

WP 2011-07
February 2011



Working Paper

Charles H. Dyson School of Applied Economics and Management
Cornell University, Ithaca, New York 14853-7801 USA

THE ECONOMICS OF AFRICA

**Ernest Aryeetey, Shantayanan
Devarajan, Ravi Kanbur and Louis
Kasekende**

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The Economics of Africa¹

Ernest Aryeetey², Shantayanan Devarajan³, Ravi Kanbur⁴ and Louis Kasekende⁵

This Draft November 19, 2010

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Abstract

This compendium of entries on the economics of Africa provides thematic and country perspectives by more than 100 leading economic analysts of Africa. The contributors include: the best of young African researchers based in Africa; renowned academics from the top universities in Africa, Europe and North America; present and past Chief Economists of the African Development Bank; present and past Chief Economists for Africa of the World Bank; present and past Chief Economists of the World Bank; African Central Bank Governors and Finance Ministers; and four recipients of the Nobel Memorial Prize in Economics. Other than the requirement that the entry be analytical and not polemical, the contributors were given freedom to put forward their particular perspective on a topic. The entries are not therefore surveys of the literature. Rather, they constitute a picture of the concerns of modern economics as it is applied to African problems, as seen by the leading economists working on Africa.

¹ Introduction to *The Oxford Companion to the Economics of Africa*, Edited by Ernest Aryeetey, Shantayanan Devarajan, Ravi Kanbur and Louis Kasekende. To be published by Oxford University Press in 2011.

² Vice Chancellor, University of Ghana

³ Chief Economist, Africa Region, The World Bank

⁴ T.H. Lee Professor of World Affairs, Cornell University

⁵ Deputy Governor, Bank of Uganda

1. Introduction

“Ex Africa semper aliquid novi.” (From Africa always something new)

Pliny’s maxim of 2,000 years ago is still valid for African development, whether north or south of the Sahara. For the oil economies of Africa, development has been linked to natural resource exploitation and has cycled with the global price of oil. Peaks in this price have seen the accumulation of great wealth, troughs have brought with them questions of overdependence on a single source of income. For much of Sub-Saharan Africa, post-independence hopes sparkled briefly but were then sorely disappointed and dimmed in the subsequent decades. After three decades of stagnation and decline, however, and the crisis of 2008/9 notwithstanding, Sub-Saharan African countries are now growing at the same rate as all developing countries (save China and India). Seventeen non-oil-exporters sustained better-than-four percent GDP growth for over a decade before the crisis. However, in many other countries, growth is stalled because of political instability or other internal and external factors. And the legacy of Africa’s “growth tragedy” of the 1980s and 1990s is that Sub-Saharan Africa has the highest poverty rate and lowest human development indicators in the world.

Africa is thus a diverse continent. But is there a pattern to the diversity? Are there commonalities across the countries? And what does economics tell us about the diversity and the commonalities? Following Keynes, we consider economics to be an engine of thought and analysis, rather than a given set of prescriptions. The great diversity of Africa should be reflected in the diversity of analytical findings and prescriptions, just as the commonalities should elicit similarities of perspective in these dimensions. But what is truly common is the application of the economic mode of reasoning to African economies and to the African continent.

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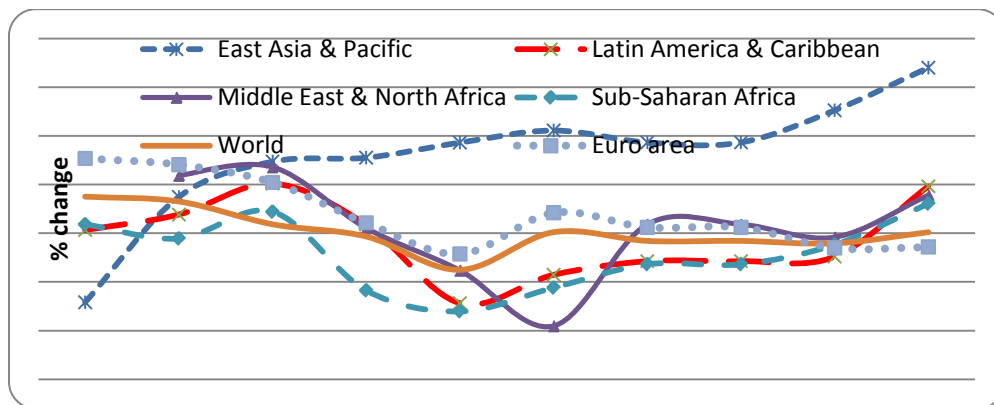
It is neither feasible nor desirable to summarize or synthesize the entries in this Companion. Rather, we provide in this chapter our own perspective on the Economics of Africa, drawing on the entries where relevant, and on the broader literature as necessary.⁶ Section 2 begins by setting out the key dimensions of economic diversity and commonality across the continent. From this emerge the major themes tackled in this overview. Section 3 begins the detailed consideration of economic policy by placing Africa in the global context and discussing the opportunities and challenges that the global economy presents to the African economies. Section 4 focuses on macroeconomic policy including monetary and fiscal policy. Section 5 then takes up micro and sectoral issues of poverty and human development. Section 6 turns to a major factor that has been suggested as explaining the diversity of performance—the effectiveness of the state in pursuing a development agenda. Section 7 follows up on a particular manifestation of a failed state that is unfortunately too prevalent in Africa—internal or cross-border conflict. Section 8 looks up from the specifics of current policy making to the long term, in the context of broad environmental and demographic trends. Section 9 concludes.

⁶ Partly because of the poverty challenges there, the primary focus of this overview is on Sub-Saharan Africa. The Companion itself includes entries on all the North Africa economies

2. African Diversities and Commonalities

Africa is home to some of the largest deposits of natural resources in the world. From oil and gas deposits around the Gulf of Guinea and now Sudan and Uganda to precious metals such as gold, diamond and cobalt in the Democratic Republic of Congo (DRC), Botswana and South Africa among others. But Africa presents the global community with the biggest challenges. The poverty levels and other development indicators for Africa, particularly Sub Saharan Africa, are some of the most unattractive features of the world economy. Apart from the last ten years, Africa was the slowest growing region creating a divergence in welfare with all the other regions of the world. The growth performance was in spite of reform efforts embarked on by many countries during the 1980s and the substantial international financial support for most of the post-independence period. According to the World Bank (Figure 1), per capita income growth for Sub-Saharan Africa has been below average, except during 2005-2009, the period that included the global financial crises, which adversely affected growth in the euro area and other advanced economies while Africa managed to record low but positive growth and enjoy a quick recovery.

