP (2008), Chapter 2, "Freshwater Resources," section on "A Scarce and Competitive Resource," graphic on "The coming water scarcity in Africa." Available at: www.unep.org/ dewa/vitalwater/article83.html.

development, water must figure prominently in the defining of a sustainable growth strategy. Water management will be an ongoing and expensive undertaking.⁶⁴ However, if neglected, poor water management will lead to rising food prices, trade imbalances, and water stress, and cities will suffer under the weight of unchecked migration from rural areas.

4.5. URBAN SYSTEMS

Industrial and innovation policies (which have a bearing on the business climate) are intermeshed with urbanization policies. Together these affect what sort of productive activities flourish and where, their competitiveness, how much employment they generate, their growth potential, and the revenue they produce for cities. Managing the process and the characteristics of urbanization in Africa to extract the productivity gains from agglomeration economies will be a crucial test for policymakers. This challenge must be confronted while containing per capita resource and energy costs, and also minimizing the negative externalities that undermine the quality of urban life and contribute to environmental degradation.⁶⁵ Policymakers will have to battle the inertial patterns of sprawling urban development prevalent in almost all countries because of widening private automobile use, the problems caused by past infrastructure and housing development, and resistance from all those who benefit from the existing land use and urbanization patterns. But neglect of urbanization strategy and enabling policies would seriously compromise an important strand of development and also cripple efforts to limit climate change and mitigate its consequences. Urbanization strategies can be highly complex, and most African municipal administrations will need to develop the technical capacity, the administrative skills, and the financing to craft and implement workable strategies that take full advantage of new technologies, hard as well as soft.

5. CONCLUDING OBSERVATIONS

The current decade is likely to differ markedly from the preceding one and this will have significant implications for national growth policy formulation in Africa and for the policies of others, principally donors and foreign investors (see Rodrik 2012a, 2012b). The evolving global economic environment is both a blessing and a curse. It is a blessing because the high-growth engine of the world economy, China, is generating substantial and sustained demand for raw materials that Africa has in abundance, and because China's financial status, and its willingness to use its surpluses, make Africa a privileged destination. Moreover, China's resource commitment to Africa in recent years exceeds that of the World Bank and the AfDB

⁶⁴ See Schaefer (2008) and Science (2006).

⁶⁵ The urbanization rate in Africa was 36 percent in 2011. See http://data.worldbank.org/topic/urban-development.

combined, if one looks at lending and foreign direct investment flows.⁶⁶ Hence, Africa has everything to gain under current circumstances. Of course, the generalized global slowdown is not good news for the export of manufactures; however, it will take a while for Africa to reach the stage when it can compete in many developed markets and by then the outlook may well have improved. Moreover, while the advanced economies are struggling to extricate themselves from the financial crisis aftermath, Africa until now has been largely spared these dislocations. It is for this reason that we argue that this could well be the take-off decade for the continent, provided that progress is made on some key infrastructure and institutional bottlenecks.

Africa's growth momentum, if sustained, will also continue to benefit from the policy dividend arising from favorable macroeconomic developments. Independent examination by the IMF, the World Bank, and others show that macroeconomic management has been increasingly prudent in many African countries, and that as a group, they are in a better position than at any other time in recent memory to make significant advances (according to the IMF and others).⁶⁷ By any number of measures of macroeconomic probity—fiscal and current account balances, foreign exchange reserves, and access to capital markets or inflation—the situation is generally propitious and governments are well positioned to take advantage of this. According to most analysts, moreover, the historically low interest rates that now prevail are unlikely to continue in the medium term, another reason to attract capital for the myriad of needed investments previously mentioned. Hence, there is ample reason to act vigorously and to act now.

So what constitutes a vigorous growth policy and how might governments act so as to achieve the elusive 7 percent per year growth rate that doubles incomes in a decade? From past experience, it is clear that few countries have managed growth acceleration without considerable policy effort (Commission on Growth and Development, 2008). Rapidly growing countries have generally made conscious choices to defer some consumption in order to promote investment. While a country is living near subsistence, this may be a difficult tradeoff to manage, yet, Africa as a region is no longer in this absolutely dire situation (although there are of course counterexamples and special cases). The policy elements that have worked have included high and effective investments in human capital; strong efforts on infrastructure; the channeling of savings into productive export-led growth (executed by the private sector but supported by public sector policies); well-coordinated, yet malleable programs; and a long-term vision to propel the economy forward.

