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Abbreviations and Acronyms

BECE	Basic Education Certificate Examination
CBA	Collective Bargaining Agreements
CEM	Country Economic Memorandum
CINTERFOR	Inter-American Research and Documentation Center on Vocational Training
COTVET	Council for Technical and Vocational Education and Training
DACF	District Assemblies Common Funds
EMIS	Education Management Information System
ESP	Education Strategic Plan
FDI	Foreign Direct Investment
FTC	Fixed-Term Contracts OECD
GDP	Gross Development Product
GEA	Ghana Employers' Association
GES	Ghana Education Service
GET	Ghana Education Trust
GSS	Ghana Statistical Services
GLSS	Ghana Living Standard Surveys
GOG	Government of Ghana
HIPC	Heavily-Indebted Poor Countries
ICCCE	Integrated Community Centers for Employable Skills
ICA	Investment Climate Assessment
ICT	Information and Communication Technologies
ILO	International Labor Organization
JICA	Japanese International Cooperation Agency
JSS	Junior Secondary School
LIC	Low-Income Countries
MMYE	Ministry of Manpower, Youth and Employment
MOESS	Ministry of Education, Science and Sports
NACVET	National Coordinating Committee for Technical and Vocational Education and Training
NBSSE	National Board of Small Scale Enterprises
NGO	Non-Governmental Organization
NHIS	National Health Insurance System
NQF	National Qualification Framework
NTVI	National Vocational Training Institute
NYEP	National Youth Employment Program
OECD	Trade Committee's Group on Export Credits and Credit Guarantees
REDP	Rural Enterprise Development Program
SPI	Special Presidential Initiatives
SSS	Senior Secondary School
SSSCE	Senior Secondary School Certificate Examination
TTI	Technical Training Institute
TUC	Trade Union Congress
TVE	Technical and Vocational Education
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VTI	Vocational Technical Institute
WDR	World Development Report

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Executive Summary

Thanks to a steady pace of structural reforms and sound macroeconomic management, Ghana has experienced fast and sustained growth. Since the 1990s, the annual GDP growth rate has averaged 5 percent, reaching about 6 percent in 2005-2006. This growth has outpaced that experienced by most Sub-Saharan Africa low-income countries during this period. Despite major gains, as discussed in the recent Ghana CEM (see Bogetic et al, 2007), significant policy challenges remain in terms of consolidating gains and further accelerating economic growth.

High economic growth has contributed to a sharp reduction in poverty. The core poor represented 28 percent of the population in 2005, down from about 52 percent in 1991 (see Coulombe, Wodon, 2007). This poverty reduction came mainly from growth, despite an increase in inequality. However, the pace of poverty reduction has been weaker in northern regions, and if poverty is to be further reduced, spatial inequities need to be addressed through an effective regional policy.

Population growth in Ghana is low by Sub-Sahara African standards and is decreasing, but the urban population is increasing. Ghana's population growth rate has fallen to about 2.5 percent, and this has translated into a higher ratio of workers to dependents. Yet capitalizing on this opportunity will require a significant acceleration of the pace of job creation in the economy. Moreover, the rapid urbanization (from 32 percent in 1983 to 48 percent in 2005) has brought with it an increase in the number of new job seekers, especially in cities and among youths.

The Government is placing priority on employment, both in terms of fighting poverty and as an underpinning for economic growth. Especially given recent demographic trends and increasing urbanization, creating more and better jobs is an explicit priority for the Government, as reflected in the Government's second Poverty Reduction Strategy (GPRS II). In late 2005, the Government launched the National Employment Summit to formulate the national employment policy and strategy. In addition, to promote the development of human capital and strengthen links between skills development and employment, in July 2006 the Parliament passed a Bill to establish a Council for Technical and Vocational Education and Training (COTVET) to formulate national policies for skills development across the broad spectrum of formal, informal, and non-formal education.

In this context, and complementing the recent CEM and earlier Bank's work on youth employment, this report addresses labor market challenges that Ghana is facing, particularly as it strives for middle income status by 2015. This report: (i) briefly reviews the determinants of labor demand; (ii) analyzes labor market outcomes based on recent survey data; (iii) reviews the role of labor policies, institutions and programs; and (iv) examines education and skills development policies and their links to labor market outcomes.

The main findings of the report can be summarized as follows:

- Ghana's growth created new jobs during 1991-2005 and as a result of the structural changes in composition of output, labor has shifted from agriculture to better paid

jobs (self-employment and informal wage employment), leading to the growth of informal urban employment. This has created better income-earning opportunities and has contributed to poverty reduction. Nevertheless there are several challenges to sustaining these gains in the future.

- The prerequisite for preserving and strengthening recent growth and poverty reduction, as well as promoting job creation, is macro policy (including investment climate) conducive to the ongoing shift towards higher productivity sectors. Since wage employment is and will remain a small share of the labor force for some time, the overall job strategy must continue to broaden the source of agriculture growth, while stimulating growth of other formal sector jobs (i.e., manufacturing, services).
- In addition, other key elements for creating sustainable jobs, both in formal and informal sectors, are: (i) an adequate industrial relations framework (including realistic firing procedures, minimum wages, and non-wage costs); (ii) cost-effective employment programs; and (iii) a good quality education and training system. More specifically:
 - Although labor market functioning seems flexible, (i) the effect of rigidities (e.g., union mark-up on wages) on the economy may be masked by the dominant effect of sustainable macro performance; and (ii) in the future, the growth of modern sectors may be slowed down by rigidities at the micro level;
 - Given the challenges of youth employment, the existing program could be an effective tool to increase the employability of youth, but it needs (i) clear criteria and objectives, and (ii) close monitoring to ensure that it has a positive impact on the beneficiaries;
 - Ghana has been successful in expanding basic education, but challenges remain in (i) addressing quality and equity issues, (ii) meeting the increasing demand for post-basic education; (iii) ensuring that the education and training system allows youth and older workers to acquire skills and return, when needed, for further education; and (iv) providing for those who leave education early, a traditional apprenticeship system that offers good quality skills recognized by employers and opens opportunities for further education.

DETERMINANTS OF LABOR DEMAND

Demand for labor cannot be viewed outside of the overall development in product markets. The review of growth patterns and characteristics of firms in Ghana during the last fifteen years provides the context in which to consider challenges and prospects for job creation over the medium term.

Overall growth created new jobs, while structural changes in output composition led to shifts in labor shares creating better income-earning opportunities and contributing to poverty reduction. During the last 15 years, most sectors with strong growth in output experienced growth in employment. Growth has generated employment and wage gains which have in turn led to poverty reduction. The highest growth was in services, followed by industry, while agriculture share of GDP declined. As a result, the inter-sectoral labor reallocation in Ghana between 1991 and 2005 saw a sectoral shift in the composition of the labor force, from the agricultural sector toward, among others, the financial services, transport and communication, and construction sectors. This confirms that people move to

better paying jobs. At the same time, wage employment in the formal sector is not growing fast enough to absorb the new influx of workers especially in urban areas, so that many workers are moving outside agriculture into self-employment and informal wage employment, leading to growth in informal urban employment.

Nevertheless, past trends in employment generation and wage gains need to be treated with caution. Based on the characteristics of the growth and employment, as well as some possible overestimation of wage gains in the past, there are several challenges to sustaining these gains in the future. First, much of the growth in employment has taken place in the informal sector, which does not provide the same security and benefits as the formal sector and may not be attractive to skilled labor. Second, while there have certainly substantial gains in earnings, consumption, and poverty reduction, due to measurement issues, some of the past gains may have been overestimated (low increase in the Consumer Price Index as compared to the GDP deflator, especially in urban areas outside of Accra). Third, part of the gains in earnings has been obtained through an increase in working hours, which may not be sustained in the future. Fourth, the pressure on the labor market to absorb a large number of new entrants will remain in the future due to the demographic transition phased by the country. Fifth, at the macroeconomic level, the contribution to growth of the improvement in factor productivity has been limited, and probably due over the last few years in large part to the boom of the cocoa sector, a success that may not be easily reproduced in future years. Finally, although there have been sectoral shifts in the labor force to better paying jobs, more than half of the labor force remains employed in agriculture, in most cases in low productivity jobs, so that the transformation of the economy remains limited. It is expected that the movement away from the agriculture sector will continue in the future and therefore policies (among others in terms of the investment climate) need to help increase productivity in the informal sector (agriculture and non-agriculture) as well as shift Ghana's economy towards its higher productivity sectors.

Reflecting the Government's strategy, Ghana's growth has been driven by domestic absorption, and exports have not played an important role as an engine of growth, with the exception of cocoa in recent years. Experience in other countries has shown that the model of growth that focuses on domestic demand and investment is not likely to provide a sustainable source of employment. Moreover, due to lack of diversification - 70 percent of its exports are traditional products (cocoa, gold and timber) - Ghana remains vulnerable to commodity price shocks. Although the increase in the price of cocoa in recent years had a direct impact on trade, its impact on the labor market was limited: the share of workers in cocoa production remained stable during 1991-2005 (6 percent), while the share of non-cocoa agriculture workers decreased (from 54 percent to 47 percent). The increase in cocoa prices led to an increase in rural earnings among cocoa producers, many of whom are small farmers. Thus, poverty incidence among these producers decreased significantly (from 62 percent in 1991 to 21 in 2005) as compared to non-cocoa workers. Second round effects from the increase in rural spending of these producers also contributed to rural poverty reduction.

The characteristics of Ghanaian firms, which are less productive than firms in comparator countries, explains the concentration of job creation among self-employed. As discussed in the CEM, Ghanaian firms are less productive mainly because they are less

capital and skill intensive and relatively small in size, therefore, they do not account for the bulk of the economy's job creation. Ghanaian firms are mainly concentrated in the traditional sectors, such as manufacturing and trade, and given the country's growth model, their production is primarily oriented toward the domestic market. As such, they create temporary low-skilled jobs at low wages. As demonstrated by Teal, the small size of most firms likely explains the concentration of job creation among the self-employed. In this context, a business climate that is favorable for investment will also promote employment by allowing large and labor-intensive firms to grow and create more jobs in the urban formal sector.

LABOR MARKET OUTCOMES

The economic growth has been associated with substantial job creation, and most people continue to be employed in agriculture. The employment rate of the working age population (25-64 years of age) has remained around 89 percent over time. Between 1991 and 2005, employment increased by about 2.8 million jobs (from 4.1 to 6.9 million for people from the 25-64 age group), which is comparable to the labor force growth (from 4.8 to 7.9 million), as well as the population growth among that age group. As discussed earlier, although economic activity is slowly shifting away from agriculture, the agriculture sector is still by far the main sector of employment, accounting for 54 percent of the labor force (age group 25-64), followed by services (31 percent), and industry (15 percent).

Most of the labor force remains employed in the informal sector, which has accounted for most new job creation in the past fifteen years. In terms of composition, employment is dominated by self-employment (82 percent of workers), of which over two thirds are working in the agriculture sector. A minority (about 18 percent of the labor force) work in wage-earning jobs. Indeed, during the last 15 years, the percentage of formal jobs (both public and private) as a share of total employment has decreased (from 16 percent to 13 percent). This is due to the fact that the decline in the share of public sector jobs has been only partially compensated by an increase in the share of private formal jobs. Since wage employment in the formal sector is not growing fast enough to absorb the new influx of workers especially in urban areas, many workers are moving outside agriculture into self-employment and informal wage employment, leading to growth in informal urban employment. Thus, the labor force has become more informal over time. The decrease in the formal sector as a share of total employment is also confirmed by a series of other indicators, such as decrease in the share of workers with contracts, and decrease in the share of unionized workers (see below).

Earnings have increased substantially during the last 15 years for all groups and the gap between the public sector and the private formal sector has continued to increase. Between 1991 and 2005, average annual earnings increased about 77 percent in real terms. This rise in earnings has been an important driver of poverty reduction in Ghana. The largest gain was among the self-employed in the agriculture sector (92 percent increase) followed by wage workers in the public sector (89 percent). Despite these increases in earnings, the wage gap between different employment categories remains high, and the gap between public sector workers and other workers is increasing. Overall public sector workers earn 47 percent more than private formal sector employees. Wage workers in the private informal sector are the third highest-earning category, earning about 63 percent of

what private formal sector workers earn, followed by the non-agriculture self-employed. Finally, despite their earnings gains, agriculture self-employed workers – accounting for the majority of the employed - earn almost half of what non-agriculture self-employed workers are paid.

Unemployment remains low and is primarily an urban phenomenon. Overall, the proportion of the unemployed remains very small (2.3 percent in 2005), and as in other low income countries, is heavily concentrated in the capital (Great Accra 4.9 percent). It is also concentrated among young persons (between 15-24 years old) and those who have an upper secondary education (6.1 percent unemployment rate). Although unemployment in low income countries has often been described as a luxury, there is heterogeneity among the unemployed in Ghana, with about one out of five unemployed workers residing in a poor household in 2005. Moreover, poverty decreased more slowly among the unemployed over the past years. This suggests that there may be two types of unemployed: (i) those queuing for a good job (with high earnings and other attributes, particularly in the public sector), and (ii) those not finding a job, probably due to urban migration by relatively young unskilled workers and lack of sufficient wage employment opportunities in the urban centers which are not expanding fast enough to absorb the increasing number of job seekers.

Returns to education are positive, suggesting that youngsters have an incentive to continue their education. As discussed below, education influences the type of job held and earnings received, confirming that the higher the level of education, the more likely one is to become a wage and salary worker. Overall, education (including TVET) lowers the likelihood of becoming a self-employed worker in the agriculture sector and increases the chances of becoming either non-agriculture self-employed or a wage worker. Basic education has become increasingly important to the self-employed, improving their earnings. While TVET and tertiary education affect the likelihood of wage employment, education also influences earnings directly, with gains in earnings with TVET matching those of general secondary education. This is an important finding when it comes to choices for further investment in post-basic education.

LABOR MARKET POLICIES AND INSTITUTIONS

Although the share of the formal economy in Ghana is below 20 percent and most jobs are in the informal sector, increase in job creation in the private formal sector confirms that some formalization is taking place: notably, total wage employment in the formal private sector more than doubled during 1991-2005 (from 167,000 in 1991 to 498,000 in 2005). Therefore, it is important to examine the functioning of the labor market and to review the role of labor regulations and institutions for job creation in the growing economy. Ensuring that labor market policies create a stimulating environment for a dynamic private sector that would create jobs and increase productivity while providing adequate social protection to workers is a challenging task for Ghana as it strives to reach middle-income economy status.

Overall, Ghana labor regulations are relatively flexible compared to those of its neighbors, and the 2003 Labor Act has introduced more flexibility to the labor market. Among the more important changes are: (i) consolidation of a large number of old labor

laws to facilitate coherence and to improve application and enforcement of the labor code; (ii) creation of the National Labor Commission to tackle labor disputes; (iii) introduction of private employment agencies to facilitate job searches by the unemployed and to help employers find workers with desired skills; and (iv) flexibility in the hiring of temporary workers.

Although the changes introduced by the new law are a step in the right direction, dismissal procedures are still complex and costly. Ghana hiring and firing rules are overall flexible, but dismissal costs can be high and the procedures are cumbersome. According to employers' surveys, labor regulations in Ghana do not seem to be a constraint to job creation, but further investigation is still needed to better understand the effects of existing labor regulations on job creation in the private formal sector. This will allow Government to take necessary steps to ensure that modern sector growth is not impeded. According to 2008 Doing Business, firing costs in Ghana are equal to 178 weeks of wages, which is over twice the average cost in Sub-Saharan countries and about five times the cost in OECD countries. While Ghana's high dismissal costs could partially be explained by the methodology employed by Doing Business (based on cost for workers with over 20 years of experience), they can also be due to the lack of safety nets for those who may lose their jobs. Overall, based on international experience, the existing set-up raises several concerns for the labor market. First, flexible hiring procedures combined with costly and cumbersome termination regulations could lead to a fast increase in temporary jobs without security. Second, costly firing regulations impede enterprise restructuring and efficient resource – including human resource – allocation, resulting in a lower level of formal job creation. Third, the impact could be substantially more negative for youth, women, and those with low skills.

The minimum wage, despite continues increase, does not currently seem to constrain job creation, but if enforced, it could substantially increase the cost of unskilled labor. According to the 2003 Labor Act, the National Tripartite Committee annually sets the daily minimum wage, which is currently equal to ₵19,000 (US\$1.7). The GLSS data shows that the minimum wage is high in comparison to prevailing wages, in the sense that an increasing share of workers now has wages below the minimum wage, especially among youth and in the informal market. While this may not have yet had negative impact due to weak enforcement, the continuous increase of the minimum wage in the last fifteen years at a rate much faster than the inflation rate may cause problems in the future. Therefore, a close follow up of the increase of the minimum wage and a reassessment of its level are warranted, especially in terms of its potential impact on the cost of unskilled labor and access to formal jobs for youth.

Mandatory social security charges are relatively low in Ghana, though firms also pay additional non-wage benefits agreed through collective agreements with workers' unions. Mandatory social security charges equal to 17.5 percent of the gross wage bill are shared between the employer (12.5 percent) and the employee (5 percent). In addition to social security contributions, employers, especially in large firms, also provide additional non-wage benefits agreed through collective bargaining with workers' unions. The Government is currently considering several pension reform options, and it will be important to assess the impact of the proposed reforms on the labor market to ensure that

the new pension schemes do not distort workers' labor force participation decisions and do not increase inappropriately wage costs for employers.

The share of unionized labor has fallen in the last 15 years, but there are still barriers that separate public and unionized employment from private non-unionized employment. Currently about 10 percent of the total labor force in Ghana is unionized, which is less than a half of the 1990 rate of 26 percent. This decrease was due mainly to a decline in the number of public sector jobs and a fast increase in informal jobs, with no job-security. Nevertheless, the majority of formal sector workers in Ghana, particularly in the public sector, are unionized (70 percent of the public sector wage employees and about 30 percent of the private sector wage employees), and controlling for human capital, there is a wage premium associated with unions. However, despite the active and influential role played by the unions, the GLSS data show that this wage premium may well have decreased in recent years. Further work is needed to better understand the factors affecting this decline in both union membership and its wage premium, including barriers that separate public unionized employment from private non-unionized employment.

EMPLOYMENT PROGRAMS

As Ghana aims to reach middle income status, an effective employment program and safety net will be essential to support workers, including youth. The government has recently developed a few employment-related interventions, but the National Youth Employment Program (NYEP), launched in 2006 by the Ministry of Manpower, Youth and Employment, is the major program that directly addresses job creation. Though it is too early to evaluate the impact of the NYEP on employability of its beneficiaries, the design of the program raises some concerns.

The NYEP has a high cost and mainly targets educated urban youth. Emphasis of the program on youth (of 18-35 years of age) seems justified, given that this group's unemployment rate is about twice as high as the national unemployment rate (6 percent compared to about 3). However, since 2006, the NYEP has consumed significant resources (about six times larger than the total budget of the Ministry of Manpower) to support a relatively small portion of youth (about 90,000 people). This scale of spending could be justified only if programs improved labor market functioning by helping the youth to find employment.

The design of the program raises several issues vis-à-vis labor market functioning: (i) the wage paid by the program (ranging between 500,000- 2,000,000 Cedis per month) are high compared to the national minimum wage (360,000 Cedis), creating disincentives for youth to look for jobs outside of the program and building unrealistic expectations for future earning prospects; (ii) the targeted groups are primarily urban youth with secondary and higher education, thus from relatively better-off households and not really aimed to poverty alleviation; and (iii) the program mainly creates temporary jobs in the public sector (e.g. education and health services), and given the government's limited fiscal space, it raises issues related to jobs' sustainability.

The program's monitoring and evaluation system is weak. Currently, some information on the characteristics of the beneficiaries is collected at the regional level. However, there is no information on the results of the program and there is no sound monitoring and

evaluation system in place to ensure that resources are being effectively spent or to adjust program's design as needed.

EDUCATION, SKILLS AND LABOR MARKET OUTCOMES

For Ghana improving skills development is key to the attainment of middle-income status. Intensified economic competition in countries worldwide has increased the focus on education and training system's ability to prepare youth for employment and support more seasoned workers in adjusting to structural changes taking place in labor markets. In this context, concerns exist as to whether skill deficits have or may become a constraint to Ghana's further growth and capacity for reducing poverty.

The review of the education and training system in Ghana confirms that it is expanding, but faces a number of challenges, such as: (i) regional disparities in access; (ii) gender inequalities that increase with the level of education; (iii) low rates of completion for basic education; (iv) infrastructure in need of repairs; and (v) teachers needing further qualifications. At the same time, demand is growing for post-basic education, adding pressure to Ghana's efforts to finance a good quality basic education for all. To acquire the vocational and technical skills needed by employers or necessary for starting one's own business, people must rely on a small public TVET sector with its own quality issues, the willingness of enterprises to provide workers with training, and a large traditional apprenticeship system.

Education and skills training influence wages and earnings directly by raising the productivity of the worker and indirectly by promoting entry into more lucrative forms of employment. Overall, education has a positive impact on the type of employment and earnings and GLSS data confirms that demand exists for education and skills at all levels, from primary to tertiary, including TVET and apprenticeship. Investing in education is generally associated with movement out of the agriculture sector to wage or self-employment in the non-agriculture sector, and the likelihood of becoming a wage worker in urban areas increases with the level of education, controlling for other personal characteristics. In general, having less than a secondary education raises the chances of self-employment in non-agriculture, and to a lesser extent it raises the chance of self-employment in agriculture. TVET exerts a positive influence on wage and self-employment, particularly in the non-agriculture sector. Apprenticeship also offers a pathway to self-employment, but is less effective than TVET in opening access to wage employment.

Post-basic education improves the likelihood of wage employment, while those with only primary education largely work as self-employed in agriculture, and junior secondary education translates into self-employment in non-agriculture. To promote wage employment, primary education is not sufficient and there is need to plan for more post-basic education. The analysis shows that primary education or the junior secondary education alone do not yield significant earning gains compared to those who have no education. However, the additional completion of a senior secondary education or TVET provides substantial earnings gains in both rural and urban areas and for virtually all categories of employment.

Ghana's success in expanding access to education, beginning with basic education, has built a foundation for the expansion of post-basic education. Economic growth, now in the 6 percent range, will increasingly demand more skilled workers, and the economic returns to education, evident in the results above, will justify this expansion. The investment is important, not only for its direct impact on the productivity of the workforce and their earnings, but for its indirect influence on the access to wage employment and the higher earnings found in these jobs. At the same time, evidence from the review of the education and training system shows that investment in quality at all levels has to accompany investments in expanding access, and that these investments need to take into consideration balancing opportunities among and within regions and by gender.

Against this backdrop, although enrolment in education is rising at all levels, 9 out of 10 youth aged 15-17 are not enrolled in senior secondary education either because they have dropped out of school or because they are behind in their curriculum due to repetition. Many of them have altogether left formal schooling to find work or acquire skills through traditional apprenticeship or by learning on the job. Public initiatives to provide skills training reach nearly 48,000 young people, but suffer from low quality and limited connection to the market. Meanwhile, a 2003 Ghana Statistical Service survey indicates that there are over 207,000 active apprentices, mainly in the informal economy. Traditional apprenticeships offer the primary source of skills development today in Ghana, but they suffer from weak pedagogy, limited education of master craftsmen and apprentices, instruction in out-dated technologies, and a lack of standards and quality assurance. A large private training sector exists, but it too is of variable quality.

There is ample room for a country with middle-income aspirations to invest in broadening access to good quality secondary education while also strengthening the foundation for basic education. The main policy findings confirm that: (i) Ghana has been successful in expanding basic education, but quality and equity issues remain; (ii) there are challenges in meeting the demand for post-basic education for those who progress through basic education; (iii) there is a need for an integrated education and training system with numerous pathways allowing youth and older workers to acquire skills needed by the market and return, when needed, for further education; and (iv) for those who leave education early, there is need for a traditional apprenticeship system that provides good quality skills, creates credentials accepted by employers and in a National Qualifications Framework, recognizes these skills and opens opportunities for further education.

POLICY AGENDA FOR THE LABOR MARKET

The strategy for addressing Ghana's employment challenges must be based on multi-sectoral reforms that create a favorable environment for job creation in the private sector. Jobs are created when new firms are created and existing firms expand. This requires a multi-sectoral strategy that is based on macroeconomic stability, encourages investment, allows for the mobility of workers from declining to growing sectors, creates a highly skilled and flexible work force, and provides support for workers while creating incentives to find employment.

Macroeconomic stability and a dynamic private sector are prerequisites for job creation. The recent CEM provided recommendations for sustaining high growth. Although

recommendations in the area of economic policy are beyond the scope of this report, it is important to emphasize that sustained growth is essential for promoting job creation in Ghana. Though the 2008 World Bank's Doing Business report selected Ghana as one of the five best reformers of Sub-Saharan Africa for facilitating business practices, further efforts are needed to address procedures for formal business start ups, which are still cumbersome and so push firms to informality. Moreover, there are serious concerns regarding small and medium-size enterprises' access to electricity and finance, which need to be addressed.

As part of the job creation agenda, the functioning of the labor market needs to be improved. Although the most important constraints to job creation lie outside the labor market (i.e., macro uncertainty, business climate), labor market policy reforms are also needed. Ghana has a relatively flexible labor market arrangement. However, rigidities at the micro level, such as labor regulations (particularly dismissal procedures) add additional cost to labor, particularly in larger firms, and may impede both firms' ability to undertake structural changes and job creation. According to lessons learned in other countries, it would be advisable to have fewer protective measures inside the firm (aimed at preserving jobs), and more effective schemes outside the firm, through a social safety net, including active labor market programs. This could be achieved through effective re-employment programs and perhaps income support programs.

Growth in labor productivity will also require a highly qualified labor force and thus a strengthened education and skills development system. For a country that aspires to middle-income status, interventions to improve education and training need to be balanced with interventions in economic and labor market policies to promote a favorable climate for private investment and job creation. Overall, Ghana has taken important steps toward opening access to education and introducing TVET reforms. Against this background, further investments in promoting access to good quality education and training for all are essential and it is important to invest in skills training beyond general education. Increasingly in today's global environment, the design of education and training systems need to promote learning throughout all stages of the people's lifecycle, particularly for workers who will change jobs many times during the course of their working lives as the economy restructures in response to global economic pressures. In this context, priority actions could focus on: (i) improving the quality of both formal education and TVET and strengthening the articulation within the two systems to provide choices to youth in acquiring skills and accommodating different learning needs; (ii) strengthening and improving the quality of traditional apprenticeships; and (iii) providing incentives for using resources more effectively through introduction of performance accountability and performance-based budgeting.

