DIRECTIONS IN DEVELOPMENT

Poverty

Working Out of Poverty

Job Creation and the Quality of Growth in Africa

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THE WORLD BANK

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Abbreviations

CFA	Communauté Financière Africaine
DHS	Demographic and Health Surveys
GDP	gross domestic product
HIV/AIDS	human immunodeficiency virus/acquired immune deficiency syndrome
ILO	International Labour Organization
LFPR	labor force participation rate
OECD	Organisation for Economic Co-operation and Development

Introduction

After more than 10 years of deteriorating per capita income, the low-income countries of Sub-Saharan Africa are on the move.[1] Since the mid-1990s, 16 countries have maintained an average economic growth rate of over 4.5 percent a year. This growth was stimulated by policy changes and reforms implemented in the 1980s and 1990s, which created macroeconomic stability and the conditions for expansion of the domestic private sector. Poverty reduction has accompanied this growth, but owing to the depth of the recession since the 1990s Africa still has the worst poverty reduction record of any low- or middle-income region, except for Eastern Europe and Central Asia. Africa has an estimated 46 million people living on less than $1 a day (table 1).

Table 1. Percentage of the Population Living on Less than $1 a Day, by Region

Region	*1990*	*2001*	*2015*
East Asia and Pacific	29.6	14.9	0.9
Europe and Central Asia	0.5	3.6	0.4
Latin America and the Caribbean	11.3	9.5	6.9
Middle East and North Africa	2.3	2.4	0.9
South Asia	41.3	31.3	12.8
Sub-Saharan Africa	44.6	46.4	38.4

Source: World Bank 2005a.

Most poor households derive their income from selling their labor either to themselves or to others; therefore, creating opportunities for people to earn more money faster is the key factor in increasing the impact of economic growth on poverty. New entrants to the labor force (and others) are leaving the agriculture sector—the largest employer in the past—and flooding cities and towns to find work. Most do not end up in the small number of wage and salary jobs that open up each year—because they are not qualified and because there are not enough jobs for those who are qualified. Thus, they end up supporting themselves in casual labor, self-employment, or small family businesses. For many, these activities have been lucrative enough to raise their incomes above the poverty line, but their productivity is low and they remain vulnerable.

For African governments faced with swelling urban labor forces, a paramount goal is to achieve the kind of economic growth that can create new urban wage or salaried jobs at least as fast as the urban labor force is growing. In most low-income Sub-Saharan African countries, wage and salary job creation has lagged behind growth—to the surprise of many, given the extensive reforms implemented. If the quality of growth is not improved—if the creation of wage and salary jobs remains sluggish—poverty reduction and social stability could be at risk.

This paper explores Africa's economic performance and the creation of jobs over the decade and more since 1995, recognizing that some standard labor concepts are difficult to apply to conditions prevailing in Africa (box 1).[2] The intent of the paper is to identify the economic factors behind the more successful outcomes and the options available for improving the quality of growth. The report focuses on four key issues:

- How has the structure of economic growth and labor demand shaped the job creation process?
- Does rigidity in African labor markets impede job creation?
- Have the quality and quantity of the labor supply affected job creation? What policies have been pursued to raise the quality of the African labor force?
- What does the expanding "informal" sector mean for the labor market and the quality of growth? Is it a route out of poverty or a low-skills trap?

Throughout the paper, the focus is on the factors, exogenous and endogenous, that are linked to the outcomes, and the implications that these factors may have for raising the quality of Africa's economic growth. (Unfortunately, this task is severely hampered by the absence of comparable household survey data for at least two points in time.) Some

Box 1

Translating Common Labor Concepts to Conditions in Africa

Many of the commonly used labor market concepts, such as employment, unemployment, participation, wages, and earnings, are difficult to apply in Africa, and their normative interpretations are ambiguous. To begin with, on average 80 percent of the labor force is self-employed, usually in a family business. For these people, the amount of time spent in economic activity (for example, employment) is not an individual decision, but a collective one. It usually varies with the season and the number of able-bodied adults at home, as well as the number of hours that have to be spent by at least some members of the household in chores such as washing, ironing, fetching and chopping wood, or collecting water. Case studies in Blackden and Wodon (2006) found that, even in urban areas, very few adults are able to work full time in traditional labor market activities (that is, excluding chores), because either they had no work to do or they had to spend sometimes 25 hours a week in household chores (excluding taking care of children). While many of these chores are considered economic activities under the latest version of the United Nations guidelines on calculating GDP, statistical agencies rarely report them as labor market activities, and, as a result, households do not consider them economic activities either. (An example from Tanzania is provided in the appendix to this paper.)

For the self-employed, especially where there is a household business, a job (employment), an enterprise, and household income are often one and the same. Income is not earned by individuals, but by the household enterprise. Thus the concept of *labor earnings* over a given period (per hour, day, or week) for an individual does not exist and cannot be measured.

Despite the fact that most people engage in activities traditionally classified as labor for less than 40 hours a week most weeks, *unemployment* is very low, and is observed mostly in the cities. The low observed unemployment rate in countries such as Uganda (7 percent) is not an indicator of a tight labor market, as it would be in an Organisation for Economic Co-operation and Development (OECD) country, but rather is a measure of the low level of urbanization and the poverty of urban households that cannot afford to have a member of the household unemployed. In the few, more urbanized countries where urban unemployment is observed, (a) it is found predominantly in the high-income quintiles (Ghana), and (b) it tends to fall over time as expectations adjust (Kenya). These observations hold up even in countries with highly urbanized labor

(*continued*)

forces, such as Senegal (48 percent urban), Mauritania (60 percent urban), and the Republic of Congo (Brazzaville, 66 percent urban) (UNECA 2005).

The *labor force participation rate* (LFPR), as applied in OECD countries, is mostly meaningless in a subsistence economy. In OECD countries, LFPR is considered a dichotomous variable. In low-income Africa, employment is not something the labor force goes to as a distinct activity; economic tasks such as growing food or selling products are done simultaneously with economic chores such as collecting wood or fetching water, and with noneconomic activities such as caring for children. And, because economic activities, especially agriculture, are often seasonal, the level of participation can vary with the season. Such fluctuations would make any measurement difficult to interpret.

Given the irrelevance of many of the standard labor force metrics, national statistical offices are left to collect and interpret the sample survey data in their own ways. It is not surprising, therefore, that labor statistics produced from national sample surveys are rarely comparable across countries.

Source: Author's compilation.

countries have reversed many of the vicious cycles underlying Sub-Saharan Africa's generally poor performance on job creation; those countries are highlighted where adequate data are available, and the lessons these experiences offer all stakeholders in meeting the growth and poverty reduction challenges of the future are pointed out. The diversity of African countries does not allow broad generalizations. Therefore, the focus is on countries that have had sustained GDP growth for the past decade; oil-exporting countries and those in conflict (see box 2 in chapter 1) are excluded from the analysis. Where data permit, the discussion includes examples from low-growth countries.

The paper concludes that Africa's record of poor economic performance has in part been an inevitable result of its colonial heritage—the low levels of human capital at independence. It is also a function of the ensuing policies pursued, especially those that led to the debt crisis and the subsequent recession and public sector restructuring. In most countries, these costs have been paid, and the future looks brighter as a result. In sum, analysis of the experience of high-growth countries suggests the following reasons for poor job creation performance:

- Recession and public sector restructuring caused net job losses in the 1990s.

- The labor force, notably in urban areas where most wage and salary jobs are found in Africa, is growing very rapidly.
- Over the last 15 years, some countries have been able to expand private wage and salary jobs quickly, but they started from a low base, so this job growth could not absorb more than a fraction of the new entrants.
- Investment in large-scale, labor-intensive manufacturing firms, the locus of the majority of private sector wage and salary jobs in the past, has been very weak in Africa despite good overall economic performance. Explanations abound, but one key factor is poor investment climates relative to competing countries. Poor investment climates turn low-income African countries into high-cost ones in which to operate, which destroys job creation opportunities.
- Despite tremendous progress, Africa's education deficit still looms large relative to that of its competitors. Investors report skill gaps (both in years of education and in skills mastered while in the system) as a major obstacle to investment and expansion. Poorly educated workers cannot compete for wage and salary jobs.

The demographic factors already in place greatly increase the challenge of job creation in Africa. Opportunities exist and can be exploited. Government policy can improve the quality of growth by offering a better environment for firms, especially large, labor-intensive ones. Export-oriented growth in industrial and service output has the potential to greatly expand formal employment. To create such jobs, African economies need to become more competitive in the global economy. Most analysis suggests that the important competitiveness issues are outside the narrow area of labor regulation, and belong in the broader category of the investment climate. Many African countries have taken measures to improve their investment climates, but much more remains to be done if Sub-Saharan African economies are to rise to the level of their competitors. African countries need to continue to devise effective policies and programs to increase the quality of the labor supply by upgrading the education and health of workers, focusing on skill gaps critical to growth. Incentives to stay in school, combined with stricter enforcement of legislation to combat child labor, would provide youth with better opportunities for the future.

The high growth of the informal sector—which is a supply response to the weak demand from the medium- and large-enterprise sector and the poor prospects in agriculture—has been a route out of poverty for many households, and the mechanisms underlying this deserve further

analysis. Given the size of the projected growth of the urban labor market, even under the best of scenarios the expansion of wage and salary jobs will not absorb the majority of the future urban labor force and the informal sector will continue to take in a large share of labor force growth over the next 10–20 years. Therefore, efforts to increase the rate of growth of wage and salary jobs need to be complemented by policies and programs to improve the productivity of the informal economy, including increasing integration of this sector with the high-wage economy. How to do this effectively needs to be further analyzed, including impact evaluations of promising programs. Overall, the analysis of labor markets and employment in Africa is strongly hampered by the lack of data that measure earnings from economic activity and welfare of the household.

Notes

1. The focus of this paper is on the lower-income countries of Sub-Saharan Africa, because these are some of the poorest countries of the world and share a variety of problems, including similar colonial history, geographic isolation, economically small internal markets, small manufacturing sectors, and weak economic institutions. Although South Africa is the largest economy in the region, its higher income level and unique history create a distinct labor market without parallel in the rest of the continent, and as such is not comparable with the others. Similarly, Botswana and Mauritius are excluded. When the terms "Africa" or "Sub-Saharan Africa" are used in the paper, they mean this selected group of lower-income countries.
2. "Job" means the condition by which workers sell their labor services to someone other than themselves or their families and by which these services are demanded on a mostly regular basis and paid at least partly in cash at an agreed price (per piece, hour, day, week, or any other standard unit). The employer may be in the public or private sector, may employ the worker on terms ranging from on demand (week by week, as needed) to a contract with tenure (full job security). To be clear, the paper often refers to these as "wage and salary" jobs. Often, these jobs are also referred to as "formal sector jobs," and other (nonformal) activity referred to as "informal sector jobs." This nomenclature frequently causes confusion, because (a) "formal sector" can refer either to the characteristics of the employer (for example, registered or legalized in some way or public), or the job (working hours, enrollment in formal social security agencies, for instance). Because most employment analysis in Africa uses household survey data, the characteristics of the private

employer are usually unknown—one only knows the characteristics of the job. If the formal sector is defined by strict characteristics of the job, the informal sector is then very large and difficult to analyze. It may include all the rest of total employment (85 percent of the labor force or more) or only nonagricultural, nonformal employment. The term "informal sector" is often used without definition or clarification, sowing confusion.

CHAPTER 1

Context: The Economic Environment for Job Creation

The efforts of Sub-Saharan African governments to promote the creation of well-paying jobs occurred within the context of broader economic and demographic changes. This study focuses on four aspects of the economic environment in the decade 1995–2005: demographics, wage and salary employment, economic growth, and structural shifts within wage and salary employment.

Demographics

A rapidly growing labor force means that, even in the best case, finding jobs for all the job seekers is a challenge. At 2.2 percent a year, the rate of population growth for Sub-Saharan Africa as a whole is the highest in the world (World Bank 2006h).[1] While fertility rates in Sub-Saharan Africa have decreased from an average of 6.1 births per woman in 1990 to 5.2 in 2003, fertility is still very high, indicating that Africa is only at the beginning of the demographic transition. Half the population in Africa is of working age, and the median age of the working-age population is 17 years. The HIV/AIDS epidemic is expected to lower these figures even further in the future, both by reducing the population of working adults and increasing fertility rates.[2]

This young and rapidly growing population has meant that African labor markets are flooded every year with new job seekers, especially in the cities, because in African countries this is where most wage and salary jobs, especially high-paying jobs, are found.[3] Overall, the average annual labor force growth for 1990–2003 was 2.5 percent per year (World Bank 2005a), but the urban population is rising at nearly double this rate, reflecting a high level of rural-urban migration (Kessides 2005). Large African cities, such as Lagos, Nigeria, are growing at 6 percent per year—a population increase almost impossible to absorb. This high rate of urbanization is partially caused by the lack of opportunities in agriculture—rapid population growth has pushed farmers into more arid and nonproductive lands. Much of the arable land in Africa is of poor quality, with variable rainfall, making rain-fed agriculture a risky livelihood. Such rural uncertainties contribute to the rising level of urbanization and intensify the pressure for job growth in the nonfarm sector. Urbanization is expected to increase further; by 2015 almost 50 percent of the total labor force will be in urban areas (ILO 2004a).

Wage and Salary Employment

Urban job seekers have had a very difficult time finding jobs. Jobs in the formal sector have expanded in most countries, but not enough to keep pace with growth in the labor force, much less the massive growth in the urban labor force. For example, in Kenya, wage and salary employment increased by half a million from 1982 to 1996, while during the same period the country's labor force grew by half a million people per year (Fluitman 2001). This led to stagnation of the proportion of workers in formal wage employment. In the early 1970s in Zambia, nearly 25 percent of the labor force was employed in wage and salary jobs, but by 2005 this share had shrunk to less than 10 percent (World Bank 2005b). It should be noted that data on this subject are scarce and rarely comparable.

A few countries did manage to do better. In Senegal, between 1994 and 2001 the labor force grew 2.8 percent a year, while wage and salary employment grew 4.9 percent a year (table 2). Mozambique's formal sector grew at a strikingly large 5.7 percent per year during the period 1996–2002. In Ethiopia, data from a panel survey of the urban labor force[4] show 2.2 percent annual average job growth over the 10-year period 1994–2004 (World Bank 2007a). In Burkina Faso, after a long period of decline, wage and salary employment grew by 3.6 percent per year between 1998 and 2003.