Some of the necessary, but not in and of themselves sufficient, conditions have already

⁶⁶ Although data is often imprecise and confusing, Fitch reported than China's Exim Bank lending over the 2001–10 period totalled US\$67.2 billion compared with US\$54.7 billion for the World Bank, and that in 2011 lending from China was an estimated US\$11 billion without counting either Chinese grant aid or its considerable FDI in the continent, a stock figure reported to be US\$40 billion. See www.bloomberg.com (12-28-2011) and www.ChinaDaily.com as well as Ali and Jafrani (2012).

⁶⁷ See IMF (2010). More generally on China's contribution to Africa's investment and growth, see, among others, Weisbrod and Whalley (2011), Kaplinsky and Morris (2009), and Renard (2011).

been mentioned, in particular capable bureaucracies, effective public spending, low levels of corruption, and a workable relationship between business and government. With respect to a key point on cooperation between business and government, it should be noted that local entrepreneurs with the ability to tap informal overseas financial markets can be effectively mobilized—provided they understand what is expected of them. In the case of Malaysia, the 30-year pro-Bumiputra policy stance yielded some positive results in terms of redistribution and opportunity for the Malay majority. It is now widely accepted that the ethnic Chinese Malaysians (who saw themselves as nationals but may not have been perceived as such) needed to be given a firm stake in the future of the country to harness their considerable talent, finance, and energy. The same is true in Africa, where entrepreneurship is scarcer and where offshore ties to its diaspora (Ratha and Plaza 2011) and East Asian financing can be an asset if properly exploited. Affirmative action programs, along with other pro-growth policies, can be meritorious, as long as the opportunities are judged as to their effectiveness in delivering jobs, manufactures, and exports.

Another lesson to be learned from East Asia is that vigorous competition is a good thing. In some countries, such as the Republic of Korea, access to scarce finance was used as the lever to force firms to compete for export markets, with the successful ones being given the opportunity to grow and ultimately become national champions. If firms are protected in the domestic market, they will have little incentive to improve productivity, pursue innovation, and shift their energies to exports. Examples from Latin America abound, where either a lack of domestic competition has resulted in high-cost services (for example, Mexican telecommunications charges are the highest in the OECD) or where comfortable domestic markets have limited the export drive in new products (for example, Chilean manufacturing). Where domestic markets are small, as in most African economies, the focus should be on regional markets supported by regional trading arrangements. These can be encouraged by cross-border policies on infrastructure, regulations, and standards (as has been happening in East Africa with some success). To

The interest on the part of China in both exploiting natural resources on the continent and also providing large infusions of capital provides an opportunity that is not infinite in duration. The rules of the game, therefore, become quite crucial in determining how natural resource rents will be used, what kinds of enticements will be offered and in exchange for what, how infrastructure projects will be sequenced, how much job creation will occur, and how much technical knowhow will be transferred. Africa's policymakers can take advantage of favorable circumstances, provided that they have strong and viable development strategies

⁶⁸ See Amsden (1992) and Kim and Leipziger (1997).

⁶⁹ In his recent book on the making of an antifragile system, Nassim Taleb (2012) makes the case for tough love.

⁷⁰ On East African trade-related arrangements, see "EAC and China Discuss Partnerships for Trade and Investment" and "The Future of East African Integration," at www.eac.int.

prepared. This is a clear lesson of East Asia's success.71

Finally, the role of bilateral and multilateral donors in helping Africa to make maximum use of this "decade of opportunity" requires some elaboration. The stories of bilateral assistance programs that are too small to be effective, too narrowly focused on areas that seem to generate support in donor capitals, and too short-term in duration to generated sustainable impact are well known. Also well established is the insufficient level of cross-border financing for projects, especially in infrastructure needed on the continent, but that cannot command sufficient international development assistance. To break free of their low-manufacturing, low-value-added export structure, African countries need a significantly altered flow of assistance. Priority needs to be given to those flows that can be leveraged with private sector investments in energy, transport, ports, and rails. The analytic work of the Stern Report on Infrastructure (Commission for Africa 2005) and the follow-up work by the World Bank (Foster and Briceno-Garmendia 2010) leave no doubt that there are a myriad of high-return projects waiting to be funded. Action on these, some of which NEPAD has identified, is long overdue.⁷²