Figure 1: per capita GDP growth by region



Source: World Development Indicators, 2009

Of the world's poorest countries, 33 are in Africa compared to Asia (15) and Latin America and Caribbean (1)⁷. Between 2000 and 2008, 48 percent of African people lived below the poverty line of \$1.25 per day. The continent has also stagnated in terms of literacy and life expectancy. The UN Human Development Index indicates that 32 of the 40 countries that rank lowest are in sub-Saharan Africa.

Numerous factors⁸ have been identified in explaining the growth performance of Africa. (See O'Connell and Ndulu, 2000). This overview does not neglect those factors. However, it is necessary to avoid making generalisations about Africa. African economies are very heterogeneous: in terms of economic performance, capacity to mobilise domestic resources, capacity to absorb aid and ability to attract foreign capital, etc. This means that there are large differences between African countries in respect of their need for aid and the modalities by which aid is best delivered. Emerging economies (such as South Africa, Tunisia,) versus Least Developed States (such as Gambia, Burundi, Rwanda, Eritrea); resource rich (such as Namibia, DRC, Angola) versus resource poor countries (such as Ethiopia and Eritrea); countries where democracy is taking root (Ghana, Tanzania and Uganda) and a failed state (such as Somalia) or post conflict countries (Liberia, Burundi). Any discussion of Africa needs to be properly tailored to Africa's diverse realities and unique characteristics. We start with these and then move to a discussion of the commonalities.

Africa possesses a wide array of climatic and ecological zones due to its varying altitudes, and mountainous ranges. Around the equator, there is a mixture of rain and hot temperatures throughout the year, producing equatorial rain forests, mostly in West Africa. Outside the equatorial zone lies summer and dry savannah grasslands. Further away from the equator, the climate becomes drier (northern Sahel Desert and southern Kalahari Desert). In the far North (Maghreb region) and South (South Africa), temperate climatic characteristics dominate.

Significant diversity exists in terms of population density. A large part of the continent is sparsely populated, with an average of 20 persons per square kilometer,

⁷ The UN classification of countries

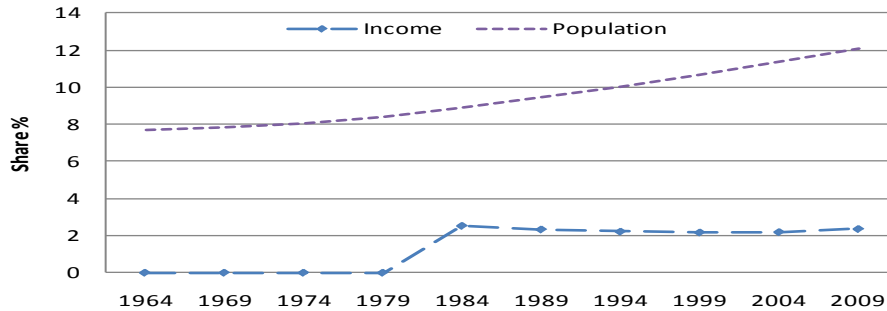
⁸ Such factors include external forces, heavy dependence on a small number of internationally low valued primary products, bad policies and economic mismanagement, insecurity and political instability, social conditions, poor policies, lack of openness and low savings rates.

compared to 148 persons in Asia. There is a vast expanse of empty desert (5 persons per square kilometers in Chad) and large areas of sparsely populated savannas with weak agricultural potential. Cases of relatively high population density are in the Great Lakes region of the East African highlands, coastal areas in West Africa, and the Indian Ocean islands. Low levels of population density translate to low levels of urbanization, which in turn raises the costs of providing infrastructure such as road networks, telephone systems, water, sewerage, and financial services infrastructure.

Africa's major challenge is the under-developed and diverse nature of its institutions. Institutional diversity in Africa has been largely attributed to colonial inheritance and geographical differences. The English legal system for instance is based on common law, while the governmental system is based on parliamentary democracy. Thus, all the former English colonies virtually have a common law system and a form of parliamentary democracy. By contrast, the French, Portuguese and Spanish colonies are based on civil law and more autocratic governmental institutions. Well designed institutions stimulate economic progress. However, wholesale re-design of institutional structures based on other, more economically successful countries cannot be appropriate for Africa. It is important to identify beneficial aspects of particular institutions in each African economy and tailor reforms to suit their diverse conditions. Institutional reforms such as property rights and social institutions (especially anti-corruption) tend to be more effective in promoting growth than an overhaul of the whole system.

Turning now to commonalities across the continent, Africa's population is among the fastest growing in the world. Between 1960 and 2009, Africa's population grew at an average of 2.7 percent per year (World Bank, 2009). Despite this unprecedented growth in population, Africa's share in world income (Figure 2) has been relatively constant, while its share in world population has risen.

Figure 2: Africa's share of world income and population



Source: World Development Indicators, 2009

Africa has the world's highest youth dependency ratios, a result of the combination of both high fertility rates and declining levels of infant and child mortality rates. High dependency ratio reduces the continent's productive capacity per capita. High youth dependency is also associated with low rates of savings and investment, which in turn lead to slower economic growth.

High levels of product concentration characterize many African economies, especially in the range of exports and sources of revenue. Natural-resource-rich countries are the most emblematic with concentration levels as high as 80 per cent on a single commodity and value addition largely limited. Most of these primary products suffer fluctuations in international prices and long-term declines in international terms of trade are common across Africa.

With life expectancy at 53.8 years, Africa has the poorest regional health status in the world. The nature of the continent's disease burden is significantly different from other regions: 42.5 percent of the diseases are caused by infectious and parasitic diseases compared 28.9 percent in India and 2.8 percent in the market economies of Europe making the continent much more vulnerable to infectious diseases than any other region of the world. Malaria is one of the most lethal health problems faced by the region. Estimates suggest that between 1 and 2 million people in Africa die from malaria each year. In addition, HIV/AIDS is one of the currently most daunting problems of Africa. Of the over 30 million people living with HIV/AIDS in the world, 21 million are in Sub Saharan Africa.

These commonalities and differences are taken up in greater detail in the rest of the overview. We start by placing African development in the context of its engagement with the global economy.

3. Africa in the Global Economy

In the early post-independence years there were questions among African governments about the appropriateness of participating in global trade and capital transactions. Many saw trade and international capital transactions as being structured to the disadvantage of poorer economies and tried to stay away from it—hence import-substitution industrialization (Killick, 1978). Those were the times when calls for a “new international economic order” dominated the development debate. Today that debate appears to be largely over, even if questions remain about how best Africa can engage the rest of the world in international exchanges within a fairer environment.