Table 2. Growth of the Labor Force, Wage and Salary Employment, and GDP per Capita in Selected African Countries

		Average annual growth			*Percentage of formal sector workers who are female*
Country	*Years*	*GDP per capita (%)*	*Labor force (%)*	*Wage and salary employment (%)*	
Burkina Faso	1998–2003	1.9	1.8	3.6	24.2
Cameroon	1996–2001	2.6	2.1	8.7	23.0
Ghana	1991–98	1.6	3.3	2.5	25.4
Mozambique	1996–2002	6.5	1.8	5.7	18.5
Senegal	1994–2001	2.0	2.8	4.9	36.6
Uganda	1992–2002	3.7	2.9	3.1	26.5

Source: Authors' calculations using World Bank data.
Note: Data are for last year of each range.

In many cases, however, the growth of the urban labor force was higher than job growth, so this good performance was still not enough. And, in many cases, this growth started from a very low base. For example, in Burkina Faso, 3.6 percent growth of wage and salary jobs per year for five years only raised the share of wage and salary employment in total employment from 3.9 percent to 4.6 percent (World Bank staff estimates), while 18 percent of the population lives in urban areas (World Bank 2006a). Ghana had a higher share of wage and salary employment in 1980 than in 1990 (Dabalen and others 2002). In the 1990s, Ghana experienced job growth of 2.5 percent a year, but this was lower than overall labor force growth and still left the share of wage and salary employment at 13 percent, in a country where 45.8 percent of the population lives in urban areas (World Bank 2006a). Note that for the countries in table 2 (ones for which good data are available), the majority of the wage and salary job holders are men. In most of these countries, women have increased their share of wage and salary employment, but they still only hold about one-quarter of these jobs.

Economic Growth and Structure of GDP

Africa's record on job creation follows economic growth patterns, and over the past decade economic growth performance has been uneven. As a whole, Sub-Saharan Africa experienced a period of low growth in the 15-year period 1990–2005, but strong variation among countries has emerged. Excluding South Africa, only 37 percent of the population lived in countries with sustained, nonmineral-sector growth of GDP well above

the growth of the labor force. These countries had the initial conditions for significant new job creation, and most did experience strong wage and salary job growth. The rest of the continent was not able to generate high, broadly based GDP growth; as a result, net new wage and salary job creation was low. About 21 percent of the Sub-Saharan African population lived in countries that had 10 years of weak growth. In these countries, private investment was low, sustaining little hope of creating net new jobs. In others, such as Côte d'Ivoire, the Democratic Republic of Congo, and Burundi, a devastating downward spiral of conflict, debt, and destruction prevents economic growth. Another 31 percent of the population lives in countries where oil and natural gas are the main drivers of economic growth—a sector that creates very few domestic jobs directly, so that when countries such as Angola, with over 50 percent of GDP coming from the oil and gas sector, do show GDP growth, the quality of that growth is poor for job creation and poverty reduction.

Part of Africa's poor job creation can thus be explained: countries with poor economic growth, or economic growth dominated by the mineral exporting sector, have had little or no job creation. And countries with strong growth (for example, Ghana and Senegal) have seen the strongest wage and salary job growth in the region. Nevertheless, a paradox remains. Why, in countries with over 4 percent annual growth and strong poverty reduction, is job creation weak compared with, for example, East Asia? The rest of this section looks at structural explanations for this paradox.

In the non-oil-exporting countries, the high economic growth of the last 10 years was associated with significant changes in the structure of output and employment. One major structural change occurred in the agriculture sector. In Sub-Saharan Africa, agriculture's share[5] in GDP was still 26 percent in 2003—higher than in any other region of the world. In many of the fast-growing but low-income countries, the share of agriculture in total output is even higher (for example, Burkina Faso at 31 percent of GDP in 2004 and Uganda at 29 percent of GDP in 2004). At the same time, between 1995 and 2005 overall employment in agriculture as a share of total employment in Sub-Saharan Africa declined from 70.1 percent to 63.6 percent (ILO 2006), and it fell even faster in the low-income, high-growth countries (from 90 percent to 80 percent in Mozambique, for instance). This decrease in agricultural employment resulted in improvements in labor productivity and in overall income growth for households in the sector. Because the poor in Africa are overwhelmingly rural, the increase in agricultural productivity was one of the most important drivers of poverty reduction in these

Box 2

Most African Countries Did not Realize High Economic Growth Rates, 1995–2006

Uneven growth performance						*Special circumstances*			
I. Countries able to achieve sustained growth (fast job creation)		*II. Countries able to achieve sustained but slow growth (minimal job creation)*		*III. Countries able to produce economic growth (no job creation)*		*IV. Oil-exporting countries*		*V. Conflict countries*	
Mozambique	8.4	Namibia	4.0	Swaziland	2.8	Equatorial Guinea	20.9	Somalia	
Rwanda	7.5	Zambia	3.6	Kenya	2.8	Angola	7.9	Liberia	
Cape Verde	6.5	Guinea	3.6	Lesotho	2.7	Chad	7.8	Burundi	
Uganda	6.1	Niger	3.5	Eritrea	2.2	Sudan	6.4	Côte d'Ivoire	
Mali	5.7	Togo	3.3	Comoros	2.0	Nigeria	4.0	Congo, Dem. Rep. of	
Botswana	5.7	Madagascar	3.3	Seychelles	2.0	Congo, Rep. of	3.5	Sierra Leone	
Ethiopia	5.5	Malawi	3.2	Central African		Gabon	1.7		
Tanzania	5.4	South Africa	3.1	Republic	0.9				
Mauritius	4.9	São Tomé		Guinea-Bissau	0.6				
Mauritania	4.9	and Principe	3.1	Zimbabwe	–2.4				
Benin	4.8								
Ghana	4.7								
Senegal	4.6								
Burkina Faso	4.6								
Gambia, The	4.5								
Cameroon	4.5								

Source: World Bank 2006a.

countries. In Mozambique, between 1996 and 2002 the growth rate of consumption per adult for households whose primary earner was in agriculture was 4.6 percent, in Burkina Faso 3.2 percent (1998–2003), and in Uganda 3.1 percent (1992–2002).[6]

The share of output has increased in the service sector, and the labor force has followed. The service sector has emerged as the largest source of value added on the continent, representing 39 percent of GDP in 2003 (World Bank 2006b). Employment in this sector is much less likely to take the form of wage and salary jobs. Employment in sectors such as trade, transport, and personal services tends to be self-employment or family businesses. Meanwhile, employment growth in industry has fallen. In 1990, the share of the labor force in industry in Sub-Saharan Africa (excluding South Africa) was 12 percent (World Bank 2005a), but by 1995 it had fallen to 9 percent and has remained there (ILO 2006). Much of the expansion in industrial value added in Africa in the past two decades has been in nonmanufacturing sectors, such as the mining sector—a sector with a high capital-labor ratio and little potential for creating domestic employment. The manufacturing sector, normally labor intensive and a strong source of jobs, accounts for only 14 percent of GDP—four percentage points lower than the world average (World Bank 2005a).[7] Ndulu and O'Connell (1999) dub this phenomenon Africa's "delayed structural transformation." It also represents Africa's delayed labor force transformation.

Structural Shifts Within Wage and Salary Employment

A final reason for weak wage and salary job creation performance is the nature of the adjustment policies countries undertook in the previous decade. The failure of the postcolonial statist economic model—adopted by many countries in an effort to overcome the lack of wage and salary jobs at independence—as well as declines in Africa's terms of trade, brought about structural balance of payments deficits. Countries undertook reforms to increase openness to trade and to increase exports. Policies such as real monetary devaluation and declines in protection for industry improved the terms of trade for agriculture (laying the foundation for the poverty reduction achievements of the 1990s). At the same time, the domestic industrial sector was exposed to increased competition from imports, which for many firms was a shock. Many industrial firms were in financial trouble even before the adjustment took place, so they were forced to close down. The trade reforms were usually accompanied

by programs to restructure the public sector,[8] which were intended to lay the foundation for macroeconomic stability. These programs included liquidation or privatization of public enterprises—including whatever remained of the industrial sector after the shock of the devaluation.

The result was a dramatic loss of jobs:

- In Kenya, the public sector share in registered employment declined from 36 percent in the 1970s to 16 percent in 1996 (Fluitman 2001).
- In Benin, the number of public employees decreased from 40,000 in 1990 to less than 30,000 in 1999 (Fluitman 2001).
- In Côte d'Ivoire, public sector employment was 8.6 percent smaller in 1999 than in 1993 (Fluitman 2001).
- In the 1990s, Ghana's civil service decreased by 40 percent (Larbi 1999).

As a result, the public sector no longer accounted for the majority of wage and salary jobs. In Ghana, the share of the government in total employment declined from 8 percent in 1987–88 to 5.9 percent in 1998–99 (Teal 2005); in Tanzania, the public sector share of wage and salary jobs fell from 73 percent to 50 percent. The case of Uganda clearly illustrates the story. Between 1992 and 2002, private sector employment in Uganda grew at an annual rate of 4.8 percent—above the rate of growth of urban labor during this period. But the number of government employees decreased at an average annual rate of 1.4 percent, so overall wage and salary job growth was only 3 percent—below the rate of growth of the urban labor force (World Bank 2006f).

The painful role public sector restructuring played in reducing net job creation in African economies was a one-time event. Having paid this price, many African countries should be able to show stronger job creation in the future, provided that they can achieve economic growth rates of 5 percent or more per capita in the non-oil economy. The recent history of the 11 or more countries in Africa that have undertaken extensive economic and political reforms, and as a result achieved sustained growth and poverty reduction, shows that this is possible. Recent growth diagnostics studies,[9] which have exposed the factors behind Africa's past growth performance and laid out the challenges and opportunities for the future, offer strategies that have a track record of catalyzing broadly based, employment-generating growth. Although each African country will need to adapt these strategies to its own conditions, the analyses provide the basis for hope.

The depth of the challenge cannot be underestimated, however, given Africa's demographics and economic structure. Major efforts are needed to improve the quality of growth, so that Africa's delayed structural change in employment can take place. The remainder of this paper discusses the job-creating elements of these strategies.

Notes

1. While population growth rates in some African countries are high (such as Uganda's 3.2 percent a year), other countries (such as Zambia, with a growth rate of 1 percent and Kenya with 1.4 percent) are passing through the demographic transition. The behavioral impact of the high HIV prevalence on population growth and the demographic transition is difficult to predict.
2. It is believed that HIV/AIDS might increase fertility if parents decide to have more children to increase the chances that enough children would survive to take care of the family. For further discussion on the effect of HIV/AIDS on fertility, see Gregson et al. 2004.
3. African agriculture is generally small-farmer subsistence or commercial, not large landowner. African countries traditionally do not have a large landless rural population or plantation agriculture with wage labor.
4. Because they are panel data they do not include new entrants, so the data on job growth are biased upward.
5. These figures exclude South Africa.
6. Authors' calculations using available household survey data.
7. Once again, there are exceptions to this trend in countries with good policies and strong growth performance. In Uganda, the manufacturing share rose from 6 percent in 1990 to 10 percent in 2002; in both Madagascar and Mozambique the share grew from 8 percent in 1994 to more than 11 percent in 2002, but for most African countries the share of manufacturing value added in GDP has remained flat over the past 20 years.
8. In the early 1990s in Kenya,Tanzania, and Zambia, approximately half of formal sector employment was in the public sector. Richer countries tended to have lower shares; in 1994 in Zimbabwe it was only 18 percent (van der Geest and van der Hoeven 1999).
9. These studies include *The Political Economy of Economic Growth in Africa, 1960–2000* (Ndulu, O'Connell, and others 2007).

CHAPTER 2

Constraints: Missing Private Sector Demand

Growth in industrial output has been a key element in the successful transformation of most economies that have seen a sustained increase in per capita income. Formerly low-income countries that have achieved or are achieving this transformation include Brazil, Chile, China, and the Republic of Korea. The industrial sector in developing countries has the potential to act as an engine of modernization, a creator of skilled jobs, and a generator of positive spillover effects (Tybout 2000). Manufacturing, especially, creates jobs and stimulates innovation and technology diffusion.

The industrial sector is not the only route to job creation. Recent analyses have pointed to the role of information and communication technologies in supporting the growth of a modern service sector as an alternative stimulant to economic growth and job creation. Chandra (2006) analyzes the case of India, where the outsourcing sector has created a profusion of new urban jobs. Indeed, the growth of the modern service sector in Africa over the past 10 years (especially in communications) has helped to sustain the growth of private sector wage and salary jobs. In Burkina Faso, for example, the share of wage and salary jobs in the service sector is as high as in the industrial sector. However, this may be due to the very small share of wage and salary jobs in the entire economy. Although the service sector should

not be ruled out as a driver of growth and jobs, the requirements in human capital, especially technological skills, are high.

The small manufacturing sector in many African countries is a symptom of a bigger problem: the lack of private investment in large, labor-intensive firms, especially those producing for export. Investment in Sub-Saharan Africa as a portion of GDP was only 19.8 percent in 2006, compared with 36.3 percent in Asia, 23.1 percent in the Middle East, and 27.3 percent in other emerging and developing countries (IMF 2006). Low investment is a reflection of two factors: (a) low domestic savings rates, which create a very small source of capital for domestic investors; and (b) low foreign investment outside natural resource enclaves. Furthermore, low foreign investment means low technology transfer, impeding productivity improvements and higher wages.

Rapid expansion of jobs requires investment in large-scale enterprises combined with technical knowledge to exploit opportunities for making profits. In Africa, these enterprises have to be exporters, because most domestic markets are very small, and the demand for manufactured goods is low. The value added of the largest economy in Sub-Saharan Africa, Nigeria, is less than that of Norway; the economies close to the African median (Botswana and Zambia) are 40 percent smaller than the economy of Luxembourg. Moreover, in low-income countries, the structure of domestic demand favors basic subsistence needs over sophisticated manufactured goods (Tybout 2000). For these reasons, the African industrial and service sectors must orient a substantial share of their output toward exporting if they are to promote development, create new jobs, and reduce poverty. Africa currently accounts for just a tiny fraction of world trade, suggesting that the potential for expansion is significant.

