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WORK IN PROGRESS: Job Creation and the Quality of Growth in Africa

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INTRODUCTION

AFTER more than ten years of falling 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 an expansion of the domestic private sector. Poverty reduction has accompanied this growth, but owing to the depth of the recession, Africa still has the worst poverty reduction record of any developing country 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

<i>Region</i>	<i>1990</i>	<i>2001</i>	<i>2015</i>
East Asia and the Pacific	29.6	14.9	0.9
Eastern 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 America	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 2005c.

Most poor households derive their income from selling their labor either to themselves or to others, – so creating opportunities for people to earn more money faster is the key factor in increasing the impact of economic growth on poverty. For African governments faced with a swelling urban labor force, 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 Africa 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—in other words, if the creation of wage and salary jobs remains sluggish—poverty reduction and social stability could be at risk.

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, North Africa is excluded, as are Botswana and Mauritius. When the terms “Africa” or “Sub-Saharan Africa” are used in the paper, they mean this selected group of lower-income countries.

This paper explores the economic and job creation performance in Africa over the past decade, recognizing that some standard labor concepts are difficult to apply to conditions prevailing in Africa (box 1).² Our intentions are to identify the economic factors behind both poor and 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 (as discussed in section 1 on the context for job creation).
- Has rigidity in African labor markets impeded job creation (section 2 on the constraints on demand).
- How have the quality and quantity of labor supplied affected job creation and what policies have been pursued to raise the quality of the African labor force (section 3 on the conditions in the labor force).
- What does the expanding “informal” sector mean for the quality of growth—is it a low skills trap or a reservoir for private investors (section 4 on the consequences of growth in the informal sector).

Throughout the paper, our focus is on the factors, exogenous and endogenous, that are linked to these trends, and the implications that these factors may have for raising the quality of Africa’s economic growth. We highlight those countries that have reversed many of the vicious cycles underlying Sub-Saharan Africa’s generally poor performance on job creation, and we point out some of the lessons these experiences offer all stakeholders in meeting the growth and poverty reduction challenges of the future. We conclude that Africa’s poor performance record has in part been an inevitable result of the colonial heritage and the ensuing policies pursued, including those leading up to the debt crisis and the subsequent policy reforms. In most countries, these costs have been paid, and the future looks brighter as a result.

Although 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 private wage and salary employment and by increasing the quality of the labor supplied. Given 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—government policy needs to focus on this sector as well. Developing effective institutions of labor relations will also help the job creation process.

² By “job,” we mean the condition by which workers sell their labor services to someone other than themselves or their family 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, we often refer to these in the paper as “wage and salary” jobs. Often, these jobs are also referred to as “formal sector jobs,” and other (non-formal) activity referred to as “informal sector jobs.” This nomenclature is often the cause of confusion, because (a) “formal sector” usually refers to the characteristics of the employer (e.g., registered or legalized in some way or public), not the job. Since most employment analysis in Africa uses household survey data, the characteristics of the private employer usually unknown—one only knows the characteristics of the job; and (b) the informal sector is then either the rest of total employment or only nonagricultural, nonformal employment. As the term is often used without definition or clarification, another source of confusion arises.

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. One reason is that, with 80 percent of the labor force self-employed, these concepts are not observable. A job (employment), an enterprise, and a household are often one and the same. The low observed unemployment rate in countries such as Uganda (7 percent) is not an indicator of a tight labor market, but rather a measure of the low level of urbanization and the poverty of urban households who can not afford to be 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 a highly urbanized labor force, such as Senegal (48 percent urban), Mauritania (60 percent urban), and the Republic of Congo (Brazzaville, 66 percent urban).

Labor force participation is also a meaningless concept in a subsistence economy. This is because (a) employment is not something the labor force goes to as a distinct activity; economic tasks, such as growing food, collecting wood, or fetching water, are done simultaneously with noneconomic ones, such as caring for children; and (b) economic activities, especially agriculture, are seasonal, so that unemployment in the classic sense, where a job search is required, does not fit this situation (nor would the standard remedies).

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 way. It is not surprising, therefore, that labor statistics produced from national sample surveys are rarely comparable across countries.

1. CONTEXT: THE ECONOMIC ENVIRONMENT FOR JOB CREATION

The efforts of Sub-Saharan African governments to promote the creation of well-paid 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 2006).³ While fertility rates in Sub-Saharan Africa have decreased from an average of 6.1 births per women in 1990 to 5.2 in 2003, fertility is still very high, indicating that Africa is only at the beginning of the demographic transition. The percentage of the population of working age in Africa is 50 percent, and the median age is 17 years. The HIV/AIDS epidemic is expected to lower these ratios even further in the future, both by reducing the population of working adults and increasing fertility rates.

This young and rapidly growing population has meant that African labor markets are flooded every year with new job seekers, especially in the cities. Overall, the average annual labor force growth for 1990–2003 was 2.5 percent per year (World Bank 2005), but the urban population is rising *at nearly double this rate*, reflecting a high level of rural-urban migration (Kessides 2005). Large Africa cities, such as Lagos, are growing at 6 percent per year—an almost impossible population to absorb. This high rate of urbanization is partially caused by the lack of opportunities in agriculture, as the high rate of 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. Urbanization is expected to increase further; by 2015 almost 50 percent of the total labor force will be in urban areas (ILO 2004).