Africa is the last region to be facing the huge development challenges of today. In the past, much time was spent lamenting what did not happen and explaining why, and much of the scholarly work was excellent in its diagnostics. The game has to move on to the phase where action is required to enable Africa to make the necessary strides forward. A great deal can be learned from the policies of other regions, particularly East Asia. After all, Vietnam 20 years ago had an average per capita income of around US\$100 and a poverty rate of 70 percent; currently its average per capita income is above US\$1,000 and poverty is below 20 percent. While still an agricultural exporter, Vietnam managed to attract FDI and expatriate capital and move into new and higher value—adding industries. Vietnam was better endowed with energy than other poor developing countries, had a population of close to 70 million and thus a large domestic market, and is not landlocked. Nevertheless, Vietnam's vital statistics as of 1990 were far worse than those of many African economies. Yet it has begun transforming into a more modern economy. Africa can and should do no less.

A final observation based on the work of the Commission on Growth and Development is that countries that radically transformed themselves and grew at high and sustainable rates decade upon decade did so not with the stroke of the pen or a single policy intervention, but with the help of many, coordinated policy interventions. The *Growth Report* (Commission on Growth and Development, 2008) enumerates these interventions, and most have found their way into this diagnostic paper on Africa's future growth. The salient finding of that exhaustive exercise, however, was that countries needed to get many policies right, needed to have coherence among policies, needed effective leadership and political stability, and needed a

⁷¹ See Leipziger (1997) and World Bank (1993).

⁷² The role of the New Partnership for Africa's Development (NEPAD) and Africa's regional infrastructure needs are outlined in Estache (2011).

⁷³ See Collier (2007).

long-term vision of where the economy was headed. Africa is at a moment in history, in our modest opinion, where it must grasp the opportunities that exist and propel itself forward. The time is now!

REFERENCES

- Abdon, Arnelyn, and Jesus Felipe. 2011. "The Product Space: What Does It Say about the Opportunities for Growth and Structural Transformation of Sub-Saharan Africa?" Levy Economics Institute Working Papers No. 670. Available from papers.ssrn.com/sol3/papers.cfm?abstract_id=1846734.
- Acemoglu, Daron, and James A. Robinson. 2010. "Why is Africa Poor?" *Economic History of Developing Regions* 25(1): 21–50.
- ———. 2012. "10 Reasons Countries Fall Apart." *Foreign Policy*. Available at http://www.foreignpolicy.com/articles/2012/06/18/10_reasons_countries_fall_apart.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "An African Success Story: Botswana." MIT Department of Economics Working Paper No. 01-37. Available at SSRN: http://ssrn.com/abstract=290791
- African Development Bank (AfDB). 2010. "Infrastructure Deficit and Opportunities in Africa." *Economic Brief* 1 (September). AfDB, Abidjan, Côte d'Ivoire. Available at http://www.afdb.org/fileadmin/uploads/afdb/
 Documents/Publications/ECON%20Brief_Infrastructure%20Deficit%20and%20Opportunities%20in%20Africa_Vol%201%20Issue%202.pdf.
- African Development Bank (AfDB), Organisation for Economic Co-operation and Development, United Nations Development Programme, United Nations Economic Commission for Africa. 2012. *African Economic Outlook* 2012. OECD Publishing.
- Aghion, Philippe, Julian Boulanger, and Elie Cohen. 2012. "Rethinking Industrial Policy." Breugel Policy Brief 2011/4, 2011.
- Aikins, Ama de-Graft, Nigel Unwin, Charles Agyemang, Pascale Allotey, Catherine Campbell, and Daniel Arhin. 2010. "Tackling Africa's Chronic Disease Burden: From the Local to the Global." *Globalization and Health* 6: 5. Available at www.globalizationandhealth.com/content/6/1/5.
- Ali, S., and N. Jafrani. 2012. "China's Growing Role in Africa: Myths and Facts." *International Economic Bulletin*, Feb. 2012. Carnegie Endowment for Peace.
- Amsden, A. 1992. Asia's Next Giant. New York: Oxford University Press.
- Asian Development Bank (ADB). 2012. Key Indicators for Asia and the Pacific 2012. Manila: ADB.
- Baldwin, Richard, and Simon J. Evenett. 2009. "Don't Let Murky Protectionism Stall a Global Recovery: Things the G20 Should Do." VoxEU.org, March 5. Available from www.voxeu.org/index.php?q=node/3206.
- Beck, Thorsten, Tao Chen, Chen Lin, and Frank Song. 2012. "Financial Innovation: The Bright and the Dark Sides." VoxEU.org. Available at http://www.voxeu.org/article/financial-innovation-good-and-bad.
- Bekaert, Geert, Campbell R. Harvey, and Christian Lundblad. 2011. "Financial Openness and Productivity." *World Development* 39(1): 1–19. Available at http://www0.gsb.columbia.edu/faculty/gbekaert/papers/openness.pdf.