After several years of limited engagement with the international trading system, one of the most conspicuous features of African economies today is the smallness of their shares in global transactions. Their involvement in global trade is the lowest for all regions at 3.5% of world merchandise exports in 2008 compared to 27.7% for Asia. While their involvement with global capital flows expanded significantly before the recent financial crisis, there are several indications that growth in inflows has been slowed down considerably, and lags far behind that of other developing regions. Another major feature of Africa’s trading relationships is the paucity of trade among the countries of the region. Only 11.7% of African exports went to other African countries in 2008. This means that many producers do not get the opportunity to experience trading across borders, and what it entails in terms of payments systems, before plunging into larger international markets.

Africa engages with the rest of the world in a few other ways. One of the more significant ones is through international migration. An aspect of such migration is the brain-drain which sees lots of skilled labor migrate to other parts of the world. Migration from Africa grew remarkably in the last decade, depriving many economies of the contributions of such persons. On the other hand, there has been an increase in remittances. The debate about whether remittances make up for the skills and income

losses associated with brain-drain will continue for a long time⁹. Also indicative of Africa's current relationship with the global economy is the fairly large size of development assistance it draws from the more developed economies. The significance of aid in some countries leads to questions about the sustainability of financing for development projects and programs.

The question of how best Africa can engage with the rest of the world in international exchanges has been addressed by many studies. One of the more comprehensive studies of Africa and the world trading system from an African perspective was carried out by the African Economic Research Consortium, documenting the paradigm shifts in how Africa has interacted with the rest of the world in the trading of goods and services (Oyejide and Lyakurwa, 2005). The issue of how Africa can learn from its Uruguay Round experiences is addressed in that volume, while the age-old market access issues for African exports are also covered. The studies also present how African agricultural, manufacturing and mining products might find easier access in international markets within the WTO framework.

Today, many African economies draw inspiration from the experiences of Asian economies. They see how Asian economies have progressively engaged with outward-oriented policies and benefited significantly from them. But they are also mindful of the many risks and challenges that the Asian economies have faced. Many remember the Asian financial crisis of 1997 and wonder if they would have to go through that experience as part of the "growing up" challenges after opening up markets. The more cynical may see the recent limited adverse impact of the global financial crisis on African economies as 'vindication' of non-integration into the global economy. Overall, however, the view that integration into the global economy can have significant net positive results largely drives policy in most countries.

What will it take for Africa to integrate on a larger scale with the global economy? Aryeetey et.al. (2003) have suggested that participating successfully in the global economy requires a strategic approach. They argue that "integration is multi-dimensional", covering trade, investment, capital flows and technology. For each of these a different level of openness may be required depending on the initial conditions of the economy and the

⁹ For a recent contribution, see Clemens, Michael Petersen, 2006.

specific market of interest. For many countries, they will have to develop a mix of policies with varied levels of openness. Among the pre-requisites often cited for successful integration into the global economy is the need to ensure a stable macroeconomic environment. There have been concerns that an inability to keep inflation and budget deficits at appropriate levels will slow down the integration process. Issues about appropriate and stable exchange rates and real interest rates have often been significant and need to be addressed in several countries.

The fears associated with trade liberalization are quite well known. African countries have often had an ambivalent position on trade liberalization and this is largely due to the fact that they have fewer options for generating revenues, a point we return to in Section 6. There are also major fears about what open markets can do to domestic production of goods and services, leading to possible de-industrialization. There is, however, growing consensus that greater openness may be pursued with better sequencing. To enhance intra-regional trade, promoting integration requires significant political commitment as well as huge infrastructural developments. In pursuing greater integration into the global system, it is definitely essential for African economies to strengthen the institutions that make for an outward orientation. These include those that promote transparency in public affairs and support the pursuit of consistency in public policy that will lead to economic growth. The institutional basis of African development will be taken up in Section 6. The next section turns to macroeconomic policies in Africa.

4. The Macroeconomics of Africa

The policy prescriptions by the economics discipline for Africa have had mixed results, to say the least. Just after the independence of most countries in Africa, the economics discipline prescribed “big push” and “state intervention” as means to industrialization and sustainable development. For a large part of the post-independence period, sustainable growth eluded Africa. Strong state intervention was blamed for most economic failings. The pendulum swung to market-based policies to correct for the failings of government. But more recently, especially following the recent experience during the crisis, the need for the role of the state has been emphasized given that market based policies have not sufficiently focused on the long term development challenges of

Africa. One can fault most post independence policy prescriptions for the lack of sufficient focus on country-specific circumstances in the design and implementation of policy. As economists, we are challenged to find appropriate policies that can both address the structural constraints to growth in our countries while at the same time harnessing the potential of our economies in terms of natural resources and human capital¹⁰.

The policy debate aside, the decade leading up to the financial crisis represents a unique period in the economic growth history of Africa. Africa recorded a sustained period of growth while at the same time controlling inflation. The growth experienced was not limited to resource rich countries but spread to resource poor countries and fragile states. Analysis of this development reveals that improved macroeconomic framework and political governance in a majority of countries were key drivers for the improved economic performance. Indeed, improved economic policies were a source of resilience to financial crisis and an impetus to observed recovery since 2009. Therefore, at a minimum, African countries must sustain and strengthen policies that have sustained growth in the decade prior to the crisis. However, the sustained growth in the period was not associated with a sufficient drop in poverty across many countries in Africa. Going forward, the balance between growth and equitable distribution on the one hand and between stimulation of growth and macroeconomic stability on the other will present a challenge to policy makers.

A benign inflation environment, away from an average inflation of about 25 percent for the decade to 2000, set the bedrock for robust economic growth for both African oil importers and exporters¹¹. However, the food and fuel crisis of 2008-2009 pushed up inflation rates beyond targets set by central banks. The average inflation rate for 2008 and 2009 was 12.5 percent and 8.3 percent, respectively (IMF IFS October 2010). The subsequent fall in both food and fuel prices combined with a slack in aggregate demand in the aftermath of the financial crisis has brought back inflation to about 5 per cent per annum.

The widespread pessimism about African growth prospects prior to 2000 was somewhat dispelled by a fairly broad-based economic upturn that allowed the average income growth rate to exceed the population growth rate, thereby resulting in some gains in

¹⁰ We return to this point in section 6 on “African Economies and African States.”