WAGE AND SALARY EMPLOYMENT

These urban job seekers have, for the most part, had a very difficult time finding jobs. For most countries, there has been some job expansion in the formal sector, 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 the stagnation of the proportion of workers in formal wage employment. In the early 1970s in Zambia, nearly

³ While population growth rates in some African countries are high (such as Uganda's whopping 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.

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 very scarce and rarely comparable.

A few countries did manage to do better. In Uganda between 1992 and 2002, the labor force grew at 2.8 percent a year, while wage and salary employment grew at 3 percent a year (World Bank 2006b). In Ethiopia, data from a panel survey of the urban labor force—meaning that it does not include new entrants, so the data on job growth are biased upward—shows 2.2 percent annual average job growth over the ten-year period 1994–2004 (World Bank 2006c). In Burkina Faso, after a long period of decline, wage and salary employment grew by 6 percent per year between 1998 and 2003. Senegal also managed to get rapid growth of wage and salary employment: 9 percent per year for 1994–2001 (table 2).

But in all cases except Senegal 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 came from a very low base. For example, in Burkina Faso, 6 percent growth per year for five years only raised the share of wage and salary employment in total employment from 2.9 percent to 3.7 percent (World Bank staff estimates), while 18 percent of the population lives in urban areas (World Bank 2006d). Ghana had a higher share of wage and salary employment in 1980 than in 1990 (Dabalén and others 2002), but then in the 1990s experienced job growth of 8 percent a year (World Bank staff estimates). This 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 2006d).

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

Country	Years	Average Annual Growth		
		Labor force	Wage and salary employment	GDP per capita %
Burkina Faso	1998–2003	2.0	6.0	1.9
Cameroon	1996–2001	2.1	5.7	2.4
Ghana	1991–1998	3.3	8.2	1.6
Mozambique	1996–2002	1.8	-1.8	6.6
Senegal	1994–2001	2.8	9.4	2.0
Uganda	1992–2002	2.9	3.0	3.7

Source: Calculated using World Bank data.

ECONOMIC GROWTH AND STRUCTURE OF GDP

Africa's uneven and heterogeneous performance on job creation reflects its uneven growth record. After growing at 5 percent a year in 1960–73, growth slowed to 2.7 percent 1990–99 and 4.3 percent from 2000–04 (World Bank 2006d). Countries with poor economic growth have had little or no job creation. Excluding South Africa, about 21.3 percent of the Sub-Saharan Africa population lives in countries that have had ten years of weak growth; these countries had no chance of creating net new jobs. These include countries such as Cote d'Ivoire, the Democratic Republic of the Congo, and Burundi, which are caught in a devastating downward spiral of conflict, debt, and destruction. Another 31 percent 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 the growth is poor in terms of job creation and poverty reduction. Only 37.4 percent of the population lives in countries with a sustained, nonmineral sector growth rate well above the growth of the labor force. Many of these (e.g., Ghana and Senegal) are countries where wage and salary job growth has been strongest.

Nevertheless, a paradox remains. Why, in countries with over 4 percent a year growth and poverty reduction, is job creation weak compared with, for example, East Asia? One reason is the structure of African economies and their economic growth over the past two decades. Sub-Saharan Africa agriculture's share⁴ in GDP was 26 percent in 2003 (World Bank 2006e), higher than in any other region of the world, and it is even more important in fast-growing but low-income countries, such as Burkina Faso (31 percent of GDP in 2004) and Uganda (29 percent of GDP in 2004) (World Bank 2006e). In the last decade, the share of the labor force working in agriculture decreased in many countries; employment in agriculture as a share of total employment in Sub-Saharan Africa decreased from 70.1 percent in 1995 to 63.6 percent in 2005 (ILO 2006). This decrease in agricultural employment allowed for improvements in labor productivity and overall income growth for households in the sector. As the poor in Africa are overwhelmingly rural, the increase in agricultural productivity was one of the most important drivers of poverty reduction in these countries. In Mozambique, between 1996 and 2002 the growth rate of consumption per capita for households whose primary earner was in agriculture was 4.7 percent, in Burkina Faso (1998–2003) 3.9 percent, and in Senegal (1994–2001) 4.8 percent (World Bank staff estimates).

While the recent upturn in growth has continued the structural transformation of African employment and value added out of agriculture into higher-productivity sectors, the movement has been primarily into the service sector, so that this sector has emerged as the largest source of value added on the continent, representing 39 percent of GDP in 2003 (World Bank 2006e). 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 2005), but by 1995 it had fallen to 9 percent and has remained there (ILO 2006). Much of the expansion in 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 2005).⁵ Ndulu and O'Connell (1999) dub this phenomenon Africa's "delayed structural transformation."

⁴ Note that these figures exclude South Africa.

⁵ 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 Madagascar and Mozambique the share grew from 8 percent in 1994 to more than 11 percent in 2002, but for most Africa countries, the share of manufacturing value added in GDP remained flat over the past 20 years.

STRUCTURAL SHIFTS WITHIN WAGE AND SALARY EMPLOYMENT

A final reason for the weak wage and salary job creation performance is the nature of the adjustment policies countries undertook in the previous decade. The failure of the post-colonial 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 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,⁶ 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 job loss.