- Bhagwati, Jagdish. 2007. *In Defense of Globalization*. New York and London: Oxford University Press.
- Brenton, Paul, and Gözde Isik, eds. 2012. *De-Fragmenting Africa: Deepening Regional Trade Integration in Goods and Services*. Washington, DC: World Bank.
- Broadman, Harry. 2007. Africa's Silk Road. Washington, DC: World Bank.
- Caselli, Francesco. 2005. "Accounting for Cross-Country Income Differences." In Phillipe Aghion and Steven Durlauf, eds., *Handbook of Economic Growth, Vol.1*. Amsterdam: North Holland.
- Chandra, Vandana, Justin Yifu Lin, and Yan Wang. 2012. "Leading Dragons Phenomenon: New Opportunities for Catch-Up in Low-Income Countries." Policy Research Working Paper 6000. World Bank, Washington, DC. Available at http://ideas.repec.org/p/wbk/wbrwps/6000.html.
- Collier, Paul. 2003. *Breaking the Conflict Trap: Civil War and Development Policy*. Policy Research Reports. Washington, DC: World Bank.
- ———. 2007. *The Bottom Billion*. New York: Oxford University Press.
- Comin, Diego, and Bart Hobijn. 2010. "Technology Diffusion and Postwar Growth." NBER Working Paper No. 16378. NBER, Cambridge, MA.
- Commission for Africa. 2005. "Going for Growth and Poverty Reduction." In *Our Common Interest: Report of the Commission for Africa*, pp 219–54. Available at: http://www.commissionforafrica.info/2005-report.
- Commission on Growth and Development. 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: World Bank.
- Custers, Raf, and Ken Matthysen. 2009. "Africa's Natural Resources in a Global Context." International Peace Information Service (IPIS), Antwerp, Belgium. Available at http://www.ipisresearch.be/att/20090812_Natural_Resources.pdf.
- Deen, Thalif. 2011. "Africa Faces Explosive Population Growth." Inter Press Service (IPS), June 20. Available at http://www.ipsnews.net/2011/06/africa-faces-explosive-population-growth/.
- Deininger, Klaus, and Derek Byerlee. 2011. "Rising Global Interest in Farmland." World Bank, Washington, DC.
- Doucouliagos Hristos, and Martin Paldam. 2009. "The Aid Effectiveness Literature: The Sad Results of 40 Years of Research." *Journal of Economic Surveys* 23(3): 433–461.
- Doucouliagos, Hristos, and Mehm*et al*i Ulubasoglu. 2010. "Democracy and Economic Growth: A Meta-Analysis." SSRN Working paper. Available at http://ssrn.com/abstract=1014333 or http://dx.doi.org/10.2139/ssrn.1014333.
- Douillet, Mathilde, and Karl Pauw. 2012. "Trade Integration in Sub-Saharan Africa: Lessons from Malawian Trade Policy." Policy Note 10. International Food Policy Research Institute, Washington, DC.
- Estache, A. 2011. "Africa's Regional Infrastructure Needs." The Growth Dialogue's Lisbon Policy Forum (http://www.growthdialogue.org/ events/regional-events/high-level-policy-forum-regional-infrastructure-constraints-africas-growth). Available at