¹¹ For the fourteen CFA countries that have a fixed exchange rate with the Euro, inflation has always been low.

per capita income across the continent, especially in Sub-Saharan Africa. The growth was quite widespread benefitting both the low income and middle income countries. Indeed, growth in many countries was on account of factors outside natural resources including the improved political and economic management. On average, Africa recorded growth rates averaging 5.0 percent in the ten year period to 2008, relative to 2.5 percent in the decade to 1998 (World Bank ADI 2010). However, changes in the sectoral composition of African GDP are somewhat slower than in Asia, especially in the expansion of the manufacturing sector. The export basket continues to reflect products from traditional agriculture and exports of raw material. Unfortunately for Africa, the agricultural sector remains largely conventional due to under investment by governments, abolishment of input and market support systems, and limited financial extension. These constraints must be unlocked if agriculture is to provide additional employment of resources, guarantee food security and be a basis for export diversification. The high concentration of exports, with an average of 70 percent of merchandise exports being accounted for by the top three export products, is a source of vulnerability for many economies in Africa especially in resource-rich economies. Diversification of products and export markets must remain on the development agenda for Africa.

Africa's growth performance stumbled in 2009 largely due to the effects of the crisis. The global economic and financial crisis reduced exports of goods and services from Africa and also slowed net inflows of remittances and private capital flows. Growth in the middle income countries and commodity exporters was adversely affected with some of the countries such as South Africa and Botswana suffering a recession in 2009. The growth in the low-income countries held up better dropping by only 2 percent.

The improved macroeconomic and political environment augurs well for investments to Africa. The continent has become more attractive to foreign capital flows over the decade to 2010, with foreign investments reaching a peak of US\$ 87.6 billion in 2008, compared to US\$ 20.9 billion in 2003 (Economic Report on Africa 2010). However, the volatile nature of these capital flows, places private sector led growth and Africa's poverty reduction endeavors at a great risk.

Continued reliance on Official Development Assistance (ODA) by African economies and the uncertainty with foreign savings places even more emphasis on the need for integrated, sound domestic financial markets across the continent. Also Africa can reduce external dependency by increasing domestic resource mobilization through bringing the large informal sector into the tax bracket, improved fiscal prudence in the public sector and better management of revenues from exploitation of natural resources.

The majority of the African continent has received some benefits from more targeted international development initiatives like the Multilateral Debt Relief Initiative (MDRI). External debt levels for Africa as a whole have averaged 40 percent of GDP in the decade to 2010, compared to above 65 percent in the preceding decade. Increased International development support coupled with improved terms of trade, and prudent macroeconomic policies have led to a turnaround in Africa's balance of payments position. The current account improved from an average deficit of 2.4 percent of GDP in the ten years to 2000, to an average surplus of 1 percent in the decade to 2010. This however is still low compared to an average surplus of close to 5 percent for the newly industrialized Asian economies over the same period.

Engagement with the global economy and a sound macroeconomic framework are not ends in themselves, but rather the means to achieving poverty reduction and human development. The next section takes up this issue.

5. Poverty and Human Development

A basic difference between African economies and the more developed regions of the world is the more widespread poverty in the region and low incomes derived from most economic activities. Incomes are generally low as a result of the low productivity associated with most production processes. People are involved in low-productivity agriculture and economies have a major challenge introducing industrial activity. Moving from low productivity activities to high productivity ones is extremely difficult in the region for a number of reasons, including institutional challenges and poor market conditions. Structural transformation has been extremely difficult in the region. In the absence of such transformation, it has been difficult to sustain economic growth for long periods.

The poverty trends in Africa over the last 30 years have been quite revealing. While all regions of the world saw poverty, captured through the headcount index, going down steadily after 1981, the reverse happened in Africa between 1981 and 1996 (Chen and Ravallion 2008). It was only after 1996 that the headcount index began to decline somewhat, from 56.4 in 1996 to 50.4 in 2005. As many as 384.2 million Africans lived below the poverty line in 2005. Despite the fact that a number of countries have seen significant improvements in poverty in pursuit of the MDGs, the numbers of the poor remain a major challenge. Inequality figures may suggest improvements in a number of African countries, as in the paper by Thorbecke in this volume, but there is also strong indication of worsening inequality in other countries, and that is what drives many of the social development and protection programs found in those countries.

While poverty and inequality will dominate the development discourse in many African countries for a long time, there is little indication that both the governments and their development partners have found the appropriate responses to this challenge. The lack of response is best illustrated by the fact that there are hardly any policies and programs that facilitate employment-creation on a sustained basis anywhere. Thus, despite several years of economic reforms in most countries, unemployment and under-employment--and especially low productivity in agriculture--remain major obstacles in the fight to reduce poverty. In the absence of jobs, all the other manifestations of poverty, including difficult health and education status, become even more significant and self-reinforcing. The fact that deprivation in Africa has a strong gender dimension means that policies and interventions will have to be gender specific.

African economies have been waiting for a transformation that will include a new green revolution. The revolution is expected to lead to modernized agriculture that is strongly linked to a new industrial sector through processing and input supply. This has not happened in most countries despite the fact that governments talk a lot about the need to modernize agriculture and develop value chains. The absence of a new green revolution in Africa and the lack of an appropriate industrial sector have been attributed to a long list of factors, including inadequate financial systems, poor investment climate, land tenure difficulties, poor farmer education, etc. (Djurfeldt et al. 2010). The challenge facing many African countries is how to step back and begin to prioritize where it will pay most for

governments to intervene to solve these problems (Djurfeldt et.al 2010). The role of the state in resource allocation has never been properly determined in Africa; hence the difficult outcomes.

The strong link between health and productivity and incomes is generally accepted. There is evidence that Africa's growth has been affected significantly by poor health (Acemoglu and Johnson 2007). While HIV/AIDS is the problem that draws the most attention in terms of the consequences for mortality and the cost to households and national economies, malaria and several other diseases tend to have greater widespread effect on people and their income-earning capacities. The disease burden in the region is the highest in the world and this has severe consequences for production processes that are heavily reliant on labor. In many countries the largest challenge facing the authorities is how to increase access to health services, especially in rural areas. Access is more difficult for the poor than for the non-poor. There are significant impediments as a result of poor infrastructure and inadequate human resources. There are regular pressures on governments to increase health spending as expenditures on health are far less than in other developed regions, both in per capita terms and as a share of income (Poullier et.al. 2002).

It is obvious that most African countries cannot fight the health care battle alone. This makes development assistance targeting health crucial. Various forms of development assistance have recently been directed at health, especially through Global Health Partnerships. Assessments of their impact have been positive for several diseases, especially in terms of drawing additional resources to those diseases and controlling diseases within countries, especially through mass vaccinations (Caines et.al. 2004). The challenge facing many countries remains how to integrate processes associated with large international health programs into their own institutional arrangements for the longer term goal of freeing people of diseases that can easily be controlled.