- In Kenya, the share of total public sector 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 Cote d’Ivoire public sector employment was 8.6 percent smaller in 1999 than 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 to 5.9 percent (Teal 2005); in Tanzania, the public sector share of wage and salary jobs fell from 73 percent to 50 percent. The case of Uganda illustrates the story nicely. Between 1992 and 2002, private sector employment grew at an annual rate of 4.8 percent—above the rate of growth of the 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 2006b).

The painful role of public sector restructuring in reducing the net job creation performance of African economies was a one-off event. Having paid this price, many African countries *should* be able to have a stronger job creation performance in the future, provided that they can achieve 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

⁶ In the early 1990s in Tanzania, Kenya, and Zambia, approximately half of the formal sector employment was in the public sector. Richer countries tended to have lower shares; in 1994 in Zimbabwe it was only 18% (Geest and Hoeven, 1999).

extensive economic and political reforms, and as a result achieved sustained growth and poverty reduction, shows that this is possible. Recent growth diagnostics studies,⁷ by exposing the factors behind Africa's past growth performance and laying out the challenges and opportunities for the future, offer strategies that have a track record of catalyzing broad-based, employment-generating growth. While each African country will need to adapt these strategies to its own conditions, the analyses provide the basis for hope.

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

2. CONSTRAINTS: THE 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 (the most recent example are the newly industrialized countries). 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). This is especially true for manufacturing, which 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 ICT (Information and Communication Technologies) in supporting the growth of a modern service sector as an alternative engine of economic growth and job creation. Chandra (2006) analyzes the case of India, where the outsourcing sector has created a raft of new urban jobs. Indeed, the growth of the modern service sector in Africa over the past ten 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. While 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 percentage of GDP was only 19.8 in 2006, compared with 36.3 in Asia, 23.1 in the Middle East, and 27.3 in other emerging and developing countries (IMF 2006). Low investment is a reflection of two factors: (a) low domestic savings rate, which creates 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.

⁷ These studies include *The Political Economy of Economic Growth in Africa, 1960-2000*, (AERC forthcoming) and Ndulu and others 2007.

Rapid expansion of jobs requires investment in large-scale enterprises, combined with technical knowledge to exploit opportunities for making profits. In Africa, these 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 Africa median (Botswana, 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 industry 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 and others, 2005). Some African countries have built very 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, as it has raised the incomes of small producers and small, commercialized growers, but it has not yet made a large contribution 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 conclude that the investment climate plays a very important role. African countries have been found to have a poor investment climate, which increases investors' perception of risk and reduces their willingness to finance activities in Africa.⁸ Although authors differ in their definition 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 environment, and rules such as 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

⁸ See Collier and Gunning (1999) for a review, as well as Batra, Kaufman, and Stone (2003). Regulatory environments are reviewed every year by the publication *Doing Business*, <http://www.doingbusiness.org/>.

would have generated new jobs. A poor investment climate also pushes down wages, because investors need a higher rate of return to be willing to enter riskier markets.

In Africa, the investment climate problems take a number of forms. In surveys of firms already operating in African countries (known as investment climate surveys⁹) the main obstacles to expanding business cited are corruption and high indirect costs, such as utilities, transport, finance, and taxes. These factors have a direct impact on the lack of well-paid 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 China, India, Nicaragua, Bangladesh, Morocco, and Senegal, 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 and others 2005). These high costs push down wages and squeeze profits.

African countries have taken steps to improve the business climate. 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, as there are usually a number of factors at work.¹⁰ Some cases are clearer, however. Through regional integration, Senegal has some of the cheapest and most reliable electricity on the subcontinent (Fox and Leibenthal 2006). As a result, Senegal's indirect cost as a share of total costs is low, and Senegal has had 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. In the rest of this section, we examine two avenues 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 the employer and employee that influence the ability of firms to adjust production and the size of their labor force in the face of external changes. In the following section we analyze the overall condition of the labor supply and the implication 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 (which may now be 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.¹¹ A review of the evidence suggests that aggregate wage levels in Africa have been able to adjust to external and internal pressures. On average, in terms of purchasing power parity, wages for unskilled

⁹ For more information about these surveys, see <http://iresearch.worldbank.org/ics>.

¹⁰ For example, does an increase in GDP provide the space to undertake certain reforms, or do the reforms create the increase in GDP?

¹¹ 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).

production workers in 1996–99 were lower than in 1983–86.¹² Wages for unskilled workers continued to rise on average throughout the 1980s, but began to fall after that.¹³ The trend for skilled workers is similar, even with the growing globalization of this market.

But there are still competitiveness issues. Despite recent wage falls, 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 Africa 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-type 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.¹⁴

Studies of the Côte d'Ivoire and other countries surveyed in Collier and Gunning (1999) found evidence that wages are quite 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 CFA countries, related to an overvalued fixed exchanged rate. Rama also finds that wages in the formal sector follow the fluctuations 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 persist. Firms in Kenya are 5 percent less competitive than firms in Ghana, but workers in these 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 and others 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 efficiency wage-setting mechanisms may operate in the largest firms in many African countries (Mazumdar and Mazaheri 2003). The gap is large (17 percent in Zambia, 15 percent in Cote 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 and others (2002) show that size effect is only in small part due to unobserved skills. Not only firm size, but 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

¹² Based on Occupational Wages around the World (OWW) Database and Freeman and Oostendorp (2000).

¹³ 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.

¹⁴ Leibenstein (1957) was the first economist to identify the role of nutrition and food prices in wage outcomes.