- http://www.growthdialogue.org/ sites/default/files/event/document/ESTACHE_0.pdf.
- Easterly, William. 2009. "Can the West Save Africa?" *Journal of Economic Literature* 47(2): 373–447.
- — . 2011. "Benevolent Autocrats." Draft paper. Available at: http:// williameasterly.files.wordpress.com/2011/05/benevolent-autocrats-easterly-2nd-draft.pdf.
- Easterly, William, and Ariell Reshef. 2010. "African Export Successes: Surprises, Stylized Facts, and Explanations." NBER paper 16597. NBER, Cambridge, MA. Available at www.nber.org/papers/w16597.pdf.
- *Economist.* 2012a. "A Glass Half-Full: Representative Government Is Still On the March in Africa, Despite Recent Hiccups." March 31. Available at http://www.economist.com/node/21551494/.
- ——. 2012b. "Upwardly Mobile: Kenya's Technology Start-up Scene Is About to Take Off." August 25. Available at http://www.economist.com/node/ 21560912.
- England, Andrew. 2012. "Africa Sees 27% Surge in FDI Projects." *Financial Times*, May 3. Available at http://www.ft.com/intl/cms/s/0/1c68c03a-9530-11e1-ad38-00144feab49a.html#axzz27tQTZaUh.
- Feng, Yi. 2003. Democracy, Governance and Economic Performance. Cambridge, MA: MIT Press.
- Fine, David. 2012. "Inside Africa's Consumer Revolution." Project Syndicate. Available at http://www.project-syndicate.org/commentary/inside-africa-s-consumer-revolution-by-david-fine.
- Fine, David, and Susan Lund. 2012. "Jobs: The Next Piece of Africa's Growth Jigsaw." VOX, December 4. Available at: http://www.voxeu.org/article/jobs-next-piece-africa-s-growth-jigsaw.
- Foster V., and C. Briceno-Garmendia. 2010. *Africa's Infrastructure*. World Bank Report. Washington, DC: World Bank.
- Gelb, Alan, Kai Kaiser, and Lorena Viñuela. 2012. "How Much Does Natural Resource Extraction Really Diminish National Wealth? The Implications of Discovery." Working Paper 290. Center for Global Development, Washington, DC. Available at: http://www.cgdev.org/content/publications/ detail/1426040/.
- Gerring, John, Philip Bond, William T. Barndt, and Carola Moreno. 2005. "Democracy and Economic Growth: A Historical Perspective." World Politics 57 (April): 323–64.
- Gettleman, Jeffrey. 2010. "Africa's Forever Wars: Why the Continent's Conflicts Never End." *Foreign Policy*. Available at http://www.foreignpolicy.com/articles/2010/02/22/africas_forever_wars.
- Glewwe, Paul W., Eric A. Hanushek, Sarah D. Humpage, Renato Ravina. 2011. "School Resources and Educational Outcomes in Developing Countries: A Review of the Literature from 1990 to 2010." NBER Working Paper No. 17554. NBER, Cambridge, MA. Available at http://www.nber.org/papers/w17554.
- Glewwe, Paul, and Michael Kremer. 2005. "Schools, Teachers, and Education Outcomes in Developing Countries." Second draft of chapter for *Handbook on the Economics of*