Several African governments have achieved success in improving access to education as reflected by improvements in enrolments rates reported in the paper by Gyimah-Brempong, but this varies widely. In rural communities access generally remains poor. Also, most of the emphasis, beginning from the 1990s, has been on expansion of primary education. There is a growing view that there is a need for more balance among

the different levels of education as they serve different purposes in terms of skills provision.

While access has improved, there is a general perception that the quality of education is low and possibly declining in several countries. The skills required for structural transformation are not being adequately produced by the educational systems. After expanded outlays on education and the still significant challenges in education there is the view that the poor delivery of education services is a reflection of poor institutions and limited accountability. Poor service delivery is not just a resource constraint problem. Governments need to devote greater attention to the efficient management of the systems for generating education outcomes.

Africa has a large population of vulnerable people. They are not able to participate in markets, either as suppliers of labor or entrepreneurs, because of their health status or lack of functional skills. They may be mainly women and those who depend on them. For these groups of people, a system of social protection is often considered necessary. The last decade has seen several African countries initiating social protection policies and programs, including cash transfers, food programs, food for work programs, social insurance including micro-insurance, in-kind vouchers, etc. Other related policies may include labor market policies and regulations. They may be effective in encouraging participation in markets or schooling as they facilitate risk management, increase consumption and also reduce the irreversible loss in assets. Unfortunately there are hardly any comprehensive evaluations of major social protection programs, thus making it difficult to assess their impact on people and economies. There are, however, several indications that many of them might become unsustainable as they place huge burdens on national budgets.

All of the policy prescriptions discussed so far require an effective state for their formulation and implementation. The interaction between economic policy and the African state is taken up in the next section.

6. African Economics and the African State

At a speech to the United Nations in 1957, Ghanaian President Kwame Nkrumah argued that, because Ghana's institutions were weak, it needed state-led industrialization to develop. Felix Houphouët-Boigny, who would become his Ivorian counterpart a few years later, disagreed: for precisely the same reason, he said his country would rely on market capitalism. The evolution of Africa's economic performance can be interpreted as oscillating between the two sides of this "West African Wager"¹².

Reflecting economics' prevailing paradigm at the time of their independence, most African economies, including Côte d'Ivoire, embarked on ambitious public investment programs. The rationale was that these countries were replete with market failures—public goods such as bridges, roads and ports could only be built by collective action. Most countries went further and identified externalities that needed a subsidy to be corrected, the most common being the "infant industry" argument that resulted in protection to domestic industries from imports. Some countries simply built and ran the firm as a public enterprise: governments produced shoes, batteries and bread. Finally, to fulfill the redistributive role of government, countries such as Tanzania introduced collective farming.

Three aspects of this phase are worth mentioning. First, the rationale for these interventions was based on standard, neoclassical economic reasoning. There was no sense that the economics of Africa were different from the economics of, say, Southern Europe after World War II. Second, both sides of the West African Wager were being practiced elsewhere—with equally impressive results. The socialist economies of the Soviet Union and Eastern Europe were enjoying rapid economic growth, as were the market economies of the United States, Western Europe and Japan. Third, there was an alignment between the interests of donors, who not only financed the public investments but also provided technical assistance in building the electric power stations or irrigation canals, and those of recipient governments, who could take credit for correcting market failures.

Starting in the 1970s, this relatively salubrious situation began to deteriorate rapidly. Several African countries lost their democratically elected governments to military

¹² Woronoff (1972).

strongmen. Nkrumah himself was toppled in a coup d'état, leading some to think that he lost the West African wager with Houphouët (although, as we show below, it is not clear who won). The advent of non-democratic governments meant that political power lay in the hands of a small elite (usually urban-based citizens) rather than a broad swath of the population including the rural poor. In turn, this meant that economic policy was geared towards the elite. Countries such as Ghana would run overvalued exchange rates because they kept food and import prices low (which kept the urban elite happy), while discriminating against food producers.

The commodity price shocks of the 1970s, especially the quadrupling of the price of oil, amplified the distortions in African economies to the point where the continent's per capita income started declining. Countries with high tariff barriers found it much harder to adjust to the terms of trade shock because they had limited means of raising foreign exchange to pay for the higher-priced oil; the more open economies of East Asia for instance could adjust more smoothly. Even countries that experienced favorable terms of trade shocks—such as Côte d'Ivoire and Kenya—found that governments did a poor job of managing their windfall revenues. When the budget constraint is relaxed, governments spend on unproductive projects or transfer rents to their political clients.

When they were asked to help African countries manage the ensuing balance of payments crises, the international community responded by asking countries to remove some of the government interventions that they themselves had advised them to adopt!¹³ Not surprisingly, African governments resisted. These reforms threatened the rents of the elites, who were still in power. Since countries had to tighten their belts anyway (to adjust to the transfer of wealth associated with a negative terms of trade shock), the so-called “structural adjustment” reforms took on a negative connotation. Perhaps more fundamentally, when countries adopted some of these reform measures, the promised results failed to appear. Exchange rate devaluations led to inflation (and sometimes hyperinflation); trade liberalization often resulted in massive current account deficits, banking crises and eventually a call for import restrictions. Since growth remained anemic, poverty in Africa continued to rise.

¹³ “The Berg Report”, World Bank (1981).

In light of this experience, scholars began to ask if the underlying economics of Africa was different, whether the same policy reforms that worked elsewhere would not work in Africa because of different initial conditions. Exchange rate devaluations did not lead to increased tradable production because labor and capital markets were rigid. Inasmuch as governments relied heavily on trade taxes for their revenues, trade liberalization led to massive fiscal deficits which were financed either by foreign borrowing (resulting in a debt crisis) or by domestic borrowing, often resulting in a banking crisis. Finally, some pointed to Africa's ethnic heterogeneity, its geographical handicaps (landlockedness, proximity to the tropics, arid land) and weak institutions left by the colonial rulers as contributing to the continent's "growth tragedy."

The situation changed significantly starting in the mid-1990s. Growth started accelerating to an average of 5 percent a year for about a decade and the poverty rate, which had been increasing, started declining by one percentage point a year. While there are many reasons for this turnaround, one of them is that African governments began to adopt economic reforms—the same reforms they had rejected in the past. For example, in 1994, the thirteen countries in the CFA zone devalued the CFA Franc by 50 percent. The parity had not been changed since 1947. Although the economies of the 13 countries in the CFA zone had been deteriorating since the fall of commodity prices in the early 1980s and the French Franc started appreciating in 1985, governments had been resisting calls for devaluation for about a decade.