In other low- and middle-income countries, exports have created new urban jobs. The share of manufacturing in total exports in China is 88 percent, in Bangladesh 92 percent, in India 77 percent, and in Morocco 64 percent, while for African countries the share is 15 percent (Eifert, Gelb, and Ramachandran 2005). The average of manufacturing exports as a percentage of GDP for Africa was 3.3 percent in 2002—very low compared with Asia's average of 17.9 percent (Clarke 2004). Some African countries have built successful export industries in nontraditional products (with higher income elasticities of demand), such as processed fish, flowers, horticulture, and garments; and in services, such as tourism and informatics. This shift has been key to Africa's poverty reduction performance because it has raised the incomes of small producers and

small commercialized growers, but it has not yet made a large contribution to alleviating the urban employment crisis (Chandra 2006).

Investment Climate

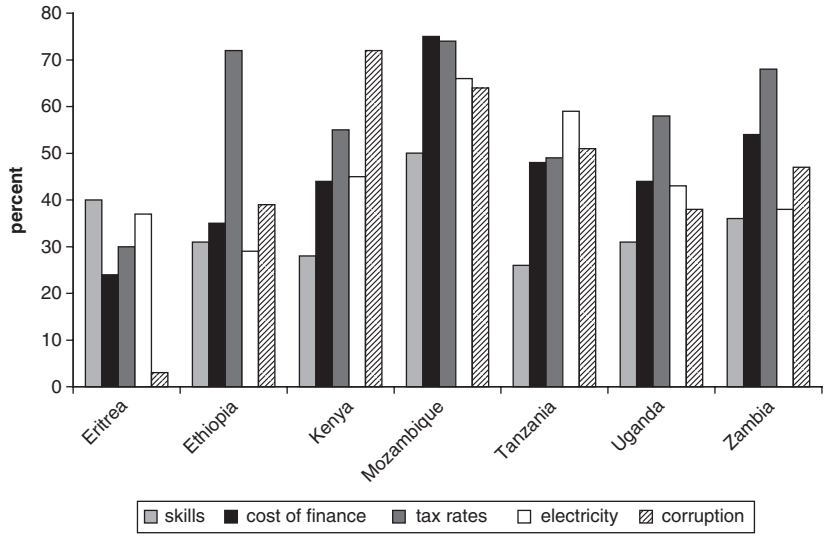
A number of authors have looked at the reason behind the weak growth of African non-oil industrial exports and concluded that the investment climate plays an important role. African countries have been found to have a poor investment climate, which increases investors' perceptions of risk and reduces their willingness to finance activities in Africa.[1] Although authors differ in their definitions of a poor investment climate, it broadly includes these factors:

- *High transaction costs*. These include rules and regulations that raise the costs of transactions with government institutions, such as registering a business, dealing with a health inspector, or getting goods in and out of customs.
- *High investment risks*. These include nonexistent or unreliable infrastructure, insecurity, political risk, volatile macroeconomic environments, and labor regulations that make it difficult for firms to react quickly to changes in the external environment.
- *Weak institutional and human capacity*. These include legal and judicial barriers to timely contract enforcement, inefficient and shallow financial institutions, and low levels of scientific and managerial skills and experience.

It is beyond the scope of this paper to review this literature, but it is clear that a poor investment climate dissuades firms from making investments in industries that could generate new jobs.[2] A poor investment climate also pushes down wages, because investors need higher rates of return to be willing to enter riskier markets. These effects have been observed in Africa, and recent research has begun to quantify the results. Bigsten and Söderbom (2005) analyze firm data and find that in any year, a third to a half of firms in a country make no investment at all in their businesses. They also find a very high risk premium in African countries compared with other markets.

In Africa, the investment climate problems take a number of forms. In surveys of firms already operating in African countries, the main obstacles to expanding business cited are corruption, and high indirect costs such as utilities, transport, finance, and taxes (see figure 1). Lack of a skilled

Figure 1. Major Obstacles Facing African Firms



Source: Eifert and Ramachandran 2004.

labor force (discussed further in chapter 3) is also considered a barrier in some places, such as Dar es Salaam, Tanzania, where 20 percent of firms ranked skill shortage among the top three obstacles they faced (World Bank 2004b). Further analysis showed that workers in the medium- to large-enterprise sector in Tanzania have low levels of education, forcing Tanzanian firms to rely on foreign workers (World Bank 2006e,h). However, most governments in Africa restrict the entry of foreign workers into the domestic labor market as a measure to reduce the unemployment and underemployment of school leavers. Paradoxically, these restrictions may hurt more than help, by reducing the total number of well-paying wage and salary jobs.

Total factor productivity and capacity utilization are lower in Africa than in Asia, in part because of the loss of production caused by such factors as frequent power outages and logistics delays. As a share of total costs in Africa, indirect costs are two to three times higher than in Asia. In Bangladesh, China, India, Nicaragua, and Morocco, indirect costs tend to be, on average, 7–12 percent of total costs, while in Africa, this number reaches 20–30 percent, higher than labor costs (Eifert, Gelb, and Ramachandran 2005). These high costs push down wages and squeeze profits.

Barriers at the border also raise costs and discourage investment. Days for exports and imports to clear customs are on average twice as high in Africa as in Asia. In Kenya, it takes twice as long for imports to clear customs as it does in China, for example. These barriers are a particular problem for small African countries that have to import many inputs, compared with firms operating in large, diversified economies such as China and India. As a result, even in countries with faster average customs clearance than China, nonexporting and exporting firms alike are more likely than Asian firms to report trade and customs as major or severe problems (Clarke 2004).

African countries have taken steps to improve their business climates. Macroeconomic stability has improved dramatically, for example, and reforms of legislation governing business transactions have been undertaken in a number of countries. The payoff these improvements will have in the growth of wage and salary jobs is hard to measure because there are usually a number of factors at work.[3] Some cases are clearer, however. Through regional integration, Senegal enjoys some of the cheapest and most reliable electricity on the subcontinent (Fox and Liebenthal 2006). As a result, Senegal's indirect costs as a share of total costs is low, and Senegal has enjoyed strong growth and employment performance in the past decade.

Two key elements of the investment climate are found directly in the labor market: labor market flexibility and the supply of labor with adequate skills. Poor performance in job creation in non-African countries has been related to both of these issues. The rest of this section examines two aspects of labor market inflexibility in Africa: (a) *wage flexibility*, comprising the institutions and policies, including public sector pay policies that set and alter wages in the economy; and (b) *labor flexibility*, concerning the regulations governing the relationship between employer and employee that influence the ability of firms to adjust production and the size of their labor forces in the face of external changes. This discussion sets the stage for chapter 3, which analyzes the overall condition of the labor supply and the resulting implications for investment and job creation.

Wage Flexibility

Investor risk is higher and job creation lower if real wages fail to adjust over time to macroeconomic shocks or supply pressures—external as well as internal in a globalized world. If African labor is not competitive, investments in labor-intensive industries or services may not take place.[4]

A review of the evidence suggests that aggregate wage levels in Africa have been able to adjust to external and internal pressures. On average, measured using purchasing power parity, wages for unskilled production workers in 1996–99 were lower than in 1983–86.[5] Wages for unskilled workers rose on average throughout the 1980s, but then began to fall.[6] The trend for skilled workers was similar, even with the growing globalization of this market.

However, competitiveness issues remain. Despite recent wage decreases, in dollar terms, African unskilled and skilled wages are higher than in comparable countries in Eastern and Southern Asia, but they are not higher in purchasing power parity. This reflects the high cost of food, transportation, and housing in African urban areas. Thus, the wage floor for an African worker is the cost of a minimum living standard, such as would be available in rural areas through work in low-technology, subsistence agriculture. The only way these basic living costs can be reduced and African workers can become more competitive is through investments in infrastructure, especially in urban areas.[7]

Studies of Côte d'Ivoire and other countries surveyed in Collier and Gunning (1999) found evidence that wages are flexible within individual countries, and increasing supply has put downward pressure on wages. Rama (2000) finds that minimum wages were downwardly flexible throughout a period of overall wage misalignment in Communauté Financière Africaine (CFA) countries, related to an overvalued fixed exchange rate. Rama also finds that wages in the formal sector follow flunctuations in public sector wages, mainly because of the large size of public employment, implying that in some countries there may be some upward wage pressure if public sector wages, especially for very low-skill work, rise above market-clearing levels. Nonetheless, based on aggregate evidence, we can conclude that African economies do show wage flexibility in response to slack demand, and therefore wage rigidity should not be a major constraint on the creation of jobs in the formal sector.

Even though minimum and average wages in Africa are fairly flexible with respect to macroeconomic and sectoral trends, unexplained wage differentials across countries persist. Firms in Kenya are 5 percent less competitive than firms in Ghana, but workers in these Kenyan firms have wages 40 percent higher. Tanzania and Nigeria also observe higher wages than in Ghana, even if they have lower total factor productivity (Kingdon, Sandefur, and Teal 2004). Wage differentials within countries also persist. For example, wages tend to increase with the size of the firm when controlling for skill level, suggesting that efficiency wage–setting

mechanisms may operate in the largest firms in many African countries (Mazaheri 2003). The gap is large (17 percent in Zambia, 15 percent in Côte d'Ivoire, and 14 percent in Ghana) and significantly exceeds those found in developed economies. It cannot be explained by observable skill differences. Because there is sometimes imperfect competition in the goods market and larger firms have monopoly power, the wage gap between firms could also be related to rent-sharing behavior, as larger firms share the accrued rent from the noncompetitive products market with the workers. By collecting panel worker data to match the panel data of the firm, Söderbom, Teal, and Wambagu (2002) show that the size effect is only minimally due to unobserved skills. Not only firm size, but also a range of firm-level variables such as unionization, capital stock, and formal sector registration, are highly correlated with wages even after allowing for differences based on human capital. This high firm premium may be explained by information failures concerning the quality of workers (such as high diversity in the quality of education), so that the premium actually reflects qualities of workers unobservable in the data but observable to the firm through a more sophisticated selection process. If this is true, however, then firms may have to spend more time finding workers with the qualities desired—another negative feature of the investment climate.[8]

Labor Flexibility

In many African countries, strict laws regulate individual employment relations with an employer, including required provisions of the contract governing hiring, maximum hours of work and overtime, minimum wage, protection against dismissal without cause, and severance pay. On average, Africa's labor market is the most rigid and most costly in the world, as measured by the World Bank's Doing Business indexes on hiring and firing workers (table 3). High mandatory benefits, social insurance, and labor taxes further raise costs.

The effect of labor regulation on the African investment climate is ambiguous. Studies have not been able to find a relationship between labor flexibility as measured by the Doing Business indicators and GDP growth (Blanchet 2006). At the microeconomic level, the evidence is weak as well. Studies find no correlation between country scores on hiring and firing flexibility and firm perceptions of labor laws in practice (Gelb and others 2007). Despite rigid labor laws, firms report that labor regulations are less an obstacle to investment and expansion than are factors such as worker skills, infrastructure, and lack of credit.[9]

Table 3. Indicators of Labor Flexibility, by Region

Region or economy	*Difficulty of hiring*	*Rigidity of hours*	*Difficulty of firing*	*Average (rigidity of employment)*
Sub-Saharan Africa	***44.3***	***52.0***	***44.9***	***47.1***
Niger (highest)	100.0	80.0	50.0	77.0
Uganda (lowest)	0	20.0	0	7.0
South Asia	41.8	25.0	37.5	34.8
East Asia and Pacific	23.7	25.2	19.6	23.0
Latin America and the Caribbean	34.0	34.8	26.5	31.7
Europe and Central Asia	34.2	50.7	37.1	40.8
Middle East and North Africa	29.7	44.7	32.9	35.8
OECD: High-income	27.0	45.2	27.4	33.3

Source: World Bank, Doing Business database, http://rru.worldbank.org/DoingBusiness/.
Note: The rigidity of employment index is the average of three subindexes: difficulty of hiring index, rigidity of hours index, and difficulty of firing index. All the subindexes have several components, and take values between 0 and 100, with higher values indicating more rigid regulation.

Nonetheless, labor regulation can get out of hand. In Mozambique, in a 2002 investment climate survey firms reported that labor regulations were not very important as an obstacle compared with other factors, despite the fact that Mozambique's labor law was rigid, even by African standards. But in a 2006 follow-up survey, the same firms rated labor regulations second in importance as an obstacle to firm expansion (out of 20 factors). One reason is that some of the other factors that were high on the list in 2002, such as electricity, access to land, and business licensing, have been successfully addressed by government policy initiatives, so they were cited by firms as less important than they had been previously. This suggests that strict labor regulations may rise in importance as other constraints are addressed; thus, African governments should not be complacent about addressing this issue.[10]

Evidence on the role of unions in the investment climate and job creation in Africa is also ambiguous. Sub-Saharan Africa's labor unions are small and underdeveloped, reflecting the overall character of Africa's economic institutions. Many unions date back only to independence in the 1960s, when the political and economic roles of the state were fused into one-party governments tasked with promoting development primarily through import-substitution industrialization. This nationalistic-socialistic state, created in part in reaction to decades of colonial exploitation, failed for the most part to produce an enabling environment for economic development or independent, participatory

social institutions capable of resolving distributional conflicts. When the nationalistic-socialistic-patronage model collapsed as terms of trade fell in the late 1970s, the result was devastating for trade union membership. Membership was concentrated primarily in the state-owned sector and had therefore gained substantially during the early postindependence period. Since the 1980s, trade union membership has declined in all countries.[11]

The presence of labor unions has been cited as a factor that decreases job creation because (a) in a monopoly situation, unions can increase uncertainty and impose high costs through work stoppages and other collective actions; and (b) unions can push up wages and increase the rigidity of the employment contract at the firm level.

With respect to collective actions, strikes and work stoppages have become rare in Africa. One reason is that implementation of labor standards is weak. The right to strike is very often violated in Sub-Saharan Africa, and freedom of organization is sometimes constrained. Many countries do not enforce ILO Convention 98, a labor code against antiunion discrimination. The threat of job loss associated with a flat or slow-growing unionized sector (especially relative to other sectors) must be a factor as well. Ultimately, the effect of labor unrest on productivity appears small. In Zambia, a more unionized country previously prone to strikes, 97 percent of firms surveyed in 2002 reported no days of production lost to labor unrest.