Sequencing policy responses will be an important consideration; some reforms ought to take place over the next two years, while others should be part of a medium-term agenda. The most immediate actions that are required in the labor market are: (i) to continue investment in basic and post basic education to improve access and quality and to improve the performance of the skills development systems (both formal and informal); (ii) to ensure that the ongoing pension reforms do not increase labor cost excessively; (iii) to review the design of the NYEP; and (iv) to introduce a monitoring and evaluation system for the youth employment program. Over the medium term, Ghana could consider

(i) as part of its poverty alleviation, introducing self-targeted public work programs to offer temporary employment opportunities for youth; (ii) linking funding of training systems to outcomes and performance; and (iii) reviewing dismissal procedures. In addition further work is needed to (i) assess the impact of the minimum wage on formal job creation; (ii) review the barriers that separate public unionized employment from private non-unionized employment; and (iii) review industrial relations. This policy agenda is summarized in the matrix below.

SUMMARY OF MAIN FINDINGS AND POLICY AGENDA IN GHANA LABOR MARKET

Main Findings	Desirable Outcomes	Policy Options to Achieve Outcomes	
		Short term	Medium term
LABOR MARKET POLICIES & INSTITUTIONS			
<p><i>Labor market policies do not pose a major constraint to job creation in the formal sector in the short run, but merit consideration in the medium term</i></p> <ul style="list-style-type: none">Hiring regulations are relatively flexible, but firing procedures are complex and can be costlyMinimum wage policy does not seem to constrain job creation but it has more than doubled in real terms in the last 15 years.Non-wage costs are relatively low, but the proposed social security reforms could lead to an increase in labor costLarge firms pay additional non-wage benefits that increase the cost of labor	<p>Flexible labor regulations to enable firms to adjust quickly to rapidly changing business conditions while ensuring the protection of workers</p> <p>Ensure minimum wage do not increase faster than inflation</p> <p>Pension reforms do not increase non-wage labor costs</p> <p>Non-wage labor costs do not affect negatively job creation</p>	<p>Assess impact of firing costs on the firms and propose reforms to reduce costs for employers as well as considering social protection for those who may lose their jobs</p> <p>Asses impact of the minimum wage on access to formal jobs for youth</p> <p>Assess the impact of various pension reform options on labor market and labor costs</p> <p>Evaluate impact of non-wage costs job creation</p>	<p>Implement necessary reforms</p> <p>Monitor closely minimum wage trends</p> <p>Carry out sound pension reforms</p>
<p><i>There are barriers that separate public and unionized employment from private non-unionized employment and state labor market institutions are weak</i></p> <ul style="list-style-type: none">According to the GLSS data, share of unionized labor has fallen in the last 15 years and union wage premium has decreasedGiven the role of unions in wage negotiations, unionized workers have about 20 percent wage premium over the non-unionized labor forceNew labor law has shifted responsibilities between unions and state institutionsState labor institutions are weak, with little capacity to enforce regulation and monitor the labor market	<p>Labor unions do not impede job creation in the formal sector or in large firms</p> <p>Develop a modernized institutional framework</p>	<p>Review barriers that separate public unionized employment from private non-unionized employment</p> <p>Review the Industrial relations to refine the responsibilities and roles of various institutions and identify the areas that need further strengthening and institutional capacity building.</p>	
EMPLOYMENT PROGRAMS			
<p><i>The National Youth Employment Program targets primarily educated youth while other government programs concentrate mainly on income generation and poverty reduction</i></p> <ul style="list-style-type: none">The program was launched in 2006 to help the youth (between age of 18 and 35) to find a jobThe design of the program raises concerns: the level of wages paid is high compared to the minimum wage; the beneficiaries are mainly educated urban youth from better-off families; and the program mainly creates temporary jobs in the public sector.The program is costly, with weak M&E system.	<p>Develop cost-effective employment programs that provides short-term support to youth employment and does not disturb the functioning of the labor market</p>	<p>Revise the design of the program to ensure that it reaches vulnerable youth beyond urban areas; the level of wages do not distort the labor market; involve more closely the private sector in the design and implementation; keep the duration of the program short; and review the eligibility criteria.</p> <p>Introduce a solid monitoring and evaluation system.</p>	<p>Consider introduction of self-targeted public work schemes to offer temporary employment opportunities for youth.</p>

SKILLS DEVELOPMENT			
<p><i>Limited opportunities for good quality secondary education force many youth to leave education after junior secondary school and to search elsewhere for skills.</i></p> <ul style="list-style-type: none"> Enrolment in basic and secondary education is expanding, but there are substantial disparities across regions and the system is facing many issues in terms of quality of teachers and infrastructure Net enrolment rate in secondary education is low (10.6%); only one out of ten youth (15 to 17 years of age) is enrolled in secondary education 	<p>A strengthened foundation for basic education</p> <p>Broader access to good quality secondary education</p>	<p>Continue investment in basic as well as post-basic education to improve both access and quality at all levels and to take into account regional and gender disparities</p>	<p>Strengthen capacity for planning and policy development</p>
<p><i>Public providers of skills training offer only a small number of places for youth and the quality is low</i></p> <ul style="list-style-type: none"> Only 10% of youth (15-17) are enrolled in public training centers The resources allocated to TVET are insufficient to provide good quality instructors and adequately equipped workshops 	<p>Reformed technical and vocational education at secondary and tertiary levels</p> <p>Improved quality and better policy development through strengthening links between schools, training centers and employers</p>	<p>Strengthen the capacity and improve the quality of public and private technical vocational training</p> <p>Improve the performance of public and private training institutions with performance-based financing and strengthening employers' engagement</p> <p>National Training Authorities (coordination bodies) engage employers, worker representatives, and Gov. in coordination and governance of training system and more efficient use of public resources</p>	<p>Link funding of the training system to outcomes and performance (performance-based budgeting)</p> <p>Evaluate the impact of training and introduce tracer studies</p>
<p><i>Traditional apprenticeships are a major source of skills training for youths, but quality varies widely, and it is doubtful this system will meet the skill needs of an aspiring middle-income country</i></p> <ul style="list-style-type: none"> Over 80% of youth pursue skills development through traditional apprenticeships Most apprentices and masters lack formal vocational or technical training, Some apprentices lack sufficient basic education The pedagogical skills and knowledge of new technology is low among master craftsmen There are no instruments for assuring the quality of traditional apprenticeships 	<p>Reformed non-formal training system through facilitating the improvement process (rather than the formalization of traditional apprenticeships)</p>	<p>Strengthen capacity and improve quality of traditional apprenticeships</p> <p>Bring literacy to master craftsmen and apprentices, provide access to new technologies for master craftsmen upgrade pedagogical skills and technical knowledge of master craftsmen</p> <p>Provide certification to apprenticeship skills</p>	

<p><i>The many youth who miss first-chance opportunities for education have few second-chance options</i></p> <ul style="list-style-type: none"> • The lack of basic education reduces the chances of youth being selected for training by employers • Those who miss early education opportunities offer a weak foundation for the development of a skilled workforce • Missed education opportunities can increase later social costs 	<p>Expanded choices for youth and opportunities for them to return to formal education once they have left</p> <p>Provide better information to market participants</p> <p>Children at risk to dropping out are able to find support helping them remain in school</p> <p>Children who have left school and do not wish to return to formal education can find equivalent non-formal education programs</p>	<p>Improve the articulation between education and training and open vertical and horizontal pathways to improve choice</p> <p>Provide programs for at-risk children that offer tutoring, raise the demand for further education, and lower income constraints to keeping youth in school</p> <p>Introduce "second-chance" education programs that use non-formal education methods to deliver education that is accepted as equivalent to basic and secondary education programs</p>	<p>Introduce market institutions that provide quality assurance of training programs</p> <p>Develop information instruments, such as national qualifications frameworks, standards based training, testing and certification process.</p>
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CHAPTER 1. INTRODUCTION

BACKGROUND

1. ***According to Government, Ghana is facing many challenges in the area of skill development and job creation.*** The Government is particularly concerned with (i) unemployment among the youth (6.1 percent in 2005 for 15-24 years old), which has been attributable to the rapid population growth rate of the youth, the rapid urbanization rate, the quality of labor supply, and low labor absorption rate of the economy; and (ii) the external efficiency of the education/training system and its ability to supply the skills demanded by a diversified and competitive economy. Moreover, other related concerns include: channeling economic growth toward creating jobs, including ‘good jobs’¹; better understanding the functioning of the informal sector; explaining the mismatch between skills development and jobs; improving labor market indicators; monitoring and evaluating employment programs’ outcomes; reviewing the role of labor market regulations in job creation; and reforming technical vocational education and training (TVET) systems.

2. ***The key objective of Ghana’s development policy is to accelerate economic growth and put the creation of new and better jobs at the center of the Government agenda.*** Ghana aims to achieve middle income status by 2015, and the Government Second Growth and Poverty Reduction Strategy (GPRS II for 2006-2009) indicates clearly the determination of the authorities to mainstream employment policies and programs in the overall development agenda of the country. To achieve this objective, the Government launched the National Employment Summit with a High-Level Technical Workshop of major stakeholders in employment in November 2005. Moreover, to promote human development capital and strengthen links between skills development and employment, a Council for Technical and Vocational Education and Training (COTVET) has been established to formulate national policies for skills development across the broad spectrum of formal, informal and non-formal education.

3. ***To reach middle income status by 2015, an annual GDP growth of 6 to 8 percent is needed.*** This implies that Ghana needs to accelerate its growth rate, which is already at its highest point since 1960. To assist the Government in operationalizing its agenda, the World Bank has focused the recent Country Economic Memorandum (CEM, report # 40934-GH, November 2007) on accelerated and shared growth. To complement this work, as well as the earlier Bank’s work on youth employment,² and assist the Government in its thinking on constraints and opportunities for job creation and skills development, the preparation of this report on “Job Creation and Skills Development” was launched.

4. ***In this context, understanding the functioning of labor markets, key constraints and implications for policy makers is a priority.*** Based on updated information, the scope of this report is to focus on labor market outcomes, key barriers to job creation within labor markets, and issues related to the skills development. During the discussion of the

¹ Good job is defined by a job that provides sufficient earning to leave a person out of poverty as well as ensure basic social protection.

² See: The Youth and Prospects for Quality Jobs in Ghana; WB, December 2005.

preliminary results of the study, the authorities (Ministry of Manpower, Youth and Employment; Ministry of Finance and Economic Planning; and Ministry of Education and Sports), confirmed that this report: (i) is closely linked to the Government's own policy agenda for addressing job creation and skills development; (ii) will bring new knowledge regarding the functioning and outcomes of labor markets in Ghana (both supply and demand sides), and policy options for consideration; and (iii) will lay the groundwork for Ghana to reach a Middle-Income Country (MIC) status. In response to the Government's request, the preparation of the study has been carried out on a consultative basis, and interim steps have been used to share and discuss early analytical findings.

Framework and Structure of the Report

5. *This report follows a multi-sector approach to analyze and interpret the employment situation.* The report recognizes that the challenge of job creation can only be addressed through a comprehensive strategy that has both economic and social elements and that addresses both labor supply and labor demand. The framework for the analysis considers the implications for employment of Ghana's macroeconomic performance, the investment climate, labor market policies and institutions, safety net for workers, and education and skills development opportunities. By reviewing all the factors, the report aims to identify policy priorities that can promote creation of more and better jobs.

6. *The analysis involves an up-to-date empirical assessment of Ghana's labor market trends and a policy discussion that focuses specifically on labor market and skills development.* The report is organized as follows. Chapter 2 sets the stage by focusing on major determinants of labor demand (macroeconomic environment and the investment climate) and relying heavily on the findings of the recent CEM that has been prepared in tandem with this report. Chapter 3 looks at the structure and trends of labor markets. Chapter 4 reviews factors within the labor market that affect employment – labor market policies, institutions and programs. Finally, Chapter 5 reviews education and skills development opportunities and the link to job creation.

CHAPTER 2. THE CONTEXT FOR JOB CREATION

Creating a favorable environment for growth and private sector development is key to promoting job creation. This chapter looks at the context surrounding the labor market, focusing on major determinants of labor demand – the macroeconomic environment and the investment climate. Since the economic environment is the most critical determinant of labor market outcomes, this chapter: (i) highlights the relationship between output and employment; and (ii) reviews the extent the investment climate remains a constraint on investment, growth and job creation. Overall, it shows that economic growth has been strong and has prompted substantial job creation, which has been accompanied by a decrease in poverty. The shift in the structure of output increased demand for labor, creating new income-earning opportunities. Most sectors with strong growth in output had a strong growth in employment, and composition of the labor force shifted from agriculture toward other sectors (e.g., financial services, construction and transport/communication). This confirms, as discussed in the next chapter, that people are moving outside agriculture into self-employment and informal wage employment, leading to the growth of informal urban employment. At the same time, some of the gains in wages and poverty reduction may be slightly lower than the data suggest due to measurement issues, and it is not fully clear from the data that strong micro-economic foundations are there to sustain continuing high rates of growth in the futures. Looking forward, further changes in the structure of employment are needed in order to promote continued a pro-poor growth. This will require among others strengthening infrastructure, increasing firm productivity, and diversifying outputs. Moreover, diversified exports may need to play an increasing role as an engine of growth and job creation. The investment climate, while good, leaves room for improvement. Although firm surveys show that labor market regulations and workers skills do not currently impede firm development, reflecting the fact that most of the firms are in low productivity activities and are small in size, these are issues that Ghana will have to address if it wishes to become a middle income country by 2015.

MACROECONOMIC ENVIRONMENT, WAGE GAINS AND POVERTY REDUCTION

7. *During the last 15 years, Ghana has had one of the strongest growth rates amongst Sub-Saharan countries.* The Government of Ghana's (GOG) substantial efforts to achieve macro economic stability have clearly paid off. Ghana is among the strongest policy performers among low-income African countries (see Bogetic et al., 2007, first volume of this CEM, for an analysis of Ghana's growth performance) along with Tanzania, Uganda, and some other West African countries. Growth averaged 4 percent per year in the 1990s, increased to 5 percent between 2001 and 2005, and surpassed 6 percent in 2006-07. With a population growth rate of slightly less than 2.5%, this translates into a GDP per capita growth of up to 4%.

8. *Apart from gains in export sectors in the period from 2001 to 2005, growth was driven largely by public investment and domestic consumption funded in part by foreign aid and remittances.* Table 1 from the CEM provides data on growth and a decomposition into contributions from capital, labor force, education, and total factor productivity (TFP).

In the 1990s, there was no increase in TFP. Growth came mainly from population growth (people must make a living) and capital accumulation financed through the budget thanks in part to higher foreign aid. There were also some limited gains through a better educated workforce. In other words, with good macroeconomic and fiscal management, Ghana attracted foreign aid, which helped boost public investment and generated growth in per capita incomes apart from the growth that would naturally follow from population growth. For the period 2001-2005 however, there was in addition an increase in TFP, which contributed to almost a third of the growth.

Table 1: Growth rates and sources of growth from a Solow-Denison Model (%)

	1970–2005	1991–1995	1996–2000	2001–2005
Growth accounting for the whole economy, 1970–2005				
<i>Average annual growth, depreciation = 0.04</i>				
Real GDP ^a	2.7	4.0	4.2	5.2
Fixed capital accumulation	2.1	4.3	5.9	3.9
Labor force	2.7	2.8	2.3	2.5
School years of the labor force	0.8	0.8	0.9	1.0
Total factor productivity	-0.26	0.05	-0.07	1.6
<i>Contribution to growth, $\alpha = 0.4$, depreciation = 0.04^b</i>				
Fixed capital accumulation	31.6	43.7	56.2	29.8
Labor force	61.3	42.6	32.8	28.5
School years of the labor force	16.9	12.4	12.7	11.1
Total factor productivity	-9.9	1.3	-1.6	30.6
Total	100	100	100	100

Source: See CEM 2007 Table 1.4. WDI, Ghana Live Data Base (LDB), authors' calculation.

Notes: (a) Sensitivity analysis is based on various scenarios, including the initial capital output ratio at 1.3, estimated using the perpetual inventory method as in Nehru and Dhareshwar (1993), depreciation rate at 0.06, and α at 0.35 and 0.45. The results are basically the same: the factor accumulation accounted for most of the growth over the 15 years while TFP contribution to growth was more pronounced in the last 5 years. b α is the parameter that measures the importance of physical capital in Cobb-Douglas production function.

9. A large part of the recent increase in TFP is likely to be related to gains in agricultural productivity, especially in the cocoa sector. Agriculture accounts for about 40 percent of GDP and the sector as a whole had a growth rate of 5.7 percent over the period 2001-2005. About 30 percent of that growth was due to cocoa alone, even though cocoa represents a much smaller share of total agricultural output. It can therefore be inferred that the cocoa boom added approximately 0.7 percentage point to the overall GDP growth. These gains are mostly captured through TFP in Table 1, since they cannot be accounted for by capital accumulation, increases in the overall labor force, or better schooling. In addition to the impact of the cocoa boom, growth also increased in part due to a construction boom linked to public investment as well as remittances, which are important in Ghana and increasing. Finally growth increased further to 6.3-6.4 percent in 2006-2007. In 2007, high growth sectors included mining (up 30 percent), finance, insurance, and real estate (up 15 percent) and construction (up 11 percent). Output however declined in manufacturing (down 2.3 percent) and utilities (down 22 percent). A fiscal policy stimulus led to Government services growing as well, yielding an additional one percent of real GDP growth. Thus over the last 15 years apart from recent export-oriented mining and cocoa booms, long-term growth has been driven mostly by public investment and domestic consumption themselves financed in part externally through foreign aid and remittances.

10. *Economic growth has led to massive poverty reduction* (see Volume III – Chapter 2 of the CEM by Coulombe and Wodon, 2007). The share of the population in poverty fell from 51.7 percent in 1991–02 to 39.5 percent in 1998–09, and 28.5 percent in 2005–06. It is expected that Ghana will meet the Millennium Development Goal of reducing poverty by half, with 1990 set as the baseline, well ahead of the target date of 2015. However, the reduction in poverty has been accompanied by an increase in inequality, and it is notable that the pace of poverty reduction has been weaker in the northern regions, which were already poorer in the 1990s. In addition, as noted by Coulombe and Wodon (2007), there is a possibility that the decrease in poverty and the increase in consumption and wages observed in the GLSS5 data may have been overestimated due to a weaker increase than expected in the official consumer price data for urban areas outside of Accra which tends to result in relatively low poverty lines for these areas, and thereby lower poverty as well and higher wages in real terms. On the basis of the information available from the Consumer Price Index, consumption increased in real terms by about 35.5 percent according to the data available in the household surveys, while the cumulative growth rate in per capita GDP was only at 18.4 percent over the same period. The difference between these two estimates can be explained through the GDP deflator, which grew more rapidly than the CPI, among others because the prices of some imports (such as cocoa) increased. Still, even if we assume that the CPI could have been underestimated in some areas, it is clear that substantial poverty reduction took place in Ghana between 1998/99 and 2005/06.

11. *The labor market was able to absorb new entrants, and gains in wages were important, but as for the case of poverty, may be overestimated due to data limitations.* Labor force participation has remained stable over time at 89 percent (population aged 25–64) over time, and unemployment has decreased slightly from 2.7 to 2.3 percent. Gains in standards of living, including wages, have come from three main sources: (i) lower dependency ratios within households which does not affect wages, but do enable households to spread their income on a smaller number of household members, which contributes to reducing poverty; (ii) shifts away from lower paying jobs in agriculture to better paying jobs in services, which are also related to migration from rural to urban areas; and (iii) higher earnings in most job categories thanks to an overall increase in wage rates. The gain in average earnings between 1991/92 and 2005/06 were at 77 percent, which is roughly in line with household gains in consumption per equivalent adult (64 percent) over the 15-year period (see Box 1). Part of the gains in earnings were related to an increase in average hours worked per person was at about 14 percent. The average gain in earnings per hour was at 35 percent (since we are dealing with ratios, we need not have the average gains in wages per hour equal to the average gains in earnings less the average increase in hours worked). However, it should be noted that the divergence between the GDP deflator and the CPI mentioned above also affects the link between growth as observed in the national Accounts and earning trends since the CPI is used to deflate earnings while the GDP deflator is used for growth analysis. Thus gains in earnings may have been overestimated somewhat (or alternatively the pace of growth in the country may have been underestimated).

Table 2: Ghana: Sectoral sources of economic growth, 1990–2006 (%)

	Share of GDP			Growth rate
	1991	1998	2005	1991-2005
<i>GDP</i>	100.0%	100.0%	100.0%	
Agriculture	38.6%	35.2%	34.5%	-0.8%
Mining/Quarrying	4.9%	5.5%	4.9%	0.0%
Manufacturing	9.5%	8.8%	8.6%	-0.8%
Utilities	2.3%	2.4%	2.5%	0.8%
Construction	6.8%	7.4%	8.1%	1.3%
Trading	4.1%	4.4%	4.8%	1.2%
Transport/Communication	5.3%	6.4%	6.9%	2.0%
Financial Services	4.0%	4.1%	4.2%	0.4%
Community & Other Services	24.8%	25.9%	25.5%	0.2%
<i>Share of Labor Force</i>				
<i>Labor Force</i>	100.0%	100.0%	100.0%	
Agriculture	60.3%	51.4%	53.2%	-0.9%
Mining/Quarrying	0.5%	0.9%	0.8%	3.2%
Manufacturing	8.8%	12.3%	11.8%	2.1%
Utilities	0.1%	0.2%	0.2%	2.7%
Construction	1.2%	1.7%	1.9%	3.4%
Trading	16.9%	20.0%	18.6%	0.7%
Transport/Communication	1.9%	2.6%	3.1%	3.5%
Financial Services	0.5%	0.9%	1.2%	6.1%
Community & Other Services	9.7%	10.1%	9.2%	-0.4%
<i>Average Productivity(GDP based)</i>				
<i>All</i>	9.4	12.2	11.6	1.5%
Agriculture	6.0	8.3	7.5	1.6%
Mining/Quarrying	90.7	76.9	72.9	-1.5%
Manufacturing	10.2	8.7	8.5	-1.3%
Utilities	145.4	139.5	138.0	-0.4%
Construction	52.6	54.2	48.6	-0.6%
Trading	2.3	2.7	3.0	2.0%
Transport/Communication	25.6	30.2	26.0	0.1%
Financial Services	70.1	55.4	40.0	-3.9%
Community & Other Services	24.0	31.3	32.3	2.2%
<i>Average Productivity(Consumption based)</i>				
<i>All</i>	6.0	7.8	10.1	3.8%
Agriculture	4.7	5.6	7.4	3.3%
Mining/Quarrying	9.1	13.1	12.2	2.1%
Manufacturing	7.0	9.1	11.6	3.7%
Utilities	13.7	11.2	20.1	2.8%
Construction	8.0	8.5	12.1	3.0%
Trading	7.4	9.7	12.7	4.0%
Transport/Communication	10.5	13.1	13.9	2.0%
Financial Services	11.3	17.4	19.5	4.0%
Community & Other Services	9.2	10.6	15.3	3.7%
<i>Poverty Headcount</i>				
<i>All</i>	49.5%	35.2%	25.8%	-4.5%
Agriculture	61.5%	49.4%	38.4%	-3.3%
Mining/Quarrying	34.2%	7.6%	4.7%	-13.2%
Manufacturing	35.5%	25.9%	17.5%	-4.9%
Utilities	18.2%	11.6%	0.0%	NA
Construction	29.7%	20.9%	10.2%	-7.3%
Trading	33.8%	21.2%	11.0%	-7.7%
Transport/Communication	20.7%	8.3%	11.7%	-4.0%
Financial Services	12.5%	5.8%	5.3%	-5.9%
Community & Other Services	26.3%	17.0%	6.7%	-9.3%

Average productivity =real GDP/LF.

Source: Staff estimates.

12. *Structural changes in the composition of output led to shifts in labor shares creating better income-earning opportunities and contributing to poverty reduction.*

Table 2 provides data on the share of GDP accounted for by different sectors, the share of the labor force working in these sectors, the average productivity of workers computed as the total GDP or household consumption related to each sector (in the case of consumption, this is done on the basis of the main occupation of the household head), and finally the share of the population living in poverty in each of the sectors. Overall the degree of “structural transformation” among the large sectors of the economy has been limited in Ghana. The service sector has maintained an average growth rate of 6 percent, compared to a total economic growth rate of 4.7 percent (Table 2). More specifically, the following findings are observed:

- The share of agriculture in GDP is decreasing over time, to the benefit of the other sectors, and especially construction, trading, and transport and communications. Similarly, the share of the workforce in agriculture is falling, while it is increasing in all the other sectors, with the exception of community and other services which include public administration where employment in relative terms has been reduced. Within agriculture, although the increase in the price of cocoa had a direct impact on trade, its impact on the labor market was limited: the share of workers in cocoa production remained stable during 1991-2005 (6 percent), while the share of non-cocoa agriculture workers decreased (from 54 percent to 47 percent).
- Figure 1a and 1b provide data on the growth in labor force by sector, the GDP output growth by sector, and the level of worker productivity by sector. The size of the bubbles on the Figures is proportional to the GDP shares of the various sectors. Two findings stand out. As expected, the growth in the labor force is highest in those sectors where the growth in output is highest as well (Figure 1a). In addition, there is a clear indication that workers are shifting to those sectors where productivity, as measures according to GDP or consumption per worker is higher (Figure 1b). Said differently, the inter-sectoral labor reallocation in Ghana between 1991 and 2005 saw a sectoral shift in composition of labor force from the agricultural sector toward among others the financial services, transport and communication, and construction sectors (Chapter 3, Table 4), which has helped increase the earnings of the workers who have made this transition.
- While the data confirms that people move to better paying jobs, at the same time, wage employment in the formal sector is not growing fast enough to absorb the new influx of workers especially in urban areas, so that many workers are moving outside agriculture into self-employment and informal wage employment, leading to growth in informal urban employment. This transition is expected to continue. Indeed, agriculture still accounts for about a quarter of Ghana’s GDP and almost half of the labor force, with these shares expected to decrease in the future.
- When measured in terms of changes in consumption levels, productivity per worker has increased substantially over time in all sectors of the economy. However, as mentioned earlier the increase in consumption in real terms has been significantly higher than the increase in GDP, due to the fact that the CPI has increased less

rapidly than the GDP deflator. When looking at productivity in terms of GDP per worker, the data suggest that for some sectors there has been a gain in productivity, while for others, there has been a loss. It is likely that the “true” changes in productivity are somewhere between the changes obtained with the two indicators, GDP and consumption.

- According to the consumption-based data that is used to measure trends in poverty, poverty was reduced substantially in all of the sectors, although in comparative terms, the reduction in poverty was slower in agriculture than for the rest of the sectors. As shown by Coulombe and Wodon (2007), the price and productivity gains in cocoa led to a decrease in poverty among these producers from 62 percent in 1991 to 21 in 2005, while the decrease was much smaller for other farmers. As a result, some northern regions where agriculture remains by far the main occupation are lagging behind.