These developments raise two questions. Why did these economic reforms work in the late 1990s when they failed in the previous decade? And why did African governments choose to adopt these reforms now, when they had resisted them previously? The answer to the first lies in the fact that the reforms, even if they resembled the "Washington consensus", were largely home-grown. The international community had found that structural adjustment conditionality was not working because the political costs of reforms outweighed the monetary benefits. So they switched to providing aid based on the government's own program. Since the reforms therefore emerged from a domestic political consensus, they were more likely to be sustained which, in turn, meant that they would lead to results. It should be noted that, in addition, the populist policies of the past had

delivered disappointing results. And the fall of the Soviet Union had (temporarily) discredited the Nkrumah-style socialist model of development.

As to why governments chose to adopt reforms at this stage, recall that the early 1990s saw a dramatic increase in the number of democratically-elected governments. African leaders now had to rely on support from a majority of their citizens to stay in power. In particular, since about 70 percent of the citizens were in rural areas, they had to advocate policies that promoted farmers' interests—including a neutral exchange rate policy. In short, the political climate for pro-poor policies had improved.

In its fifty years of independence, Africa has suffered from market failures and government failures. In the wager for West Africa, each side ignored one of the two. Today, the people of Africa seem to be striking a better balance—using government to address market failure, but avoiding some of the government failures that might ensue. Such developments bode well for the continent's future. However, the specter of civil war and conflict still haunts the development prospects of many countries. The next section addresses this key issue for Africa.

7. Conflict and the Development of Africa

The previous section discussed government failures, and how they undermined Africa's growth and poverty reduction. Perhaps the biggest failure was several African governments' inability to provide peace, a basic public good. Between 1960 and 1999, 20 African countries have experienced a civil war, with the incidence of war peaking at 8 per year in the 1980s, declining to only 7.5 per year in the following decade¹⁴. In addition to the death and destruction they cause, civil wars have a profound effect on the economy. Investment is one of the biggest casualties: both domestic and foreign investments fall precipitously when war breaks out. Disturbingly, when a civil war ends (or at least a peace treaty is signed), investment does not resume immediately. This "wait-and-see" attitude of investors perpetuates the slow growth and grinding poverty that civil war brings. It also increases the chances that a civil war will recur.

¹⁴ Nkurunziza, Janvier D, 2008.

In a paper titled “Why are there so many civil wars in Africa?”, Elbadawi and Sambanis [2000] go beyond factors such as ethno-linguistic fractionalization—or “grievance”—and suggest three reasons, two of which were previously identified by Collier and Hoeffler [1998]: the presence of natural resources, especially minerals, that are easy to loot and finance rebellions (Angola and Sierra Leone being prominent examples); and low per-capita incomes and education levels that make it easy to recruit soldiers (Mozambique and Central African Republic are possible examples). They add, and empirically corroborate, a third, which is the weakness of democratic institutions that make it difficult to resolve conflicts peacefully. The vicious cycle of poor governance and weak economic performance that we identified in the previous section may therefore have contributed to relatively high incidence of civil wars in Africa. This raises the obvious question: Have the improvements in democratic governance since the 1990s helped to lower the incidence of civil war? In addition to the direct effect, improvements in governance would also help reduce the other two factors, namely, unregulated mineral resources and low per-capita income and education levels. Nkurunziza [2008] confirms that there was an average of 3.4 civil wars per year in 2000-2007. In the second half of 2007, there were only 3 ongoing civil wars in Africa—Chad, Sudan and Somalia. While these are encouraging statistics, Azam [2009] suggests that there may be more wars waiting to happen. He proposes a model whereby seemingly stable countries such as Côte d’Ivoire erupt into conflict. In these multi-ethnic societies, a strong ruler (like Houphouët-Boigny) is able to maintain a modicum of harmony by transferring small amounts of the country’s wealth to every ethnic group, ensuring that no group feels left out. When it appears that the strong ruler’s days are numbered, the minority groups feel threatened. Violent conflict ensues, possibly (as in the case of Côte d’Ivoire) lasting a decade. Inasmuch as Africa still has strong rulers, some of whom emerged from a previous civil war, Azam’s analysis indicates that we must not be complacent.

We must not be complacent for another reason. While the incidence of civil wars has declined, Africa’s experience with post-war reconstruction has been decidedly mixed. Countries such as Mozambique, Rwanda and Uganda have emerged from conflict to become dynamic economies. But others such as Democratic Republic of Congo, Central African Republic and Chad are making much slower progress. In fact, these countries

seem to be in a low-level equilibrium trap, even after the signing of a peace agreement. Using the World Bank's definition of "fragile and conflict-affected states (FACS)," we calculate that the probability that a FACS in 2000 will still be a FACS in 2008 is 0.96. There are a number of reasons for this apparent lack of progress. One is that the international community has, in some cases, withdrawn its peace-keeping operations soon after the first set of elections. As Collier [2009] points out, elections may be the beginning, not the end of the conflict, especially if the loser has nothing more to lose by taking up arms. But another, perhaps less understood reason is that, if these countries' economies are mired in a low-governance-low-economic-growth trap, the resources made available to fragile states are too little to help them escape the trap. The donor community continues to allocate resources based more or less on the same criteria as for non-conflict countries, namely on the quality of policy and institutions in the country. Not surprisingly, this leads to relatively low amounts going to these post-conflict and fragile countries. It is possible that a new approach to supporting fragile states is needed, one that is akin to a venture capital investment, whereby we take a gamble and pour a lot of money into one fragile state, acknowledging that it is a high-risk but also high-return proposition. The alternative, of dribbling small amounts of resources to these desperately poor countries, may condemn them to remain in poverty.

8. Africa Over the Long Term

The previous sections have looked at various aspects of Africa's history over the last 50 years. What are the key challenges facing Africa over the next 50 years? In this section we highlight the consequences of three major trends—population growth and composition, urbanization, and environmental degradation.

According to the United Nations, Africa's population will grow from around 1 billion in 2009 to around 2 billion in 2050.¹⁵ Within this, North Africa's population will grow from 213 million to 321 million. Population density will grow from 34 persons per square kilometer to 66 persons per square kilometer for Africa as a whole (the numbers are 23 to 38 for North Africa and 36 to 72 for Sub-Saharan Africa). This compares to a trend

¹⁵ <http://www.un.org/esa/population/publications/ageing/ageing2009.htm>

from 51 to 67 for the world as a whole. Thus population levels and densities will rise sharply throughout Africa, particularly in Sub-Saharan Africa. To be sure, these numbers do not come anywhere near the 231 persons per square kilometer projected for South-Central Asia (which includes India) for 2050.