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 to finding workers with the qualities desired, and this is another negative feature of the investment climate.¹⁵

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 *Doing Business* indexes on hiring and firing workers (table 3). High mandatory benefits, social insurance, and labor taxes further raise costs.

Table 3: Indicators of Labor Flexibility, by Region

<i>Region or economy</i>	<i>Difficulty of hiring</i>	<i>Ridigity of Hours</i>	<i>Difficulty of firing</i>	<i>Average (rigidity of employment)</i>
Sub-Saharan Africa	44.3	52.0	44.9	47.1
<i>Niger (highest)</i>	100	80	50	77
<i>Uganda (lowest)</i>	0	20	0	7
South Asia	41.8	25.0	37.5	34.8
East Asia and the 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	45.2	27.4	33.3

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

The effect of labor regulation on the African investment climate is ambiguous. Despite rigid labor laws, firms report in surveys that labor regulations are less of an obstacle to investment and expansion than factors such as worker skills, infrastructure, and lack of credit. 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 to other factors, despite that fact that Mozambique's labor law was rigid, even by African standards. But in a 2006 follow up survey the same firms now 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

¹⁵ Anecdotal evidence supports this point. Indeed, part of firms' complaints about the skill shortage seems to refer to just this problem.

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 previously. This suggests that strict labor regulations may rise in importance as other constraints are addressed, and thus African governments should not be complacent about addressing this issue.

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 the trade union membership. Membership was concentrated primarily in the state-owned sector and had therefore gained substantially during the early post-independence period. Since the 1980s, trade union membership has declined in all countries.¹⁶

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 of reason is that implementation of labor standards is weak. The right to strike is very often violated in Sub-Saharan Africa, and freedom of organizations 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 and others (2002) found a very small union premium. However, in West Africa, analysis 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 and others 2005). With respect to the overall wage level, trade unions do not appear to have influenced the wage

¹⁶ For an elaboration of the points in this paragraph, see Mukandala, Fox, and Liebenthal (2004).

misalignment in CFA countries prior to the devaluation, nor were the benefits or high minimum wages often associated with union negative factors in post-devaluation adjustment. Thus we can conclude 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. 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 afterwards, compared with countries having more flexible institutions. The growth rate was estimated to be almost three percentage points lower in the rigid countries. Rama suggested that unions influence economic reforms more through political than economic channels (e.g., 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.¹⁷

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. Our 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. But evidence from Mozambique indicates that the rigidity of Africa's labor markets, compared with those of competitors, may become a factor in the future.

3. CONDITIONS: THE STATE OF THE AFRICAN LABOR FORCE

While 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, implying that supply factors do indeed impede investment and employment creation in Africa. To attract new investment in large labor-intensive production processes, countries need to ensure that their labor supply matches 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 improving productivity and reducing poverty. Workers with more education and skills are

¹⁷ In Mozambique, the union associations participated in designing a new, more flexible, labor law.

better able to adopt new technologies, which allows industries to “move up the value chain,” increasing total factor productivity and value added per worker (Chandra 2006). Better-educated workers can also command higher earnings and the opportunity to get and hold high-paying, stable jobs.

Moreover, education is not the only dimension to the quality of labor; health and maturity are also critical. Ill health increases worker absences 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 Africa workers is the lowest in the world. At independence, the colonial legacy left most Sub-Saharan Africa 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 ten years (Nehru and others 1995). Gross primary enrollment has increased from 73 percent in 1990 to 95 percent in 2002 (World Bank 2005). 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 Caribbean and 88 percent in South Asia (World Bank 2006)¹⁸

Country performance on increasing educational attainment has been uneven, pointing up once again the importance of policy in alleviating constraints to job creation. By providing nearly free and universal education, countries such as Uganda, Lesotho, Kenya, and Tanzania have increased enrollment rates dramatically, allowing the projected percentage of illiterates in the labor force to fall to less than 10 percent by 2015. Others, 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 percent to 26 percent of the male labor force illiterate by 2015 (UNESCO 2004). 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. But the most important impact may be the change in the culture of education in the country, moving from one of elitism to one of inclusion.

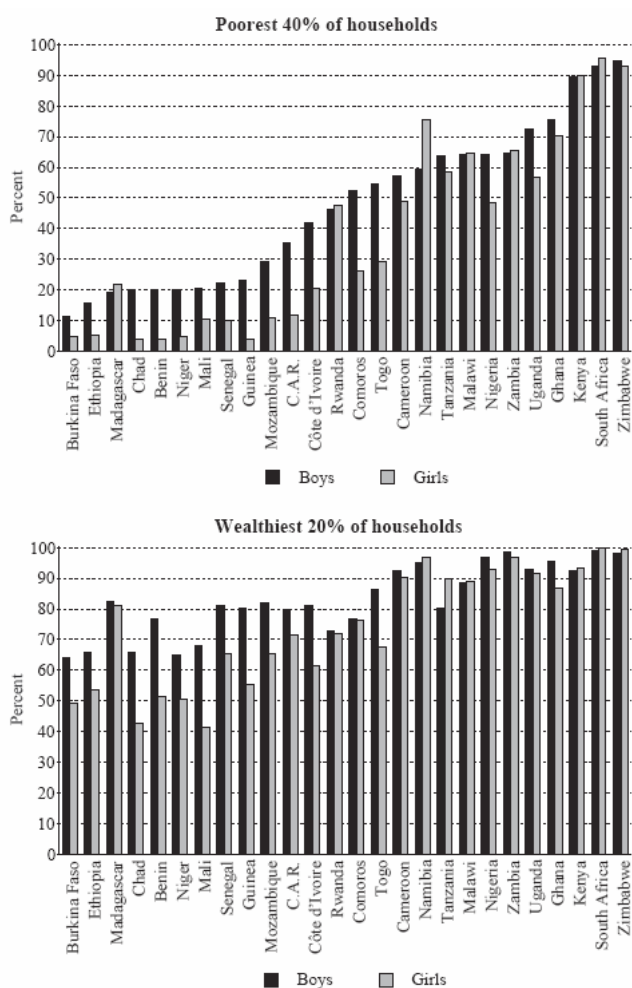
Universal education policies have been successful because they have brought into the system formerly excluded groups: children from poor households, especially those in rural areas and especially girls. In Uganda in 1992/93, the net enrollment rate for girls in the poorest quintile was only 41.1 percent, a gap of 34.2 percentage points from the