Figure 1.a: Sectoral Reallocation of Labor Force

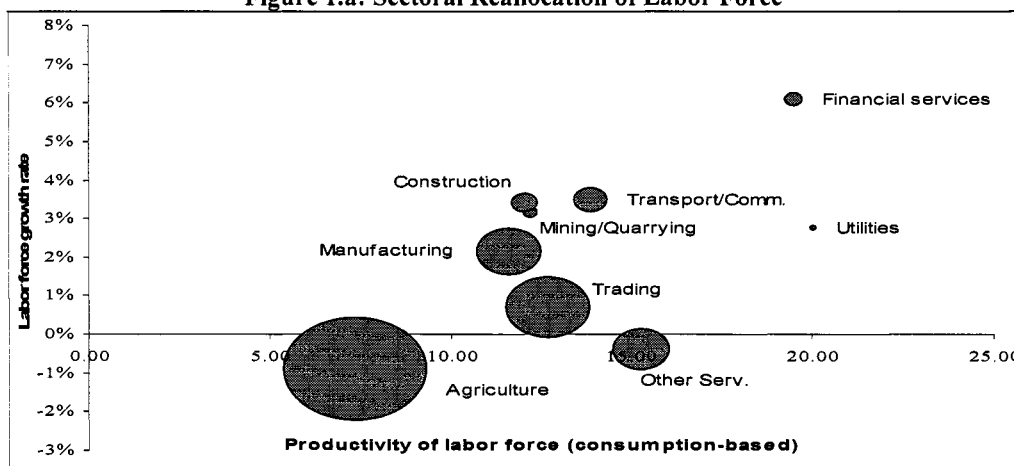
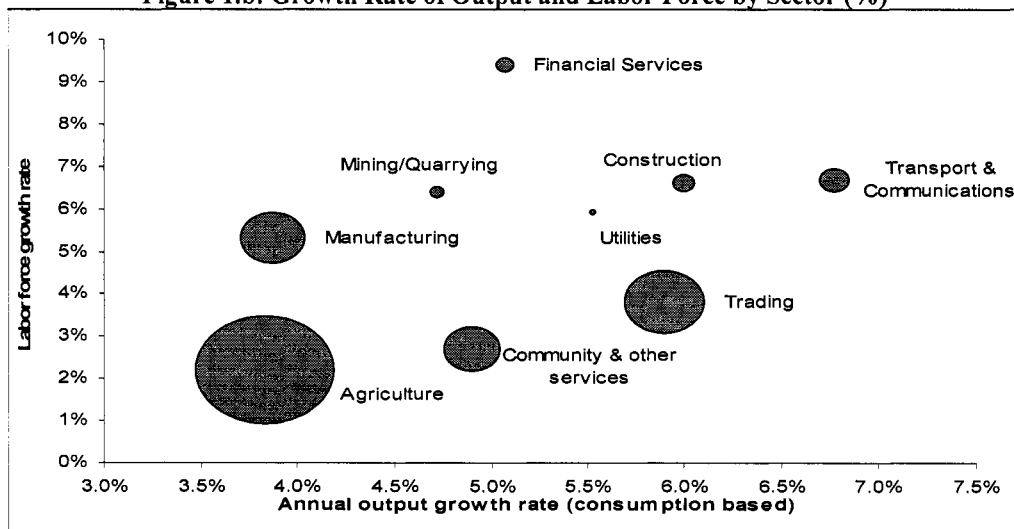


Figure 1.b: Growth Rate of Output and Labor Force by Sector (%)



Source: Staff estimates.

Box 1: Accounting for the increase in welfare levels in Ghana

The average consumption per equivalent adult increased in Ghana by about 64 percent in real terms between 1991/92 and 2005/06, which is very large. Various decomposition methods can be used to provide an account of what were the drivers for this change. Such decompositions typically include the following factors: a) sectoral shifts observed in the labor force towards sectors with higher earnings; b) higher number of hours worked; c) demographic transition factors such that earnings are shared by a smaller number of household members; d) potential over- or under-estimation of income or consumption gains (due in Ghana to a potential underestimation of inflation in parts of the country); and e) productivity gains per worker within sectors. Rather than providing detailed results from such a decomposition (these results are complex because of the interactions between the different factors involved) we provide below an intuitive discussion of the key factors that are likely to have had a large impact on household welfare.

Sectoral shifts between sectors (gain of about 10 percent in welfare). As shown in table 2, the share of the labor force in agriculture decreased by 7 percentage points between 1991/92 and 2005/06, from 60 percent to 53 percent. In addition, the average productivity (consumption-based) of a worker in agriculture was only 7.4 million cedis per year in 2005/2006, versus an average of about twice that (13 million cedis) per year in the other sectors. In previous years as well, the productivity per worker is about twice as high outside of agriculture than within agriculture. If 7 percent of the workers change job and earn twice as much as they did previously in doing so, this generates an overall gain in welfare of about 7 percent. As workers try to move to the highest paying sectors, the gains are likely to be slightly larger.

Change in number of hours worked (gain of about 15 percent in welfare). The average worker increased his/her working hours by about 14 percent between the two years. On average, the increase in working hours was larger outside of agriculture than in agriculture (where the increase was at about 10 percent). Thus, the impact of higher working hours on total earnings must have been at least 14 percent.

Change in demographic structure, labor force participation and unemployment (gain of about 10 percent in welfare). Consumption and poverty measures are based on total household consumption divided by the number of equivalent adults in the household. In Ghana, the number of equivalent adults decreased between 1991/92 and 2005/06 from 4.17 to 3.90, a drop of about 6.5 percent. Similarly, the number of individuals in the average household decreased from 5.59 to 5.13 (a drop of 8.5 percent). Another useful statistic is that the dependency ratio based on the age of various members of the households decreased from 2.72 to 2.38 (a decrease of 12.5 percent). Overall, on the basis of these statistics, changes in demographic structure may have led to an increase of about 10 percent in welfare. By contrast labor force participation rates did not change much, and unemployment rates decreased marginally from a low base.

Potential over-estimation in gains of welfare (gain of 0 to 18 percent in welfare or about 9 percent in average). As discussed previously, there has been a divergence between the GDP deflator and the CPI in Ghana over the last few years. The increase in GDP per capita between 1998/99 and 2005/06 was at about 18 percent, while the increase in consumption was twice as large. It may be that part of the difference is due to an underestimation in the CPI in some areas of the country (non-Accra urban areas specifically). Thus, some of the divergence in the GDP deflator and the CPI may reflect a measurement error that leads to higher "observed" welfare than the actual changes in well-being for the population.

Gains in productivity within sectors (gain of about 20 percent in welfare). As shown in table 2, even when using productivity as measured by GDP per worker, there was an increase in productivity in the two largest sectors of the economy in terms of their labor force share (agriculture, with a 25 percent increase in GDP per worker, and trading with a 32 percent increase). Despite the loss in productivity according to this measure in some of the other sectors, overall productivity gains may have generated gains in welfare.

13. *Part of the gains in income or productivity of workers is due to an increase in the number of working hours of those workers.* There has been an increase in working hours per worker of about 14 percent between 1991-92 and 2005-06. This increase is observed for all sectors, although there are some differences between sectors in terms of the

magnitude of the increase. Once again, this increase in working hours suggests that the growth of the economy has generated substantial employment, especially in the trading sector where the increase in working hours per workers was one of the highest. But this also means that in terms of wage earnings per hour worked, the gains have been lower than one might be led to believe if one were not observing the increase in working hours over the period.

14. *Since exports have not diversified, the economy remains vulnerable to commodity price shocks.* Reflecting the Government growth strategy, Ghana's export contribution to total GDP has been lower than that in rapidly growing comparator economies (Botswana, Mauritius, Mozambique, Malaysia): between 1990-2005, exports in Ghana contributed to only 6 percent of GDP growth (compared to over 40 percent in comparator economies), government spending and investment accounted for 40 percent of growth, and the remainder was due to private consumption. Moreover, as shown in the recent CEM, Ghana's exports by commodity have *not* diversified significantly, and cocoa, gold, and timber still account for about 70 percent of total commodity exports. As a result, Ghana's economy remains vulnerable to commodity price shocks. The growth success stories in Africa (Mauritius and Botswana) testify that for sustained, long-term growth, the strength of economic policies rest on fiscal soundness, transparency, and export orientation of the economy.

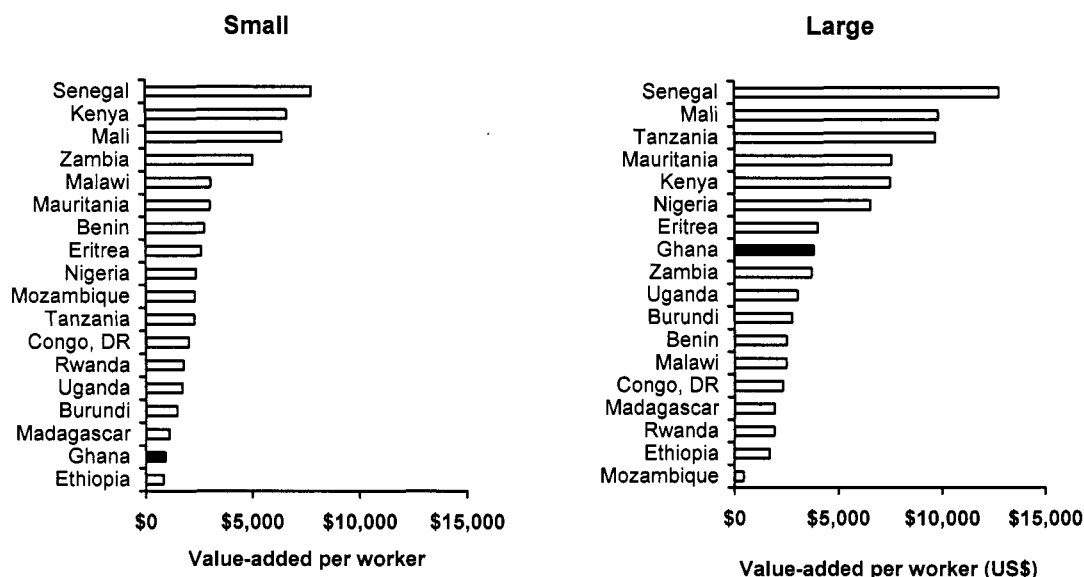
15. *Microeconomic evidence suggests that Ghanaian firms lag behind the most productive African firms, indicating scope for improvements.* According to Teal and others (2006), based on microeconomic firm-level data, productivity (values for value-added per worker) for the median manufacturing firm in Ghana was approximately one-tenth of the productivity for the median firm in South Africa. Firms in Ghana compared more favorably with productivity in other countries; in particular, the median Ghanaian firm was slightly more productive than the median Tanzanian firm, approximately half as productive as the median Kenyan firm, and approximately one-third as productive as the median Nigerian firm. According to the 2007 Investment Climate Assessment (see Clarke 2007), productivity appears to be relatively low in Ghana. The median firm in Ghana produces far less output per worker than firms in more successful manufacturing economies elsewhere in Sub-Saharan Africa or in East Asia.

CHARACTERISTICS OF FIRMS AND INVESTMENT CLIMATE IN GHANA

16. *Low Productivity of firms reflects the characteristics of the enterprises in Ghana.* As discussed in the 2007 CEM, firms in Ghana are less productive than firms in the comparator countries or other low-income countries in Sub-Saharan Africa. This is mainly because firms in Ghana are (i) less capital and skill intensive (less machinery and equipment per worker); (ii) relatively small in size: the median manufacturing firm has only about 10 employees in Ghana, compared to 60 employees in Swaziland, and 50 employees in Kenya; and (iii) less likely to export: only one-quarter of manufacturing Small, Medium and Large Enterprises (MLEs) in Ghana exports, compared to more than half in most of the comparator countries (see Figure 2). Labor productivity appears to be particularly low among small firms—small firms from Ghana are less productive and less capital intensive than small firms even in other low income countries in Sub-Saharan

Africa, while large firms are relatively productive and relatively capital intensive. The small size of firms has been noted in other studies, along with the substantial increase in their number, which potentially explains the continuation of the job creation in the informal sector (Teal and others, 2006).

Figure 2: Labor productivity is particularly low among small enterprises in Ghana.



Source: Enterprise Surveys; See CEM 2007.

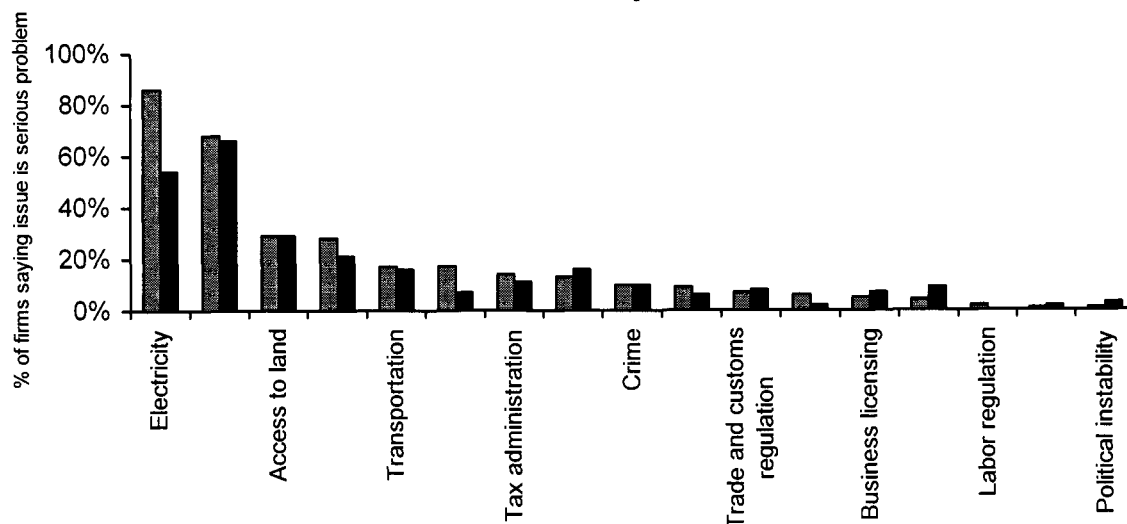
Note: Comparisons only include manufacturing enterprises. Countries where there were fewer than 10 large enterprises and middle income countries are excluded from the graph. Definitions are provided in footnote to previous figure.

17. According to Enterprise Surveys, impediments to firm development exist outside of the labor market. The overall investment climate in Ghana, as measured by the World Bank's enterprise investment climate survey (2007), is relatively good.³ This is confirmed by the 2008 Doing Business Report, which lists Ghana among the top ten reformers. In the report, Ghana scores relatively well on the basic indicators such as law and order, taxes, trading across border, and enforcement of contracts, but less well on issues affecting starting a business, getting a license and hiring workers. Based on the 2007 Investment Climate Survey, the two main areas of investment climate that deserve particular attention and stand out as particular concerns for small, medium and large enterprise (SMLE) are power (electricity) and access to finance, especially for small and medium size firms (Figure 3): close to nine out of ten SMLE managers and over half of the microenterprise managers rated electricity as a serious problem (i.e., a major or very constraint) and about seven out of ten SMLE and microenterprise managers rated access to finance as a serious problem. Far fewer enterprise managers were concerned about other constraints, such as

³ An Investment Climate Firm Survey was conducted in Ghana in May through July 2007. The survey covered firm performance and productivity, manager's perceptions about the main obstacles to doing business in Ghana, and objective indicators of the investment climate. Results from the survey will be discussed in greater detail in the forthcoming *Investment Climate Assessment*, which is under preparation.

access to land, tax rates, transportation, macroeconomic instability, skills, tax administration, labor regulation, courts, and political instability.

Figure 3: Managers' responses on biggest investment climate constraints, MLEs and microenterprises



Source: World Bank Enterprise Surveys.

18. *Characteristics of firms, explain to a large extent the results of the ICA.* The low level of firms' concern about some issues—such as labor regulations and worker skills—might reflect the small size, low capital intensity and low productivity observed among firms in Ghana, rather than indicate that labor regulations and skills are not a problem for the country overall. If firms are mostly engaged in low productivity activities, they are less likely to demand skilled workers. In addition, since small firms are less unionized, they are less affected by labor regulations. These issues will also be discussed in greater detail in the following Chapters.

SUMMARY OF FINDINGS

19. *Growth has generated employment and wage gains which have in turn led to poverty reduction, but there are challenges to sustaining these gains in the future.* Several challenges can be highlighted. First, much of the growth in employment has taken place in the informal sector, which can be helpful for reducing poverty, but it may be less attractive to more skilled labor, particularly since it will not provide the same security and benefits as the formal sector. Second there have been substantial gains in earnings, consumption, and poverty reduction, but it could be that some of these gains have been overestimated due to a comparatively low increase in the Consumer Price Index as compared to the GDP deflator, especially in urban areas outside of Accra. Third, part of the gains in earnings have been obtained through an increase in working hours, which could potentially be increased more in the future, but only up to point since there is a limit to the number of hours that workers can work in a day. Fourth, the pressure on the labor

market to absorb a large number of new entrants will remain in the future due to the demographic transition phased by the country. Fifth, at the macroeconomic level, the contribution to growth of the improvement in factor productivity has been limited, and probably due over the last few years in large part to the boom of the cocoa sector, a success that may not be easily reproduced in future years. Finally, although there have been sectoral shifts in the labor force to better paying jobs, more than half of the labor force remains employed in agriculture, in most cases in low productivity jobs, so that the transformation of the economy remains limited.

20. *These results suggest that efforts need to be made to upgrade the skills of the labor force for Ghana's economy to acquire the features observed in middle-income countries.* The macroeconomic analysis of the sources of growth in Ghana (see table 1) suggest that: (i) improvements in the education of the labor force have contributed only for about 11-12 percent of the growth observed over the last fifteen years; (ii) total factor productivity has also not risen much, with the exception perhaps of the cocoa boom between 2001 and 2005; (iii) although real wages have increased, it is likely that part of those gains will be reversed due to the increase in the cost of living (due to higher food and oil prices); (iv) some of the gains in earnings have been obtained by working more rather than by obtaining higher hourly wages. While the increase in working hours is positive since it suggests better employment opportunities, it cannot be repeated indefinitely; and (v) a large share of the population remains engaged in low productivity unskilled work. Therefore, for a country that aspires to middle-income status, a key priority should be to increase the skills of the labor force, and ensure that interventions to improve education and training are balanced with interventions in economic and labor market policies to promote a favorable climate for private investment and job creation. In this context, labor market policies, institutions and programs are discussed in Chapter 4, and the issue of ensuring that the education and training systems prepare and support workers to respond to the skills needs of the economy is discussed in Chapter 5 of the report.

21. *A business climate that is favorable for investments will also be favorable for employment, including employment in the formal sector.* Cross-country comparisons demonstrate that reforms that make business development easier allow large and labor-intensive firms to grow faster and create more jobs in urban areas (World Bank WDR 2005). Therefore a sustained employment growth requires a dynamic private sector and a friendly investment climate. Ghana has made clear progress in improving the laws and regulations that define the business climate. However, as discussed in the CEM, there are serious concerns in respect to electricity and access to finance by small and medium-size enterprises, which need to be addressed. Moreover, certain business regulations need to be improved, such as procedures for formal business start ups, which are still cumbersome and push firms to informality. Currently, according to the recent investment climate, the main obstacles are not labor market policies or lack of skills, but as other constraints are addressed, labor market regulations and inadequate skilled labor may become important (see Chapters 4 and 5).

22. *Exports need to play an increasing role as an engine of growth and job creation.* The model of economic growth that has focused primarily on domestic demand and investment is not likely to provide a sustainable source of employment growth. At present,

the increases in the demand for labor come mainly from the domestic market, where self-employment activities have expanded far more rapidly than wage employment (see Chapter 3). As discussed in the CEM, exports need to play a larger role as an engine of growth, and export diversification need to be promoted. Currently, agriculture exports are the primary source of foreign exchange accounting for over half of export receipts. Government GPRS II is focused on an agriculture-led strategy which seeks to diversify the economy's structure from dependence on cocoa to cereals and other cash crops for export markets. In this context, the review of the sector in the recent CEM suggests substantial scope to increase physical yields, opportunities to substitute low-value production for higher value crops, including those for export. However, to promote job creation as well as productivity gains, future macroeconomic growth policies need to improve the competitiveness of the manufacturing sector and enable firms to enter and grow in the export market.

CHAPTER 3. LABOR MARKET OUTCOMES: BASIC STATISTICS

As discussed in the previous chapter, during the last 15 years, Ghana has had one of the strongest growth rates amongst Sub-Saharan countries and an outstanding performance in terms of poverty reduction. Since the vast majority of people depend on their labor as the primary source of income, the quantity and quality of employment play a central role in the translation of growth into poverty reduction. This chapter reviews labor market trends in Ghana using simple statistical analysis (regression analysis is used in the next chapter). The analysis focuses on data spanning the last 15 years to answer the following questions: How has growth been translated in terms of job creation? How has the distribution of employment across various sectors changed? Who works and what type of skills do workers possess? What is the quality of the jobs created in both the public and private sectors? What share of workers in various sectors belongs to poor households? Which groups among the working population are relatively disadvantaged, as measured by labor market status, earnings, education, skills and other job attributes? In answering these questions, the chapter shows that jobs are being created, although more so in the informal than in other sectors. Although wages are increasing, the labor market remains somewhat segmented between high wage, high benefit public sector jobs, and lower wage, lower benefit jobs in the informal sectors and among the self-employed. Unemployment is primarily found among the better-educated urban youth. Looking forward, job generation needs to be promoted in higher productivity sectors, public sector pay policy may need to be reviewed, and given the positive impact of education on earnings, investments must be made in the education level and skills of the working population (this is discussed in chapter 5).

23. *In order to present basic trends on Ghana's labor market outcomes, we rely in this chapter on simple statistics, leaving for later the analysis of the determinants of labor outcomes.* This chapter provides basic statistics on jobs and earnings, as well as some data on time use patterns. We start with some information on dependency ratios (section 1), and follow with sections on labor outcomes (section 2), with a focus on the adult population aged 25 to 64. We then present data on total individual earnings (Section 3), and finally on hours worked and hourly earnings (Section 4). The analysis is based on the last three rounds of the GLSS surveys for 1991/92, 1998/99 and 2005/06. The objective is to provide a simple picture of the labor markets at three points in time, and assess how the labor market has evolved. An analysis of the determinants of the occupational choices of workers as well as of their wages is provided in chapter 5.

24. *There is an important caveat related to the comparability of the surveys that needs to be emphasized – we do not consider here the issue of youth employment.* Most of the statistics presented in the next section of this chapter are based on GLSS surveys for 1991/92, 1998/99, and 2005/06. Though the surveys are comparable for most questions, there is one major difference in the design of the 1998/99 questionnaire that needs to be taken into account. In the 1998/99 questionnaire, once a child or youth was enrolled in

school, no questions were asked about his labor activities; however, this was not the case in the 1991/92 and 2005/06 surveys. This means that when considering the whole adult population aged 15 to 64, only the data from the 1991/92 and 2005/2006 surveys are comparable, as estimates based on the 1998/99 surveys do not account properly for the labor activities of youths aged 15 to 24 (or children below the age of 15). By contrast, when considering the population aged 25 to 64, the three surveys are to a large extent comparable, although in some cases, we still find some divergence in the results obtained with the 1998/99 survey as compared to the other two surveys. In this chapter, we report separately on the trends for the 25-64 age group using all three surveys, and the issue of youth employment for the 15-24 age group using the first and third surveys (1991 and 2005) only.

DEMOGRAPHIC TRENDS AND DEPENDENCY RATIOS

25. *Ghana's population is experiencing a decline in fertility which is resulting in changing demographic structure and improving (falling) dependency ratios.* As a result of the declining fertility the age structure is changing. This will affect dependency ratios which will fall, and will create a window of opportunity, as there will be more working people relative to dependents. Annual population growth has fallen from about 4% in the early eighties to slightly less than 2.5% in 2005. With this population growth rate Ghana is below the Sub-Sahara African average, but the country is still above the average for low income countries as a whole. In addition to a reduction in its population growth rate, Ghana is experiencing a demographic transition characterized by a declining fertility and improving (falling) dependency ratio (this is the ratio of the total population to the working age population). The working age population is indeed increasing as a share of the total population (from 52 percent in 1983 to 57 percent in 2005), while the share of children (0-14 age cohort) has decreased from 45% to 39%. The proportion of people above 65 is increasing rapidly, but from a low base, and therefore remains low at about 4% in 2005. According to projected population pyramids (see Figure 3), this trend will continue. Of course, for households to benefit from the falling dependency ratio the economy must create sufficient jobs so that both the existing active population and the new cohorts who are entering the labor force are able to find work. Yet as will be documented in this chapter, this has largely been the experience in Ghana over the last 15 years, with the growth in employment closely matching the growth in the supply of labor among the adult population, especially in the 25-64 age group.

26. *The fall in dependency ratios is already observed in the various rounds of the GLSS surveys.* As shown in Figures 4 and 5, while the population grew for all age groups between 1991 and 2006, the largest increase was observed among the working age population, and especially among youths. This has resulted in a substantial decrease in the dependency ratio, whether calculated by comparing the total population to the number of people aged 15 and 64, or to the number of people aged 25-64. For example, when using the population between the ages of 25 and 64 as the denominator, the dependency ratio decreased from 2.72 in 1991/92 to 2.38 in 2005/06. This is likely to have been a key factor in the improvement of the consumption per capita indicators used to measure poverty.

27. *However, while Ghana is benefiting from a demographic transition, the urban population is increasing rapidly, which implies a rapid rise in the urban labor supply, especially among youth.* While the youngest age cohort (0-14) is growing at the slowest rate (about 1% per year), the working age population (15-64 years) is growing at a much higher of 3% per year, and the rate is higher for youth (15-24 years). Another important trend is the rapid rate of urbanization, with the share of the urban population increasing from 32% in 1983 to 48% in 2005. Together, the high rate of population growth and the rapid urbanization have yielded a large increase in new job seekers, especially in cities, and especially among youth. We will document in this chapter the fact that poverty has decreased much less among the unemployed than among other groups over time. This suggests that interventions to help the unemployed, and especially young workers with limited experience that may have difficulty finding good jobs, will be important if the aspirations of the new cohorts entering the labor force are to be addressed.