- *Education*. Available at http://www.imap.givewell.org/files/DWDA%202009/Interventions/EconEducationHandbook.pdf.
- Growth Dialogue. 2012. "The Bellagio Symposium on New Growth Paradigms: A Growth Dialogue White Paper." The Growth Dialogue, Washington, DC. Available at http://www.growthdialogue.org/sites/default/files/event/document/Bellagio_paper_FINAL_proof_6-18-12-a.pdf.
- Gruber, Harald, and Pantelis Koutroumpis. 2011. "Mobile Telecommunications and the Impact on Economic Development." Centre for Economic Policy Research, London. Available at http://www.cepr.org/meets/wkcn/9/979/ papers/Gruber_Koutroumpis.pdf.
- Hidalgo, César A., and Ricardo Hausmann. 2009. "The Building Blocks of Economic Complexity." Harvard University Center for International Development working paper No.186. Available at http://chidalgo.com/ Papers/HidalgoHausmann_PNAS_2009_PaperAndSM.pdf.
- Hironaka, Ann. 2005. *Neverending Wars: The International Community, Weak States and the Perpetuation of War*. Cambridge MA, Harvard University Press.
- International Monetary Fund (IMF). 2010. "Regional Economic Outlook: Sub-Saharan Africa: Resilience and Risks." October 10. IMF, Washington, DC. Available at http://www.imf.org/external/pubs/ft/reo/2010/afr/eng/pdf/ sreo1010.pdf.
- ——. 2011. "Harnessing Diasporas." *Finance & Development*, September. IMF, Washington, DC. Available at http://www.imf.org/external/pubs/ft/fandd/ 2011/09/pdf/ratha.pdf.
- ———. 2012. *Regional Economic Outlook*. Washington, DC: IMF.
- Jorgenson, Dale W., and Khuong Vu. 2007. "Information Technology and the World Growth Resurgence." *German Economic Review* 8(2).
- Kaplinsky, R., and M. Morris. 2009. "Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons." *The European Journal of Development Research* 21(4): 551–569.
- Kapsos, Steven. 2005. "The Employment Intensity of Growth: Trends and Macroeconomic Determinants." Employment Strategy Paper. Geneva: International Labour Organization.
- Kim, K., and D. Leipziger. 1997. "Korea: A Case of Government-Led Development." In D. Leipziger, ed., *Lessons From East Asia*. Ann Arbor: University of Michigan Press.
- Knutsen, Carl Henrik. 2009. "Democracy and Economic Growth." Working paper. University of Oslo. Available at http://folk.uio.no/carlhk/ publications/DemocracyGrowth_Survey.pdf.
- Kumo, Wolassa L. 2011. "Investment Efficiency, Savings and Economic Growth in Sub-Saharan Africa." Afro Articles. Available at http://www.afroarticles.com/articledashboard/article.php?id=222601.
- Lederman, Daniel, and William F. Maloney. 2010. "Does What you Export Matter? In Search of Empirical Guidance for Industrial Policies." World Bank, Washington, DC. Available at http://siteresources.worldbank.org/
 - EXTLACOFFICEOFCE/Resources/DoesWhatYouExportMatterSept2010.pdf.
- Leipziger, Danny M. 1997. *Lessons of East Asia*. Ann Arbor, MI: University of Michigan Press. Leipziger, Danny. 2012. "The Competition between Western Capitalism and State Capitalism as