In African countries with higher union membership, do trade union wages exert an independent effect on wages? In Ghana, several studies using data from the early 1990s have shown a union wage effect of 15–28 percent. But using panel data and controlling for as many other effects as possible, Söderbom, Teal, and Wambagu (2002) found a very small union premium. However, in West Africa, analyses of data from 1993 (Cameroon) and the late 1980s (Senegal) indicate that the wage effect is negative. This unusual result could be due to the fact that union members receive nonwage benefits not measured in the analysis (Rama 2000). It also could be explained by the possible spillover of union wages to nonunion workers. A firm-level study in Kenya, Tanzania, and Uganda found that 60 percent of firms in the manufacturing sector reported that nonunionized members benefited from wages that unions had negotiated (Alby, Azam, and Rospabé 2005). With respect to the overall wage level, trade unions do not appear to have influenced the wage misalignment in CFA countries before the monetary devaluation, nor were the benefits or high minimum wages often associated with unions, negative factors in

postdevaluation adjustment. Thus, it can be concluded that the presence of unions does not seem to hamper job creation.

Nonetheless, unions do have political influence. Surveys of governments, unions, and employer associations in four East African countries found that all three had significant influence on labor regulation. This influence is usually voiced through a tripartite consultative body attached to the ministry of labor. Unions may have an effect on economic reforms. Forteza and Rama (2001) found that in countries with high levels of unionization and government employment, economic reforms tend to be less successful because of objections from unions. Forteza and Rama's study showed that countries with more rigid labor market institutions experienced steeper declines in GDP growth rates before they adopted adjustment programs and weaker recoveries afterward, compared with countries having more flexible institutions. The growth rate was estimated to be almost 3 percentage points lower in the rigid countries. Forteza and Rama suggested that unions influence economic reforms more through political than economic channels (for example, bargaining). Thus, if labor regulation becomes a more important element in the investment climate, unions' political influence might become a negative factor, but this remains to be demonstrated.[12]

In sum, because job creation depends on the creation of a dynamic export sector, a country's investment climate is clearly critical in supporting or impeding this growth. This analysis of both perception data (firm surveys) and outcomes (wage determinations) indicates that African labor markets function well, and, at this point, factors outside the labor market seem to be the binding constraints. Job creation and competitiveness now depend on policies and investments to reduce costs and risks, such as improvements to infrastructure, access to credit, and reductions in transaction times and in the cost of living in African cities. Evidence from Mozambique indicates, however, that the rigidity of Africa's labor markets, compared with those of competitors, may become a factor in the future.

Notes

1. See Collier and Gunning (1999) for a review, as well as Batra, Kaufmann, and Stone (2003). Regulatory environments are reviewed every year by the World Bank publication *Doing Business* (http://www.doingbusiness.org/).
2. See http://iresearch.worldbank.org/InvestmentClimate for papers analyzing this relationship. See Bigsten and Söderbom (2005) for an Africa-specific analysis.

3. For example, does an increase in GDP provide the space to undertake certain reforms, or do the reforms create the increase in GDP?
4. The need for downward flexibility of real wages to achieve full employment in response to budget cuts and other demand reductions was a crucial feature of structural adjustment programs, as noted by Horton, Kanbur, and Mazumdar (1994).
5. Based on the Occupational Wages around the World Database (http://www.nber.org/oww/) and Freeman and Oostendorp (2000).
6. This regional trend in rising wages in the face of economic decline is driven largely by the appreciation of the currencies in West Africa. The devaluation of 1995 brought these wages down sharply in real terms.
7. Leibenstein (1957) was the first economist to identify the role of nutrition and food prices in wage outcomes.
8. Anecdotal evidence supports this point. Indeed, part of firms' complaints about the skill shortage seems to refer to just this problem.
9. One reason for this result may be that the Doing Business indicators on labor flexibility do a poor job of measuring African labor market conditions because of the benchmarks they use. The definition of the standard company is a manufacturing company that has operated for 20 years and employs 200 workers, which is rare in Sub-Saharan Africa. The definition of a worker is one who (a) has worked for 20 years in the same company; (b) has a full-time permanent contract; (c) earns the medium pay of the country; (d) works as laborer; and (e) is not a member of a trade union, which is also very rare in Sub-Saharan Africa.
10. A recent study of the impact of labor regulation on employment in India's retail stores found that as computer technology became more accessible in an area, the negative employment effect of regulation increased (Amin 2006).
11. For elaboration on the points in this paragraph, see Mukandala, Fox, and Liebenthal (2004).
12. In Mozambique, the union associations participated in designing a new, more flexible labor law.

CHAPTER 3

Conditions: The State of the African Labor Force

Although a better macroeconomic environment and investment climate would support the creation of more wage and salary jobs, the quality of the labor supply is an equally important factor. The lack of an adequate base of skilled, healthy workers hinders investments in even the simplest manufacturing processes. Investment climate surveys usually find that firms are not able to hire the skills they need in the local market. For example, in Mozambique, 50 percent of firms listed skills and education of workers as a large or severe problem (World Bank 2003); in Zambia, this number was 35.8 percent (World Bank 2004d). This indicates that supply factors do indeed impede investment and employment creation in Africa, especially in the manufacturing sector. To attract new investment in large, labor-intensive production processes, countries need to ensure that their labor supplies match the demands of firms exporting in a globalized world (Bosworth and Collins 2003).

Efforts to improve the quality of labor also have a longer-term payoff by increasing the overall rate of economic growth, which occurs through a number of channels, including supporting the introduction of new technology. Workers with more education and skills are better able to adopt new technologies, thus allowing industries to "move up the value chain," increasing total factor productivity and value added per

worker (Chandra 2006). Through this process, better-educated workers have a higher chance of getting and holding high-paying, stable jobs. A better-educated labor force improves the labor pool for the public sector as well, leading to a more efficient and effective government that can implement the policies and programs required for a high-quality growth environment.

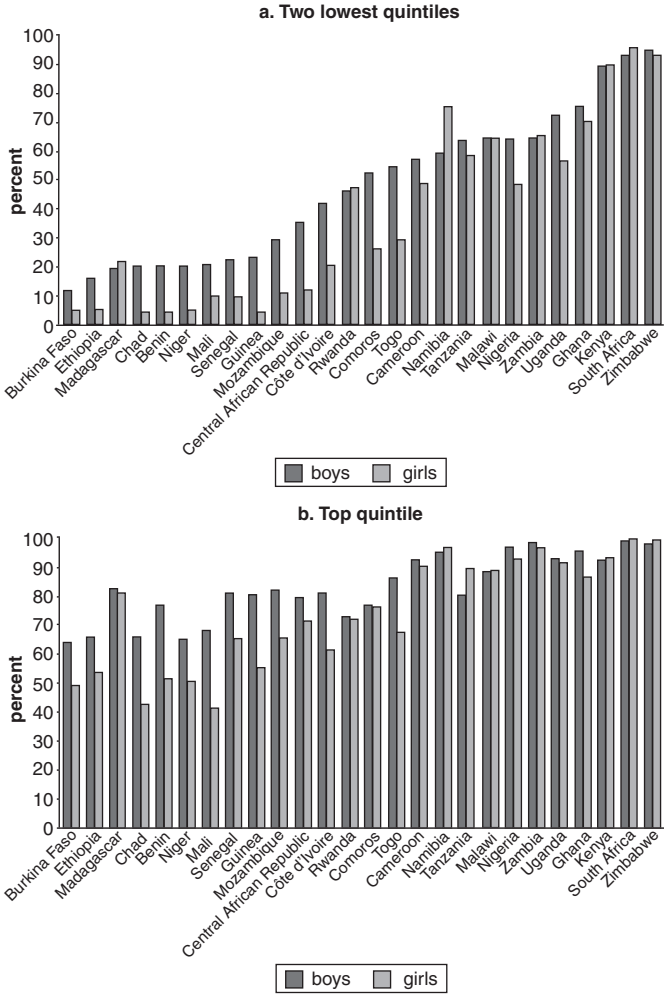
Education is not the only dimension to the quality of labor; health and nutrition are also critical. Ill health increases worker absences, lowers productivity per worker, and keeps firms from investing in workers. Child labor intrinsically undermines the quality of the labor force by stifling educational opportunities and even jeopardizing health. Because education and health services are usually provided by the state in Africa, improving the condition of the labor force requires continued policy action to create a more efficient, transparent, and effective state.

Education

The average education of Sub-Saharan African workers is the lowest in the world. At independence, the colonial legacy left most Sub-Saharan African countries with a poorly educated populace and even poorer schools, teachers, and textbooks to build up the quality of the new labor force. Since then, most countries have made huge strides in reducing the education deficit. Against the odds, Africa has had the fastest growth of human capital in the labor force in the past 10 years (Ndulu, Chakraborti, and others 2007). Gross primary enrollment has increased from 73 percent in 1990 to 95 percent in 2002 (World Bank 2005a). Nevertheless, Sub-Saharan Africa still has lower primary and secondary education enrollment rates than all other regions. Net enrollment in primary education in 2004 was 64 percent in Sub-Saharan Africa, compared with 96 percent in Latin America and the Caribbean, and 88 percent in South Asia (World Bank 2006h).[1] For secondary education, the gross enrollment rate in Sub-Saharan Africa was 30 percent in 2004, with poor countries such as Mozambique mired at levels as low as 11 percent (World Bank 2006h).

Country performance on increasing educational attainment has been uneven, highlighting once again the importance of policy in alleviating constraints to job creation. In most countries, children living in the wealthiest households are able to complete primary education. However, as figure 2 shows, the educational attainment of children from poor households varies substantially across Sub-Saharan Africa. In Kenya, for example, the level of education is somewhat even across income

Figure 2. Percentage of Children Completing Primary Education, by Gender and Household Income



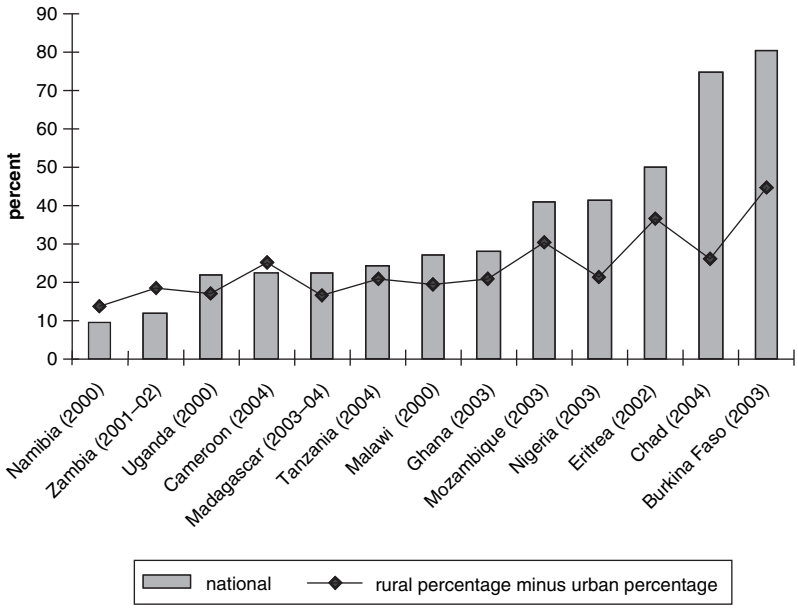
Source: Centre for Development Policy Research 2005.

quintiles: 90 percent of the boys in households in the two poorest quintiles have basic education, while 93 percent of boys in the wealthiest quintile of households have basic education. In Ethiopia, however, the poorest households have a significantly lower percentage of boys with basic education than the richest households: 16 percent and 64 percent, respectively (Centre for Development Policy Research 2005). The differences

between countries are not correlated with per capita income, but show the results of different policy environments. Physical distance to school is a major factor that reduces enrollment, especially for girls. Only 32 percent of children in rural Senegal live within walking distance to a full cycle (six grades) school (Betcherman and others 2004). For low-income households, direct and indirect costs are one of the highest barriers to enrollment and retention. The effect of universal primary education policies in East Africa—where the main policy measures are the abolition of education fees, uniform requirements, and other impediments to enrollment for low-income children—can be credited with dramatic increases in enrollment in these countries.

The most important impact of universal education policies may be the change in the culture of education in the country, moving from one of elitism to one of inclusion. Universal education policies have been successful because they have brought into the system formerly excluded groups: children from poor households, especially those in rural areas, and especially girls. In Uganda in 1992–93, the net enrollment rate for

Figure 3. Women without Education: National Percentage and Gap between Rural and Urban



Source: Demographic and Health Surveys, STAT compiler, http://www.measuredhs.com/.

girls in the poorest quintiles was only 41 percent, a gap of 34 percentage points from the richest quintile. By 2002–03, the net enrollment rate for girls in the poorest quintiles had increased to 77 percent, narrowing the gap to 14 percentage points (Word Bank 2006f). Controlling for gender, children from poor households were as likely to enroll in primary education as were children from rich households.

The results of these policies on the skill level of the labor force have been substantial, especially for women. In Uganda, where universal primary education policies have been in place the longest, fewer than 20 percent of adult women in the labor force reported having no education at all. This is much lower than many other countries, despite the fact that Uganda is still a very poor country, with less than 20 percent of the population living in urban areas. In Nigeria, a much richer country, the adult female population without education is twice that in Uganda. In Kenya, Lesotho, Uganda, and Tanzania, the percentage of women unable to read and write in the labor force is projected to fall to less than 10 percent by 2015. Other countries, such as Côte d'Ivoire and Ethiopia, which have adopted different policies, are projected to still have 30 percent of the female labor force illiterate and 20–26 percent of the male labor force illiterate by 2015 (UNESCO 2004).

Progress in secondary school enrollment has not been as rapid. In Ethiopia, from 1999 to 2005, the net secondary enrollment ratio increased from 14 percent to 28 percent. In Mauritius, it went from 65 percent in 1998 to 82 percent in 2005, while in Lesotho net secondary enrollment was 13 percent in 1998 and 23 percent in 2004 (World Bank 2006b). In Nigeria, community sensitization and empowerment, teacher development, and an increase in the number of classrooms led to an increase in the transition rate from primary to secondary school from 45.0 percent in 1992 to 54.6 percent in 2002 (ADEA 2005). There was also an improvement in enrollment in tertiary education in Sub-Saharan Africa (from 3 percent in 1991 to 6 percent in 2003), although tertiary enrollment continues to be low (World Bank 2006b). This slow progress in postprimary education is partly the result of the high level of attention given to primary education over the last 15 years. However, as discussed below, a similar push is now needed for postprimary educational attainment.