Figure 4: Population Pyramids 2000, 2025, 2050

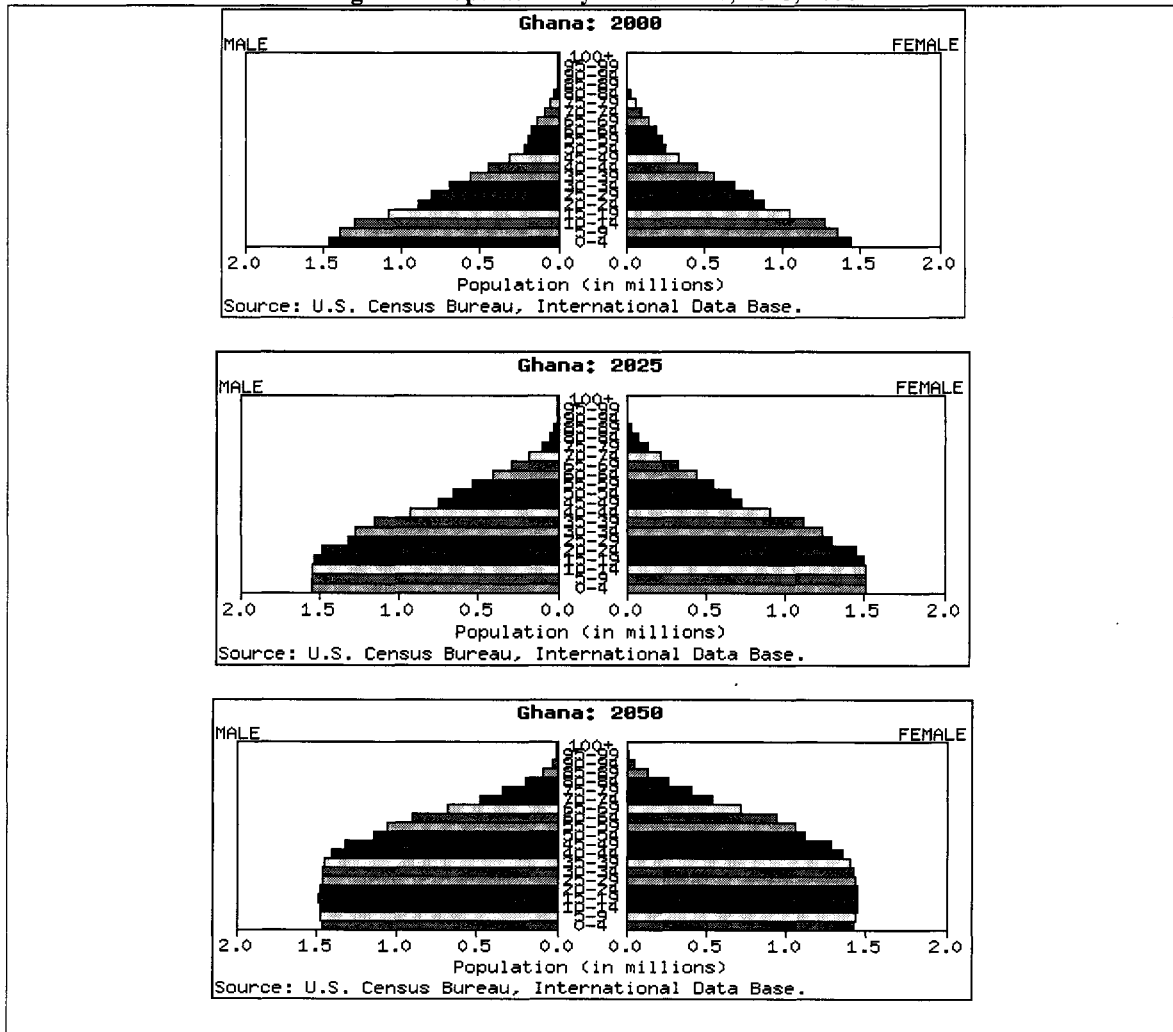
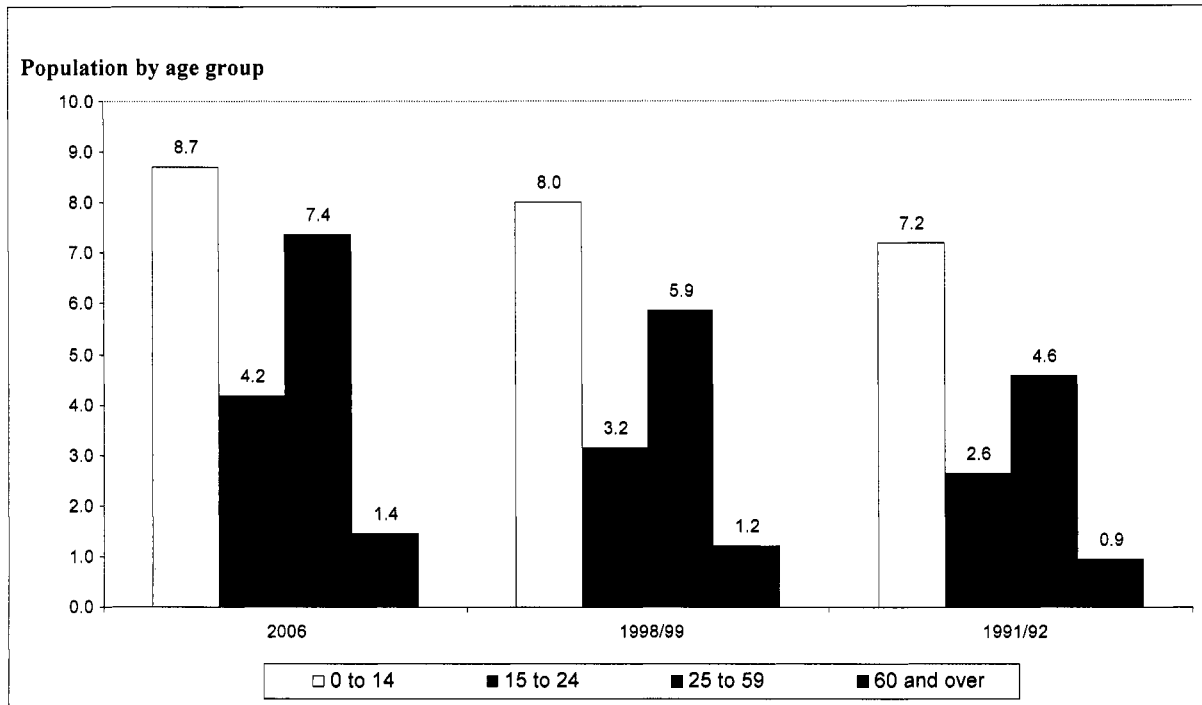
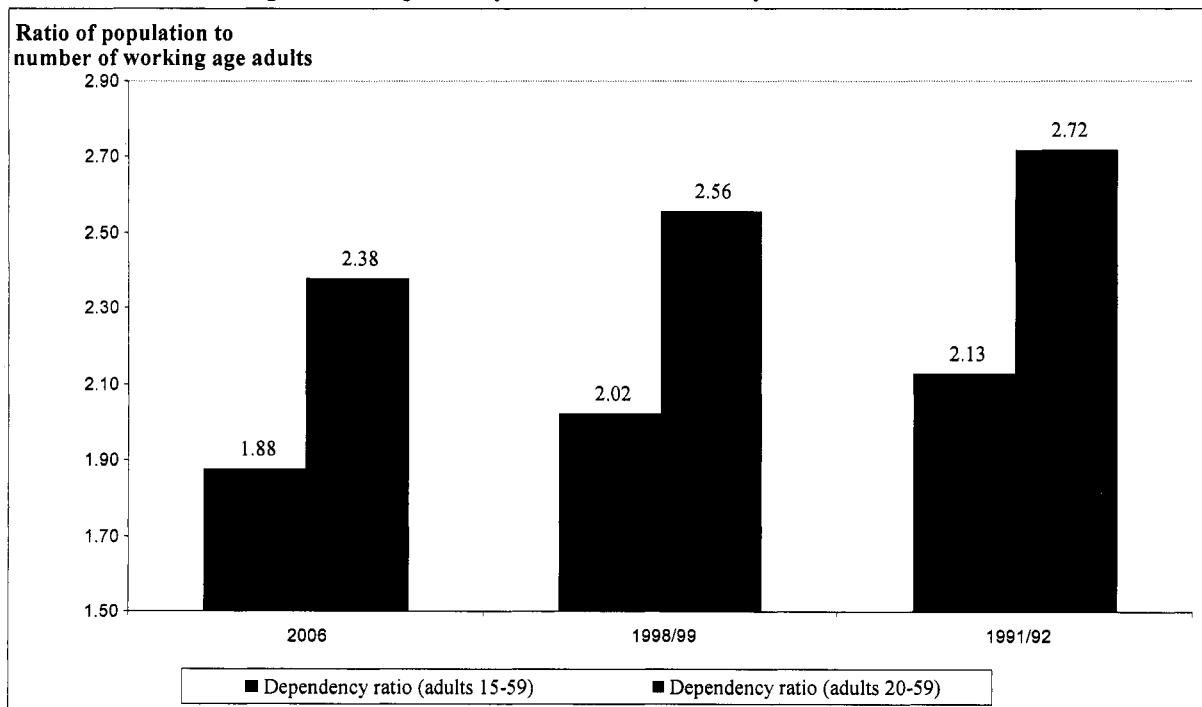


Figure 5.a: Population by age group in GLSS surveys, 1991-2006



Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

Figure 5.b: Dependency Ratios in GLSS surveys, 1991-2006



Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

LABOR OUTCOMES AMONG WORKERS AGED 25-64

28. *Although labor force participation rates are high in Ghana, the data need to be interpreted with caution.* There is substantial debate whether labor force participation is being measured accurately in a Sub-Sahara African context, especially for work in rural areas and particularly for women. In Ghana, the data suggests that labor force participation is very high among the adult population aged 25-64 (more than 90% for men, and more than 85% for women) and has remained stable over time. Stylized facts suggest that (i) participation is higher in rural areas; (ii) better educated adults are less likely to participate in the labor force, both in urban and rural areas – after controlling for age and family situation; and (iii) at least in rural areas, being married increases the probability of participating in the labor force for both men and women (Table 3). However, in order to better appreciate the extent to which different individuals work, an analysis of hours worked (given below) is required.

Table 3: Labor Force Participation in age group 25-64, 1991-2005

	1991/92	1998/99	2005/06	change
<i>Sex</i>				
Male	92.2	87.4	92.2	0.0
Female	86.4	80.5	86.2	-0.2
<i>Age</i>				
24-54	89.5	84.0	89.7	0.2
55-64	85.1	80.4	83.6	-1.5
<i>Education Level</i>				
No education	88.5	81.7	88.5	0.0
Primary	88.8	86.5	90.0	1.2
Secondary lower	90.3	84.5	90.1	-0.2
Secondary Higher	86.3	82.3	84.5	-1.8
Post Secondary	87.8	87.2	88.9	1.1
<i>Urban/Rural</i>				
Urban	86.5	81.3	85.0	-1.5
Rural	90.2	84.8	91.7	1.5
<i>Region</i>				
Western	93.4	86.3	89.1	-4.3
Central	92.9	93.1	94.8	1.9
Greater Accra	85.4	78.6	81.6	-3.8
Volta	90.5	89.1	91.1	0.6
Eastern	87.6	82.7	91.6	4.0
Ashanti	88.0	86.2	92.0	4.0
Brong Ahafo	94.4	88.6	93.9	-0.5
Northern	89.8	73.2	89.7	-0.1
Upper East	90.0	58.6	76.8	-13.2
Upper West	70.6	81.7	79.8	9.2
All	88.9	83.5	88.9	0.0

Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

29. *The employment rate has remained high among the adult population over 25 years of age, and has decreased among children and youths in part due to better school enrollment rates.* According to the GLSS surveys, the employment rate of the working age population (25-64) has remained at about 89 percent over time (with a slight drop in 1998/99). The unemployment rate has also remained stable. This implies that the labor

force participation rate has remained stable as well. By contrast, labor force participation has dropped among younger individuals, in part due to higher enrollment in schools (see Coulombe and Wodon, 2007). Finally, the employment rate among the elderly has also fallen consistently, which probably suggests that at least some elderly persons may not need to work anymore to maintain a decent standard of living (see Table 4).

Table 4: Comparison of employment rates by age group, 1991-2005

	1991/92	1998/99	2005/06
Employment rate (15-64)	75.9	-	70.2
Employment rate (25-65)	86.5	82.0	85.9
Child labor rate (7-14)	27.9	-	15.9
Elderly Employment rate (65+)	63.0	55.0	52.4
Unemployment rate (25-64)	2.7	2.4	2.3

Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

30. *Growth has been associated with substantial job creation, with the increase in the number of workers matching the increase in the adult population.* Between 1991 and 2005, as shown in table 5, the labor force among the population aged 25 to 64 grew by about two thirds (from 4.2 to 7.1 million people), which is comparable to the growth rate in the population itself for that age group: 2.8 million jobs were created for the population aged 25-64 over the last fifteen years (see Box 2).

Table 5: Composition of the Labor Market, 1991-2005

	1991/92	1998/99	2005/06
Working age population (25-64)	4,764,710	6,038,507	7,941,919
Inactive (last 7 days)	527,060	994,123	878,437
Active (last 7 days)	4,237,650	5,044,384	7,063,482
Unemployed	114,610	120,715	163,668
Employed	4,123,040	4,923,669	6,899,814
Child Population (7-14)	3,506,190	4,074,978	4,552,153
Child Laborers	979,660	-	592,308
Elderly Population (65+)	580,350	806,838	1,015,964
Employed Elderly	365,730	420,228	547,062

Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

31. *Most of the inactive youth are students aged below 27 years old, with older inactives more likely to be females who are busy at home.* Based on 2005/06 data, it can be shown that the large majority of inactive individuals in the labor market are younger people still at school. However, if we concentrate on the group aged between 25 and 64, more than two thirds are women staying at home, undertaking domestic chores. Excluding child rearing, these women spend an average of close to 25 hours a week on housekeeping (see Box 3). From a statistical point of view, we had to remove child rearing as an at-home activity, as many women considered it to be a 24 hour a day job, and reported it as such in the survey.

Box 2: Youth employment

Most of the analysis found in this report concentrates on the 25 to 64 age group, rather than the usual 15-64 group found in most economic literature. The main reason for this departure from convention is a problem of comparability between the different rounds of the Ghana Living Standards Survey. In both the 1991/92 and 2005/06 rounds, the questions related to time use and employment were asked of all participants, student or not. However, the 1998/99 questionnaire instructed interviewers to skip the employment section for individuals who were attending schools. Since a significant proportion of the students also participate in the labor market, any 1998/99 figures for an age-group that is likely to include students would be biased. Therefore, the analysis below refers to the 1991/92 and 2005/06 surveys only.

Employment declined over the past 15 years, while rates of schooling increased. Table A1 shows that between the early 90s and 2006, the youth employment rate dropped from close to 56% to less than 40%, a decline that was much more significant in rural areas (though employment rates in rural areas remain higher). That decline in employment is partly explained by a significant increase in school attendance - around 10 percentage points - in both urban and rural areas. The main difference between urban and rural areas concerns unemployment. Although the youth unemployment rate increased slightly over the 15 year period and remains above the rate for the population as a whole, the urban/rural gap is huge. In 1991/92, close to 19 percent of the youth labor force in urban areas was considered unemployed, with only 1.3 percent unemployed in rural areas. Even though the rural unemployment rate rose more quickly between 1991/92 and 2005/6 than the urban unemployment rate, urban areas still experienced a much higher unemployment rate (13.5 vs 3.4).

Table A1.: Employment, Unemployment and Schooling rates, age group 15-24

		1991/92	2005/06
Ghana	Employment rate	55.8	39.1
	Unemployment rate	5.3	6.6
	Schooling rate	37.1	46.5
Urban	Employment rate	29.4	26.7
	Unemployment rate	18.6	13.5
	Schooling rate	43.4	50.0
Rural	Employment rate	71.8	48.5
	Unemployment rate	1.3	3.4
	Schooling rate	32.2	43.8

Around half of working youth are still doing unpaid work on family farms. Table A2 shows that even if unpaid work on family farm decline since 1991, half the 15-24 year old individuals remain in this category. Compared to the older age group (see table 8 in the main text), a much higher proportion of younger workers are self-employed. However the change in status pattern is similar between the two age-groups: a significant decline in public employment but a more than compensating increase in the private wage earning jobs.

Table A2: Employment Distribution by Labor Force Status (percentage)

	1991/92	2005/06
Wage Public	3.0	1.1
Wage Private Formal	2.1	4.6
Wage Private Informal	2.8	5.5
Self-empl Agro – Paid	15.5	11.2
Self-empl Agro – Unpaid	55.0	49.6
Self-empl NonAgro	21.5	28.1
All	100.0	100.0

Box 3: Time Use Patterns

Standard labor statistics do not take into account time worked at home. Work includes both productive work (for the production of goods and services for the market) and domestic or reproductive work (production of goods and services for household consumption). In most societies gender is a key means of determining the division of labor and responsibilities among household members. Women's domestic work –particularly that related to biological reproduction- increases disproportionately in relation to other adults in the household as the number of infants and children grows. Mothers of large families spend more time pregnant, breast-feeding, and caring and cooking for children and other family members. While being male or female is a biological fact, becoming a man or a woman is a cultural and social process which affects labor outcomes and leads to gender disparities in labor markets.

Detailed data are available in the GLSS on time use, and these data have been used by Coulombe and Wodon (200a) to provide an analysis of patterns of time by age and gender, and of changes over time in those patterns. The individual-level indicator used is the total amount of time spent by individuals working, whether in the formal and informal labor market, in domestic chores or in collecting water and wood. Only a small share of the adult population does not work at all (between 2 and 3%). The mean working time at the national level is 47.0 hours for the adult population between 25 and 64 years of age in 1991/92, 46.2 hours in 1998/99 and 48.4 hours in 2005/06. There are however substantial differences between adult men and women in all three years. In 1991/92, the average workload reaches 51.9 hours for women, and 40.8 hours for men. This gender gap of around 11 working hours is also observed in 1998/99 (workload of 51.1 hours per week for women versus 40.4 hours for men). However, this gender gap had shrunk by 2005/06 to 5.4 hours. The diminishing gender gap was due to male being more occupied by about 5 hours a week. However, a closer look at the results shows a rather more complex and interesting stories. If we compare 1998/99 with 2005/06, the additional hours by male workers were essentially spent on the labor market, being a wage earner or self-employed. In the case of female workers, their time spent on domestic chores was reduced by 4.8 hours (from 25.9 hours in 1998/99 to 21.1 hours in 2005/06) but that time free of domestic chores was compensated by an almost equivalent number of additional hours (4.6) on the labor market. This labor market activity seems to be due to increasing earnings and job opportunities in both urban and rural areas. While men spend a few more hours on average in the labor market than women, the amount of time spent by women in domestic chores is much higher than for men, and this explains the large differences in total working time.

Among the 7-24 age group, girls also work longer hours than boys due to a higher burden from domestic work, but the total amount of work remains reasonable (about 24.3 hours per week on average in 2005/06). There is a reduction in working hours observed for children and youth aged 7 to 24 over time between the surveys that may be related in part to an increase in school enrollment rates. As for comparisons across urban and rural areas, the results suggest differences in total working time, with on average rural individuals working five hours more per week than their urban counterparts. The main difference by location is the higher burden of domestic chores for women as well as children (boys and girls) in rural areas, especially due to the need for rural households to fetch water and wood. However it is worth noting that fetching water and wood has taken half as much time in 2005/06 than in early 90s, which may be due in part to better access to infrastructure services.

It is possible to estimate the share of individuals in various groups that can be considered as "time poor", i.e. working extra long hours. In the absence of a well-established procedure to compute time poverty lines, we use arbitrary multiples of median numbers of hours spend on work. After having computed the median time use of the 7-24, 25-64 and over 64 age groups, a first line was set at 1.5 times the median. A second time poverty line was at twice those medians. The lower poverty line was set at 25.5 hours for the 7 to 24 year old, 72 hours for the adults (25-64) and at 37.5 for the elderly. The higher time poverty lines were set at 34, 96 and 50 hours respectively. Some 17 percent of adults aged 25-64 were time poor in 2005/06. This is an increase of almost 4 percentage points over 1991/92, and a lower increase of 0.6 point over 1998/99. We also find that a much higher percentage of women (21.1 percent) are time poor than men (12.3 percent). Although the gender gap in time poverty seems to have declined slightly for this population, it remains large, with still almost twice as many women who were time poor in 2005/06 than men. The data also suggest that time poverty is higher for adults aged 25-64 in rural than in urban areas. Similarly, for young persons aged 7 to 24, time poverty is higher in rural than in urban areas, although the threshold of relative time poverty is much lower for this age group, so it is less likely to be an issue.

Who works the most in Ghana? To a large extent, the results provided in this paper confirm conventional wisdom. Women are found to work much more than men, especially on domestic tasks and in rural areas. Thus, while it is often argued on the basis of labor statistics that women participate less than men in the labor force of developing countries such as Ghana, especially in urban areas, this reflects more the impact of traditional definition of what constitutes work in household survey questionnaires than any real differences between genders, as women tend to work at least as hard as men.

Source: Coulombe and Wodon (2008a).

32. *Agriculture remains by far the most important sector of employment, but its importance has slightly decreased over time.* As shown in tables 6 and 7, agriculture still accounted for more than half of total employment in 2005/06. The services sector (trading, transport and communication, financial services, and other services) comes in second place, employing roughly one third of the labor force, while the industry sector employed about 15% of workers. Over the past fifteen years, the percentage of employed people working in the agriculture sector has fallen, along with that in the services sector (due to a drop in the shares of workers employed in community and other services), while the share of workers employed in industrial sectors has risen. Of the 2.8 million new jobs created between 1991-2005 for the 25-64 age group, approximately 44.5% were in agriculture (1.24 million), with close to one million new jobs in services (including Government), and more than half a million in industry (see Tables 6 and 7).

Table 6: Employment Distribution by Sector (percentage, for age group 25-64)

	1991/92	1998/99	2005/06	changes
Agriculture	55.6	52.9	54.1	-1.5
Mining/Quarrying	0.6	0.8	0.7	0.1
Manufacturing	9.1	11.9	11.6	2.5
Utilities	0.2	0.2	0.3	0.1
Construction	1.4	1.4	1.8	0.4
Trading	18.4	19.3	18.8	0.4
Transport/Communication	2.4	2.3	2.7	0.3
Financial Services	0.7	0.9	1.3	0.6
Community & Other Services	11.6	10.3	8.8	-2.8
All	100.0	100.0	100.0	0.0

Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

Table 7: Employment Distribution by Sector (absolute numbers, for age group 25-64)

	1991/92	1998/99	2005/06	change	distribution
Agriculture	2,294,390	2,419,690	3,533,997	1,239,607	44.6
Mining/Quarrying	23,360	49,794	54,436	31,076	1.1
Manufacturing	375,950	619,075	835,085	459,135	16.5
Utilities	8,030	9,188	17,475	9,445	0.3
Construction	59,130	85,022	134,635	75,505	2.7
Trading	757,010	1,027,445	1,387,163	630,153	22.7
Transport/Communication	99,280	134,920	206,843	107,563	3.9
Financial Services	27,010	47,304	92,098	65,088	2.3
Community & Other Services	478,880	531,231	638,082	159,202	5.7
All	4,123,040	4,923,670	6,899,813	2,776,773	100.0

Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

33. *A large share of labor force remains employed in the informal sector.* In tables 8 and 9, which group workers by category, we see that more than 80 percent of total employment remains in the informal sector, and this share has increased slightly over time. This increase is due mostly to a rise in the share of unpaid self-employed agriculture workers. However, since the employment status of these workers is not entirely clear (many are women who combine domestic and other work), it is quite possible that while some may declare themselves to be working, others in similar situations may not. As such, statistics on these workers can appear volatile. If all or some of these workers had been

excluded from the analysis, the rate of formalization would probably appear to have increased over time.

34. *There has been a shift from public to private formal sector employment.* Though Aryeetey et al (2004) argued that the decline in public sector employment over time has been compensated for, in terms of total employment, by growth in informal sector employment, tables 8 and 9 demonstrate that in this case, total employment figures have been sustained by an increase in private sector formal employment. It is also worth noting that in urban areas over 50 percent of employment is salaried, while in rural areas, most workers are self-employed. Note also that the distinction between paid and unpaid agriculture workers is an imperfect way to try to identify those workers who belong to larger farms or small enterprises, versus subsistence farmers working on their own; unfortunately, differences in definitions between surveys make it difficult to measure over time more precisely the share of informal workers working in firms or farms with multiple employees as opposed to by themselves.

Table 8: Employment Status (percentage, for age group 25-64) 1991-2005

	1991/92	1998/99	2005/06	change
Wage Public sector	12.3	8.1	6.6	-5.7
Wage Private sector Formal	4.1	4.5	6.7	2.6
Wage Private sector Informal	2.2	2.2	4.3	2.1
Self-employed Agro – Paid	36.9	38.0	30.7	-6.2
Self-employed Agro – Unpaid	16.4	13.6	21.8	5.4
Self-employed Non Agro	28.0	33.6	29.9	1.9
All	100.0	100.0	100.0	0.0

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

Table 9: Employment Status (Absolute numbers for age group 25-64), 1991-2005

	1991/92	1998/99	2005/06	change	distribution
Wage Public sector	508,080	417,258	487,019	21,061	-0.8
Wage Private sector Formal	167,900	246,771	497,876	329,976	11.9
Wage Private sector Informal	92,710	128,162	335,948	243,238	8.8
Self-employed Agro - Paid	1,519,860	1,734,566	2,214,710	694,850	25.0
Self-employed Agro - Unpaid	678,170	622,588	1,193,344	515,174	18.6
Self-employed Non Agro	1,156,320	1,774,324	2,170,917	1,014,597	36.5
All	4,123,040	4,923,670	6,899,813	2,776,773	100.0

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

35. *The share of workers living in poverty has decreased for all groups, but the decrease has been largest for workers with better jobs.* As the tables below show, there has been a decrease over time in poverty for all categories of individuals, but the decrease has been largest in proportional terms for the categories of workers with the smallest rates of poverty in the initial year. For example, poverty among formal sector workers has virtually been eliminated, while it remained substantial among the self-employed in 2005/06. This suggests that improvements in wages and standards of living have been larger for better off individuals, which confirms that inequality in consumption per capita has increased over time in Ghana (See Table 12). Also, in 2005/06, the probability of being poor remained much higher for agricultural workers than for any other group of workers.