These population projections simultaneously alert us to two long term factors that will influence the development of Africa. First, pressure on land and particularly agricultural land, will grow as population increases. This will require special attention on the one hand to investment in research and development for raising crop yields after their long period of decline, and on the other hand to environmental degradation as forest cover is denuded at the extensive margin to feed a growing population.¹⁶ The argument that food can be imported takes us to a second of argument, especially comparing population density in Africa with that in Asia. Africa's comparative advantage is in land intensive products, which includes agriculture but also natural resources, and will still be so in fifty year's time. Especially on natural resources, this emphasizes the importance of managing resource rents, and having good governance structures to do so.¹⁷ Finally, one way of altering the comparative advantage would be to change the education and skills of the population and this suggest a very clear use of resource rents generated by natural resources—to build up the human capital of the population.¹⁸

Alongside the increase in population will come an increase in urbanization. Africa as a whole will cross the “tipping point” where more than half the population will be urban, going from 40.0% in 2010 to 61.6% in 2050.¹⁹ (The numbers for Sub-Saharan Africa are 37.2% and 60.1%). As a comparison, the projection for South-Central Asia in 2050 is 56.0%. Thus in 2050 Africa will be more urbanized than India (54.2%) and surrounding countries. This fast rate of urbanization is a long term trend that will define African

¹⁶ “Natural forests and woodlands in Africa have been drastically reduced in size over the last century but particularly so since independence, as countries have struggled to improve their economies through exploitation of natural resources. Deforestation for commercial timber sales and clearance for agricultural and urban developments are the most intensive pressures, as well as overharvesting of wood for fuel, medicinal products, and construction materials. Remaining forests have also been degraded as a result of clear felling, fires, selective harvesting, and encroachment.” United Nations Environment Program (2002, p. 146)

¹⁷ There is of course a large literature on this. For recent examples of the links between natural resources rents and political economy, see Jensen and Wantchekon (2004), or Collier (2010).

¹⁸ For a discussion of the role of human capital in explaining wages in the presence of international trade, see Wood (2002).

¹⁹ <http://esa.un.org/unpd/wup/unup/p2k0data.asp>

development challenges and raises a number of questions: Is urbanization the result of “rural push” or “urban pull”? Is the urban pull itself the result of “urban bias” in policies that discriminates against rural and agricultural activities?²⁰ How exactly should governments think about the balance between investing in urban areas to meet the need of a growing urban population, versus investing in rural areas to help the poor there but also, perhaps, to stem the tide of rural to urban migration?

There is considerable controversy around these questions in the literature.²¹ The urban-bias thesis has strong support, and the realities of African governance, with a focus on the capital city and other big urban agglomerations, tend to support this argument. However, recent work has begun to question the magnitude of this effect. The importance of climatic and geographic factors is increasingly emphasized in empirical findings on the rate and pattern of urbanization in Africa, particularly Sub-Saharan Africa. In the words of a recent analysis of urbanization: “If Africa’s rapid urbanization rate is driven by rural distress or migration from near-by land locked countries, allowing conditions in African cities to continue to deteriorate by reducing subsidies is callous at best, and will have little or no effect on urbanization.”²² Whether one subscribes fully to this thesis or not, we can perhaps accept that there is an inexorable trend of urbanization in Africa, and policy makers will have to get themselves ready for development challenges that are increasingly urban in nature.

At the same time, the “rural push” side of the urbanization debate highlights another major factor in Africa’s long term development—climate change and its environmental and developmental consequences. Global warming will have diverse consequences in Africa, but there are some common themes.²³ In North Africa water shortages will be a key challenge of the coming half century, with attendant consequences for agriculture. Coastal flooding is another major issue given the concentration of population in these zones. For Sub-Saharan Africa, the increased intensity of both drought and floods—greater climate variability—is the major concern. With current agricultural practices, agricultural yields are forecast to decline by 15% between now and 2050. While yields may increase in a very

²⁰ The Urban Bias thesis was popularized by Lipton (1977), and has been remarkably resilient, as evidenced for example, by its advancement in World Bank (2000, p. Box 6.4, p. 130).

²¹ See a recent review by Corbridge and Jones (2006)

²² Annez, Buckley and Kalarickal (2010).

²³ See the broad regional overviews in World Bank (2010).

small number of countries, the overall pattern is one of yield decline, going as high as 50% in some cases.²⁴

The policy debate on addressing climate change falls under two broad headings—mitigation and adaptation.²⁵ For the oil producing economies of Africa, mitigation is a long term challenge. Cutting through the detailed specifics of different policy proposals, a key plank of mitigation is to make the consumption of fossil fuels more expensive, and to find renewable alternatives to them. Over a fifty year period, this would reduce the incomes of oil producing economies and they would need to adapt to this long term trend through alternative sources of development. Agriculture is the other land-based production activity in which Africa has a comparative advantage, but this itself will be under threat from climate change. So, once again, using current natural resource rents to enhance the human capital of the population seems to be the appropriate long term strategy.

There is an argument that Africa will bear the consequences of climate change for the next fifty years even if global mitigation efforts are immediately successful. The main policy challenge will therefore be adaptation. The detailed nature of this will depend on the specific circumstances—coastal flooding, drought, excessive rainfall, etc—but a common feature that emerges from research is the importance of investing in human and social capital to build resilience to shocks²⁶. Thus human capital investment is also the right strategy under the heading of adaptation to climate change.

²⁴ See World Bank (2010, p 5, Map 1 and p 6, Box 1). For a broad perspective on climate change in Africa, see Low (2005)

²⁵ For a specific discussion by an African regional Institution, see African Development Bank (2009).

²⁶ See Blankespoor et. al. (2010)

9. Conclusion

Africa is a diverse continent, and its development challenges are no less diverse. We reject the “one-size-fits-all” approaches that have sometimes been applied to African development. We believe that country specificities matter, and that policies that work in one setting may not do so in another setting in Africa. And yet, certain key issues and challenges do emerge that are Africa wide, and that are amenable to and require careful economic analysis. These have been detailed in the previous sections. In this conclusion we highlight five major themes that economic analysts and economic policy makers in Africa will have to grapple in the years and decades to come.