¹⁸ 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 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.

richest quintile. By 2002/03, the net enrollment rate for girls in the poorest quintiles had increased to 76.6 percent, narrowing the gap to 14.3 percentage points.

In most countries, children living in the wealthiest households were able to complete primary education. However, as figure 1 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 quintiles: 90 percent of the boys in the 40 percent poorest households have basic education, while 93 percent of boys in the wealthiest 20 percent of households have basic education. In Ethiopia, however, the poorest households have a significant 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 income, but show the results of different policy environments.

Figure 1: Percentage of Children Completing Primary Education, by Gender and Household Income



Source: Centre for Development Policy Research, University of London, 2005,

Net enrollment in secondary education has improved in some countries: In Ethiopia, from 1999 to 2005, net 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 2006e). 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 percent in 1992 to 54.6 percent in 2002 (ADEA 2003). 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 2006e).

The impact on jobs and 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 the 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, education policies must still address the large skills deficits still faced by many employers. These are reflected in the low 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. Most analyses of returns to education in African countries show increasing returns to education at upper levels of schooling, another indicator of skill shortages.¹⁹ For males in Ghana, for example, in 1998 returns on a middle school education amounted to 11 percent a year, while for secondary school the number was 12 percent, and for university 44 percent. Wage regressions for Mozambique confirm higher returns to schooling as the educational level increases²⁰ (Fox and others 2005), as do those for Tanzania (World Bank 2006f). Increasing returns to education using wage data illustrate the fact that private enterprise demand for workers with primary education is low; large enterprises require a workforce that has higher levels of education.

¹⁹Unlike Africa, higher-income countries usually experience decreasing returns to education. In Africa, Appleton, Hodinott, 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 Westergaard-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.

²⁰ On the wage regression for 2002, the coefficient for completed primary education was 0.5, while for completed secondary it was 1.1 (Fox and others 2005)

In most countries the skill premium has been falling over time, especially at lower levels of education (table 4). The return to primary education for females in Burkina Faso decreased from 10.1 percent in 1994 to 7.1 percent in 1998, while for post-secondary education the numbers were 17.24 percent in 1994 and 16 percent in 1998. There are several explanations for this result. First, the share of the workforce with education, especially primary education, has been growing faster than the growth of physical capital and technological change. 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 family income and assets and parents' education. Thus, the skill premia observed were overstated, because these other variables were missing from the specification.

Table 4: Annual Returns to Education in Selected African Countries (percent)

A. Ghana

Level	1987				1998			
	Age 25-34		Age 35-44		Age 25-34		Age 35-54	
	Male	Female	Male	Female	Male	Female	Male	Female
Primary	9	6.2	6.5	6.3	11	7.5	7.8	-2.9
Middle	3.8	2.7	5.9	-2	3.9	3.4	5.2	4.8
Secondary	15	8.1	9.9	18	12	14	9	16
University	24	54	5.8	6.2	44	25	20	-20

B. Kenya

Level	1994			
	Age 25-34		Age 35-44	
	Male	Female	Male	Female
Middle	11	8.1	10	5.8
Secondary	7.4	20	12	19
University	21	26	13	16

C. Burkina Faso

Level	1994		1998	
	Male	Female	Male	Female
Primary	10.1	17.2	10.9	7.1
Secondary	17.2	17.4	12.9	14.4
Post-secondary	17.4			16.0

Source: Schultz (2004), except for Burkina Faso, Kazianga (2002).

Falling rates of return to education and almost zero returns to less than primary education cannot negate the benefits of Africa's huge investment in education, as these data hide other social and economic returns. For example, wage data exclude the self-employed, who may have higher returns to primary education. Analysis using total household consumption consistently shows higher returns to primary school education for the head of the household than those using wage data in Uganda, Tanzania, and Mozambique, and proportional returns for higher levels of education (World Bank 2006). 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 even in the wage equations, but not controlled for in the household equations as the unit of observation is the household, not the individual).²¹ The conclusion is that (a) completion of primary school is the bare minimum needed for wage employment, especially in larger, higher-wage firms, and for most, some secondary will increasingly be needed, but (b) efforts to improve the education level of adults, even if they only reach primary school level, will still have a strong effect on poverty reduction.