Table 10: Percentage of Workers Residing in a Poor Household, for Different Categories of Labor
Market and Employment Status for age group 25-64, 1991-2005

	1991/92	1998/99	2005/06	change
Wage Public sector	26.4	15.9	5.9	-20.5
Wage Private sector Formal	22.6	9.0	5.7	-16.9
Wage Private sector Informal	29.1	15.3	13.1	-16.0
Self-employed Agro – Paid	59.5	47.7	32.4	-27.1
Self-employed Agro – Unpaid	67.8	54.4	45.3	-22.5
Self-employed Non Agro	35.3	22.6	13.1	-22.2
Unemployed	21.7	8.0	18.9	-2.8
Inactive	42.7	40.1	29.3	-13.4
All	46.6	34.5	24.3	-22.3

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

Table 11: Percentage of Workers Residing in a Poor Household, for Different Categories of Labor
Market and Employment Status for Age Group 25-64, in Rural and Urban Areas

	1991/92		1998/99		2005/06		Change	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Wage Public sector	15.5	43.0	10.1	23.7	3.5	13.5	-12.0	-29.5
Wage Private sector Formal	20.4	27.4	5.0	16.7	3.4	12.8	-17.0	-14.6
Wage Private sector Informal	27.4	32.6	2.9	26.7	11.9	15.1	-15.5	-17.5
Self-employed Agro - Paid	37.4	61.7	40.0	48.7	17.1	34.6	-20.3	-27.1
Self-employed Agro - Unpaid	51.7	70.1	41.4	56.6	30.6	46.9	-21.1	-23.2
Self-employed Non Agro	21.3	52.5	12.6	32.9	5.3	24.4	-16.0	-28.1
Unemployed	16.7	41.9	3.9	20.8	12.4	42.5	-4.3	0.6
Inactive	24.5	56.0	17.6	55.2	14.0	48.6	-10.5	-7.4
All	23.5	59.0	15.7	44.8	8.8	35.1	-14.7	-23.9

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

Table 12: Percentage of Workers residing in a Poor Household by Sector of Employment for Age Group
25-64, 1991-2005

	1991/92	1998/99	2005/06
Agriculture	61.0	48.9	36.1
Mining/Quarrying	28.1	7.7	3.4
Manufacturing	37.9	25.3	16.6
Utilities	18.2	10.0	0.0
Construction	27.2	21.8	10.5
Trading	34.5	21.2	10.6
Transport/Communication	18.4	5.4	10.0
Financial Services	10.8	6.3	5.3
Community & Other Services	25.8	16.0	6.2
All	47.8	34.0	23.8

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

Table 13: Percentage of People Residing in a Poor Household by Level of Education for Age Group 25-64, 1991-2005

	1991/92	1998/99	2005/06
No education	58.0	48.5	39.3
Primary	46.6	32.7	20.1
Secondary lower	33.5	23.2	12.8
Secondary Higher	14.0	12.3	6.9
Post Secondary	17.4	12.9	3.8
All	46.6	34.5	24.3

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

36. Who are the unemployed? Unemployment, as in other Low Income Countries (LICs), is predominantly an *urban phenomenon*, and heavily concentrated in the capital, with an unemployment rate in Greater Accra more than twice that of the rest of the country. It is also concentrated among the young and relatively well-educated – especially those with secondary education (Table 14). This phenomenon is often explained by the description of unemployment in LICs as being a ‘luxury’: only the non-poor can afford not to be working in some capacity. However, the reality is more nuanced for Ghana. In 2005 about one out of five unemployed workers resided in a poor household. Furthermore, poverty decreased much more slowly among the unemployed than for the population as a whole, with unemployed people in Accra, the Volta, the Northern, and the Upper West regions actually getting poorer. Clearly, unemployment is progressively becoming a serious issue for at least part of Accra’s population, probably in part due to urban migration by relatively young workers, some of whom have a hard time finding work. However, it must be noted that sample sizes for the unemployed are often small, which may lead to misleading large variations over time in poverty rates. Also, the proportion of the unemployed remains very small (at least when using a “narrow” definition of unemployment), and has actually decreased over time at the national level. As such, underemployment is probably a more serious issue for many Ghanaians than unemployment per se.

Table 14: Unemployment Rates for Age Group 25-64, 1991-2005

	<i>1991/92</i>	<i>1998/99</i>	<i>2005/06</i>	<i>change</i>
<i>Sex</i>				
Male	2.8	3.0	2.2	-0.6
Female	2.6	1.8	2.4	-0.2
<i>Age</i>				
24-54	2.9	2.5	2.5	-0.4
55-64	1.1	1.5	1.2	0.1
<i>Education Level</i>				
No education	1.3	0.9	1.4	0.1
Primary	2.1	2.5	2.3	0.2
Secondary lower	4.6	4.0	2.7	-1.9
Secondary Higher	7.9	4.2	6.1	-1.8
Post Secondary	4.0	2.3	3.4	-0.6
<i>Urban/Rural</i>				
Urban	6.4	5.3	4.6	-1.8
Rural	0.8	0.9	0.8	0.0
<i>Region</i>				
Western	1.2	2.5	2.0	0.8
Central	1.2	0.6	3.0	1.8
Greater Accra	7.5	8.1	4.9	-2.6
Volta	3.2	0.6	1.4	-1.8
Eastern	0.8	1.4	1.2	0.4
Ashanti	4.7	3.1	2.8	-1.9
Brong Ahafo	0.8	0.7	1.1	0.3
Northern	1.6	1.0	0.7	-0.9
Upper East	1.0	3.3	2.4	1.4
Upper West	0.7	0.4	3.6	2.9
All	2.7	2.4	2.3	-0.4

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

Table 15: Poverty (head count index) among the Unemployed for Age Group 25-64, 1991-2005

	1991/92	1998/99	2005/06	change
<i>Sex</i>				
Male	23.3	7.8	22.1	-1.2
Female	20.2	8.2	16.2	-4.0
<i>Age</i>				
24-54	21.5	5.9	19.3	-2.2
55-64	25.0	34.0	11.4	-13.6
<i>Education Level</i>				
No education	30.8	13.3	35.0	4.2
Primary	33.3	19.3	24.5	-8.8
Secondary lower	17.5	4.8	13.5	-4.0
Secondary Higher	20.0	0.0	9.7	-10.3
Post Secondary	0.0	11.5	3.5	3.5
<i>Urban/Rural</i>				
Urban	16.7	3.9	12.4	-4.3
Rural	41.9	20.8	42.5	0.6
<i>Region</i>				
Western	37.5	20.5	0.0	-37.5
Central	42.9	17.5	3.0	-39.9
Greater Accra	16.4	0.3	23.9	7.5
Volta	8.0	25.9	14.4	6.4
Eastern	75.0	13.7	10.2	-64.8
Ashanti	25.0	5.2	5.6	-19.4
Brong Ahafo	20.0	0.0	0.0	-20.0
Northern	11.1	51.2	34.6	23.5
Upper East	100.0	6.4	71.8	-28.2
Upper West	0.0	0.0	92.5	92.5
All	21.7	8.0	18.9	-2.8

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points. Note: The drop in the poverty statistics for then unemployed in 1998/99 is probably due in part to a sampling issue in the greater Accra area where poverty was observed to fall much more than expected that year (see Coulombe and Wodon, 2007).

37. The population is becoming more educated and is increasing its skills. The percentage of people (not workers) with no formal education has dropped by 4.4 percentage points over the last 15 years, while the share of population with tertiary education increased from 2.6% in 1991 to 7.6% in 2005 (Table 16). As suggested by others (e.g., Aryeetey et al 2004; Dabalen et al 2003), it is likely that part of this improvement is due to a number of factors, including the fact that : (i) workers are upgrading their skills in order to be better able to “take advantage of growing opportunities arising from increased globalization”; (ii) in the manufacturing sector, which is growing,

training is more easily available and paid for and provided by the employer; (iii) foreign or large firms also provide more training than domestic and small one; and (iv) already educated workers receive more training. A more detailed discussion of education as it relates to the labor market is provided in chapter 5.

Table 16: Distribution of the Population by Education Level in Age Group 25-64, 1991-20055

	1991/92	1998/99	2005/06	Change
No education	53.6	45.1	49.2	-4.4
Primary	9.9	11.8	10.7	0.8
Secondary lower	29.4	32.9	27.0	-2.4
Secondary Higher	4.5	5.3	5.4	0.9
Post Secondary	2.6	4.8	7.6	5.0
All	100.0	100.0	100.0	0.0

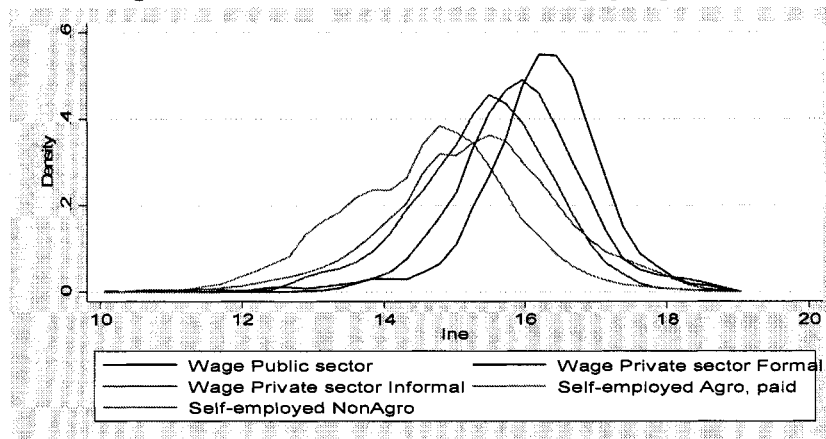
Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points. Note: The drop in the share of the population with no education in 1998/99 is probably overestimated.

INCOME FROM WORK IN AGE GROUP 25-64

38. *It has long been a source of debate as to whether earnings data are of good quality in Low Income Countries (LICs) with large rural population shares.* Many LICs collect wage data only from salaried workers. This approach, though straightforward, assesses only a small section of the labor force – often as small 10% - which also represents better off workers. It is therefore difficult to carry out a credible analysis of labor markets when restricting oneself to wage and salary workers. The Ghana Living Standard Surveys (GLSS) collect wage data on a much larger group of individuals, and includes a separate module for agricultural and non-agricultural business, and the Ghana Statistical Services provide data on business profits (see GSS (2000)). Based on this information, income for the self-employed can be calculated as the profit of the business, divided by the number of household members working in the business. For agricultural businesses, a similar approach can be followed. The GSS computes household agricultural income by deducting total input costs (seeds, fertilizer, etc), inclusive of wages paid to non-household members and an allowance for depreciation from the value of gross output, (either sold to the market or consumed), from total revenues. This, divided by the number of working household members, can be used to calculate income per worker. Income from rent and remittances should not be incorporated.

39. *In Ghana, the labor market is characterized by large differences in earnings between different types of workers, with public sector employment paying the highest wages.* Figure 6 shows that there is a clear hierarchy in wages, with salaried workers in the public sector faring best, followed by salaried workers in the private formal sector, salaried workers in the private informal sector and self-employed workers not in agriculture, and, finally, self-employed workers in agriculture. In addition, the groups of wage and salary workers with the highest earnings also tend to have a distribution of earnings with a limited spread (less variance in earnings between individuals). Finally, formal sector workers not only have better paid jobs, but in addition they usually bring home other valuable job attributes (such as job security, worker protection, access to social security, etc.).

Figure 6: Income from work for 2005 in Age group 25-64



Source: Based on Coulombe and Wodon (2007), using GLSS surveys.

40. *Earnings increased substantially from 1991-2005, but the gap between formal public and private sector workers increased.* While table 17 shows that the largest earnings gain is observed for the self-employed in agriculture who are paid, this increase is from a low base, and subject to some extent to measurement error (the ratio of household farm business profits to the number of family workers is very sensitive to movements in and out of the household, and probably leads to an underestimation of true earnings). The second highest increase was for wage workers in the public sector (89%). Other groups have seen earning gains between 40% and 50% in real terms over the 15 year period under review. Overall, the wage gaps between different employment categories remain high, as expected. Yet what is striking is that in 2005, public sector workers earned 47% more than private formal sector workers, with an increasing differential between both groups over time. Private informal sector wage workers earn about 63% of what private formal sector workers earn, while individual self-employed earn less than a third of what private sector workers are paid. This increase in the gap between public sector workers and other workers may be due to multiple reasons and it does not necessarily mean that there is a systematic premium for public sector workers. For example, the gap may be related to the fact that public sector workers tend to work in Accra and are better educated. We will come back in Chapters 4 and 5 to the analysis of the determinants of earnings, and the marginal impact of being in the public sector (as well as having a formal job and benefiting from a trade union) on earnings controlling for other individual characteristics and geographic effects on wages. Also of interest is the fact that the self employed (paid) agricultural workers gained substantially in terms of earnings, which could perhaps be related to the fact that hired workers in cocoa production probably have been able to improve their earnings due to the boom in the sector.

Table 17: Annual Real Earnings across Employment Status in Age group 25-64 (in '000 cedis)

	1991/92	1998/99	2005/06	Change
Wage Public sector	7,470	8,992	14,120	89.0
Wage Private sector Formal	6,480	8,054	9,574	47.7
Wage Private sector Informal	4,205	3,915	6,025	43.3
Self-employed Agro-Paid	1,597	1,385	3,064	91.9
Self-employed Agro-Unpaid	-	-	-	-
Self-employed Non Agro	3,455	3,733	5,180	49.9
All	1,442	1,293	2,551	76.9

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points. Note: Median annual earnings expressed in local currency in 1991 prices. Some divergences in trends observed with the 1998/99 data may be due to sampling issues and/or lower level of comparability.

Table 18: Earnings Ratio's to private formal sector wage in age group 25-64, 1991-2005

	1991/92	1998/99	2005/06
Wage Public sector	1.15	1.12	1.47
Wage Private sector Formal	1.00	1.00	1.00
Wage Private sector Informal	0.65	0.49	0.63
Self-employed Agro-Paid	0.25	0.17	0.32
Self-employed Agro-Unpaid	-	-	-
Self-employed Non Agro	0.53	0.46	0.54
All	0.22	0.16	0.27

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Some divergences in trends observed with the 1998/99 data may be due to sampling issues and/or lower level of comparability.

41. *The relatively high wages in the public sector and their increase over time is of potential concern for the rest of the economy.* Analyses in other countries (including in the Africa region) have shown that high public sector wages prompt rising formal private wages, due to competition for human resources. As shown in Ethiopia, it is also likely that high public sector earnings will encourage individuals to queue for public sector jobs instead of pursuing less attractive private sector opportunities. Based on earlier works on Ghana, there is evidence that both the size of firms and unionization are important explanatory factors for this wage premium (Soderbom and Teal; Kingdon, Sandefur and Teal and others, 2005). Although, the size effect is likely to reflect a difference in productivity (it may also be due to a higher cost to monitor), the union effect indicates the importance of institutions and labor regulation (see chapter 4).

42. *There are also disparities in earnings by region, socio-economic groups, sector of activities, gender, age and skills.* Findings include: women earn consistently less than men, regardless of their employment status; the earnings-age profile follows an inverse U-shape pattern; in general, earnings increase with education; earnings in the urban sector are higher than those in the rural sector; agriculture workers have consistently the lowest earnings; and earnings in the manufacturing and trading sectors are at the tail end of the earnings distribution. Overall, according to GLSS data the share of low earners has consistently decreased for virtually all groups, but the pace of progress has been uneven between groups.

HOURS WORKED AND HOURLY EARNINGS IN AGE GROUP 25-64

43. Labor supply expressed in hours worked per year is lowest in the agriculture sector and highest for wage workers in the private sector. Based on average work load reported in hours per year, the hours worked are the highest in transport and communication, and lowest in agriculture where seasonality plays a larger role (see Table 19). The number of hours worked has increased for all categories of workers over time, which has contributed to increasing living standards. However, these increases have been more dramatic for certain categories, and there are notable differences between categories in terms of hours worked. For example, public sector workers, who earn more, are working fewer hours than private sector workers. For every eight hours worked by a wage worker in the private formal sector, the public sector workers work 7 hours. Over time, the gap between public sector and formal private sector workers has widened, despite the faster increase in the former's wages documented earlier. It is also worth noting that the poor supply less labor than the non-poor (they work about 10% fewer hours), so that underemployment, defined as working limited number of hours, is probably one of the contributing factors to poverty (in rural areas mainly).

Table 19: Mean Number of Hours Worked per Year in age group 25-64 (1991-2005)

	1991/92	1998/99	2005/06	change
<i>Sector</i>				
Agriculture	1,400	1,356	1,541	10.1
Mining/Quarrying	2,067	2,254	2,662	28.8
Manufacturing	1,653	1,658	1,953	18.1
Utilities	2,332	2,202	2,380	2.1
Construction	1,868	1,403	1,894	1.4
Trading	1,893	1,943	2,230	17.8
Transport/Communication	2,707	2,687	2,885	6.6
Financial Services	2,160	2,312	2,452	13.5
Community & Other Services	1,904	2,086	2,064	8.4
<i>Employment Status</i>				
Wage Public sector	1,974	2,091	2,074	5.1
Wage Private sector Formal	2,237	2,187	2,516	12.5
Wage Private sector Informal	1,902	2,230	2,217	16.6
Self-employed Agro-Paid	1,451	1,389	1,579	8.8
Self-employed Agro-Unpaid	1,211	1,210	1,429	18.0
Self-employed Non Agro	1,817	1,846	2,091	15.1
<i>Poverty Status</i>				
Very poor	1,418	1,286	1,520	7.2
Poor	1,558	1,359	1,727	10.8
Non poor	1,765	1,827	1,924	9.0
All	1,620	1,651	1,846	14.0

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

44. There are large disparities between hourly earnings for different categories of employment. Overall, the hourly earnings in industry and services are broadly similar (with differences according to selected sub-sectors), while the agriculture sector has

significantly lower hourly earnings (although it is likely that these are underestimated). Among employment status categories, public sector workers have benefited from the largest increase in hourly earnings, at about twice the rate of the national average. The increase in hourly earnings of poor workers has been much lower (and in some cases negative) than for non-poor workers (Table 20).

Table 20: Earnings per Actual Hour Worked by Economic Activity, Employment Status and Poverty in age group 25-64, 1991-2005 (in cedi)

	1991/92	1998/99	2005/06	change
<i>Sector</i>				
Agriculture	757	724	937	23.8
Mining/Quarrying	5,341	6,685	5,297	-0.8
Manufacturing	2,255	2,384	3,021	34.0
Utilities	3,437	4,473	6,988	103.3
Construction	3,539	3,925	4,992	41.1
Trading	2,269	2,271	2,598	14.5
Transport/Communication	3,004	3,843	3,078	2.5
Financial Services	4,779	7,829	5,793	21.2
Community & Other Services	4,123	3,563	5,183	25.7
<i>Employment Status</i>				
Wage Public sector	3,954	4,869	6,925	75.1
Wage Private sector Formal	3,232	3,806	3,930	21.6
Wage Private sector Informal	2,306	2,189	2,782	20.6
Self-employed Agro-Paid	1,277	1,211	2,033	59.2
Self-employed Agro-Unpaid		-	-	
Self-employed Non Agro	2,388	2,309	2,713	13.6
<i>Poverty status</i>				
Very poor	912	829	552	-39.5
Poor	1,270	1,261	1,346	6.0
Non poor	2,157	2,117	2,483	15.1
All	1,521	1,669	2,060	35.4

Source: Based on Coulombe and Wodon (2007), using GLSS surveys; Changes are expressed in percentage points.

45. Differences in earnings across different types of employment raise several issues.

Wage and salary workers' earnings are up to three times higher (in the case of public sector workers) than the hourly earnings of the individual self-employed. Further preliminary analysis based on regression techniques also suggests that men are more likely to be in wage and salary work than women. Young people are by contrast less likely to be wage and salary workers (see the following section for more details related to education). Overall, workers (men and women) with secondary education, TVET or Tertiary education have the highest probability of being wage and salary workers, while those with lower education are more likely to be self-employed, and many agriculture workers have no education (see Chapter 5).

SUMMARY OF FINDINGS

46. From this descriptive analysis of labor market trends and characteristics, a few conclusions stand out:

- ***Earnings from work have risen for all groups, although less so for the poor.*** This rise in earnings has been an important driver of poverty reduction in Ghana. However, a majority of the labor force remains in low productivity, mostly agricultural activities, which yield low earnings. The percentage of formal jobs (both public and private), as a share of total employment, has decreased, as the decline in the share of public sector jobs has been only partially compensated by an increase in the share of private formal jobs. Thus, the labor force has become more informal over time, especially as many workers have shifted out of agriculture to join the informal service sector in urban areas. The decrease in the formal sector as a share of total employment is confirmed by a series of statistics to be discussed in the next chapter on contracts, trade unions, and other aspects.
- ***The public sector's attractive pay policies are likely to affect labor supply decisions.*** As discussed in this chapter the increase in the gap between public sector workers and other workers can be due to multiple reasons. Also the attractive pay in the public sector encourages queuing for higher paying public sector jobs rather than less attractive opportunities in the private sector. These effects can limit the potential dynamism of the private sector in attracting the needed labor with the appropriate skills. The public sector can also affect wage setting in the private sector. These are important issues that need further investigation.
- ***A large amount of the working population remains low skilled, lacking even primary education.*** Based on the preliminary analysis, it seems the returns to education are positive, but low at low levels of schooling. The analysis also confirms that education plays a role in the attainment of high paying jobs, which suggests that the poor require more education to get access to such jobs. Apprenticeships may offer one solution. Chapter 5 provides more details analysis of links between education and labor market outcomes

CHAPTER 4. LABOR MARKET POLICIES, INSTITUTIONS, AND PROGRAMS

As mentioned in the previous chapter, less than 20 percent of the labor force is engaged in the formal sector, but this sector is growing, with private wage employment doubling in absolute terms during 1991-2006. For a country like Ghana that aims to reach a middle-income country status, the challenge is to ensure that labor market policies are flexible enough to encourage growth of jobs and productivity. In this context this chapter examines the functioning of the labor market itself, looking at the implications of labor regulations, institutions and programs on job creation and formalization of the economy. The first section reviews labor regulations; the second section examines the institutional settings of the labor market; and the third section reviews employment programs. The analysis shows that: (i) overall, Ghana has relatively flexible labor regulations that do not create a major obstacle for private sector development, but further reforms might be necessary to address dismissal costs and procedures that seem to be costly and complex; (ii) the increase in informal employment and reduction in public jobs in the last 15 years, leading to decline in the share of workers with contracts and social protection benefits, raises concerns; (iii) non-wage labor costs are moderate compared to other countries in the region, but the Government needs to be careful to ensure that the ongoing pension reforms do not distort the labor market and do not raise labor costs; (iv) the workers' unions play an important role in labor relations and influence the wage-setting process, especially in large firms, though recent institutional changes introduced by the Labor Act have changed the dynamics of industrial relations and require further investigation; and (v) the Government youth employment program can be an effective tool to increase the employability of youth but the design needs to avoid distorting the labor market functioning and ensure efficient use of the public fund, and the monitoring and evaluation system needs to be strengthened.

LABOR MARKET POLICIES

Labor Regulations

47. *Although labor market regulations affect mostly formal sector employment, they also influence workers in the informal sector and the unemployed.* As discussed in the previous Chapter, workers engaged in formal employment - including wage workers in public sector and wage workers in private formal sector - account for about 13 percent of employment in Ghana. One of the main objectives of the government's poverty reduction strategy is to create favorable conditions for private sector development, which is seen to be essential for long-term economic growth and poverty reduction. A strong and sizable formal private sector would create better-quality and higher-paying jobs and would contribute to increased public revenues, which, in turn, could be channeled to help the poor through various social programs. In this context and given the fact that most of the labor force is outside of the formal sector, it is important to consider whether the regulatory and institutional framework in Ghana is sufficiently flexible to encourage overall job creation and to provide right incentives for informal businesses to enter the formal sector.

48. *Government has taken major steps forward in consolidating and harmonizing a large number of different labor laws, bringing more flexibility to labor relations.* Adopted in 2003, the Ghana Labor Act serves as the main legal document on labor

relations and is more detailed and comprehensive than previous laws. The new Labor Act has: (i) unified and modified a large number of old labor laws, bringing them into conformity with the core principles of the International Labor Convention, to which Ghana is a signatory; (ii) introduced more flexible hiring conditions through short term contracts and temporary workers; (iii) clarified rights and obligations of employees and employers, particularly in terms of disputes, dismissals, and severance pay; (iv) defined the functioning of trade unions and employers' organizations, collective bargaining, and collective agreements; and (v) allowed the establishment of private employment agencies (see Box 4). Compared to the previous labor laws in Ghana, and to existing labor laws in neighboring West African countries, the new Ghana labor law has a relatively flexible framework with a limited number of direct state interventions in the labor market. Discussions carried out in the country during the preparation of this study showed that there is a general consensus among the employers' groups, workers' unions, and the government that the recent reforms are a right step towards simplification and flexibility of labor regulations in Ghana.

Box 4: Labor Law in Ghana

Prior to 2003, the main sources of regulations relating to termination of employment in Ghana were the Industrial Relations Act of 1965, the Labor Decree of 1967, as well as the Civil Service Act and the Civil Service Disciplinary Code Regulations, 1971, which regulated only State employees. Based on extensive tripartite consultations the Labor Act of 2003 (LA) was prepared and is now the main source of legislation relating to labor law and termination of employment. The 2003 LA applies to all workers and employers, except the Armed Forces, the Police, and Security Agencies. However, the LA does not apply to the workers under a contract of employment for specified period of time or specified work and workers engaged on a casual/seasonal basis. According to the 2003 LA, the employment of a worker by an employer for a period of six months or more must be secured by a written contract of employment.

Termination of employment and dismissal. The LA allows the termination of contract (i) by mutual agreement between the employer and the worker; or (ii) by the worker on grounds of inappropriate treatment. The employer can also dismiss a worker (i) if the worker is unable to carry out his or her work due to sickness or accident; (ii) if the worker is incompetent and lacks qualification in relation to the work; (iii) for proven misconduct of the worker; and (iv) for economic reasons (redundancy when employer contemplates the introduction of major changes in production or technology). The termination of worker is considered unfair if it is linked (i) to the worker membership in trade union; (ii) to the worker's gender, race, color, religion, social, political or economic status; (iii) to temporarily illness/ injury; (iv) to the current level of qualification required in relation to the work for which the worker was employed.

Notice and prior procedural safeguards. A contract of employment may be terminated at anytime by either party giving to the other party: (i) one month's notice, or one month's pay in lieu of notice, in the case of a contract of three years or more; (ii) notice of two weeks or payment in lieu in the case of a contract of less than three years; (iii) seven days' notice or payment in lieu in the case of a contract from week to week; or (iv) without notice if the amount of remuneration for the period of the notice is paid. However, the legal provisions are not applicable where in a collective agreement the terms and conditions for termination of employment are defined and which are more beneficial to the worker. In respect to *collective dismissals for economic reasons*, the employer has to provide in writing to the Chief Labor Officer and the trade union concerned, not later than three months before the contemplated changes, all relevant information including the reasons for any termination, the number and categories of workers likely to be affected, and the period within which any termination is to be carried out. The employer must also consult the trade union concerned on measures to be taken to avert or minimize the termination, as well as measures to mitigate the adverse effects of any terminations on the workers concerned, such as finding alternative employment.

Severance pay. In case of dismissals for economic reasons (severance), where the worker becomes unemployed or where the worker suffers any diminution in the terms and conditions of employment (measured by past services and accumulated benefits), such worker is entitled to compensation ("redundancy pay"). According to the LA, the terms and conditions of redundancy pay are subject to negotiation between the employer and the worker or the trade union concerned.