- Drivers of Economic Growth." Policy Brief #7, 2012. Growth Dialogue, Washington, DC.
- Mckenzie, David. 2011. "How Can We Learn Whether Firm Policies Are Working in Africa?" World Bank, Washington, DC. Available at http://elibrary. worldbank.org/content/workingpaper/10.1596/1813-9450-5632.
- McKinsey & Company. 2010. *McKinsey on Africa*. McKinsey & Company. Available at http://mckinseyonsociety.com/mckinsey-on-africa/.
- McKinsey Global Institute. 2010. *India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth.* McKinsey & Company. Available at http://www.mckinsey.com/insights/mgi/research/urbanization/urban_awakening_in_in dia.
- ——. 2012. *Africa at Work: Job Creation and Inclusive Growth, 2012.* McKinsey & Company. Available at http://www.mckinsey.com/insights/mgi/research/africa_europe_middle_east/africa_at_work.
- Mbiti, Isaac, and David N. Weil. 2011. "Mobile Banking: The Impact of M-PESA in Kenya." NBER Working Paper No. 17129. National Bureau of Economic Research (NBER), Cambridge, MA.
- Miguel, Edward. 2009. Africa's Turn. Cambridge, MA: MIT Press.
- Ndulu, Benno, L. Chakraborti, L. Lijane, V. Ramachandran, and J. Wolgin. 2007. *Challenges of African Growth: Opportunities, Constraints, and Strategic Directions*. Washington, DC: World Bank.
- Paarlberg, Robert. 2008. Starved for Science: How Biotechnology Is Being Kept Out of Africa. Cambridge MA: Harvard University Press.
- Parente, Stephen L., and Edward C. Prescott. 2000. Barriers to Riches. Cambridge MA: MIT Press.
- Pereira, Carlos, and Vladimir Teles. 2010. "Political Institutions, Economic Growth, and Democracy: The Substitute Effect." Brookings Institution, January 19. Available at http://www.brookings.edu/research/opinions/ 2011/01/19-political-institutions-pereira.
- Radelet, Steven. 2010. "Emerging Africa: How 17 Countries Are Leading the Way." Center for Global Development, Washington, DC.
- Ratha, Dilip, and Sonia Plaza. 2011. "Harnessing Diasporas." *Finance & Development* (September): 48–51. Available at http://www.imf.org/external/pubs/ft/fandd/2011/09/pdf/ratha.pdf.
- Renard, Mary-Francoise.2011. "China's Trade and FDI in Africa." Working Paper #126. African Development Bank, Abidjan, Côte d'Ivoire.
- Rippel, Barbara. 2011. "Why Trade Facilitation Is Important for Africa." Policy Note No.27. World Bank, Washington, DC. Available at http://go.worldbank.org/CYT7YFM2G0.
- Rock, Michael T. 2009. "Has Democracy Slowed Growth in Asia?" World Development 37(5): 941–952. Available at http://EconPapers.repec.org/RePEc: eee:wdevel:v:37:y:2009:i:5:p:941-952.
- Rodrik, Dani. 2011. "The Future of Economic Growth." Project Syndicate. Available at www.project-syndicate.org/commentary/rodrik58/English.
- ———. 2012a. "No More Growth Miracles." Project Syndicate, August 8. Available at

- http://www.project-syndicate.org/commentary/no-more-growth-miracles-by-danirodrik.
- ———. 2012b. *The Globalization Paradox: Democracy and the Future of the World Economy.* New York: W.W. Norton.
- Rogoff, Kenneth. 2012. "Rethinking the Growth Imperative." Project Syndicate. Available at www.project-syndicate.org/commentary/rogoff88/English.
- Roodman, David. 2007. "The Anarchy of Numbers: Aid, Development, and Cross-Country Empirics." World Bank Economic Review 21(2): 255–277.
- Sachs, Jeffrey D. 2005. *The End of Poverty: Economic Possibilities for Our Time.* New York: Penguin Press.
- Sala-i-Martin, Xavier, and Maxim Pinkovskiy. 2010. "African Poverty is Falling ... Much Faster than You Think!" NBER Working Paper No. 15775. NBER, Cambridge, MA. Available at http://www.nber.org/papers/w15775.
- Severino, Jean-Michel, and Emilie Debled. 2012. "Africa's Big Boom." Project Syndicate.

 Available at http://www.project-syndicate.org/commentary/the-challenges-and-opportunities-of-african-economic-growth-by-jean-michel-severino-and-emilie-debled.
- Schaefer, M. 2006. "Water Technologies and the Environment: Ramping Up by Scaling Down." *Technology in Society* 30(3-4) (August-November 2008).
- *Science*. 2006. "Freshwater Resources" *Science* 313(5790): 1005-1184. Special issue on freshwater resources. Available from www.sciencemag.org/content/ 313/5790.toc.
- Shah, Anup. 2012. "Conflicts in Africa." Global Issues. Last updated July 31, 2011. Available at: http://www.globalissues.org/issue/83/conflicts-in-africa.
- Smith, Pete, Peter J. Gregory, Detlef van Vuuren, Michael Obersteiner, Petr Havlík, Mark Rounsevell, Jeremy Woods, Elke Stehfest and Jessica Bellarby. 2010. "Competition for Land." Phil. Trans. R. Soc. 365: 2941–2957.
- Smith, David. 2012. "Boom Time for Mozambique, Once the Basket Case of Africa." *The Guardian*, March 27. Available at http://www.guardian.co.uk/world/2012/mar/27/mozambique-africa-energy-resources-bonanza.
- Steiner, Achim. 2010. "Africa's Natural Resources Key to Powering Prosperity." Environment & Poverty Times No. 5. UNEP/GRID-Arendal. Available at http://www.grida.no/publications/et/ep5/page.aspx.
- Sundaram, Jomo Kwame with Oliver Schwank and Rudiger von Arnim. 2011. "Globalization and Development in Sub-Saharan Africa." DESA Working Paper No. 102. Department of Economic and Social Affairs (DESA). United Nations, New York, NY. Available at http://www.un.org/esa/desa/papers/2011/wp102_2011.pdf.
- Taleb, Nassim. 2012. Antifragile: Things That Gain from Disorder. New York: Random House.
- Tatlock, Christopher W. 2006. "Water Stress in Sub-Saharan Africa." Council on Foreign Relations, New York, NY. Available at http://www.cfr.org/africa/water-stress-sub-saharan-africa/p11240.
- Turner, Adair. 2011. Economics After the Crisis. Cambridge, MA: MIT Press.
- United Nations. 2004. World Population to 2300. New York: United Nations. Available at