The quality of education matters as well, although few of these analyses were able to control for school quality. When using direct measures of labor force quality from international mathematics and science test scores, Hanushek and Kimko (2002) find that these measures are strongly related to growth. ADEA (2003) explains 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.

Although Collier and Gunning (1999) write that “paradoxically, education is one public service in which African performance has *not* been markedly worse than other regions,” a quality decline could account for the decline in the rate of return to education once the graduates reach the labor force. The rapid expansion in primary education may have produced a quality decline, as in some countries large jumps in enrollment massively outstripped the capacity of the education infrastructure. Indicators of quality, such as input ratios, as well as outcome measures such as average repetition and completion, have gone down. However, once again, 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.²² 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 2007)

In sum, many African governments have risen to the challenge of the education deficit, with more success in some countries than in others. Our 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 Goals 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. Africa governments need to find a way to raise educational attainment of this future workforce to secondary level. If not, sluggish job growth is likely to persist.

²¹ 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.

²² 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 Leibenthal, eds., 2006, on this issue, and World Bank (2006b) for a discussion of the experience of Uganda.

The continuing skills deficit

Microeconomic evidence suggests that the growth of the manufacturing sector in Africa has been hindered by the skill shortages. In Dar es Salaam, 20 percent of firms ranked skill shortage among the top three obstacles they faced (World Bank 2004). Further analysis showed that workers in the medium to large enterprise sector in Tanzania have low levels of education, forcing Tanzania firms to rely foreign technology (World Bank 2006). In Mozambique, 50 percent of firms listed skills and education of workers as a large or severe problem (World Bank 2003) and in Zambia this number was 35.8 percent (World Bank 2004b).

Given this skill deficit and the obstacles facing the standard education programs in Africa, can technical and vocational training help to close the gap? As in other regions, African countries have been trying to use technical and vocational training to increase the marketable skills of the labor force. Training can be provided by employers in the private sector, nongovernmental organizations, or the state. Whether training adds to the quality of the work force depends on its ability to take into account the real needs of the labor market and on the objectives behind its implementation. Training in Africa has had mixed results to date in supporting the transition to wage employment. One reason is that vocational training is not considered to be an end in itself, designed to qualify graduates in a specific trade or for jobs in a specific industry (where there is at least some labor demand). In Kenya, Haan (2002) found that there are very few high-quality training programs in place. Technical and vocational training programs implemented as a response to the high levels of unemployed urban youths—in other words, as a response to the lack of wage and salary jobs for new labor force entrants from middle- and high-income urban households without a focus on labor market needs—have been especially unsuccessful (Johanson and Adams 2004). Training is often used as a second-best option for post-secondary education, for students who did not get into the university (e.g., in Mozambique). Haan (2002) reported that youth in Uganda pursued vocational training, not with the objective of acquiring skills, but to obtain a certificate to get a job.

As we have discussed, the lack of wage and salary jobs is related to a set of factors much more complex than can be addressed by training programs. In addition, technical and vocational students are usually not from the poorest households, in many cases because the programs tend to be located in large urban areas.²³ Because training has high costs per student, countries are often wasting precious resources on programs that do not in the end achieve the expected results (Johanson and Adams 2004).

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 a job (including, for example, allowing a worker to undergo the stress of migration to the large cities) 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 they must be absent to care for ill family members. It is thus an element of the investment climate in the same way as the supply of skilled labor.

The health status of the labor force in Sub-Saharan Africa is poor. Life expectancy in most of Sub-Saharan Africa countries is extremely low. Most recent data show that the average life expectancy for 35 African countries was 46.7 for females and 44.8 for males. Even for the 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 training, as 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).

²³ See Barasa and Kaabwe, 2001; Johanson and Adams, 2004; Haan, 2002.

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 and others 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 a consequence of illness (World Bank 2006f). 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 2006b).

Table 5: Estimated Life Expectancy at Birth in Sub-Saharan Africa and other Regions, by Gender, 2000-05 and 2010-15

Region	2000–05		2010–15	
	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

Note: Data for Sub-Saharan Africa are averages for 35 countries, weighted by population.

Source: Medium variant projections of the United Nations Population Division (2003)

and <http://www.uis.unesco.org> (July 2004).

The health status of children, the future labor force, is also problematic, 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 experience differs considerably. In Mozambique, during 1995–2002 that share was 44 percent for children under five (UNICEF 2004). In Madagascar 40 percent of children under five were underweight, while in South Africa this number was 9 percent in 1990–2000 (World Bank 2004c). Mortality in children under five fell by 35 percent in Uganda and 8.5 percent in Burkina Faso over the 1990s, while it rose 21 percent in Ghana and 13.9 percent in Cameroon (World Bank 2006). As poor health and nutrition affects 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.