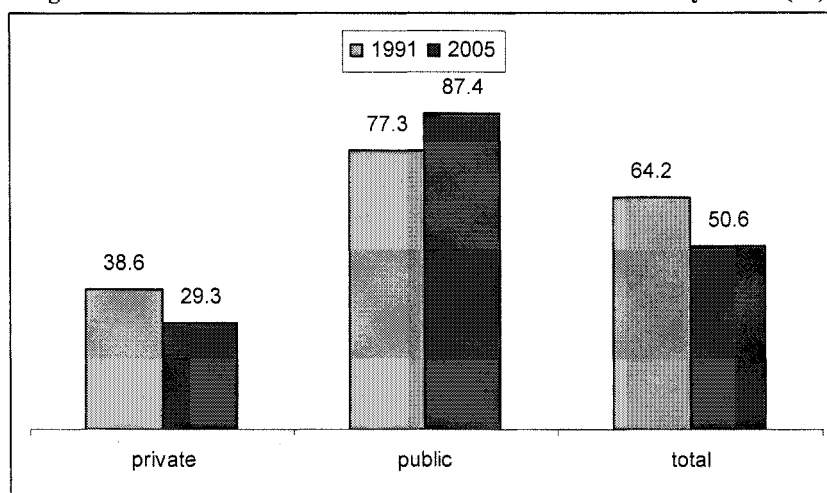
49. *The new Labor Act has introduced flexibility in hiring conditions.* Temporary and fixed-term contracts and regulations of private agency work are two labor market indicators commonly used to compare employment conditions across countries. According to the 2003 Labor Act, workers can be hired on a casual or temporary basis, and there is no need to have a written contract for casual employment. On the other hand, all temporary workers employed by the same employer for a continuous six months or longer period are entitled to the same employment conditions (concerning the minimum wage requirements, hours of work, rest period, paid public holidays, night work and sick leave) as permanent workers. As a result of this flexibility in hiring, one can expect that a large number of jobs created since early 2000s involve employment on a temporary basis. Further work using the 2007 ICA survey is needed to provide additional information on contract terms and to shed light on whether this flexibility has led to increase in temporary jobs.

50. *To facilitate job placement, the 2003 Labor Act has allowed the functioning of private employment agencies.* Currently there are about 30 private employment agencies. Since they target mainly a limited number of high-skill white-collar workers for large formal enterprises, these agencies have a very marginal impact on job placements. While the employment agencies could be a useful resource for firms looking for both permanent and temporary labor, the high cost of obtaining a license and the cumbersome renewal and reporting procedures hinder their efficiency. According to the 2003 law, the placement agencies need to obtain a license and renew it annually with the labor ministry, and they are also required to report to the ministry every three months on their activities. The law stipulates that private agencies could charge fees for finding a job placement for job seekers. However, in practice, it is the employing firm that covers recruitment expenses related to posting job announcements and pre-screening of job candidates through preliminary interviews.

51. *The share of wage workers without written contracts has increased substantially in the last 15 years confirming the rise of informal wage employment and jobs without protection.* Employment in Ghana is mostly informal and it is estimated that only about 50 percent of the wage earners (or about 6.5 percent of total employment) have written contracts. According to the GLSS data, between 1991/92 and 2005/06 the share of wage earners with written contracts decreased from 64 percent to 51 percent, mainly due to a substantial decrease of written contracts in the private sector (from 39 percent in 1991/92 to 29 percent in 2005/06). On the other hand, the share of public sector jobs with written contracts increased from 77 percent to 87 percent during the same period (Figure 7)⁴. The drop in the share of workers with written contracts confirms the earlier discussed trend towards informality of the Ghanaian economy and its labor market (see Chapter 3), and it can also be a result of an increasing share of casual workers who do not need written contracts. In addition to more informality, less written contracts also means less social protection for workers since informal sector jobs are low-paid and often do not provide non-wage benefits (see below).

⁴ The apparent inconsistency in the figure is due to the huge increase in the number of private sector wage employees (with a much lower rate of written contracts) compared to public ones. According to the survey data, the private/public ratio increased significantly during 1991-2005 so the weighted average was skewed toward the public sector jobs with written contracts in 1991/92, but toward the private ones in 2005/06.

Figure 7: Share of salaried workers with written contracts by sector (%)

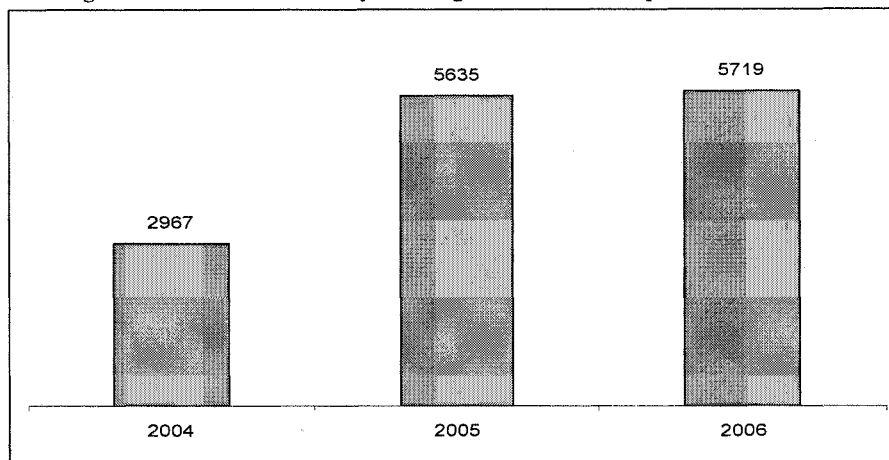


Note: The share of salaried workers is equal to about 18 percent of the active working age population
Source: GLSS3 (1991/92) & GLSS5 (2005/06)

52. Ghana's firing rules are rather moderate but the procedures are complex and firing could be costly, especially for seasoned workers. According to 2008 Doing Business indicators, dismissal costs in Ghana are equal to 178 weeks of wages, which is quite high compared to the OECD countries and other countries in the region (See Box 5). This non-favorable high cost of firing could be explained by the fact that the *Doing Business* methodology takes into account the severance pay for dismissal of workers with at least 20 years of experience, who might have a previously-negotiated very protective and costly employment contracts. Moreover, high dismissal costs are more common in well-established large formal enterprises with strong trade unions.

53. The number of lays-off is small but has almost doubled between 2004 and 2006, reflecting the fact that the need for restructuring is sufficiently strong to outweigh the high costs of laying off workers. According to the Department of Labor, there were 70 cases of labor redundancies in 2006 that resulted in laying-off 5,719 workers (see Figure 8). These numbers were similar to the number of redundancies (54 cases) and laid-off workers (5,635) in 2005, but were almost twice the number of lay-offs in 2004 (2,967). Even at the current level of close to 6,000 lay-offs per year, the number of workers affected by redundancies represents less than one percent of the formal sector employment. Financial constraints and falling workload were recorded as two major reasons for the redundancies.

Figure 8: The number of lay-offs registered at the Department of Labor



Source: Ministry of Manpower, Youth and Employment

Box 5: Ghana hiring and firing procedures and costs

Procedures: The 2003 Labor Acts defines hiring and firing regulations for all types of contracts. According to the law, an employer can only lawfully terminate employees on the grounds of redundancy (the employer is contemplating a close-down or the introduction of major changes in production, program, organization, structure or technology of its business, on the basis of which the employment of the employees will no longer be necessary). The employer is required to give a notice in writing to the Chief Labor Officer not later than three months before the planned changes or close-down setting out all relevant information, including the reasons for the termination, the number and categories of employees to be affected, and the period within which the termination is to be carried out. The employer is also required to notify the relevant union, if employees are unionized. The notification must be in writing and must be delivered three months before the contemplated changes or close down. The employer is further required to consult with the workers union on measures to mitigate the adverse effects of the terminations on the employees such as finding alternative employment.

Costs: According to 2008 *Doing Business*, an annual publication by the World Bank and IFC, the rigidity of employment index in Ghana is 37. The rigidity of employment index is the average of three sub-indices: difficulty of hiring index, rigidity of hours index, and difficulty of firing index. Each of these indices assigns values between 0 and 100, with higher values representing more rigid regulations. Ghana scores well compared to the Africa region's average, but its employment rules are more rigid than the OECD average. Ghana scores particularly poorly on *firing costs*, which measure the cost of advance notice requirements, severance payments and penalties, as expressed in weekly wages. At 178, Ghana's firing costs are high compared to the region and the OECD average, which could be explained by the fact that the *Doing Business* methodology is based on the firing costs of workers with at least 20 years of experience. Historically such contracts have high severance payments negotiated in the past. The difficulty of firing index (workers legal protections against dismissal, including the grounds for dismissal, and procedures for dismissal) is 50. Ghana's hiring index, which measures flexibility of contracts and the ratio of minimum wage to the value-added per worker, stands at a favorable 22, and the rigidity of hours index, which measures restrictions on weekend and night work, workweek requirements, and mandated days of annual leave with pay, is 40. *Doing Business* ranked Ghana a low 138 among 178 countries in terms of ease of employing workers.

Doing Business Indicators

Indicator	Ghana	Region	OECD
Difficulty of Hiring Index	22	41.7	25.2
Rigidity of Hours Index	40	43.9	39.2
Difficulty of Firing Index	50	42.2	27.4
Rigidity of Employment Index	37	42.6	30.8
Non-wage labor cost (% of salary)	13	12.3	20.7
Firing costs (weeks of wages)	178	68.3	25.7

Source: *Doing Business in 2008*, The World Bank, 2007

54. In Ghana the state does not intervene directly in defining the amount of a redundancy pay for laid-off workers, leaving the matter for negotiation between workers or their trade unions and the employer. Individual employment contracts or collective agreements negotiated between trade unions and employers include conditions for a redundancy payment and other compensations for the laid-off. However, there are also cases in which workers do not have written contracts or employment contracts do not contain a redundancy clause. In such cases, a redundancy package is decided via negotiations right before such redundancy takes place. Disputes relating to the redundancy pay and the terms and conditions are handled by the Labor Commission for settlement (see Box 6).

Box 6: Role of National Labor Commission

According to the Labor Act, a worker who claims that his/her employer has unfairly terminated his/her employment may present a complaint to the National Labor Commission. If the Commission finds that the termination of the employment is unfair, it may order the employer to: (i) re-instate the worker from the date of the termination of employment; (ii) re-employ the worker, either in the same work or other suitable work; or (iii) order the employer to pay compensation to the worker.

The main functions of the National Labor Commission are (i) to facilitate and settle industrial disputes; (ii) to investigate labor related complaints (specifically unfair labor practices) and take steps such as mediation necessary to prevent labor disputes; (iii) to maintain a data base of qualified persons to serve as mediators and arbitrators; and (iv) to promote effective labor co-operation between labor and management. In order to maintain its credibility and independence in Ghana, the exercise of the Commission's adjudicating and dispute settlement function cannot be subject to the control or direction of any person or authority.

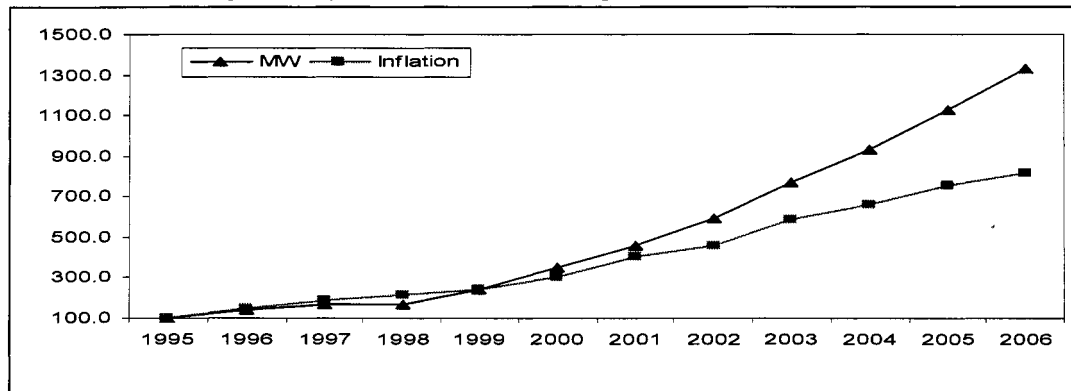
The Commission exercises the following powers: (i) receives complaints from workers, trade unions, and employers, or employers' organization on industrial disagreement and allegations of infringement of any requirements of the LA; (ii) requires an employer to furnish information and statistics concerning the employment of its workers and the terms and conditions of their employment in a form and manner the Commission considers necessary; (iii) requires a trade union or any workers' organization to provide such information as the Commission considers necessary; and (iv) can notify employers and employers' organizations or workers and trade unions in cases of contravention of the LA and direct them to rectify any default or irregularities. Any dispute that concerns redundancy pay may be referred to the Commission by the aggrieved party for settlement. The decision of the Commission in such matters is final and in settling industrial disputes, the Commission has the powers of the High Court in respect of enforcing the attendance of witness and examining the cases.

Wage Policies

55. The minimum wage in Ghana is set through tripartite negotiations between workers unions, employers, and the government. The current daily minimum wage in Ghana is ₵19,000 (US\$1.7) or about ₵6,150,000 (US\$380) per year. According to the Labor Act, the National Tripartite Committee composed of representatives of workers unions, employers associations, and the Government is responsible for determining the daily minimum wage. When the daily minimum wage is determined by the National Tripartite Committee, the Minister for Youth and Manpower Development publishes a notice of the national daily minimum wage in the media. The main goal of setting a minimum wage is to promote decent jobs and reduce poverty among workers, but its effectiveness is questionable in developing countries where a minimum wage is often set unreasonably high.

56. *There has been a large increase in real terms in the minimum wage over time.* In 2005/06, the year of the latest Ghana Living Standard Measurement survey, the minimum wage was at 13500 cedis per day (US\$ 1.5), versus the equivalent in real terms (adjusted for inflation) of 8,242 cedis per day in 1998/99, and 5,985 cedis per day in 1991/92. Thus, in real terms, the minimum wage has more than doubled in the last 15 years. Figure 9 provides data on the trend in the CPI and the minimum wage over time.

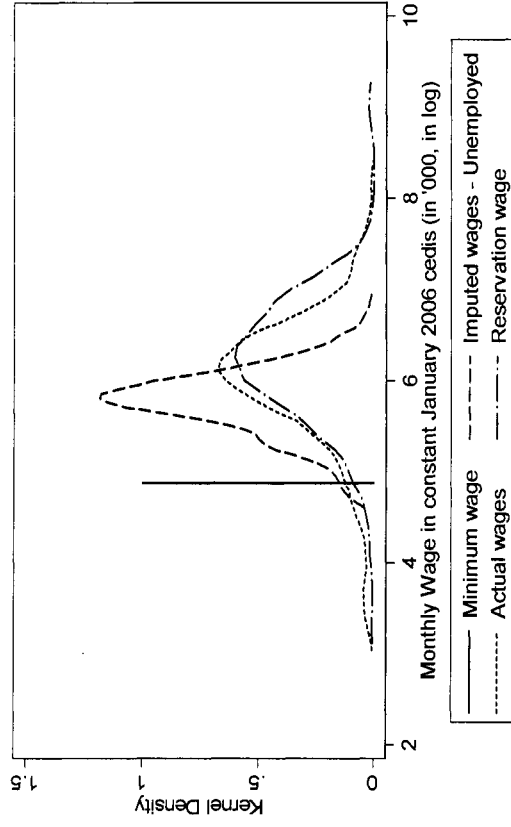
Figure 9: Dynamics of minimum wage and inflation, 1994-2006



Source: Government of Ghana, IMF

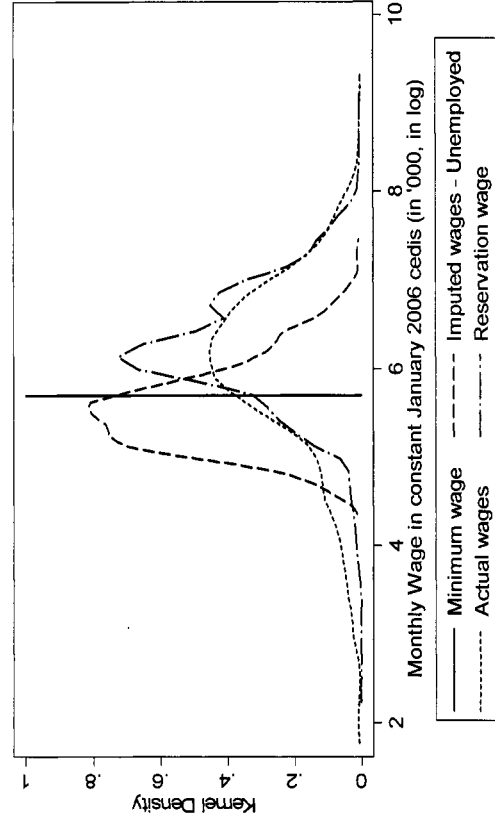
57. *The minimum wage does not seem to be a binding constraint in the sense that many wage workers today earn less than the minimum wage.* Density functions for actual wages in 2005/06, as well as the reservation wages of the unemployed and their expected wage given their characteristics are provided in Figures 10a to 10d. The sample excludes workers without pay as well as the self-employed. Data are provided separately for workers aged 18 to 30, and for workers aged 25 to 64. There is a bit of overlap between the two groups, but we defined young workers as being between 18 and 30 years of age to increase sample size for that group. The vertical lines on the figures represent the values of the minimum wage. The messages are clear. The minimum wage has increased rapidly, and while in 1991/92, very few wage workers were earning less than the minimum wage, this was not the case anymore in 2005/06. The fact that so many wage workers are earning less than the minimum wage in 2005/06 shows that enforcement is weak, but it also means that if enforcement were stronger, the costs for firms could be high. There is an interesting discrepancy between the imputed wages for the unemployed and their reservation wage, with many workers reporting a reservation wages higher than what they could expect given their characteristics. This suggests that part of the unemployment, especially among youth, may be due to high expectations.

Figure 10a: Density Function for Wages, Age 18-30, 1991/92



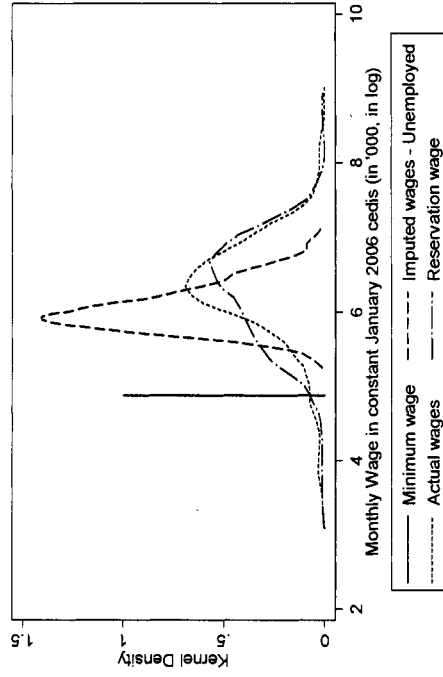
Source: Authors' computation based on GLSS3

Figure 10b: Density Function for Wages, Age 18-30, 2005/06



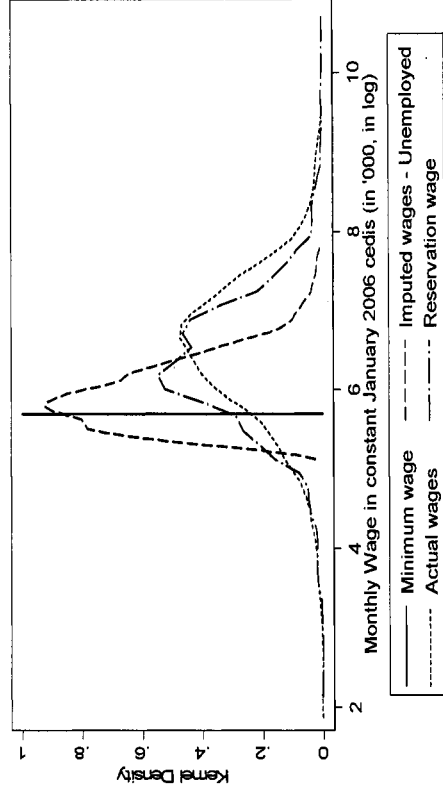
Source: Authors' computation based on GLSS5

Figure 10c: Density Function for Wages, Age 25-64, 1991/92



Source: Authors' computation based on GLSS3

Figure 10d: Density Function for Wages, Age 25-64, 1991/92



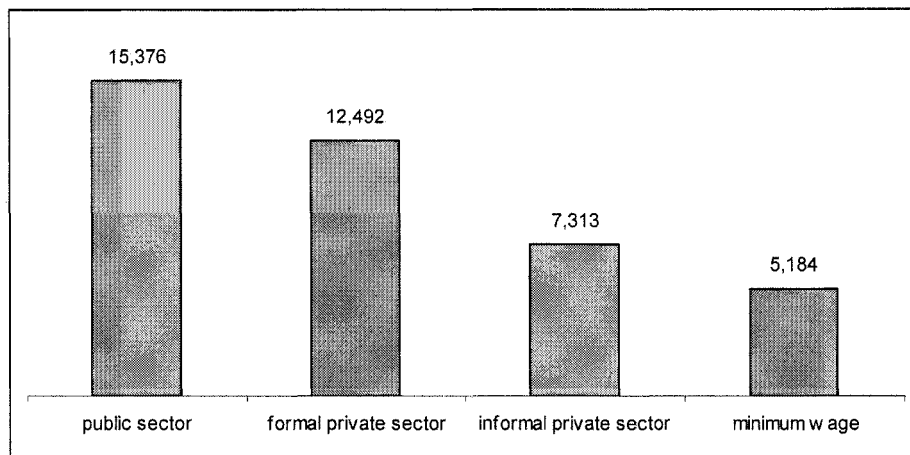
Source: Authors' computation based on GLSS5

58. *At the same time, the increase in the minimum wage implies that the cost of enforcing it could be high for firms.* Annex 4 provides estimates of the potential cost for firms of enforcing the minimum wage. The main parameter of interest is the wage gap, which computes the extra cost of hiring workers at the minimum wage as a proportion of the minimum wage (the wage gap takes into account the distance separating workers from the minimum wage; it takes a positive value only for those workers below the minimum wage, but the statistic is computed on all workers). For workers employed and between the ages of 18 and 30, the wage gap has increased at the national level from 3.7 percent in 1991/92 to 15.1 percent in 2005/06. The increase is even larger for the unemployed according to their imputed wages, from 0.3 percent in 1991/92 to 20.4 percent in 2005/06. For workers between the ages of 25 and 64, the wage gap has increased as well, although the level is smaller than for younger workers. The wage gaps are larger in rural than in urban areas, but they are still substantial even in urban areas. In 2005/06 for example, for current wage earners between the age of 18 and 30, the wage gap in urban areas is at 13.9 percent, while it is at 6.6 percent for the older age group. The increase in the wage gap over time is due essentially to an increase in the share of workers below the minimum wage. For example, in urban areas, 32.1 percent of actual wage earners today are below the minimum wage among the 18 to 30 years age group, and the proportion is 17.4 percent for older workers. For the unemployed, the proportion is a bit lower on the basis of the worker's declared reservation wage, but it is significantly higher on the basis of the imputed wage. Even when one restricts the analysis to formal sector workers, the share of current workers below the minimum wage is 25 percent for the age group 18-30 in 2005/06, and 11 percent for the age group 25-64.

59. *Another way to look at the level of the minimum wage is to compare it to actual earnings for various groups of workers.* The GLSS data suggest that the minimum wage is comparable with average earnings for workers in the informal sector, and lower than the earnings in the public and formal private sectors, but this does not mean as discussed below that a substantial share of workers are not below the minimum wage. The comparison of the 2005 monthly minimum wage with the reservation wage declared by the unemployed indicates that the minimum wage is below the average reservation wages for most workers, but as discussed previously, reservation wages seem to be unrealistically high in comparison to what unemployed workers may expect to earn on the basis of predictions made using standard wage regressions (see Figures 11 & 12)⁵.

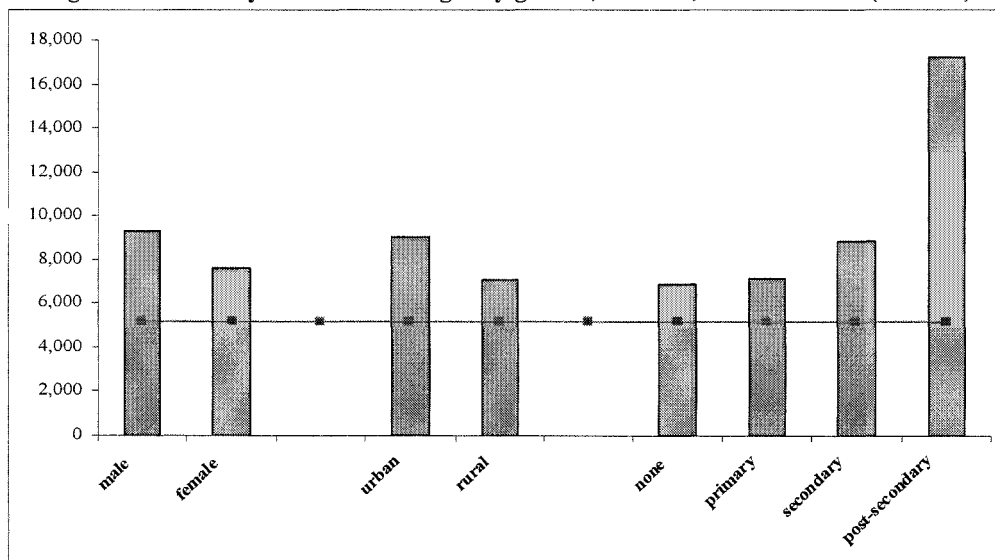
⁵ The reservation wage is calculated based on the 2005 survey, where the unemployed were asked "what is the lowest wage that you are ready to accept?"

Figure 11: Annual real earnings and minimum wage, 2005/06 ('000 cedis)



Source: GLSS5 and Department of Labor

Figure 12: Monthly Reservation wages by gender, location, and education (2005/06)



Note: The share of salaried workers is equal to about 18 percent of the active working age population
Source: GLSS5 (2005/06).

60. *While the minimum wage is high in comparison to prevailing wages, it is not enough to emerge from poverty.* The minimum wage is adjusted annually to compensate for inflation, and in fact it has been rising faster than the CPI (Figure 11). It is not sufficient, however to pull out of poverty an average family of four with one working adult. This then poses a difficult dilemma. On one hand, there is a desire to make sure that the minimum wage is high enough to enable workers not to be poor, but on the other hand a high minimum wage provides incentives for firms to stay informal, and if the minimum wage becomes too high, it may become irrelevant for the poor while also implying costs for the formal sector. Given that the minimum wage is now rather high, more detailed assessment of its potential impact is probably called for.