- http://www.un.org/esa/population/publications/longrange2/ WorldPop2300final.pdf.
- ———. 2012. *The Millennium Developments Goals Report* 2012. New York: United Nations.
- United Nations Conference on Trade and Development (UNCTAD). 2001. "Economic Development in Africa: Performance, Prospects and Policy Issues." UNCTAD, New York and Geneva. Available at http://unctad.org/en/Docs/pogdsafricad1.en.pdf.
- ———. 2011. "UNIDO and UNCTAD Economic Development in Africa 2011: Special Report." UNCTAD, New York and Geneva. Available at http://unctad.org/en/docs/aldcafrica2011_en.pdf.
- United Nations Environment Programme (UNEP). 2008. *Vital Water Graphics: An Overview of the State of the World's Fresh and Marine Waters*. Second edition. Nairobi, Kenya: UNEP.
- United Nations Human Settlements Programme (UH-HABITAT). 2008. "Drowned and Dangerous: Cities and Climate Change." UH-HABITAT, New York, NY. Available at www.unhabitat.or/downloads/docs/ presskitsowc2008/Drowned n dangerous/pdf.
- Venables, Anthony J. 2010. "Economic Geography and African Development." *Papers in Regional Science* 89(3): 469–483. Available at http://ideas.repec. org/a/bla/presci/v89y2010i3p469-483.html.
- Weisbrod, A., and J. Whalley. 2011. "The Contribution of China's FDI to Africa's Pre-Crisis Growth Surge." NBER Working paper 17544. NBER, Cambridge, MA.
- Wolf, Martin. 2004. Why Globalization Works. New Haven: Yale University Press.
- World Bank. 1993. The East Asia Miracle. Washington, DC: World Bank.
- World Bank. 2009a. *Accelerating Catch-Up: Tertiary Education for Growth in Sub-Saharan Africa*. Washington, DC: World Bank.
- ——. 2009b. *Zambia: Managing Water for Sustainable Growth and Poverty Reduction*. Washington, DC: World Bank.
- World Bank. 2011. "Fact Sheet: Infrastructure in Sub-Saharan Africa." World Bank, Washington, DC. Available at http://go.worldbank.org/ SWDECPM5S0.
- World Bank. 2011a. "Global Statistics: Key Indicators for Country Groups and Selected Economies." World Bank, Washington, DC. Available at http://data.worldbank.org/sites/default/files/gsapril2011.pdf.
- ——. 2011b. *Africa Development Indicators* 2011. Washington, DC: World Bank. Available at http://data.worldbank.org/sites/default/files/adi_2011-web.pdf.
- Young, Alwyn. 2012. "The African Growth Miracle." NBER Working Paper No. 18490. NBER, Cambridge, MA. Available at http://www.nber.org/papers/w18490.
- Yusuf, Shahid. 2011. "East Asian Experience with Industrial Policy and the Lessons for South Africa." World Bank, Washington, DC.
- Yusuf, Shahid, and Kaoru Nabeshima. 2012. Some Small Economies Do It Better: Rapid Growth and Its Causes in Singapore, Finland, and Ireland. Washington, DC: World Bank.