Impact on Growth

There is no doubt about the importance of education to growth in Africa. Cross-country regressions using endogenous growth model specifications have suggested that the education deficit has disadvantaged

Africa relative to the rest of the world (Easterly and Levine 1995), and recent analysis also shows that the efforts to close the gap have had a strong growth effect. Babatunde and Adefabi (2005) find that a well-educated labor force in Nigeria has influence on economic growth both as a factor in the production function and through total factor productivity. Levine and Renelt (1992) have concluded that, along with the rate of investment in new capital, education plays an important part in economic growth. Bosworth and Collins (2003) conclude that improvements in the education level of the labor force have accounted for 40 percent of the total increase in growth since 1990. Thus, despite the impressive gains to date, policies to improve access to education and the quality of that education need to push beyond the primary school level. An indication of the importance of this effort is the widening gap between returns to education faced by many workers with less than secondary schooling relative to those with more education.

The Returns to Education

Returns to education are often used to measure the value of investments in education to the goals of creating jobs and easing skill shortages. They have also been used as an indicator of the flexibility of the labor market, and as a complement to cross-country and macro-level studies to quantify the role of education in growth.[2] Studies have found three important trends in returns to education in Africa:

- Returns to education below university level are falling.
- Returns to primary education are falling fastest.
- As a result, the gap between the returns to primary education and returns to postprimary education is widening, thereby contributing to increasing wage and income inequality.

This section briefly summarizes the evidence on these points and the relevance of these trends for growth and job creation.

Repeated cross-section household surveys provide evidence that returns to education have been falling, especially for primary level education (table 4). The return to primary education for females in Burkina Faso, estimated from wage data, decreased from 19.0 percent in 1994 to 7.1 percent in 1998, while for secondary education the numbers were 16.1 percent in 1994 and 14.4 percent in 1998. Schultz (2004) finds similar results for Côte d'Ivoire, Ghana, Kenya, and Nigeria, also using wage data. World Bank (2006f) finds the same results for Uganda

Table 4. Implied Returns to Education in Selected African Countries

a. Uganda

	Implied private rate of return in percent per year			
	1999–2000		*2002–03*	
Level completed	*Male*	*Female*	*Male*	*Female*
Primary	6.3	9.2	2.3	4.5
Secondary	7.0	14.0	7.2	12.0

Source: Authors' calculation based on World Bank (2006f).

b. Kenya

	1994			
	Age 25–34		*Age 35–44*	
Level completed	*Male*	*Female*	*Male*	*Female*
Middle	11.0	8.1	10.0	5.8
Secondary	7.4	20.0	12.0	19.0
University	21.0	26.0	13.0	16.0

Source: Schultz 2004.

c. Burkina Faso

	1994		*1998*	
Level completed	*Male*	*Female*	*Male*	*Female*
Primary	10.1	19.0	7.9	7.1
Secondary	17.2	16.1	10.9	14.4
Postsecondary	17.4	19.2	12.9	16.0

Source: Kazianga 2002.

using wage data. Some authors have viewed these developments as evidence that either the push for rapid expansion of primary education has been a failure, or that the labor market is not functioning well. There are several reasons why these conclusions are not warranted.

First, the rapid increase in access to primary education caused the share of the workforce with education, especially primary education, to grow very rapidly. In Uganda, for example, the labor force that completed primary education increased at an average rate of 11 percent per year between 1999–2000 and 2002–03 (World Bank 2006f). Unless the growth of physical capital kept up or capital-saving technological change took place, returns had to fall (see table 4a). Thus, the falling return to higher education is evidence of a positive economic development—a labor force where the share of the workforce with some primary education is rising.[3] Second, the higher returns to education for older workers

clearly reflect some selectivity bias (Schultz 2004). Those who were able to get education earliest were primarily those with characteristics unmeasured by the cross-sectional data sets but known to affect income, such as family income and assets, and parents' education. Thus, the skill premiums observed in the past were overstated, because these other variables were missing from the specification.

Because none of these studies control for quality of education, the possibility exists that some of the decrease in returns to primary education reflects a quality decline that is observed once primary school graduates reach the labor force. Although Collier and Gunning (1999: 9) write that "paradoxically, education is one public service in which African performance has *not* been markedly worse than other regions," in some countries, increases in enrollment massively outstripped the capacity of the education infrastructure. In these countries, indicators of quality, such as input ratios, as well as outcome measures, such as average repetition and completion, have gone down. However, once again, the story is complex. As with changes in returns by cohort, outcome declines can be attributed—at least in part—to a change in the composition of the student body, which now includes children who may be more difficult to teach. Thus, declines in repetition and graduation rates, which may have been triggered by capacity constraints, cannot be used as indicators of an overall decline in the quality of education.[4] Still, the World Bank reports that in several African countries half or fewer of all young women ages 15–24 can read a simple sentence after three years of primary school (World Bank 2007b). ADEA (2005) found that in Sub-Saharan Africa more than two out of every three children old enough to leave primary school enter the labor market with, at best, limited literacy and numeracy skills.

In contrast to primary school returns, analyses show increasing returns to education at upper levels of schooling—that is, the rate of growth of wages increases with each year of education at higher education levels. This is yet another indicator of the major shortage of workers with postprimary education first highlighted in the employer survey data.[5] For males in Ghana, for example, in 1998 returns on a middle school education amounted to 3.9 percent a year, while for secondary school the number was 12.0 percent, and for university 44.0 percent (Schultz 2004). Wage regressions for Mozambique confirm higher returns per year of schooling as the educational level increases[6] (Fox, Bardasi, and Van den Broeck 2005), as do those for Tanzania (World Bank 2006e). Furthermore, analyses of wage data from manufacturing enterprises show virtually no returns to

education for workers who have not completed primary education. This confirms what employment data show—that private enterprise demand for workers with primary education is low, and large, export-oriented enterprises, especially, require a workforce that has a level of education higher than primary.

Falling rates of return to education overall, and almost zero returns to less than primary education, do not negate the benefits of Africa's huge investment in education, because these data hide economic returns to education in other types of employment, and the broader relationship between education and growth noted above in cross-country studies. Wage data exclude the self-employed, whose returns to primary education are different. Analyses using total household consumption consistently show higher returns to primary school education for the head of household than do those using wage data. Furthermore, in Uganda, Tanzania, and Mozambique, estimates of returns to years of education above primary school using the same data do not increase at an increasing rate as the wage data showed, but are proportional. One explanation is that education improves the overall efficiency of the adults in running the household, including the well-known effects of education in reducing fertility and increasing healthy lifestyles, especially in caring for children. Another explanation is that these coefficients, especially on primary education, pick up the head-of-household effect (which is positive in the wage equations, but not controlled for in the household equations because the unit of observation is the household, not the individual).[7] The conclusion from rate of return studies, therefore, is that all efforts to improve the education level of adults before they reach the labor force will still have a strong effect on growth, earnings, and poverty reduction.

In sum, many African governments have risen to the challenge of the education deficit, with more success in some countries than in others. This review of the good performers indicates that the challenge can be met, but policies matter. Those countries lagging in primary school enrollment are compromising both the quantity and the quality of growth, and they urgently need to adopt stronger policies and programs to meet the Millennium Development Goal of universal primary education. Yet, even more is needed if the millions of workers entering the African labor force are to be able to compete successfully for wage and salary jobs. African governments need to find a way to raise educational attainment of this future workforce to the secondary level. If this fails to occur, sluggish job growth is likely to persist.

Other Approaches to Addressing the Skills Deficit

The problem of skills shortages is repeated in many countries, leading some to import skilled labor and alter choices of production technology. The percentage of educated workers in Africa is lower than that in any other region in the world. Skills are consistently ranked among the top five constraints to manufacturing, alongside electricity, high tax rates, cost of finance, and corruption. In Mozambique, for example, 50 percent of manufacturing firms believe skills pose a serious obstacle to their operations and growth (World Bank 2003). This percentage exceeds 30 percent in other African countries like Ethiopia, Uganda, and Zambia (World Bank 2004d). Each of these countries has given a high priority to reforms in education and training to meet this challenge.

Confronted by skills deficits, can investment in vocational and technical education in schools and other modes of training outside formal education help close the gap? Alongside public schools, private for-profit and not-for-profit schools offer skills training. These include those run by churches and other nongovernmental organizations. Private capacity sometimes exceeds that in public institutions. Employers are also active providers and financiers of training. In a sample of 37 countries and 18,217 manufacturing firms, Tan (2006) reports that 38 percent of Sub-Saharan African enterprises provide training to workers. In other regions, the average ranges from 19 percent in the Middle East and North Africa to 59 percent in East Asia and Pacific. Enterprises that train are usually large (employing more than 100 workers) exporters of goods, active users of technology, and beneficiaries of foreign direct investment. Not all workers in these enterprises are trained, because employers favor those with higher levels of education.

Whether training adds to the quality of the workforce depends on the ability of providers to take into account the real needs of the labor market and the objectives behind the implementation of training. Training focused on existing jobs and actual employer demands for skills has been more successful than training focused on broad social objectives, such as redirecting demand for expensive postsecondary education, balancing gender opportunities in employment, or resolving the youth unemployment problem (Johanson and Adams 2004). Offering a few vocational courses to improve the relevance of general education has not improved the transition to employment when compared with more intensive programs of vocational and technical content (Lauglo and Maclean 2005). Adding vocational content to the secondary curriculum, however, has helped stimulate interest in school and improve the retention of those with different learning needs (Wilson 2005).

Considerable attention has been given to the different modes of skills training and whether individually they reduce skills deficits. The success of school-based vocational and technical education varies. In Europe and North America, positive employment effects have been observed, controlling for selectivity and other factors, but weaker wage effects resulted (Ryan 2001). The picture for developing countries in Sub-Saharan Africa is not as positive. Vocational and technical education programs developed in the last century usually offered training in skills demanded only by large manufacturing firms, which was not where jobs were being created. Thus, graduates of these programs were often unemployed. Vocational and technical courses for the most part failed to address the need for entrepreneurial skills in the much larger informal economy. Quality, too, was an issue. As a consequence, a growing number of countries are engaged in education reforms that would strengthen the relevance and quality of instruction in schools offering vocational and technical education.[8]

Where job growth is present in formal sectors and labor shortages are evident, as illustrated by Mozambique, graduates of vocational and technical education are easily absorbed into employment (World Bank 2004b). In Ghana, where the economy is growing at a 6 percent annual rate, the earnings gains of a secondary technical and vocational education match those of a general secondary education (Adams 2007). Ensuring strong links between school and work—by getting employers actively involved in training—ensures a higher return to investments in vocational and technical education. In Kenya, Zambia, and Zimbabwe, a sample of workers participating in enterprise-based training experienced wage gains that averaged 15–21 percent when compared with workers without this training (Rosholm, Nielsen, and Dabalen 2007).

Apprenticeships, available to young workers in formal and informal sector employment, have a mixed record in Africa. Evidence from higher-income countries points to positive employment benefits for apprentices when compared with those in alternative school–based pathways, but with wage effects that vary from country to country with outcomes favoring young men over young women (Ryan 2001). In West Africa, traditional apprenticeships involving private contracts between the apprentice and a master craftsman are popular, largely in the informal economy. A 2001 survey in Ghana found 207,000 apprentices, outnumbering the smaller capacity of public training institutions (Adams 2007). While these apprenticeships are self-regulating and self-financing and demonstrate positive effects on employment, they perpetuate older technologies, have limited scalability in a modern economy, are gender biased in favor of young men, screen out the poorest households, and vary in quality.

In Africa, reforms are shifting vocational content to later in the secondary education curriculum. This is a positive development because it provides students with a stronger foundation of general education, allows students to acquire needed general problem-solving skills, and gives more time for students and their parents to make informed choices about career options (UNESCO 2006).

Trade, rapid advances in science and technology, and intensified economic competition are shaping the demand for labor and skills in countries worldwide, and accelerating the pace of structural change. Africa is not isolated from these forces, and education and training systems are recognized as important to the region's ability to compete in the global economy. Confronting the skills deficit to relieve the importance of this area as a constraint on growth and job creation requires open access to good-quality postbasic education and training opportunities, at an affordable price. Given the diversity of providers of skills training, public and private, an important role for governments is to ensure the efficient operation of training markets. Governments may need to pull back from their traditional roles as providers and instead undertake broader functions such as regulating private providers, encouraging enterprise-based training models, and ensuring a smooth flow of market information to potential students and trainees.

Health

Education is not the only aspect of human capital important for wage job creation. Health status is important as well, both for workers, who need good health to get and keep jobs (including, for example, health good enough to allow a worker to undergo the stress of migration to a large city), and for firms, which need a healthy workforce for efficiency and productivity. Poor adult health affects labor productivity directly when workers are unable to perform their duties, and indirectly when workers must be absent to care for ill family members. Thus, health, too, is an element of the investment climate.

The health status of the labor force in Sub-Saharan Africa is poor. Life expectancy in most Sub-Saharan African countries is extremely low. The most recent data show that the average life expectancy for 35 African countries is 46.7 years for females and 44.8 years for males. Even for countries where life expectancy is projected to increase, the numbers are still low when compared with eastern Asia and south-central Asia (table 5). Poor health could be a disincentive for firms to invest in on-the-job

Table 5. Estimated Life Expectancy at Birth in Sub-Saharan Africa and Other Regions, by Gender, 2000–05 and 2010–15
(years)

	2000–05		*2010–15*	
Region	*Female*	*Male*	*Female*	*Male*
Sub-Saharan Africa	46.7	44.8	48.0	47.3
Eastern Asia	74.7	69.7	76.5	70.4
South-central Asia	63.9	62.5	66.9	64.9

Source: Medium variant projections of the United Nations Population Division (2003) and http://www.uis.unesco.org (July 2004).
Note: Data for Sub-Saharan Africa are averages for 35 countries, weighted by population.

training because life expectancy is low and firms will not be able to enjoy the higher productivity in the future. Moreover, firms expect to pay higher costs in the future to replace workers (Schultz 2004).

Adult morbidity indexes are not good either. In Mozambique, in any two-week period in 2002, on average 16 percent of the population was ill (Fox, Bardasi, and Van den Broeck 2005). In Tanzania, according to the Household Budget Survey of 2000–01, 27 percent of adults experienced illness in the four weeks preceding the survey. As a result, close to one in four people missed at least one week of school or work as a consequence of illness (World Bank 2006e). In Uganda, between 1992–93 and 2002–03, there was an increase in the incidence of sickness in the 30 days preceding the surveys from 21.2 percent to 28.5 percent (World Bank 2006f). Another indicator of well-being in the labor force is adult malnutrition; reliable data are available for women from the Demographic and Health Surveys (DHS). These show that, in Ethiopia, on average one-third of women are malnourished.