- Managing engagement with the global economy. The debate on whether or not to engage has been settled in favor of engagement. The issues that remain are those of how—how to manage trade liberalization so as to achieve diversification of export and production, how to attract and yet regulate foreign direct investment to create employment, and how to manage the exchange rate to aid diversification.
- Translating the gains of economic growth into poverty reduction and human development. African poverty rose in the periods of low growth, and is falling in those countries that have registered significant growth rates in the past two decades. But inequalities are rising in some places and as a result the impact of growth on poverty reduction may be dissipated. Targeted policies and interventions to address poverty, human development, and the gender basis of deprivation will remain high on the Africa agenda in the years to come.
- Whether it is macroeconomic policies, or policies towards poverty and human development, the central issues concern building effective and responsive institutions of the state which raise revenue and manage its expenditure in the public interest. More generally, African successes and failures have often been explained by the developmental nature of the African state. The future depends on the African state becoming and remaining developmental, with the institutions to back this up.

- For those economies and societies in Africa that are mired in conflict, or just emerging from it, or at risk of descending into conflict, economic policy has to be at the service of conflict mitigation and conflict management. Even if the major issue is one of political reconciliation, the economic policy framework should help rather than hinder.
- Over the longer term, Africa will bear the consequences of climate change even though it has not had a part in causing it. While international support for adaptation to climate change is important and we must argue for it, as important will be country-specific adaptation measures that protect the poorest while maintaining the growth momentum that has been built up in many countries during the last decade.

There is one final commonality that we wish to highlight. It is the central role that economic analysis, applied rigorously but sensitively, can play in helping African policy makers assess the many tradeoffs among interventions, and to formulate and implement policies for African growth and development. We think that the 100 entries in this Companion to Economics in Africa are a testament to that claim.

References

- Acemogolu, D., and S. Johnson (2007). "Disease and Development: The Effect of Life Expectancy on Economic Growth", *Journal of Political Economy*, 115 (6).
- African Development Bank. 2009. "Bank Group Climate Risk Management and Adaptation Strategy." http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Climate%20Risk%20Management%20and%20Adaptation%20Strategy%20_C_RMA_%20%282%29.pdf
- Annez, Patricia, Robert Buckley, and Jerry Kalarickal. 2010. "African Urbanization as Flight: Policy Implications of Geography." *Urban Forum*. Vol. 21, No. 3, pp 221-234.
- Aryeetey, E., J. Court, M. Nissanke and B. Weder (2003). "Strengthening Africa's Participation in the Global Economy", Policy Brief, United Nations University, Tokyo.
- Azam, Jean-Paul, "Reflections on Africa's Wars," in Michelle R. Garfinkel and Stergios Skaperdas, eds., *Oxford Handbook of the Economics of Peace and Conflict*, forthcoming.
- Blankespoor, Brian, Susmita Dasgupta, Benoit Laplante and David Wheeler. 2010. "The Economics of Adaptation to Extreme Weather Events in Developing Countries." Working Paper no. 199, Center for Global Development, <http://www.cgdev.org/content/publications/detail/1423545/>
- Caines, K., K. Buse, C. Carlson, R. de Loor, N. Druce, C. Grace, M. Pearson, J. Sancho and R. Sadanandan, (2004). "Assessing the Impact of Global Health Partnerships", Mimeo, DFID Health Resource Centre, London.
- Chen, S. and M. Ravallion, (2008). "The developing world is poorer than we thought, but no less successful in the fight against poverty", Policy Research Working Paper Series 4703, The World Bank, Washington, D.C.
- Clemens, Michael and Gunilla Petersen. 2006. "New data on African health professionals abroad," Center for Global Development, Working Paper No. 95.
- Collier, Paul and Anke Hoeffler, "On economic causes of civil war," *Oxf. Econ. Pap.* (1998) 50 (4): 563-573.
- Collier, Paul, *Wars, Guns and Votes: Democracy in Dangerous Places*, HarperCollins, 2009.
- Collier, Paul. 2010. *The Plundered Planet*. New York, Oxford University Press.
- Corbridge, S. and G. Jones. 2006. *The Continuing Debate About Urban Bias: The Thesis, Its Critics, Its Influence and Implications for Poverty Reduction* DFID, London.

Djurfeldt, G., Aryeetey, E., and A. Isinika (eds.), (2010). *African Smallholders: Food Crops, Markets and Policy*. CABI, Wallingford. (forthcoming December).

Elbadawi, Ibrahim A. and Nicholas Sambanis, "Why are there so many civil wars in Africa? Understanding and preventing violent conflict," *Journal African Econ* (2000) 9 (3): 244-269.

Jensen, Nathan and Leonard Wantchekon. 2004. "Resource Wealth and Political Regimes in Africa." *Comparative Political Studies*, Volume 37, pp. 816-841.

Killick, T. (1978). *Development Economics in Action: A Study of Economic Policies in Ghana*, Heinemann Educational Books, London.

Lipton, Michael. *Why Poor People Stay Poor: A Study of Urban Bias in World Development*. London, Temple Smith.

Low, Pak Sum (Editor). 2005. *Climate Change and Africa*. Cambridge, Cambridge University Press.

Nkurunziza, Janvier D., "Civil War and Post-conflict Reconstruction in Africa," paper presented at the African Economic Conference, 2008.

O'Connell, Stephen A. and Benno J. Ndulu (2000). "Africa's Growth Experience: A Focus on the Sources of Growth" *Mimeo*, AERC, Nairobi.

Oyejide, T.A. and W. Lyakurwa (eds.) (2005). *Africa and the World Trading System*. Volume 1: Selected Issues of the Doha Agenda. Trenton, N.J., and Asmara: Africa World Press

Poullier, J.P., P. Hernandez, K. Kawabata and W. Savedoff, (2002). "Patterns of Global Health Expenditures: Results for 191 Countries", EIP Discussion Paper No. 51, WHO, Geneva, (November).

United Nations Environment Programme. 2002. *Africa Environmental Outlook: Past, Present and Future Prospects*. <http://www.unep.org/dewa/Africa/publications/aeo-1/index.htm>

Wood, Adrian. 2002. "Globalization and Wage Inequalities: A Synthesis of Three Theories." *Welwirtschaftliches Archiv* 138 (1), pp 54-82.

World Bank. 1981. *Accelerated Development in Sub-Saharan Africa: An Agenda for Action ("The Berg Report")*. The World Bank, Washington, D.C.

World Bank. 2000. *World Development Report 1999/2000: Entering the 21st Century*. Oxford, Oxford University Press.

World Bank (2009). World Development Indicators, 2010, World Bank Database.

World Bank. 2010. *World Development Report 2010: Development and Climate Change*. Oxford, Oxford University Press.

Woronoff, Jon, 1972. *West African Wager: Houphouet Versus Nkrumah*. Metuchen, New Jersey: Scarecrow Press.

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