61. *There are large wage discrepancies within the public sector with the government taking measures to address these imbalances.* Since early 2000s, there has been a steady increase in the wage bill, partly reflecting employment increases and partly correcting historically low levels of pay⁶. In 2006 the overall average remuneration for all public sector employees increased 44% compared to 2005, with large variations among different sectors: the average remuneration of staff of the Ghana Education Services (GES), the largest component of the wage bill, grew by 23%, remuneration of health service staff, the second largest, increased by 181%. These variations reflected the separate approaches taken by different sectors to wage negotiations with the government (e.g., for the health sector, the remuneration increase aimed to prevent the further loss of skilled staff to the private sector and abroad). With the wage bill now equal to about one half of tax revenues, and pay anomalies prevalent between services, the Government recognizes that continuation of existing pay setting arrangements is unsustainable. Currently, the Fair Wages Commission is looking at equity issues across services, and the Government has undertaken a comprehensive payroll review as part of its public sector reform program. The latter envisages shedding surplus staff through rightsizing and linking pay more closely to performance. These initiatives are critical steps towards developing a sustainable policy for pay and employment in the public sector and reducing the costs of public service reform (i.e., separation payments and pensions) and their implications on the labor markets will need to be closely followed.⁷ In the GLSS data, in comparison with other types of workers, public sector workers are found to be paid much better (as discussed in chapter 3). This remains the case after controlling for a range of characteristics including education and experience. Table 21 below provides the marginal impact of being in the formal sector, being in an organization with a trade union, and being in the public sector on wages. While the coefficients for public sector affiliation are not statistically significant, they are positive, and public sector workers also benefit from the benefit of being in the formal sector and in organizations with unions.

Table 21: Percentage increase in wages from belonging to the formal sector, being in an organization with a trade union and being in the public sector on wages

	Urban 1991/92	Rural 1991/92	Urban 1998/99	Rural 1991/92	Urban 1005/06	Rural 2005/06
Formal job	0.420** (2.36)	-0.063 (0.33)	0.217* (1.75)	0.125 (0.87)	0.180*** (2.81)	-0.141 (1.18)
Union	-0.003 (0.03)	0.169 (1.56)	0.317*** (4.51)	0.294** (2.20)	0.144*** (2.86)	0.179* (1.68)
Public	0.097 (0.85)	0.077 (0.66)	0.078 (1.12)	-0.167 (1.38)	0.095 (1.68)	0.158 (1.40)

Source: See Annex 1 (Adams et al. - 2008). T-statistics in parenthesis.

⁶ Ghanaian public servants also had salary increases in 1994 (20%), 1996 (38%), 1997 (10–18%), 1999 (20–42%) and 2000 (21% in March and 20% in November).

⁷ See “External Review of Public Financial Management”, September 2007, WB, Marcelo R. Andrade

Non-wage Labor Costs

62. *The mandatory non-wage costs of labor in Ghana are comparable with the regional rates.* According to Social Security Law of 1991, workers and employers in the formal sector (public and private) have to contribute the equivalent of 17.5 percent of the gross wage bill to the Social Security and National Insurance Trust fund. The contribution by employers amounts to 12.5 percent of gross wages, with the rest paid by workers. Self-employed persons are required to contribute the same amount of their monthly income to social security. The social security funds are used to pay old-age and disability pensions and family allowances to dependants. To qualify for a pension, a person has to contribute to social security for at least 240 months by age 60 (age 55 for underground mine workers). The law also outlines conditions for early retirement and monthly pensions versus a lump-sum payment. The non-wage labor costs in Ghana are comparable to the regional average, and even lower than in some neighboring countries (see Table 22).

Table 22: Mandatory non-wage labor costs to employers in selected countries in West Africa

Country/Region	Non-wage labor costs, %
Benin	29.00
Burkina Faso	20.00
Cameroun	16.20
Ghana	12.50
Mali	26.90
Nigeria	8.50
Senegal	21.40
Sub-Saharan Africa	12.70

Source: *Doing Business 2006*.

63. *Upcoming pension reforms need to consider effects on the labor market.* Ghana is about to start a transition towards a new three pillar pension structure and is considering several proposals for pension reforms (see Box 7). To ensure that such reforms would lead to wider social security coverage, and to avoid distorting the labor market, several important considerations should be taken into account: (i) further increases of non-wage costs could contribute to evasion and expansion of informal work; (ii) parametric reforms are needed to improve financial sustainability of the pension system in the medium and long term; and (iii) closer links between contributions and pension benefits, as well as a more transparent system with good governance, would increase incentives to contribute.

Box 7: Pension System in Ghana

There are currently two mandatory pension schemes in Ghana: the Social Security and National Insurance Trust (SSNIT), and “CAP 30”. . On the aggregate, both systems cover less than 10 percent of the labor force in Ghana and cost around 2.2 percent of GDP (2005).

- SSNIT is the main system and covers employees in the private sector, and some civil and public servants. It also covers on voluntary basis the self-employed. SSNIT was established by the Social Security Law in 1991, which converted a Provident Fund (from 1972) into a pension scheme (partially-funded PAYG). The institution provides old-age pensions, invalidity, and death benefits. It is financed by a contribution rate of 17.5 percent of the employee’s salary (5 percent from the employee and 12.5 percent from the employer). Workers become eligible for full benefits after contributing for 20 years, and the pension benefit is based on the average of the workers’ 3 highest earning years. The normal retirement age is 60, but workers in hazardous jobs may retire with a full benefit at age 55. Early retirement is available with reduced benefits from the age of 55. In 2005 SSNIT had nearly 900,000 active members (contributors), and around 65,000 pensioners.
- CAP 30 is a small scheme, currently phasing-out, and only covers military, police, and a few civil servants. However, despite its limited coverage, CAP 30 expenditures account for 1.3 percent of GDP (2004), with its annual cost rising exponentially since 2000. CAP 30 is an unfunded defined benefit system. Although its contribution rates are the same as those of the SSNIT, it provides much more generous pensions. Employees are eligible for monthly pension with only 10 years of service, with benefits based on the final year salary. Although the compulsory retirement age is 60, employees may retire as early as at the age of 45. Police and other security agency workers as well as members of the judicial and legal services are exempt from contributing. In 2004 CAP 30 system covered more than 31,000 public workers and paid benefits to 97,000 pensioners.

According to early work in Ghana and the white paper on pension reform, the main weaknesses of the current system can be summarized as follows:

- Benefits in CAP 30 lack any actuarial basis; there is inequity between workers that contribute and those who do not contribute; there are arrears in collecting contributions and paying benefits; and there is lack of transparency.
- In SSNIT the main issues are: (i) inadequate investment returns; (ii) low coverage with marginalization of informal sector (public service employees are basically all covered; more than 20 percent of private sector employees are covered; while only less than 2 percent of non-agricultural self-employed, and farmers are covered); (iii) high administrative costs and low efficiency; and (iv) substantial slippage in real value of the pensions.

To reform the system, a Presidential Commission on Pension (established in 2004) made the following recommendation for a contributory three-pillar pension structures, comprising two mandatory and one voluntary scheme:

First pillar. A mandatory basic state social security scheme to be administered by a restructured SSNIT, which will pay only periodic monthly (no lump-sums), and other pension benefits (such as survivors and invalidity benefits). Contributions would be 13.5 percent of payroll.

Second pillar. A mandatory, privately-managed occupational pension scheme, based on a defined contribution pension scheme, paying mainly lump-sum benefits with flexibility that allows the contributor to purchase additional annuities to enhance monthly pension benefits. The minimum contribution rate will be 5 percent (4 percent contributed by the employee and the remaining 1 percent contributed by the employer).

Third pillar. A voluntary private pension scheme, offering attractive tax incentives. This would be operated in line with the provisions of the Long—Term Savings Act (LTSA), 2004.

While some of the proposals for such structure are still under revision, the implementation of the new three pillar pension is planed to start in 2008. Under the new pension system all workers, currently on the SSNIT scheme and below 55 years, would automatically join the new scheme.

64. Formal sector workers, and particularly public sector employees, also receive other non-wage benefits. According to the Labor Act, every employee in the formal sector is entitled to not less than 15 working days leave with full pay in any calendar year of continuous service. Workers also have a right to paid or unpaid leave in a number of personal circumstances. The GLSS5 data analysis shows that non-wage benefits more common in the public sector than in the private sector. According to the data, for instance, 90 percent of public sector employees have paid holidays which are significantly higher than among workers in the private sector (34 percent) (see Table 23).

Table 23: Share of salaried workers with social protection (%)

	Private sector	Public sector	Total
Paid holidays	34.2	90.2	54.8
Paid sick leave	31.7	65.5	44.1
Pensions	20.9	87.0	45.2
Medical care	26.6	65.1	40.8
Social security	20.8	61.0	35.6

Note: The share of salaried workers is equal to about 18 percent of the active working age population.
Source: GLSS5 (2005/06)

65. Larger firms provide more non-wage benefits than smaller firms as part of the benefits package negotiated between employees and employers via collective bargaining. According to the GLSS data, for instance, in large firms (with 500 or more employees) 64 percent of workers received transportation subsidies and 81 percent were also given free medical care. In general, as a result of negotiations between the workers' unions and the employer, large firms tend to pay higher wages or provide additional non-wage benefits to raise labor productivity and efficiency (such as group insurance, safety provisions, etc.). These benefits, which are not mandated by the state (except for pension and social security contributions), can nevertheless increase total social charges on labor for employers to nearly 20 percent. While a complete assessment of these charges is beyond the scope of this study, it appears that the many small charges add up to a substantial supplementary indirect cost on labor (Table 24).

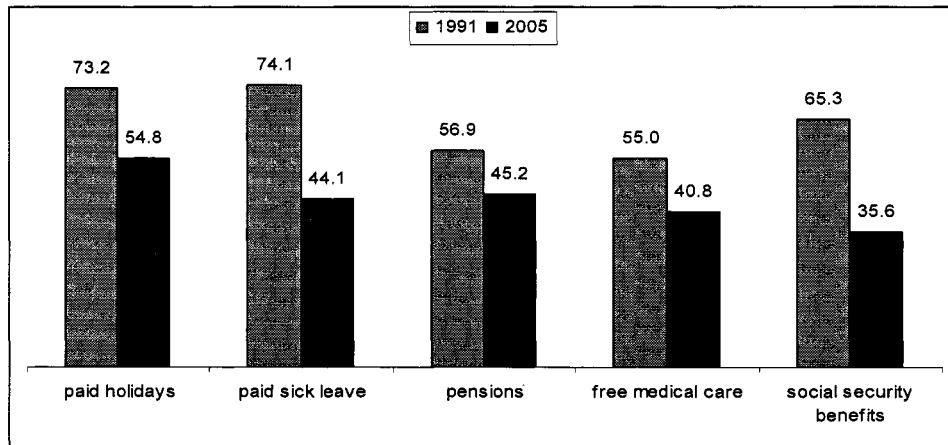
Table 24: Share of salaried workers with benefits by firm size (%)

Non-wage benefits	Firm size (number of workers)							Total
	1-5	6-10	11-20	21-50	51-100	101-500	501+	
Housing subsidies*	11.4	10.7	6.9	13.0	20.6	20.2	19.9	12.3
Transport subsidies*	4.7	9.7	13.2	12.1	17.3	24.6	63.5	14.1
Paid holidays	33.1	63.7	70.1	72.9	77.5	71.1	69.0	54.3
Paid sick leave	27.1	45.4	50.9	65.6	61.9	78.1	69.9	43.4
Pensions	21.3	51.6	55.5	67.4	75.8	81.3	85.5	44.2
Free medical care	21.5	42.7	45.26.0	62.9	59.6	84.4	80.7	39.4
Social security	17.6	44.7	46.8	42.4	41.8	72.9	76.3	34.9

Note: The share of salaried workers is equal to about 18 percent of the active working age population.
Source: *GLSS4 (1998/99) & GLSS5 (2005/06)

66. *There was a sharp decrease in the share of workers with social protection benefits during the last 15 years due mainly to the reduction of public sector jobs and an increase in informal jobs.* The data show, for instance, that during this period the share of workers with paid holidays decreased from 73 percent to 55 percent, while the share of workers with paid sick leave fell from 74 percent to 44 percent. Also, in 2005/06, only 41 percent of the wage-earners had free or subsidized medical care (compared to 55 percent in 1991/92) and only 36 percent of them (compared to 65 percent in 1991/92) had social security benefits (See Figure 13). The analysis shows that the fall in the share of workers with social protection was mainly due to the reduction of well-protected public sector jobs during this period, which declined from 12.3 percent in 1991 to 6.6 percent in 2005 (see Chapter 3). On the other hand, the private sector jobs created during this time were mostly informal and did not offer social protection benefits (including social security, pension, etc.).

Figure 13: Share Of Workers With Social Benefits, 1991/92 And 2005/06 (%)



Source: GLSS3 and GLSS5. Social security benefits include family and work injury allowances

LABOR MARKET INSTITUTIONS

67. *Social dialogue is operating through a tripartite mechanism, involving employer, employee and government.* Labor market institutions in Ghana are represented by workers unions, employers associations, and governmental labor ministries and agencies.⁸ The Labor Act provides all workers with the right of association and the freedom to form or join unions. The law requires that all trade unions register with the office of the Chief Labor Officer. While workers are represented by the labor unions, the employers have formed a number of employers associations.⁹ The Ministry of Manpower, Youth and Employment represents the government at the collective bargaining negotiations between workers unions and employers. In addition, the ministry's Department of Labor oversees

⁸ Ghana has more than 15 workers unions, including Trade Unions Congress, Public Services Workers, Teachers and Educational Workers Union, and Health Services Workers, among the largest trade unions.

⁹ Ghana's employers at collective bargaining negotiations are represented by: Ghana Employers' Association (GEA), Ghana Industries, and the Chamber of Mines. These serve as a professional and lobbying network to foster enterprise development and to promote free enterprise.

working conditions, work disputes, the social security system, and labor force developments. The law provides unions with the right to organize and to bargain collectively to set wages, benefits and work conditions. Negotiations between workers and employers usually take place at the national level, with the Government playing the role of arbitrator between workers unions and employers association.

68. *As a result of declining public sector jobs, and slow increase in private formal jobs, the share of unionized labor has been falling.* It is estimated that currently about 10 percent of the total labor force in Ghana is unionized, which is less than a half of the 1990 rate of 26 percent¹⁰. Nevertheless, the majority of formal sector workers in Ghana are unionized: according to GLSS data, in 2005 about 70 percent of public sector wage employees and 27 percent of private sector wage employees belonged to trade unions.

69. *Although the share of unionized labor has been falling in the last 15 years, the unionized labor still has a sizeable wage premium.* It is estimated that currently about 10 percent of the total labor force in Ghana is unionized, which is less than a half of the 1990 rate of 26 percent¹¹. This decrease was due mainly to a decline in the number of public sector jobs and slow increase in private formal jobs. Nevertheless, the majority of formal sector workers in Ghana are unionized: according to GLSS data, in 2005 about 70 percent of public sector wage employees and 27 percent of private sector wage employees belonged to trade unions. A study by the University of Oxford using manufacturing firms survey data concluded that without controlling for differences in human capital there is a very large difference in wages between unionized and non-unionized firms with the latter paying wages three times higher (US\$75 as against US\$25)¹². This study showed that, controlling for human capital, the union wage differential was estimated to be about 60 percent. On the other hand, the GLSS data indicates that the union wage premium for wage workers has declined from about 30 percent in 1998/99 to about 15 percent in 2005 (the premium was not statistically significant in 1991/92 however). While the GLSS data is not comparable to the data from the manufacturing sector that was used to estimate the 60 percent premium associated with unions, there is still evidence that there is a premium associated with unions but that this premium may well have decreased in recent years, as has union membership. Further work is needed to better understand the factors affecting this decline in both union membership and the wage premium associated with unions.

70. *The labor relations have evolved in the country with the government institutions taking more responsibility for dealing with industrial issues.* Under the new labor law, the Chief Labor Officer, in the Ministry of Youth and Employment, rather than the Trade Union Congress (TUC), issues collective bargaining agreements. This effectively limits the TUC's monopoly, since the old collective bargaining provisions implicitly compelled all unions to be part of the TUC. Also the National Labor Commission has been established and tasked with resolving labor and industrial issues, removing that responsibility from the Labor Court. However, the capacity of the government institutions

¹⁰ J.P. Azam et al., "Labor Institutions, Labor-Management Relations, and Social Dialogue in Africa", 2005

¹¹ J.P. Azam et al., "Labor Institutions, Labor-Management Relations, and Social Dialogue in Africa", 2005

¹² F. Teal "Labor Demand in Ghana for Skilled and Unskilled Workers", 2007

is overall weak and they lack resources (financial and technical) to enforce labor regulations and monitor the labor market.

EMPLOYMENT PROGRAMS

71. *The National Youth Employment Program (NYEP) is the main employment program.* Ghana has a number of employment-related programs, such as the Special Presidential Initiatives (SPI), the Rural Enterprise Development Program (REDP), the National Board of Small Scale Enterprises (NBSSE), and others run by a number of sectoral ministries and agencies. However, the National Youth Employment Program (NYEP) is the only major program that focuses primarily on job creation, with the rest targeting overall poverty reduction and private sector development rather than job creation *per se*. The analysis in this section, therefore, will focus primarily on the NYEP.

72. *The NYEP addresses job creation for the youth, defined as young people between the ages of 18 to 35.* Launched in October 2006, the program aims to “empower the youth to be able to contribute more productively towards the socio-economic and sustainable development of the nation”¹³. The NYEP program is built on the experience of the Skills Training and Employment Placement Program (STEP), which focused mainly on vocational training, including apprenticeship for JSS/SSS graduates, agricultural training for rural areas, and the teaching of entrepreneurship skills to college-graduates. According to the available data, between 2002 and 2004 the government spent about 19 million cedis from the HIPC funds to train some 18,000 STEP beneficiaries.

Table 25: The NYEP Youth Employment Registry Data

Region	No. of youth registered	Actual No. of youth employed	Share of youth employed (%)
Ashanti	24,322	7,537	31.0
Brong Ahafo	19,868	7,932	39.9
Central	13,016	7,697	59.1
Eastern	19,100	8,600	45.0
Greater Accra	22,363	7,922	35.4
Northern	21,959	16,528	75.3
Upper East	13,271	9,530	71.8
Upper West	12,590	9,688	76.9
Volta	18,094	8,674	47.9
Western	10,087	7,967	79.0
Total	174,670	92,075	52.7

Source: Ministry of Manpower, Youth and Employment 2005.

73. *The NYEP is more ambitious and aims to employ 500,000 young people between 2006 and 2009.* The government introduced the program to help unemployed youth find jobs. According to the 2005 survey, the unemployment rate among youth ages 15-24 is about twice as high as the national unemployment rate (6 percent compared to 3 percent). The NYEP aims to train and provide temporary employment for about 170,000 youth per year, with the overall target of 500,000 for 2006-2009. This target number is based on the

¹³ Youth Employment Implementation Guidelines, Government of Ghana, 2006

national youth employment survey/registry carried out prior to the program, which identified and registered about 175,000 young people, with only about 50 percent of them employed at the time of the survey. The survey confirmed large regional disparities in youth unemployment, with the highest unemployment rates in large urban areas, particularly Ashanti and Greater Accra regions (Table 25).

74. The NYEP is a broad-based program, involving a number of national ministries and agencies, district assemblies, community-level groups, as well as NGOs and the private sector. According to the design of the program, youth with all types of educational background are eligible, though a large share of the employment modules requires at least basic education. The youth employment program targets a wide range of activities in different sectors, such as education, health, water and sanitation, agriculture, and others, and operates in all 10 regions of the country. To reach its objectives, the program interacts on regular basis with a number of governmental structures at the national and regional levels and it also contracts out some of its activities to NGOs and the private sector.

Most of the NYEP beneficiaries are employed in the public sector to provide basic social services. Since October 2006, the NYEP has provided employment to 92,075 young people, with about 42,000 of them working as teaching assistants and health and sanitation workers. Agrobusiness (16,383) is another important employment module that promotes farm and non-farm income-generating activities in rural areas. The internships module (5,041) targets mainly the educated youth in urban areas seeking employment with the private and public sectors. The employment modules for trades and vocation and ICT are still being developed (see Table 26). Overall the largest share of NYEP employment is in the public sector, with teaching and nurse assistants financed by the NYEP filling in for absent teachers and medical staff, especially in remote areas of the country. While the program is providing important and necessarily social services, the youth hired by the program often lack proper training and do not have all necessary qualifications to carry out their tasks.

Table 26: The NYEP Beneficiary Data, 2006-07

Employment modules	Beneficiaries
Community education teaching assistants	23,021
Agro-business	16,383
Health extension workers	14,000
Internship	5,200
Waste and sanitation	5,041
Community protection	1,300
Trades and vocation	-
ICT	-
Others	26,760 ¹⁴
Program staff	370
Total	92,075

Source: Ministry of Manpower, Youth and Employment

¹⁴ No information on the break-down by types of employment was available for this category

75. The NYEP is costly, with an annual budget several times larger than that of the Ministry of labor itself. Originally the Government of Ghana has planned an earmarked annual allocation of 1,300 million cedis (US\$120 million) to finance NYEP activities. Based on the available data, the NYEP budget allocations for 2007 are estimated at 677,000 million cedis or about 0.7 percent of GDP, which corresponds to about six times the total budget of the Ministry of Manpower, Youth, and Employment (estimated at 103,000 million cedis for 2007). Since the program's launch in October 2006, the government has spent about 445,000 millions cedis (US\$42 million) to benefit 92,075 young people, or about US\$450 per beneficiary (see Box 8)¹⁵.

Box 8: NYEP financing sources

The program is financed from four main sources: (i) specialized funds and national programs, such as Poverty Alleviation Fund, HIPC, Road Fund, Ghana Education Trust (GET) Fund, National Health Insurance System (NHIS), Women Development Fund, Food and Agriculture Budget Support Funds; (ii) cost-sharing schemes and collaborative funding by district assemblies common funds (DACF), government agencies, civil society organizations, etc.; (iii) funds recovered from the program participants; and (iv) other state sources. An earmarked amount from each specialized fund is used annually to financing various NYEP employment modules. However, the budget execution is well below the planned allocation: in 2006, the NYEP received 270 billion cedis (US\$25 million) out of 552 billions cedis planned for the program; and in the first half of 2007, about 22 percent of the budget allocated to the program was actually executed.

The NYEP Annual Expenditures

Employment program	Source of financing	Annual budget (million cedis)			
		2006		2007	
NYEP		Plan	Actual	Plan	Actual*
	DACF	180,600	121,918	244,005	72,450
	HIPC	113,850	67,116	80,000	
	GET FUND	138,690	0	177,520	56,838
	NHIS	151,366	61,000	182,390	44,809
	ROAD FUND	106,900	20,000	111,380	0
	Other		144,767		
Total		552,716	270,178	795,345	174,097

Source: Ministry of Manpower, Youth and Employment, May 22, 2007.

76. The design of the program raises several concerns that can affect the labor market functioning:

- The level of wages paid by the program (ranging between 500,000- 2,000,000 Cedis per month¹⁶), varying by level of education of beneficiaries, is very high (between 2 to ten times the national minimum wage). This can create (i) disincentives for youth to look for jobs outside of the program; and (ii) create unrealistic expectations among youth and their future earning prospects.
- The targeted groups are mainly youth with secondary and higher education and from better-off urban areas (See Annex 7).

¹⁶ Wages paid by the program depend on the educational level of participants: 2,000,000 cedis (graduate degree); 1,500,000 cedis (bachelor degree); 1,000,000 cedis (higher national diploma -HND); 800,000 cedis (SSS); 500,000 cedis (JSS). However the majority of program beneficiaries are HND and SS graduates.

- The program mainly creates temporary jobs in the public sector (e.g. education and health services) and there are concerns on their sustainability.

77. *The impact of the NYEP on poverty seems to be minimal.* An analysis using GLSS data (see Annex 7) shows that the poverty impact of the program is likely to be very limited, especially in comparison to its cost. This is because most of the potential beneficiaries belong to the better-off quintiles of the population, given the fact that the program targets youth with at least a junior secondary education completed. In rural areas, on the other hand, other types of programs also providing employment such as public works could be considered to target individuals belonging to households who tend to be poor. At the current wage of the NYEP one can conjecture that with its current size, the program is reducing poverty at the national level by slightly more than half a percentage point, which is small in comparison to cost. A self-targeted public works program in rural areas with the same budget, lower wages, and no selection criteria in terms of education, could probably have an impact five times larger at the same cost as the NYEP.

78. *International experience provides useful lessons to improve the relevance of youth programs.* Overall international experience suggests that better longer-term results could be achieved if employment programs are combined with other education-related interventions. The inventory of youth employment interventions carried out by the World Bank provides some insights on how other countries deal with the issue of youth unemployment (see Box 9). Among the most important lessons learned is the fact that youth interventions should involve the private sector from the beginning to ensure an appropriate match between the skills provided by youth programs and employers' needs.

Box 9: Lessons from the Youth Employment Inventory

The Youth Employment Inventory is a World Bank inventory of 289 programs and interventions from 84 countries designed to integrate young people into the labor market. Based on these premises and the programs' primary purpose, the inventory identified the following categories of interventions applying to Sub-Saharan Africa:

1. Public works program could be more suitable than formal sector wage subsidy programs for developing countries. The review shows that wage subsidies do not go far in developing countries with a small size of the wage sector. Creating jobs through public works offer alternative pathways to employment with investments in infrastructure continuing to be important in the near future. Public work programs provide good opportunities to acquire initial work experience, especially for low-skilled and rural youth.

2. Targeted youth entrepreneurship schemes improve chances for young entrepreneurs in low-income countries where job growth in the formal economy tends to be slow. The evidence, however, indicates that not all youth will be suited to self-employment and failures rates can be high. Careful targeting and screening for these programs will be important to success and cost-effectiveness.

3. Training programs are most successful when they involve the private sector in providing practical work experience and in identifying the kind of skills required. Engagement of the private sector in training is an effective tool to mitigate the risk of high-cost training disconnected from market demand and to increase on-the-job training. Targeting of training programs varies from disadvantaged youth to the long term-unemployed, underemployed, or simply job seekers in urban and rural areas. Training programs are among the most costly of interventions for youth, and therefore attention to connecting training with jobs is important to success.

4. Traditional apprenticeships can prove to be a cost-effective alternative for especially lower skilled youth. Throughout West Africa, traditional apprenticeships between a master craftsman and apprentice are a popular source of skills. *The main strengths of traditional apprenticeship are its practical orientation, self-regulation, and self-financing.* These apprenticeships also cater to individuals who lack the educational requirements for formal training (see Chapter 3).

5. Comprehensive interventions including education equivalency programs, training, counseling, job search assistance and other services lead to better outcomes. Such programs are among the more successful, though expensive, approaches for improving the employability of disadvantaged youth. Multi-service programs are common in

Latin America and the U.S. In Latin America, the Jóvenes Programs have been widely analyzed using a welfare framework and cited as a successful story in assisting young workers in developing countries. They use a demand-driven model that targets economically disadvantaged youth, fosters private sector participation, and promotes competition among training providers. Although successful in improving job placement and earnings, the programs became expensive for some countries and have been replaced by smaller and more focused interventions. Comprehensive programs have also worked in sub-Saharan Africa.