The health status of children, the future labor force, is also troublesome because of poor nutrition and high levels of childhood illness. On average, 38 percent of African children suffer from moderate to severe stunting, but country-to-country experience differs considerably. In Mozambique, during 1995–2002 the share was 44 percent for children under five (UNICEF 2004). In Madagascar, 40 percent of children under five were underweight (World Bank 2004a). Mortality in children under five fell by 35.0 percent in Uganda and 8.5 percent in Burkina Faso over the 1990s, while it rose 21.0 percent in Ghana and 13.9 percent in Cameroon (World Bank 2006h). Because poor health and nutrition affect the ability of children to learn once they get access to education and may lead them to drop out of school, these numbers indicate that the efforts to bring up the skill level of the labor force will continue to face challenges.

The averages cited above hide major differences in outcomes by income class. In Niger in 1998, 27 percent of women in the lowest quintile were found to be malnourished, but only 13 percent of women in the highest quintile were malnourished. Even in countries with low levels of adult female malnutrition, such as Cameroon (average 6 percent), the number of malnourished women in the lowest quintile is three times the number in the highest quintile. Under-five mortality and other indicators of child health show the same story. In Kenya, a country with one of the lower levels of infant mortality in Africa, the number of children dying in the first five years of life in the lowest income quintile is over twice the number in the highest quintile. The picture these numbers paint is that, for Africa's poorest, the odds for both adults and their children of earning a good living today or in the future continue to be dim.

HIV/AIDS poses a major challenge in Africa. Prevalence is high, especially in East Africa. In 2003, it reached levels as high as 38.8 percent in Swaziland, 28.9 percent in Lesotho, 24.2 percent in Malawi, and 21.3 percent in Zambia, while in Côte d'Ivoire (7.0 percent), Uganda (4.1 percent), and Ghana (2.2 percent) HIV/AIDS prevalence was significantly lower (World Bank 2006h). The high levels of cumulative mortality losses to the total labor force as a result of HIV/AIDS, such as in Lesotho, Uganda, and Zambia, highlight the pervasive effect of the disease on the labor force. The projected numbers for 2020 in agricultural labor losses from HIV/AIDS are high: in Namibia it reaches 26.0 percent, in Botswana 23.2 percent, and in Zimbabwe 22.7 percent (ILO 2004b). HIV/AIDS reduces the ability of households to move beyond subsistence.

Children are affected as well, both as sufferers of the disease and as victims of its effects. The high adult prevalence of HIV/AIDS is creating an underclass of orphans. Current estimates indicate approximately 11 million AIDS orphans are living in Sub-Saharan Africa (World Bank 2004a). Evidence of the impact of this tragedy on child development is weak. Ainsworth and Filmer (2001) found that school enrollment ratios were lower in some countries for orphans between 7 and 14 years old (Benin and Kenya, for instance), while for others (Zambia and Chad) there was no impact. Bell and Gersbach (2006) hypothesized that the economic impact will be felt beyond the current generation, even if prevalence begins to fall, because children will lose the informal skills that parents teach, including how to farm and how to repair items such as wells and roofing, and will lose the support parents may provide in the transition from school to work.

Strong gender differences have emerged as the AIDS epidemic has spread, and now women between the ages of 14 and 24 are appearing with very high rates of infection. In Uganda in 2002–03, for all quintiles, a higher percentage of women than men reported being sick in the 30 days before the survey (World Bank 2006f). Women take the responsibility for caring for the sick, so their ability to take up or hold wage and salary jobs is reduced. In Zambia, HIV/AIDS has spread more rapidly among women than men: for 2001–02, the infection rate for females ages 20–24 was 16.3 percent, while for males it was 4.4 percent, and for ages 15–19 the numbers were 6.6 percent for females and 1.9 percent for males. This trend reverses itself for the age group 45–49, in which males have a higher infection rate (20.2 percent, compared with 13.6 for females) (World Bank 2004e).

Evidence of the effects of HIV/AIDS on the labor force is limited, but the ILO (2004b) provides some estimates: 70 percent of the worldwide labor force who are HIV-positive live in Africa. In Mozambique, 1.1 million workers in the labor force are HIV positive, in Nigeria this number is 2.4 million, and in Kenya 1 million. Given these high levels of HIV/AIDS, it is estimated that by 2010 the total labor force will be 9 percent smaller in 35 countries in Sub-Saharan Africa affected by the epidemic.[9] In the most affected countries, the estimate is even worse: countries may lose as much as 20 percent of the labor force by 2010. By 2015, the losses could be 12 percent of the labor force in Sub-Saharan Africa, reaching 30–40 percent in countries such as Botswana (36.2 percent), Lesotho (32.3 percent), Swaziland (34.3 percent), and Zimbabwe (40.7 percent) (ILO 2004b; CHGA 2004).

The impact of high HIV/AIDS prevalence on both the public and the private sectors can be severe. In a firm-level survey across Africa, 60 percent of companies envisaged significant adverse effects from HIV/AIDS, including reduced productivity (ILO 2004b). High absenteeism is a particular problem. Unlike in richer countries, firms do not pick up the costs for treatment of side effects or of antiretroviral treatment; firms usually shift these costs back to households (Rosen and Simon 2003). The estimated impact of HIV/AIDS on the education of the workforce shows the perverse effects of the disease on the future labor force. If teachers contract HIV/AIDS at the rate of the country as a whole, teacher attrition in Zambia could go up by about 40 percent, compromising many of the gains made in the past two decades toward universal primary education. HIV/AIDS also negatively affects school enrollment rates—in Botswana,

where HIV/AIDS infections have quadrupled, primary enrollment rates have dropped 30 percentage points since 1985 (Kalemli-Ozcan 2006).

Child Labor

Some of the new entrants to the labor force are school-age children and youth. Sub-Saharan Africa supplies the highest portion of child labor in the world. The ILO (2002a) estimated that 29 percent of children between the ages of 5 and 14 in Sub-Saharan Africa in 2000 were economically active, while in Asia and Pacific this number was 19 percent, and in Latin America, 16 percent. The ILO (2002a) also finds that every fourth child in Sub-Saharan Africa appears to start work under the age of 10. Some children work in extremely poor conditions, subject to exploitation and a harmful environment, such as the children who work in mining. In Guinea, the ministry of children and family reports that children who work in diamond mines end up working endless contracts to pay back loans they have taken to buy food or medicine (Kielland and Tovo 2006). Most of the economically active children (three-quarters of the total in Tanzania) perform "light work," which possibly could be combined with education. UNDP (1998) reports that in Benin, 6- to 14-year-old girls who also attend school spend 5.9 hours a week fetching water, while girls in the same age range who do not attend school spend an average of 8.9 hours a week at the same task. These numbers are lower for boys this age: 1.8 and 3.4 hours a week, respectively (Kielland and Tovo 2006).

Factors that affect the supply of child labor include the age and gender of the child, the education and employment status of parents, access to education, the availability of employment opportunities, and the household's poverty status and geographical location (Betcherman and others 2004). Cultural and social taste also influence the prevalence of child labor. Reynolds (1991) found that in Zimbabwe, girls were more likely to be working than boys, because the burden of household tasks is high and time consuming for the women of the household. Boys are more likely than girls to be combining school and work. Even though low household income can lead parents to send their children to work, poverty is not necessarily the main cause for youth employment. The higher the income share households derive from their own nonagricultural business, the higher the likelihood that the child will work. Grootaert (1998) found that in Côte d'Ivoire the presence of a household enterprise increased the likelihood that a child would work. Coulombe (1998)

shows in Côte d'Ivoire that the bigger the household's plot of owned land, the higher the probability of a child working. A study on Ghana found that family characteristics (father's education, presence of the father in the household, religious background, region of residence, and main income source) played a stronger role than poverty in the decision to send children to work (Canagarajah and Coulombe 1997). A similar result is found in Nielsen (1998) for Zambia, where there was no positive relationship between poverty and child labor.

The need for children to work has led to child migration, especially in West Africa. Again, Africa outstrips the rest of the world—a larger share of African children live away from their parents than do children on other continents (Andvig, Canagarajah, and Kielland 2001). In Benin, 8 percent of children ages 6–16 are reported to have left their parental households to work. Half of these have left the country. This child migration cannot be explained by poverty because relatively wealthy households in rural areas may be more likely to finance child migration (when children migrate to work as domestic servants) (Andvig, Canagarajah, and Kielland 2001). The income differences both within countries (between rural and urban areas) and between countries are so substantial that even a relatively wealthy rural household may consider it a good opportunity to offer their child as a servant to a wealthier household in a city or even another country (Adihou and Fanou-Ako 1998). There are also gender differences: while 62 percent of boys who live away from their parents attend school, only 23 percent of girls do so (Kielland and Tovo 2006).

In sum, the quality of African labor has clearly been a detriment, both to overall economic growth and to the creation of wage jobs. Much of what is found today in the African labor supply can be traced directly back to a lack of investment in people by colonial governments. Catching up—reducing health and education deficits—has been a high priority of governments, and major progress has been made, especially in primary education. Yet, the sad story is that much more could be done. There are huge gaps in opportunities across the continent. In half of the countries for which data are available, less than 50 percent of boys from poor households are in school—and the situation for girls is worse. Gender gaps within countries, both in opportunities and in outcomes, are prevalent. Child labor, especially for girls, is both a human rights issue and an economic one—because this is yet another factor that lowers educational achievement.

Current fertility trends have created a huge challenge for governments because the size of the labor force over the next 15 years is already set.

From a macroeconomic standpoint, the rapidly growing labor supply can be a positive force for economic growth, if the supply of physical capital increases along with the labor force, or if technological innovation and adaptation increase the productivity of labor. In the past this has not happened in Africa, and a huge class of disappointed urban job seekers has been created. Governments in countries such as Ethiopia are now having to face difficult political consequences, because economic growth and job creation in urban areas have not been enough to absorb the growing labor force, but soil degradation and uneven rainfall have strictly limited the ability of the agricultural sector to absorb these new entrants to the labor force. Many countries are in a vicious cycle. A decline in fertility is needed so that public and private funds can be directed toward secondary and higher education without compromising the primary school gains. But without more education, fertility declines are difficult to achieve.

As with labor demand, performance on upgrading the labor supply is uneven across the continent. The Millennium Development Goals have set targets for improving health and education by 2010. Progress toward these goals will not only increase welfare, but also will strengthen the foundation for economic growth by raising the quality of the future labor force. African success stories, particularly concerning the nearly universal achievement of primary school enrollment, show the way forward.

Notes

1. Gross primary enrollment is the number of students enrolled divided by the size of the relevant age group. If there is repetition of dropout, this number can be higher than 100 percent and often is. Net primary enrollment is the number of children enrolled in the relevant age group divided by the size of the age group. In Africa, this indicator is low, indicating problems in getting children to start and finish primary education on time.
2. Bosworth and Collins (2003) use micro evidence on education to illustrate this point. See Hanushek and Kimko (2000).
3. This sharp decline in the returns across cohorts indicates that when cross-country data are not disaggregated by cohort, the coefficient on the age variable (used as a proxy for experience) is overestimating the role of experience in wage setting. This may also explain difference across groups in the structure of wages. Fox, Bardasi, and Van den Broeck (2005) found in Mozambique a significantly higher return to experience for men compared with women when wage data were gender disaggregated. While some of this difference could be related to the poor performance of age as a proxy for experience for

women, some may be related to the fact that women earning wages were on average seven years younger than men—almost a cohort younger.

4. In any case, the capacity constraints are gradually being addressed, and the future effects on economic growth and poverty reduction have yet to be measured. See Fox and Liebenthal (2006) on this issue, and World Bank (2006f) for a discussion of the experience of Uganda.
5. While higher-income countries usually experience decreasing returns to education, this is not the case in low-income Africa. Appleton, Hoddinott, and Mackinnon (1996) find that the returns to education rise with its level. Other studies that find increasing returns to education include van der Gaag and Vijverberg (1989) for Côte d'Ivoire; Mazumdar (1994) for Kenya, Zambia, and Zimbabwe; Jensen and Westergard-Nielsen (1996) for Zambia; and Söderbom and others (2003) for Kenya and Tanzania. Furthermore, Schultz (2004) reports that most of the annual returns for primary education are in the single-digit range and are monotonically increasing for almost every subgroup.
6. On the wage regression for 2002, the coefficient for completed primary education was 0.5, while for completed secondary it was 1.1 (Fox, Bardasi, and Van den Broeck 2005).
7. The coefficient on having a wage job is also positive. Thus, while the rate of return to primary education in a wage job is very low compared with having secondary schooling, for example, the rate of return on just getting into the "formal" sector (the result of having a primary education) is positive.
8. Good examples of these reform programs are found in Ethiopia, Mozambique, and Namibia.
9. In Asia, the estimated loss as a proportion of the labor force in 2010 is only 0.7 percent and in Latin America 1.5 percent, and by 2015, 1.2 percent and 1.9 percent, respectively (ILO 2004b).

CHAPTER 4

Consequences: The Growth of the Informal Sector

All across Sub-Saharan Africa, as the labor force has grown and wage job creation has stalled, job seekers have moved into nonagricultural entrepreneurial economic activities—often referred to as informal sector work. In Africa, the informal sector is mostly very small–scale nonagricultural economic activities, with the form of employment characterized as either self-employment or as a worker in a family business. Often the activity is based in the household, but in urban areas these activities take place at premises outside the household as well. Examples of this type of informal sector activity in the industrial sector include small-scale manufacturing (for example, processed food, charcoal, furniture, baskets, garments, or handicraft products); and in some countries mining activities are done informally. However, the largest sector in all countries is the provision of a broad range of services such as barbering, repair, food service, street vending and other trading activities, and telecoms (mobile phone kiosks).