HIV/AIDS, of course, 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 Côte d'Ivoire (7.0 percent), Uganda (4.1 percent), and Ghana (2.2 percent) the HIV/AIDS prevalence was significantly lower (World Bank 2006). The high levels of cumulative mortality losses to the total labor force as a result of HIV/AIDS, such as in Zambia, Uganda, and Lesotho, emphasize the pervasive effect of the disease on the labor force. The projected numbers for 2020 in agricultural labor losses due to HIV/AIDS are high: in Namibia it reaches 26 percent, in Botswana 23.2 percent and 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. The high adult prevalence of HIV/AIDS is creating an underclass of orphans. Currently, it is estimated that there are approximately 11 million AIDS orphans living in Sub-Saharan Africa (World Bank 2004c). 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, Kenya), while for others (Zambia, 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, as children will lose the informal skills that parents teach, including how to farm, how to repair items such as wells and roofing, and 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 prior to the survey (World Bank 2006b). When more young women than men in their age group get infected, and women take the responsibility for caring for the sick, their ability to take up 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 age 20–24 was 16.3 percent, while for males it was 4.4 percent, and for those age 15–19 the numbers were 6.6 percent for females and 1.9 percent for males. This trend reverses itself for the age group of 45–49, when males have a higher infection rate (20.2 percent, compared with 13.6 for females) (World Bank 2004d).

Evidence of the effects of HIV/Aids on the labor force is limited, but ILO (2004b) provides some estimates: 70% of the 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 SSA affected by the epidemic²⁴. In the most affected countries this estimate is even worse: countries can lose as much as 20 percent of the labor force. By 2015, the losses could be 12 percent of the labor force in SSA, reaching 30-40 percent in countries such as Botswana (36.2%), Lesotho (32.3%), Swaziland (34.3%) and Zimbabwe (40.7%). (ILO 2004b and CHGA 2004).

The impact of high HI/AIDS prevalence on both the public and the private sector can be severe. In a firm level survey across Africa, 60% of the companies envisaged significant adverse effects due to 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 anti-retroviral treatment (ART); firms usually shift these costs back to households (Rosen and Simon 2003). The estimated impact of HIV/AIDS on the education workforce shows the perverse effects of the disease on 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%, compromising many of the gains made in the past two decades towards universal primary education. Of course, HIV/AIDS also affects schools enrollment rates negatively – in Botswana where HIV/AIDS infections has quadrupled, primary enrolment rates dropped 30 percentage points since 1985. (Kalemli-Ozcan, 2006).

²⁴ In Asia, the estimated loss as a proportion of the labor force in 2010 is only 0.7% and in Latin America 1.5%. By 2015, 1.2% and 1.9% respectively (ILO 2004b)

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. ILO (2002) 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 the Pacific this number was 19 percent and in Latin America, 16 percent. ILO (2002) also finds that every fourth child in Sub-Saharan Africa appears to start work below the age of ten. 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 the girls of 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 (cited in 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, the availability of employment opportunities, and the household’s poverty status and geographical location. 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 non-agricultural 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 on 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 and others 2001). In Benin, 8 percent of children age 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, as relatively wealthy households in rural areas may be more likely to finance child migration (when children migrate to work as domestic servants) (Andvig and others 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 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 the health and education deficit—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 we have data, 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, as this is yet another factor that lowers educational achievement.

Current fertility trends have created a huge challenge for governments, as 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 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 jobseekers 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 towards secondary education and above 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 it will strengthen the foundation for economic growth by raising the quality of the future labor force. African success stories, particularly about the nearly universal achievement of primary school enrollment, show the way forward.

4. CONSEQUENCES: THE GROWTH OF THE INFORMAL SECTOR

All across Sub-Saharan Africa, as the labor force has grown and job creation has stalled, job seekers have been forced into the informal sector. The informal sector consists of economic activities characterized by irregularities and low earnings, such as self-employment or work in a family business providing services such as barbering, repair, and food; street vending; or making furniture, garments, or other household goods in very small scale-manufacturing. The line between the informal sector and the formal one (what we refer to as wage and salary jobs) is blurry, as some informal businesses grow to have a few employees outside the family.

The share of informal sector in total employment has grown rapidly. In Ghana, from 1987 to 1998 the most important source of jobs in urban areas was in self-employment (Teal 2005), and in Uganda, the highest annual growth rate of employment from 1992 to 2002 was in nonagricultural self-employment (World Bank 2006). In Burkina Faso, with the CFA franc devaluation there was a decline in real incomes and households increased their supply of labor in informal services, with the majority of new jobs created in informal trade (Bernabe and Krstic 2005: 53). In richer economies, slow job growth relative to supply showed up as unemployment. In poor countries in Sub-Saharan Africa, open unemployment did not emerge, but instead an increase in the urban informal sector was seen, often with a decline in labor productivity and earnings. The exception was for youth, where the difficulty in making the transition from school to work did result in the emergence of open unemployment. The average youth unemployment rate in Sub-Saharan Africa countries is around 15 percent, reaching levels as high as 50 percent in some countries (World Bank 2007). The Sub-Saharan Africa average is lower than any other region, reflecting the large size of the informal sector. But again, this number is unreliable, because it reflects inconsistencies in how data are collected between countries (see box 1).

Creation of more wage and salary jobs would have offered higher earnings and less poverty, as informal sector employment usually has much less security of income and tenure, as well as a significant wage discount. Earnings data are hard to collect on the informal sector, as most of the employment is self-employment or employment as part of a family business, but where it is available, the trend is always the same—lower earnings. In Uganda in 2002, the survey data included the category of wage salary workers classified as “casual” labor. These data showed that casual wage employees had a 30 percent wage disadvantage for men and a 45 percent disadvantage for women, controlling for education and experience. Another way to get at the difference is to compare household consumption per capita (as a proxy for earnings in the self-employment sector). In Ghana, Tanzania, and Uganda, households headed by private or public sector employees were better off than the urban self-employed, who were better off than farmers.²⁵

There does not seem to be a trend in how average earnings move within the two sectors, except that wage and salary job earnings tend to increase faster than informal sector earnings. In Ghana and Tanzania, earnings of the urban self-employed households increased about 75–80 percent of the rate of income growth in private wage households during the 1990s. In Uganda, between 1992–2002, earnings growth (as measured by consumption per capita) was slowest in the informal sector. 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 and others 2004) and therefore an increase in the gap between the sectors, (but the average earnings were still higher in the informal sector than agriculture in 2002). (See table 6).