The informal sector is a very broad term. Typically, usage includes both small to medium firms that employ wage labor but are unregistered, and the household enterprises described above (see box 3). The line between the informal sector and wage and salary, or *formal sector*, jobs is blurry because some household businesses grow to have a few employees outside the family, and eventually even become registered

Box 3

Definitions and Classification of the Informal Sector

The development economic literature is full of definitions of the informal sector. As described in Ruffer and Knight (2007), the characteristics of the informal sector include ease of entry, reliance on indigenous resources, family operations of business, small scale of production, labor intensive and adapted technology, skills acquired outside school, and the bypassing of regulations. The official definition of the informal sector adopted by the Fifteenth International Conference of Labor Statisticians in January 1993 is

> a group of production units, which, according to the definitions and classifications provided in the United Nations System of National Accounts (Rev. 4), form part of the household sector as household enterprises or, equivalently, as unincorporated enterprises owned by households. (Ruffer and Knight 2007: 1)

This definition, which focused on the production unit, was subsequently modified to include those who work "informally" regardless of whether the enterprise is formal or informal—in other words, a focus on the worker, and the rights of the worker. Of course, these definitions often overlap. It is convenient to divide the concepts according to those defined by the relationship of the *place of economic activity to the state* and those defined by the *relationship of the worker to the state*. Therefore, informality can be defined according to

Characteristics of the Firm

- size of the firm
- registration status of the firm
- tax payment by the firm
- compliance with the labor code

Characteristics of the Job

- coverage by social security provisions
- security of income, including existence of a legal contract (permanent or temporary)
- presence and participation of trade unions; trade unions tend to exclude informal sector workers
- provision of other types of benefits

Depending on the question of interest, either definition can be used. Often a combination of both characteristics of the firm and the job are used, without a clear statement of what the criteria are or why.

Voluntary vs. involuntary informality. The confusion about the definition of informality leads to alternative normative views on the informal sector:

- Focusing on the characteristics of the job, one view holds that the informal sector is a residual, absorbing the labor force that cannot be employed in the formal sector. In this case, informal employment (including self-employment) is viewed as involuntary, implying that the formal sector presents higher wages and better working conditions to which all workers seek (and perhaps should have) access.
- Focusing on the characteristics of the firm (or a compact between the firm and the workers), an alternative view classifies the informal sector as dynamic and voluntarily chosen, either by the worker or the owner. In these cases, voluntary informality is linked to associated lower costs of operation in the informal sector, or it can be a response of small enterprises to overregulation or union-induced rigidities and high labor costs, or a choice by individuals who want the freedom and flexibility of working for themselves or their families (Ruffer and Knight 2007).
- Both theories find validation in different countries. In many African countries, involuntary informality is linked to the fact that wage employment could not keep up with the rapid increase of the labor force. Voluntary informality has been documented mainly in Latin America, where inflexible and inefficient labor codes encourage household businesses and firms to operate in the informal sector, and where formal sector jobs offer limited flexibility and few opportunities for advancement. In some cases, the informal sector contains both voluntary and involuntary employment, as is the case in Zimbabwe, where entry into the most productive part of the informal sector was restricted by lack of skills and capital.

Understanding the nature of the informal sector is vital for the design and implementation of appropriate policies to improve incomes for labor force participants in this sector (Ruffer and Knight 2007).

Source: Authors, based on Ruffer and Knight (2007).

firms. If the employees of the business are paid a daily wage or a regular salary, they can slide into the formal sector, depending on the usage. This paper segments the labor market between those who sell their labor to someone outside the family, earning a wage or salary (*wage job holders*), and those who sell their labor to themselves or their families, and typically do not earn a wage, but rather share in the proceeds of the business (*household enterprise workers in the informal sector*). We recognize that our informal sector—really, the household enterprise sector—excludes some workers that others would include in the informal sector, if a rights-based definition or a tax-based definition were used. However, the household enterprise sector is the fastest growing sector in most African countries and, we argue, has specific characteristics regarding the level and variability of earnings and regarding opportunities and risks that make it quite different from wage and salary jobs in small, unregistered enterprises that would be included in a broader definition.[1]

Informal sector activities can be found in both rural[2] and urban areas, but informal sector employment growth, and the policy focus, has been predominantly in urban areas. This is illustrated by Burkina Faso, Cameroon, and Senegal, where more than 65 percent of the informal sector was in urban areas in 2001 and 2003. Furthermore, for the countries in table 6 (with the exception of Mozambique), the portion of the urban labor force employed in the informal sector is higher than 40 percent, reaching levels as high as 70 percent in Senegal. In contrast, the portion of the labor force in rural areas employed in the informal sector tends to be much lower, varying from 3.5 percent in Mozambique to 18.7 percent in Uganda.[3]

The share of the informal sector in total employment has grown explosively in the last decade or so. In Ghana, from 1987 to 1998 the most important source of jobs in urban areas was self-employment (Teal 2005);

Table 6. Informal Sector Share of Labor Force by Area

		Informal sector share of total labor force (percent)		
Country	*Year*	*Urban*	*Rural*	*Total*
Burkina Faso	2003	42.7	3.7	9.6
Cameroon	2001	50.9	10.6	22.3
Mozambique	2002	28.1	3.5	11.1
Senegal	2001	69.4	11.3	30.0
Uganda	2002	54.1	18.7	24.0

Source: Authors' calculations.

in Uganda, the informal sector grew from 2.6 percent of the labor force to 17.0 percent between 1992 and 2002 (World Bank 2006f). In Burkina Faso, with the CFA franc devaluation, real incomes declined and households increased their supply of labor in informal services, with the majority of new jobs created in informal trade (Bernabé and Krstić 2005). In urban areas of most Sub-Saharan African countries, informal sector employment dominates the formal sector: in 2001 in Senegal, the percentage of the total labor force employed in the informal urban sector was almost three times as large as the percentage of those in the formal urban sector, and in 1998 in Ghana, the percentage in the informal urban sector was more than twice as large. Some countries have observed fast growth in rural areas as well. In Burkina Faso, Ghana, Mozambique, and Uganda, as labor left agriculture, it entered the nonfarm rural sector. This has translated into a quickly growing rural nonfarm sector, sometimes even surpassing the share of workers in the urban informal sector, as was the case in Uganda (table 7).

Table 7. Labor Force by Sector and Rural vs. Urban Area, Ages 10 and Above
(percentage of labor force)

	Burkina Faso			*Cameroon*			*Mozambique*		
	1998	*2003*	*Avg. annual growth*	*1996*	*2001*	*Avg. annual growth*	*1996*	*2002*	*Avg. annual growth*
Agriculture	88.0	83.9	0.0	62.7	58.6	2.2	81.9	77.4	–0.9
Formal	4.5	6.5	8.8	15.0	19.1	8.7	8.2	11.5	5.8
Rural	0.9	1.9	17.5	6.6	7.0	5.1	2.8	3.1	1.3
Urban	3.6	4.6	6.2	8.5	12.0	11.2	5.4	8.4	7.8
Informal	7.5	9.6	5.9	22.2	22.3	3.8	9.9	11.1	2.0
Rural	1.8	3.2	12.8	7.3	7.5	4.1	1.5	2.5	9.2
Urban	5.7	6.4	3.2	14.9	14.9	3.6	8.4	8.6	0.4
Total	100.0	100.0		100.0	100.0		100.0	100.0	
	Senegal			*Uganda*			*Ghana*		
	1994	*2001*	*Avg. annual growth*	*1992*	*2002*	*Avg. annual growth*	*1991*	*1998*	*Avg. annual growth*
Agriculture	61.4	59.3	2.2	78.0	62.2	–0.3	65.6	54.4	–1.4
Formal	9.1	10.6	4.9	13.0	13.8	2.7	12.4	13.7	2.6
Rural	1.5	2.8	12.0	8.3	8.8	2.6	4.6	5.8	4.7
Urban	7.6	7.8	3.1	4.7	5.0	2.5	7.9	7.9	1.3
Informal	29.5	30.0	2.9	9.0	24.0	12.5	22.0	31.9	6.8
Rural	5.9	7.6	6.4	3.3	15.9	19.3	9.3	14.6	8.0
Urban	23.6	22.4	1.9	5.7	8.1	5.7	12.7	17.3	5.9
Total	100.0	100.0		100.0	100.0		100.0	100.0	

Source: Authors' calculations.

In richer economies, slow job growth relative to supply shows up as unemployment. In poor countries in Sub-Saharan Africa, open unemployment has not yet emerged—increases in the urban informal sector appear instead. The exception is for youth, where the difficulty in making the transition from school to work has resulted in the emergence of open unemployment. The average youth unemployment rate in Sub-Saharan African countries is around 15 percent, reaching levels as high as 50 percent in some countries—a very high level given the low propensity to declare unemployment in household surveys (World Bank 2007b). But again, this number is unreliable because it reflects inconsistencies in how data are collected between countries (see box 1).

Both "push" and "pull" factors explain the growth of the informal sector in Africa. Clearly, many workers in urban areas enter the informal sector as a consequence of their inability to compete effectively for the few wage and salary jobs that open up in the private sector every year, owing to lack of education and experience. At least some postprimary education is usually required for a formal sector job. For workers who have not completed primary education, the employment choices are limited. In countries such as Ghana, however, where education levels are higher, many informal sector workers meet the education requirements for low-level formal sector jobs, but not enough jobs are being created (Adams 2007). Studies in Latin America also indicate that many urban informal sector workers prefer this type of activity, either because of the flexibility of the hours—especially important for women—or because of intrinsic preferences for independent work (Perry and others 2007).

Returns to urban informal sector activities are significantly lower than to formal sector work, and such activities usually offer less security of income and tenure. Earnings data are hard to collect on the informal sector because most of the employment is self-employment or employment as part of a family business, but where these data are available, the trend is always the same—lower earnings. In Uganda in 2002, the labor force survey classified wage workers according to whether their employment was permanent or casual—the latter being the closest category to informal employment. Analysis of these data showed that, controlling for sector of activity, education, and experience, casual wage employees had a 30 percent wage disadvantage for men and a 45 percent disadvantage for women. Another way to get at the difference in earnings is to compare household consumption per adult (as a proxy for earnings in the self-employment sector). In Ghana in 1998, households headed by private or public sector employees were only slightly better

off than the urban self-employed, but in Senegal in 2001, households headed by a wage employee were 25 percent better off than households in the informal sector.

In most cases, as employment in the urban informal sector grows, average labor productivity and earnings fall. This is consistent with the informal sector being a substitute for open unemployment. However, the figures in table 8 also show that in rapidly growing economies—which have sufficient demand for informal sector goods and services—earnings do grow. In Mozambique, earnings in this sector grew the fastest (from a very small base in a postconflict economy), as they did in Senegal and Cameroon. In Uganda between 1992 and 2002, earnings growth was slowest in the informal sector, and in Ghana and Burkina Faso, growth in earnings was negligible or negative.

Data are hard to come by, but to date there does not seem to be a trend in how average earnings move between the two sectors.[4] In Ghana and Tanzania, earnings of urban self-employed households increased at about 75–80 percent of the rate of income growth in private wage households during the 1990s. But in Ethiopia from 1994 to 1997, formal wage employees' income increased, while there was a decrease in median revenue for the self-employed (Kingdon, Sandefur, and Teal 2004) and, therefore, an increase in the gap between the sectors. This analysis does not control for human capital characteristics (either the initial level or the change).[5]

In the small but growing nonfarm rural sector (and for rural-to-urban migrants), a move into the informal sector seems to be related to pull factors. In most countries, average incomes in the informal sector are still at least 50 percent higher than those in agriculture. Data from a number of countries show that households whose main economic activity is in the informal sector have a lower-than-average rate of poverty—the highest

Table 8. Estimated Average Annual Growth in Earnings by Sector of Employment

Country	*Years of survey*	*Agriculture*	*Wage and salary job*	*Informal sector*
Burkina Faso	1998 and 2003	3.0	1.4	–1.5
Cameroon	1996 and 2001	0.8	2.8	6.8
Ghana	1991 and 1998	2.0	2.0	0.8
Mozambique	1996 and 2002	4.4	5.4	6.0
Senegal	1994 and 2001	0.4	–1.2	3.0
Uganda	1992 and 2002	3.7	4.4	1.8

Source: Authors' calculations using household survey data.
Note: Earnings are measured as total household consumption per labor force participant.

poverty rates are always in agriculture. Having a family member earn income in the informal sector both reduced risk through income diversification and usually raised household income. In Mozambique between 1997 and 2002, nearly 40 percent of the increase in rural incomes was attributed to earnings from nonfarm small businesses. This shift into rural nonfarm activities was especially important for the higher income groups. Some 15 percent of total income in the rural sector came from nonfarm enterprises in 2002, but 27 percent of income in the highest quintile came from this source. Studies using Ugandan household survey panel data showed that two-thirds of those who started and ended the decade in nonagricultural self-employment had no spells of poverty during the period, compared with only 13 percent of those who started and ended the decade in agricultural self-employment. These data suggest that moving into the informal sector does not always work out, but the chances are better than in agriculture. As long as this differential persists, the labor force will move to the informal sector to escape poverty, even if the work is hard and the days are long.

Evidence suggests that workers in the informal sector have less education, which helps to account for lower earnings and limited mobility. Lautier (2000) found that 76 percent of informal sector workers in Mali did not have any education (cited in ILO 2002b), and a 1999 survey in Kenya showed that 85 percent of workers in the informal sector had received no training at all (cited in ILO 2002b). This suggests that most workers in the informal sector could not compete successfully with workers in the formal sector, for formal sector jobs in any case. Thus, the question of whether job seekers have been "forced" into the informal sector in some countries is moot.

This education deficiency is difficult to address once it develops. Technical and vocational training could be one route, if these programs were oriented toward workers in the informal sector. In Tanzania, once the focus of a training program was shifted out of wage employment into local opportunities for rural self-employment, outcomes were much more successful; this result has been observed in other countries as well. Verner and Verner (2005) studied the impact of the labor force training program for the informal sector in Côte d'Ivoire and found a positive economic impact for women, the agricultural and electronics sectors, and firms employing one to three individuals or firms with 10 or more employees. Adams (1991: 60) provided a nuanced view, noting that "simply providing skills training for the informal sector employment has been less effective than providing training as a complementary

service in more complex programs that give clients access to credit and market advice."

In countries with strong economic growth and poverty reduction, growth of the informal sector clearly has been a driver of poverty reduction for those in the labor force moving out of agriculture, and an alternative to unemployment for those in urban areas. It is less clear whether the informal sector has also been a driver of output growth in Africa, and thus the future of this sector to absorb labor in productive activities is in doubt. A recent study of the growth of the rural nonfarm sector in low-income countries concluded that this sector was not a driver of growth, but rather fed off growth in the agricultural sector, primarily through a consumption linkage from the cash sale of crops in agricultural households, but also by putting the savings from the sale of agricultural harvests to work (Haggblade, Hazell, and Reardon 2007). In urban areas, the informal-formal sector linkages in Africa are not well documented.

Given the volume of people projected to be moving into the labor force in Africa over the next decade and the fact that average earnings in the informal sector are still above the average in the agricultural sector, both the urban labor force and the urban informal sector are likely to continue to grow throughout Sub-Saharan Africa, even in the best scenarios of growth in demand for labor in large manufacturing firms. The task of improving the quality of growth through more stable, higher income–earning economic activities calls for efforts to improve the productivity of both the informal and formal sectors—focusing on one will not be enough.[6] Higher levels of education in the labor force as a whole will mean higher human capital in the informal sector. Policies and programs are needed to ensure that this human capital is fully employed, through improving access to capital, inputs, and markets. Understanding the links between the two sectors is a key issue for future policy-oriented research. The core problem is to ensure that informal sector employment continues to be a route out of poverty, possibly by exploiting these links.

Notes

1. Specifically, in our analysis of household survey data, labor force participants are classified as in the informal sector if *they are engaged in nonagricultural economic activity for which no daily wage or regular salary is provided*. This definition of the informal sector includes those classified in household surveys as domestic and unpaid family workers who live in urban areas. (Domestic and unpaid family workers are classified as being in the agriculture sector if they

live in rural areas.) We recognize that this may be a somewhat idiosyncratic definition, but it fits an analysis based on household surveys, and from a poverty reduction perspective creates a more homogeneous group than broader definitions. See Canagarajah and Sethuraman (2001) for a review of the concept and estimates of the size of the sector in Africa using broader definitions.

2. In this paper, the informal rural sector is referred to as the "nonfarm" sector.
3. Countries have not adopted consistent definitions of "rural" and "urban" areas.
4. Various models provide an analytical framework predicting how earnings in these sectors are determined, the most famous being the Harris-Todoro. The data cited here are not meant to be evidence for any particular model, but rather are consistent with several. See Fields (2005) for a review of these models.
5. We classified households by the occupation of the head (wage and salary, self-employment or family business nonagricultural, and agriculture). Earnings were then estimated as the average for the household, which is total household consumption divided by the number of adults in the labor force. There are no controls for endowments such as education.
6. Given the predominance of the informal economy in developing countries, some researchers believe policies should focus on improving the welfare of those in the informal sector, rather than trying to formalize the sector. Interventions, therefore, would be aimed at promoting productive informal sector activities, and would focus on weakening the barriers to entry into informal sector activities. Governments could cultivate an environment favorable to business, provide credit for the self-employed and small businesses, and create policies that would facilitate the acquisition of technical and business skills (Ruffer and Knight 2007).

CHAPTER 5

Conclusion: The Prospects for Better Outcomes

The experience since the mid-1990s in Sub-Saharan Africa offers both hope and pessimism. Poverty reduction has taken place in economies that have been able to sustain strong per capita income growth; in others, poverty has stayed constant or increased. Labor market outcomes, even in fast-growing economies, have been disappointing for the most part, given the aspirations of many in the urban labor force for the reliable income stream usually provided by wage and salary jobs. The reasons are complex, and mostly lie outside the labor market, but the sheer size of the problem demands a search for underlying causes. Key elements are the demographics of the labor force in Africa, the weak growth policies that many countries have pursued, the structure of growth in those economies where high growth has been attained following the reforms of the previous decade, the poor investment climate for the private sector, and the quality of the African labor force—despite major efforts to reduce the education and skill deficits.

Amid this gloomy picture is some good news. First, the pain of the public sector restructuring seems to be over; it is now much more likely that growth will translate into net increases in wage and salary jobs. Countries such as Cameroon, Senegal, Tanzania, and Uganda created private wage jobs faster than their rates of labor force growth; this trend can be

expected to continue without the shadow of private sector job losses. Despite strict labor regulations, African labor markets are still flexible, and these regulations do not yet seem to have been a major obstacle to job creation. Countries such as Ghana, Kenya, Lesotho, and Uganda have been able to steadily raise the education level of their labor forces through policies promoting universal access to schooling, which improves the quality of labor supplied. Although Africa's labor market institutions are immature and ineffective in many ways, they are not seen as a hindrance to job creation. Finally, evidence from a number of African countries suggests that even though both average earnings and the growth of earnings are lower in the informal sector than in wage and salary jobs, both sectors can contribute to poverty reduction.

Looking forward, what are the lessons for countries wanting to realize the aspirations of their growing, mostly urban, nonagricultural labor forces?

- *Recognize the dimensions of the problem caused by the projected rapid labor force growth*.[1] Improving access to reliable means of birth spacing and family planning is an urgent growth and poverty reduction issue for many African countries, and will have positive benefits in the long term. For the current generation already born, it is difficult to envisage a strategy that would ensure that all new entrants get a wage and salary job. Expectations need to adjust and attention needs to be placed on helping the informal sector continue to be a source of poverty reduction.

- *Lower the costs of doing business and of creating jobs in urban areas for large, labor-intensive firms*. Most empirical analysis suggests that the main obstacles are not labor market policies, but the costs of doing business (that is, transacting with the government), and the cost of living and operating a business (that is, high infrastructure costs), which raise the costs of food and transportation, pushing up African wages relative to competitors (in nominal dollars, but not in purchasing power parity). However, as other constraints are addressed, labor market regulations may become important. In the one country where this happened, Mozambique, the problem is being tackled through new legislation, which shows that this issue can be addressed when it is the binding constraint.

- *Reduce the skill deficit across the board*, not just for boys and not just for the wealthier populations in urban areas. Countries need to understand the skill needs of private sector firms and make sure that public

and private education systems turn out graduates that meet these needs. Surveys of private firms indicate that this is not the case in Africa. At the same time, governments need to ensure that all children have access to a quality primary education, which clearly pays off through higher consumption and better health and nutrition outcomes.

- *Ensure that the very small informal sector (including the rural nonfarm sector) remains a route out of poverty.* This means pursuing policies to ensure that job creation and income growth in the formal and informal nonagricultural sectors are linked in a positive way that supports sustainable shared growth. Most studies find the links are on the consumption side because this small sector is dominated by the production and retail sale of consumption goods. Africa is rife with pilot and small-scale projects targeted at this sector. Analysis is needed to identify policies and programs that have the potential to achieve this goal on a larger scale.

- *Collect reliable data on labor activities, outcomes, and welfare at the household level,* and on labor demand at the firm level. The current stock of data is inadequate for monitoring trends in these variables, and even worse for identifying the underlying dynamics and analyzing the results of policies and programs. At a minimum, African countries should be collecting integrated household survey data at regular intervals that cover both economic activities of household members and consumption (as a way of measuring earnings and poverty status). Firm surveys are needed to analyze changes in labor demand and wages in the formal sector.

Note

1. Some have been assuming that the tragedy of HIV/AIDS will wipe out the employment problem. This is not true. In Uganda, where HIV/AIDS prevalence has been around 10 percent for at least 15 years, annual population growth is 3.3 percent and the labor force is growing at 3 percent per year. In many high-prevalence countries, the urban labor force is getting access to treatment, which will support their continued participation in the labor force—and they will need productive employment.

APPENDIX

Measuring Labor Force Participation in Africa: A Conundrum

Given the variety of activities that may be done in a day in Africa, as well as seasonality, measuring the labor force participation rate (LFPR) as defined in the labor economic literature—a discrete condition, that is, something that is or is not present—is almost impossible. This means that many empirical techniques used in labor market analysis, such as the Heckman wage estimation (which requires a two-step estimation of wages based on the labor probability of labor force participation) cannot be employed using African data because labor force participation is not measured consistently and reliably in repeat surveys in countries, much less consistently across time. Below is an example for Tanzania.

Differences in Measured LFPR between the 1991 and 2001 Tanzanian Household Budget Surveys

According to table A1, there was an increase in the percentage of heads of household who were "not active" between 1991 and 2001, especially in Dar es Salaam. This result is counterintuitive; in an economy where income and earnings are generally too low, being nonproductive is normally considered a luxury, especially for heads of household.

Table A1. Economic Activity of the Household Head by Area and Year of Survey, Tanzania

	Dar es Salaam		*Other urban areas*		*Rural areas*		*Mainland Tanzania*	
Activity	*1991–92*	*2000–01*	*1991–92*	*2000–01*	*1991–92*	*2000–01*	*1991–92*	*2000–01*
Farming, livestock, fishing	3.4	5.4	41.9	31.0	87.1	83.2	75.2	70.1
Employee, government	19.3	7.0	19.0	9.3	5.0	2.7	8.0	4.0
Employee, parastatal	25.8	7.2	7.0	3.2	1.3	0.5	3.7	1.4
Employee, other	18.5	28.3	6.3	14.9	1.1	2.8	2.9	6.3
Self-employed with employees	28.4	11.5	20.9	6.4	3.1	1.5	7.3	2.9
Self-employed without employees	1.1	29.6	1.0	27.0	0.2	4.0	0.4	9.2
Unpaid family helper in business	0.1	0.2	0.1	0.5	0.0	0.8	0.0	0.7
Homemaker	2.1	4.6	2.0	2.4	0.1	0.7	0.5	1.3
Student	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not active	**1.2**	**6.3**	**1.7**	**5.2**	**2.2**	**3.8**	**2.1**	**4.2**
Total	100	100	100	100	100	100	100	100

Source: NBS 2002: 57.

Note: The Household Budget Survey 2000/01 final report notes that the information on noneconomic activities is not comparable (noneconomic activities are less comparable than economic activities).

How Were the Questions Asked in Each Year and How did it Influence the Results?

The main reason for the discrepancy in the data was that the question for economic activities was different in the two surveys, which would induce respondents to give different answers, depending on the question and year. Below are the questions as they were posed in each survey:

> **1991, Question 8a:** *"Did you do any of the economic activities listed above?"* [The list showed only economic activities.]

The above question had two steps: first, respondents would provide answers about their "Economic/Productive/Money-Raising Activities," and in a second question they would provide answers about "Noneconomic/Non-Money-Raising Activities."

> **2001, Question 8:** *"During the last 7 days what was your main activity?"* [This question does not distinguish between economic and noneconomic activities.]

In 2001, in contrast, information on economic and noneconomic activities was collected in one step, with one question covering both economic and noneconomic activities. Therefore, in 1991 the respondent was more inclined to choose an economic activity. The increase in inactivity for heads of household appears to reflect the difference in how the questions were asked in 1991 and 2001, as opposed to a change in the actual LFPR.

The Issue of Main and Secondary Activities

The 2001 survey also asked about secondary activities, but included economic and noneconomic activities in the same question (that is, it followed the format of the one for primary activities). The 1991 survey did not. This is clearly another reason for the decline in those reporting their status as economically active in 2001. We can see this in the cases in which the respondent had a noneconomic activity as the "main activity" and an economic activity as the "secondary activity" (table A2). In the case of students, this was helpful because we could more easily identify those who combined work with school: 7.6 percent of respondents answered their main activity was "Student," a noneconomic activity. However, 4 percent (that is, 53 percent of "Students") do perform an economic activity (Unpaid family helper in business), which they classified as secondary. The economic activity of these respondents would not be captured if only main activities were analyzed, but could have been captured in 1991.

Table A2. Main and Secondary Activities of Adults in the Last Seven Days

	Secondary						
Main	*Farming, livestock, fishing*	*Employed or self-employed*	*Unpaid family helper in business*	*Housewife/ household chores*	*Student*	*No secondary activity*	*Total*
All adults 15–60:							
Farming, livestock, fishing	1.5	6.4	8.5	22.0	0.0	23.3	61.8
Employee, government	0.5	0.2	0.1	0.3	0.1	0.8	1.9
Employee, parastatal	0.1	0.0	0.0	0.0	0.0	0.5	0.6
Employee, other	0.4	0.2	0.3	0.5	0.0	2.6	4.0
Self-employed with employees	0.2	0.0	0.1	0.2	0.0	1.3	1.8
Self-employed without employees	0.7	0.1	0.5	1.1	0.0	3.3	5.7
Unpaid family helper in business	0.2	0.1	0.1	0.2	0.0	3.4	4.1
Housewife/household chores	0.8	0.4	0.4	0.2	0.0	6.5	8.3
Student	0.6	0.1	4.0	0.8	0.1	2.0	7.6
Not active	0.1	0.0	0.2	0.3	0.0	3.6	4.1
Total	5.1	7.6	14.2	25.7	0.2	47.3	100.0

Source: NBS 2002: 148.

Women's Economic Activity

African household surveys are particularly inconsistent in measuring women's labor force participation. Not only are definitions not consistent across the continent, they are usually not consistent over time in the same country. In the Tanzania Integrated Labour Force Survey 1991–92, the definition of economic activity excluded fetching water and collecting firewood for home consumption, while in 2001 these activities were included in economic activities. This change does not seem to have been implemented, or was potentially overwhelmed by the other changes in the questionnaire. If it had been fully implemented, we would expect an increase, not a decrease, in women reporting an economic activity. However, we do see that of the 8.3 percent of women who reported being nonparticipants because they were doing housework, over 20 percent reported a secondary economic activity. In addition, because girls are more likely than boys to report domestic chores as their primary or secondary activity, if the definition of this category is fuzzy, it is more difficult to understand why the youth is not in school—whether the constraints are growing food, or fetching water, or looking after children. The policy responses for the first issue would be different from responses for the second one.

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Governments in Africa and their stakeholders have been disappointed with the number of wage and salary jobs that have been created over the last decade or more. Even in countries that experienced both strong economic growth and rapid poverty reduction during this period, job creation has lagged behind expectations. Faced with a rapidly growing labor force, Africa has to find new ways to create better paying jobs.

Working Out of Poverty: Job Creation and the Quality of Growth in Africa reviews the literature and presents original research by the authors analyzing job creation in Sub-Saharan Africa in light of economic performance over the decade and more since 1995. The book identifies factors that impact job creation, both inside the labor market (such as labor supply and demand) and outside of it (overall investment climate).

Working Out of Poverty focuses on the following key questions: How has the structure of economic growth and labor demand shaped the job creation process? What policies have been pursued to raise the quality of the African labor force? What does the expanding "informal" sector mean for the labor market and the quality of growth? Is it a route out of poverty or a low-skills trap?

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