²⁵ We classified households by the occupation of the head (wage and salary, self-employment or family business non-agricultural, and agriculture). Earnings were then estimated as per capita consumption. There are no controls for endowments such as education.

Table 6: Annual Wages in Selected African Countries**A. Ghana**

Type of wage	1987/88		1988/89		1991/92		1998/99	
	US\$	PPP\$	US\$	PPP\$	US\$	PPP\$	US\$	PPP\$
Public wage job	1103.17	1545.55	1056.60	1664.10	1232.84	1940.25	1277.80	3250.69
Private wage job	1106.78	1156.48	980.33	1161.00	1118.43	1423.07	1260.94	2093.57
Self-employment	1129.27	1156.48	1001.20	1208.38	1227.62	1212.66	1224.81	1766.27
Farmer	736.25	288.05	669.21	232.07	727.02	403.66	712.16	491.09
% gap between private and self-employment		0.00		-3.9		17.4		18.5

Note: Income from principal job

B. Ethiopia

Type of wage	1994		1997		Average annual growth rate (percent)	
	US\$	PPP\$	US\$	PPP\$	US\$	PPP\$
Public wage job	1,281	3,696	1,664	4,248	9.1	4.7
Private wage job	1,206	3,479	1,426	3,496	5.7	0.2
Self-employment ^a	1,496	4,315	655	1,890	-24.1	-24.1
% gap between private and self-employment		-19.4		85.0		

Note: PPP\$ indicates dollar equivalents in purchasing power parity.

a. Median revenues per family worker

Source: Ghana: Teal (2000), Ghana Statistical Office surveys. Ethiopia: Urban Labour Force Survey, 1986; Labour Force Survey, 1998/99.

Studies of the informal sector have found that it is very heterogeneous, and this partly accounts for the diverse outcomes. Evidence suggests that workers in the informal sector have less education. 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 2002). It is difficult to address this education deficiency 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, and 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 ten or more employees. Adams (2002: 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."

The burgeoning informal sector puts Africa's job creation challenge in sharp relief. Many workers enter the informal sector as a consequence of their low education and skill levels, because they do not have the ability to compete effectively for a wage job in the private sector. No doubt many would prefer the formal sector, if the jobs were there. Moving as many workers out of the informal sector into the wage jobs (or making sure that they do not start there in the first place) is clearly a priority. Success in holding the growth of the informal sector below the growth of the labor force would clearly indicate that the quality of growth has improved. But such success will be hard to

achieve, given the volume of people moving into the labor force and the fact that average earnings in the informal sector are still above the averages in the agricultural sector. Thus, the urban labor force and the informal sector are likely to continue to grow throughout Sub-Saharan Africa. If so, the task of improving the quality of growth implies an effort to improve the productivity of both the informal and formal sectors.

5. CONCLUSION: THE PROSPECTS FOR BETTER OUTCOMES

The experience of the past decade in Africa offers both hope and pessimism. Outcomes in the labor market and in poverty reduction have been, for the most part, poor. 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 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 improve. Poor outcomes in the labor market have failed to reduce poverty, while the persistence of poverty has further compromised labor market outcomes. Africa's rapid urbanization in the face of high fertility and population growth means that the political and social pressures on governments will not diminish.

Amid this gloomy picture are examples of success. First, the pain of the public sector restructuring seems to be over. Countries such as Senegal, Uganda, and Tanzania created private wage jobs faster than the rate of labor force growth, and this trend can be expected to continue, without the shadow of the private sector jobs losses. Despite having some of the strictest labor regulations, African labor markets are still flexible, and this regulation does not (yet) seem to have been a major obstacle to job creation. As other constraints are addressed however, these regulations may become important. In one country where this happened, Mozambique, the problem has been tackled, which shows that this issue can be addressed. Countries such as Ghana, Kenya, Lesotho, and Uganda have been able to steadily raise the education level of their labor force 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 Ghana and Tanzania suggests that, even though the growth of incomes is slower in the informal sector than in wage and salary jobs, both sectors can contribute to poverty reduction.

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In Africa the need is urgent to expand the number of well-paid jobs in the formal sector because of the growing population and the great advantage of such jobs for alleviating poverty. New entrants to the labor force are flooding cities to find work, but few are qualified for the small proportion of wage and salary jobs in the private or public sector. So they end up supporting themselves in casual labor, self-employment (street vending), or small family businesses.

With most domestic manufacturing small in scale and oriented to local markets, only export-oriented growth of industry has the potential to greatly expand formal employment at a pace that can match population growth. To create such jobs, African economies need to become more competitive in the global economy. That will require improving the investment climate to attract export-manufacturing industries. It will also require greater flexibility in hiring, firing, and setting wages. And it will require more support to upgrade the education and health of workers and stricter enforcement to combat child labor, inimical to the education and health of youngsters.

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