Source: Global Inventory of Interventions to Support Young Workers; WB, 2007.

79. *The NYEP's monitoring and evaluation system is weak and there is no information on the project's impact on youth employment.* Given the multi-sectoral nature of the program and its huge costs, it is crucial to put in place a strong monitoring and evaluation system to monitor results on the ground and ensure efficient use of public resources. Currently the information collected on the beneficiaries is not sufficient to evaluate the outcomes of the program.

AN OVERVIEW OF FINDINGS AND POLICY IMPLICATIONS

Labor regulations and institutions

80. *The changes introduced by the new law are steps in the right direction, but further revisions of the labor code are needed to ease dismissal procedures that are still complex and costly.* Ghana hiring and firing rules are overall flexible, but firing costs can be high and the procedures are cumbersome. There is still need to better understand the dismissal procedures and costs in order to suggest further legislation reforms, if necessary. Based on lessons learned from other countries, hiring and firing regulations need to find a balance between providing security to workers and reducing business costs. High dismissal costs can hinder job creation and slow the flow of FDI into the country. Although regulations on hiring and firing are usually justified, as they protect workers from arbitrary actions and provide stability of employment, onerous employment protection legislation can discourage formal job creation because firms will be reluctant to hire workers if they face significant costs in adjusting the workplace to changes in demand.

81. *The minimum wage policy does not seem to constrain job creation because it is not strictly enforced, but if it were enforced, costs could be high due to its more than doubling in real terms in the last 15 years.* According to the 2003 Labor Act, the National Tripartite Committee annually sets the daily minimum wage, which is currently equal to ₵19,000 (US\$1.7). The GLSS data show that the minimum wage is high in comparison to prevailing wages, in the sense that an increasing share of workers now has wages below the minimum wage, especially among youth and in the informal market. While this may not have had negative impact due to weak enforcement, the continuous increase in the minimum wage at a rate much faster than inflation may cause problems in the future, so that a reassessment of the level of the minimum wage is warranted, especially in terms of its potential impact on access to formal jobs for youth.

82. *The impact of the ongoing pension reforms on the labor market, including non-wage labor costs, needs to be carefully evaluated.* Overall, the current non-wage labor costs in Ghana are moderate compared to the region, but the Government has to ensure that

the new pension reforms do not increase non-wage labor costs since it would decrease employer incentives to hire new workers as well as reduce incentives for workers to participate in the labor market. It is advisable that during the preparation of the pension reforms, the authorities assess the impact of various pension reform options on the labor market overall and on labor costs in particular.

83. *A better understanding of the Industrial relations is needed.* Recent changes in the labor law and shifting responsibilities between unions and state institutions require a better understanding of the nature and dynamics of industrial relations in Ghana. This task, which is a responsibility of the Government, employers, and workers, would help in developing a modernized institutional framework that would match Ghana's ambitions for becoming a middle-income economy. It will also help the Government refine the responsibilities and roles of various institutions and identify the areas that need further strengthening and institutional capacity building.

Employment Programs

84. Addressing youth employment requires both short and long term solutions. While cost-effective employment programs could provide short-term support to youth employment, long term solutions would require investments and policy changes that could contribute to economic growth as well as investments in education and training to better prepare future youth for more productive jobs in the growth sectors of the economy. International experience shows that training alone is not sufficient to ensure the transition of young people from school to work and it is important to link training to the real needs of the economy, particularly in the private sector (see Chapter 5).

85. To improve the effectiveness of the existing NYEP, the following measures could be considered:

- ***Reviewing the design of the program to better achieve its objectives.*** The attention given to youth employment is important and based on international experience focus on this group is justified. However, the Government needs to review the design of the NYEP to make sure that: (i) the program targets vulnerable youth well beyond urban areas; (ii) the level of wages paid by the program are below the market wages in order to avoid distorting the labor market; and (iii) temporary employment offered by the program is not de facto disguised public sector employment and involves private sector. As part of this review, it would be helpful also to revise the concept of youth since the current definition of youth (18 to 35 years old) is too broad and includes diverse groups: adolescents (18-19), youth (20-24) and young adults (25-35). These different groups are in different stages in the transitions from child to adulthood and as such require different policy and programs.
- ***Strengthening the program's monitoring and evaluation system to ensure that the public funds are spent efficiently and that the program delivers long term and sustainable results.*** The existing youth program in Ghana is relatively new and

there is not detailed information on its beneficiaries and their socio-economic characteristics and there is no information on its impact. However, given the program's high costs, the Government needs to: (i) improve the monitoring indicators; (ii) undertake sound evaluations to ensure that funds are being effectively spent; (iii) monitor closely high expenditure modules of the program in order to see whether the priority given to them is justifiable; and (iv) make sure that the beneficiaries meet the selection criteria for the program.

- ***As part of the poverty alleviation strategy, considering introduction of self-targeted public work schemes to offer temporary employment opportunities for youth.*** Given infrastructure needs in the country, the Government will continue to invest significantly in public works in near future. This provides an opportunity for low-skilled youth in both urban and rural areas to acquire initial work experience and a temporary income, while at the same time constructing/maintaining needed infrastructure. Developing innovative mechanism for road maintenance and other public services through SME also hold the potential to absorb both unskilled and skilled youth. Based on lessons learned from other countries, the public work schemes should include: (i) self targeted mechanism to ensure participation of both low-skilled and high-skilled youth (i.e., level of wage below market); and (ii) training for basic skill development of low skilled youth. Based on the design of the program, this safety net scheme can play an important role in poverty alleviation strategy.

CHAPTER 5. EDUCATION, SKILLS, AND LABOR MARKET OUTCOMES

Trade, rapid advances in science and technology, and intensified economic competition are shaping the demand for skills in countries worldwide. These forces have increased the attention given to the ability of education and training systems to prepare youth for entry to the world of work and to support more seasoned workers in adjusting to structural changes taking place in labor markets.¹⁷ Concern exists whether skill deficits have or may become a constraint to Ghana's further growth and capacity for reducing poverty. Noting the limited opportunities for skills development beyond basic education, a White Paper was prepared in 2004, building on the Education Strategic Plan (ESP) for 2003-2015 prepared by the Ministry of Education Science and Sports (MOESS) and calling for increased emphasis on technical, vocational, and agricultural education and apprenticeship.¹⁸ In a sector review, MOESS refers to evidence of a widespread disparity between what education institutions produce and what the labor market wants.¹⁹ This chapter begins with an overview of the landscape for skills development, starting with basic education and moving on to consider options for further education and skills development, comparing school-based and post-school options for training and highlighting issues of access, quality, efficiency and financing in various programs. The second section estimates returns to education and training, looking for evidence of growing skills gaps, and the third section reviews the ESP recommendations for sector reforms involving skills, and benchmarks recommendations against regional and international experience, emphasizing priorities. Overall, the analysis shows that though Ghana has made substantial investments in basic education, improvements in quality are necessary. Furthermore, education and skills training are influencing wages and earnings directly by raising the productivity of the worker and indirectly by promoting entry into more lucrative forms of employment. Therefore improving skills development is key to the attainment of middle-income status. To this end, Government needs to continue improving the quality of basic education while opening access to post-basic education and improving articulation between formal education and training programs, including traditional apprenticeships. Government can play an important role in promoting the efficient operation of training markets by engaging employers in setting skills standards, focusing on development of a quality assurance framework, and linking public financing of training to outcomes.

¹⁷ A review of global experience and the role played by skills development in helping youth make the transition from school to work is available in Adams (2007).

¹⁸ Ministry of Education, Science and Sports (2004).

¹⁹ Ministry of Education, Science and Sports (2006).

THE LANDSCAPE FOR SKILLS DEVELOPMENT

Basic Education

86. Ghana has made progress in increasing young people's access to primary education as part of its efforts to meet the Millennium Development Goals for education. Capitation grants were first piloted in 2004/05 and mainstreamed in 2005/06.²⁰ As a consequence, net enrolment rates of youth 6-11 years of age increased nationally from 59 percent in 2004/05 to nearly 79 percent in 2006/07, with net admission rates for 6 year olds more than doubling to 69.3 percent from the 2004/05 figure of 26.2 percent. Gross enrolment rates, including over-age and under-age youth, rose to nearly 91 percent in 2006/07 (see Table 27). The increase in the net enrolment rate for primary education to 78.6 percent pushed Ghana above the Sub-Saharan Africa average of 66.3 percent.²¹

Table 27: Enrolment by Level of Schooling for 2004/05 and 2006/07

	Primary		Junior secondary		Senior secondary	
	2004/05	2006/07	2004/05	2006/07	2004/05	2006/07
Enrolment	2935611	3365762	1012258	1132318	338519	414491
Gross enrolment	83.4	90.7	70.3	74.8	25.5	30.2
Net Enrolment	59.1	78.6	31.6	50.7	n.a.	10.6

Source: Ministry of Education and Sports EMIS (2007)

87. National primary enrolment rates, however, hide disparities across and within regions and between sexes, and efficiency remains low. Within the country's 10 regions, the Northern and Upper West regions show the lowest net enrolment rates, with 68 and 70 percent respectively in 2006/07. The net enrolment rate of young girls in primary education trailed the rate for young boys in 2006/07, 77.3 percent to 79.8. Girls' share of enrolment ranged from 46.3 percent in the Northern Region to 51.2 percent in Greater Accra. As an indicator of the system's inefficiency, for every 100 students enrolled in the first grade, approximately 56 complete the sixth grade. The MOESS estimates it will not meet its target for universal primary completion by 2012, preventing achievement of universal basic completion by 2015.

88. The growth in enrolment in public primary schools has put pressure on teacher training and assignments, as well as on school infrastructure. The expansion in enrolment in public schools led to new teachers being hired. Many, however, lacked appropriate training, and the percentage of trained teachers fell from 67 percent in 2005/06 to 62 percent in 2006/07. In private schools, less than 20 percent of teachers were properly trained. Pupil-teacher ratios in public primary schools ranged widely in 2005/6, from 29.4 pupils per teacher in the Volta Region to 42.8 in the Upper East Region, with the range by District even wider. Furthermore, students in public primary schools face crowded conditions, and infrastructure that needs repairs. Nationally, seats available per 100

²⁰ For every child enrolled in basic education, a school receives 30,000 Cedis, about US\$3.10 to offset a reduction in school levies.

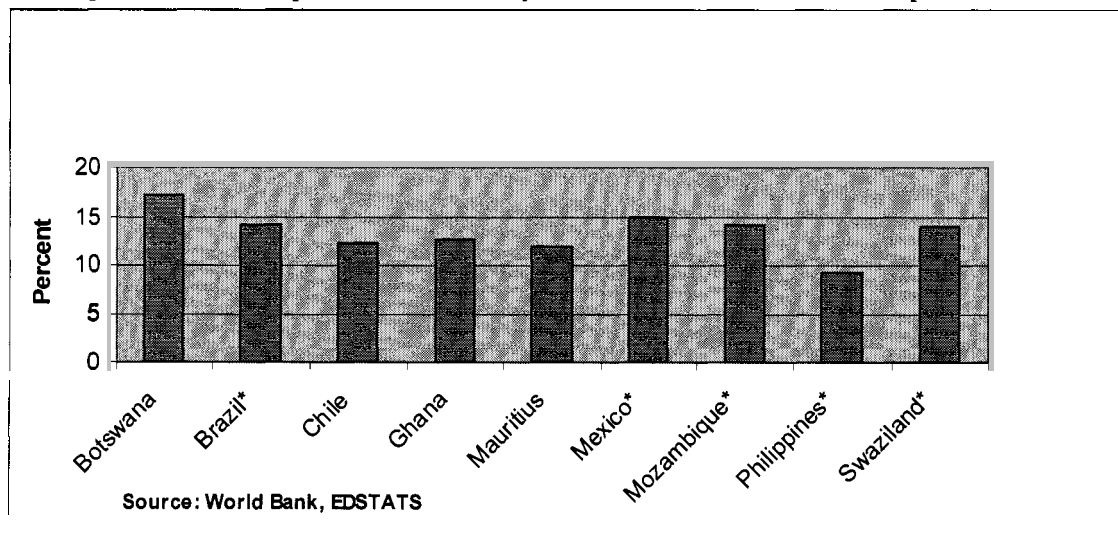
²¹ This section is based on data drawn from Ghana's Education Management Information System (EMIS) and the Preliminary Education Sector Performance Report 2006, using EMIS data prepared by the Ministry of Education, Science and Sports.

students fell from 90 to 80 in 2006/007, and twenty-seven percent of public primary classrooms were in need of major repairs.

89. Junior secondary schools (JSS), which have also seen a rise in enrolments, face many of the same difficulties. Net admission rates for 12 year old first-year JSS students in 2004/05 surged from 12.2 to 44.4 percent in 2006/07. Much of the expansion came from the increased number of students completing primary and moving on to JSS (93% of primary completers). As with primary education, the accessibility and condition of schools varies across regions and districts. Gender parity continues to be an issue. Teachers lack appropriate credentials, especially in private schools (which account for 15.9 percent of JSS level schools). In public schools, nearly eight of every ten teachers have completed Teacher Training College, but only 27 percent meet this standard among private JSS. Facilities are also in need of repairs and the growth of JSS enrollments has produced crowding. For every 100 students entering JSS, 65 are expected to complete JSS.

90. These conditions are reflected in low pass rate for those taking the Basic Education Certificate Examination (BECE), which determines whether or not a student is able to continue to the second cycle of education. The BECE is currently the only indicator measuring achievement and, thus, the quality of basic education. Sixty-two percent passed the BECE in 2005/06, a figure that has been relatively stable since 2002/03. The variation in pass rates across regions ranged from 47 percent in the Northern Region to 70 percent in the Greater Accra Region. Boys performed better than girls. Those failing the BECE join others who drop out or simply never enroll and who now must enter the labor market with limited education and skills. A 2003 survey by the Ghana Statistical Service found a significant number of children on the street engaged in labor who were not attending school. The proportion increased from 8 percent among 5 to 9 year olds to 54 percent for those ages 15 to 17.

Figure 14: Public Expenditure on Primary Education as a Percent of Per Capita GDP: 2005



91. *Despite keeping pace with international trends in education spending, Ghana faces a continued need for investment in basic education, and also faces growing demands for investment in post-basic education.* Ghana has matched international norms in spending on education, with actual expenditures in 2006/07 reaching 6 percent of GDP, and spending on primary education accounting for 12.6% of its per capita GDP (roughly average for the middle-income countries listed in Figure 14). Despite rising enrolments, increased spending on primary education has led to an increase in spending per student (Figure 15).

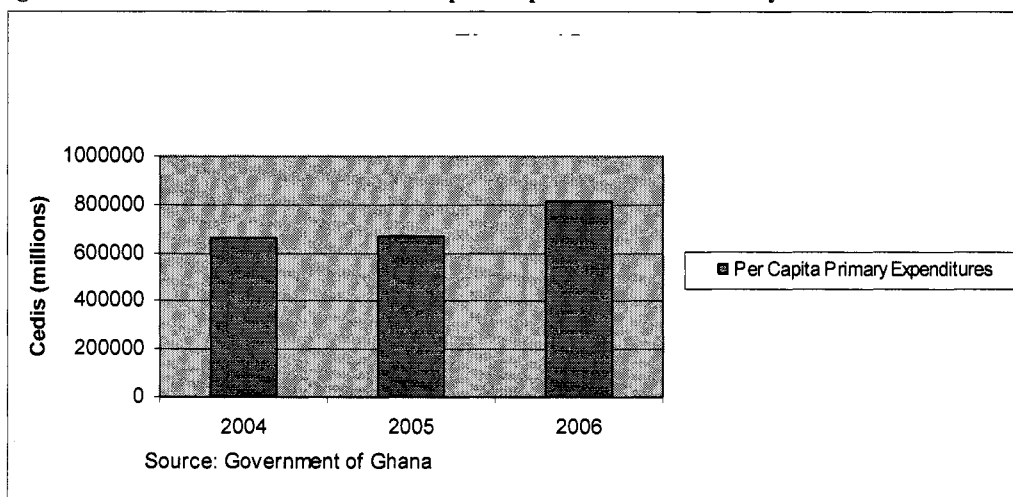
Table 28: Government of Ghana Education Expenditures by Sub-Sector: 2004

Sub-Sector	Recurrent %	Investment %
Pre-School	5.1	
Primary	35.5	
Junior Secondary	22.3	
Senior Secondary	13.1	47.3
Non-formal Education	1.0	
Special Education	0.6	3.4
Teacher Education	4.7	2.6
TVET	1.0	2.7
Tertiary	16.7	7.8
Subvented Agencies		3.0
Mgmt		33.2
HIV/AIDS		
Total	100.0	100.0

Source: Government of Ghana

However, the primary education sector still has need for more, and at the same time, Government has to respond to the growing numbers of youth expecting to enter a senior secondary school. Furthermore, the evidence above shows that less than two of every three students successfully complete primary education and JSS. This emphasizes the importance of improving the efficiency of resource allocation. Moreover, based on some preliminary analysis, it seems that about 8 percent of total investment in education is lost to migration as a result of the brain drain (See Box 10 and Annex 6). Although some of this investment may be recuperated through the returns from the migrants, further work is needed to assess the net effect of the brain drain in Ghana.

Figure 15: Government of Ghana Per Capita Expenditures on Primary Education: 2004 - 2006



Box 10: Migration, brain drain and losses in public education spending

Migration operates as an important equilibrating mechanism by allocating labor to regions and sectors where it is in most in demand. As such, migration, whether internal and international, can generate significant welfare gains for the migrants, their families and both the destination and the source economies. Since the majority of the gains accrue to the migrants through higher wages, and to their families through the remittances sent back, migration may become an important tool for economic development and poverty reduction. However, international migration data in countries such as Ghana reveal that a significant share of the migrants, especially to the OECD countries, has tertiary education. Given the importance of human capital in economic development and growth, brain drain is likely to have important development and labor market implications.

Who are the international migrants? According to preliminary data from GLSS5, a total of 422,436 individuals or 1.91% of the population is comprised of international migrants. The most favored destinations for external migrants are the US, the UK and other OECD countries followed by other African countries. The most popular destinations within Africa are Cote d'Ivoire, Nigeria, Burkina Faso and Guinea, which are all neighboring countries. A total of more than 288,000 households (5.3% of total households) have an international migrant. The vast majority of households with migrants to the OECD countries (including the US and the UK) are from urban areas and belong to the fourth and fifth consumption quintiles. Families with migrants to African countries tend to be poorer and rural. Migrants to OECD countries are predominantly from Ashanti and Greater Accra whereas there is significant number of migrants to other African countries in the Volta, Eastern and Brong Ahafo regions.

Profile of international migrants based on GLSS5. On average, migrants constitute a better educated and more skilled section of the Ghanaian labor force, and education affects the place of destination. Some 14 percent of OECD migrants have tertiary education and another 75 percent have secondary education. This is rather different than the averages for migrants to other African countries where 57 percent have secondary education and only 1 percent has post-secondary education. Another important indicator of the loss of educated workforce is the share of educated workers at home and abroad. Only 22 percent and 2.15 percent of the total population have secondary, and post secondary education within Ghana while around 70 percent of migrants have secondary education and 10 percent have post secondary education. This suggests further that the present migration trends in Ghana are leading to brain drain and have the potential of further aggravating the problem to low human capital at home. The data also suggests that a vast majority of international migrants (82.8 percent) have completed their education in Ghana. This means that a significant proportion of the expenditure on education in Ghana has gone to those who later migrated to other countries.

Loss in education spending due to brain drain. Annex 5 combines household survey data with detailed information on international migrants and their education level with administrative data on public spending for education in order to compute the share of total education investment that is lost due to migration. The migration module of GLSS5 provides information on the highest level of education achieved by each migrant in Ghana before they migrated. Thus the cumulative cost of education is calculated for each migrant by summing over the educational cost of each level of education the person have obtained. Unit costs from education are derived from data available in the Preliminary Education Sector Performance Report of the Ministry of Education and Sports in Ghana. Due to lack of data in trends in unit costs over long periods of time, we estimate the investment made in education for all individuals, even older ones, using the 2004 unit costs. The total cumulative expenditure on education for the country as a whole is the sum of the education expenditure for all Ghanaians who have remained in their country as well as the expenditure for those who have migrated (estimated at 49,116 billion cedis or \$ 5 billion, Table 4 Annex 5). The total investment in education allocated to individuals who have migrated comes up to 4,312 billion cedis. Thus about 8 percent of the total investment in education is lost to migration. Some of this may be recuperated if some migrants come back in their country, but the evidence from the survey is that the number of return migrants is very small.

Source: Joseph et al. (2008) – See Annex 6.

Senior Secondary Schools

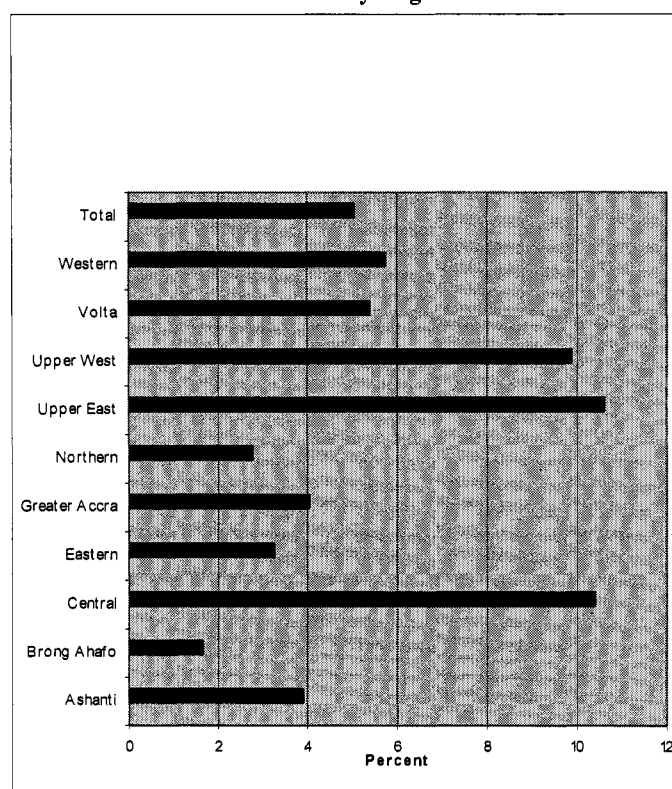
92. *Secondary school enrolments are expanding, but conditions are similar to basic education.* Though enrolment in senior secondary schools (SSS) doubled between 1999 and 2006, net enrolment remains low at 10.6 percent. This means that nine out of every ten youth 15-17 years of age are not enrolled in senior secondary school (although some of these youth may still be enrolled in lower levels of education if they have been repeating one or more grades).. Many of these youth are out of school either employed, unemployed or out of the labor force, and for those who have left school, access to skills is taking place mainly through apprenticeships, informal learning on the job, or non-formal training programs. Similar to basic education, opportunities for access are uneven across Ghana's 10 regions, with net enrolment rates ranging from 5.3 percent in the Upper West Region to 18.5 percent in the Central Region. Gender parity remains a problem: nationally, young women accounted for 44 percent of SSS enrolments in 2006/07, lower than that of basic education, with regional enrollment rates varying between 32.1 percent in the Northern Region and 47.5 percent in the Central Region (Figure 16). As observed, the percentage of girls enrolled declines as they progress through school.

93. *For those enrolled in secondary education, quality is an issue.* In public schools (accounting for 91 percent of SSS enrolments) in 2006/07, 15 percent of teachers were not fully trained, and this figure rises to over 40 percent in private schools. One out of five public secondary schools required major repairs in 2006/07 compared with only three percent of private schools. Crowding exists in public secondary schools with 0.78 seats per student available in 2005/06, and 0.63 writing places available per student. The number of textbooks for each student ranges from one for every two students of science and social studies to just over one textbook for each student of mathematics and the English language.

94. *Most of the secondary students pursue general secondary education and the curriculum choices vary by gender.* Slightly over nine out of ten secondary students pursue a general secondary education with less than one out of ten following a technical or vocational curriculum (see Figure 16 for data by region). Of those enrolled in general secondary education, more than one-third are enrolled in a business curriculum, and about the same share in general arts. Eleven percent pursues a science education, and just over 9 percent enroll in agriculture. Overall, girls are more likely than boys to enroll in secretarial studies, general arts, and home economics, while boys are found more frequently in agriculture, accounting, technical, and visual arts programs.

95. *Like basic education, pass rates for secondary students are low.* Pass rates on the Senior Secondary School Certificate Examination (SSSCE), the main instrument for assessment of learning and access to further formal education at the tertiary level, stood at 59 percent in 2005/06. Boys uniformly score higher than girls on mathematics, science, social studies, and English language exams. Adding the students who fail to the numbers who withdraw from education or who never enter the system creates a weak foundation for building a skilled workforce.

Figure 16: The Capacity of Public TVET Institutions to Absorb the Pipeline of Junior Secondary School Enrollment by Region : 2006/07



Technical and vocational education and training (TVET)

96. Government provides skills training through technical and vocational education and training (TVET) institutions. These institutions serve the need for intermediate, advanced, and technical skills with entry requirements varying from none to passing of the BECE and even the SSSCE. There are two main public systems: (i) one is handled by the Ghana Education Service (GES) in Technical Training Institutes under the MOESS; and (ii) the other is the National Vocational Training Institutes (NTVI) run by the Ministry of Manpower, Youth and Employment (MMYE) (see Table 29). In addition, other technical ministries offer sector-specific training programs as do community (for-profit and non-profit) institutions. Public capacity accounted for 47,935 training places in 2006/07.²² Formal and traditional apprenticeships are also an important source of training on-the-job (see below).

97. Public TVET institutions provide places for a small share of the potential demand for training. The enrolment in junior secondary schools in 2006/07 is a measure of the potential pipeline of students who could advance to a senior secondary education and attempt to enroll in a TVET program. Figure 15 expresses public enrolment in TVET as a percent of this pipeline for each of the 10 Regions in Ghana. Nationally, 5 percent of

²² Ministry of Education, Science and Sports, EMIS 2006, Table 3.2

junior secondary students can expect to find a place for study in a public TVET institution, with regional rates varying from 1.7 percent in Brong Ahafo to 10.6 percent in the Upper East. If private TVET capacity is included, the percentage rises to 7.2 percent. Of those students who actually advance beyond a junior secondary education, 12.7 percent enroll in a TVET institution.

98. *TVET reaches only a small share of the population, but the share has increased over the past 15 years.*

Using data from the Ghana Living Standards Survey from 1991/92 and 2005/06, just over 2 percent of youth 20 to 30 years of age have been through a TVET program, but this percentage has doubled since 1991/92 (see Table 30). Much of this growth has come from the increased number of young men enrolling in TVET as their share in the 2005/06 survey surpassed that of young women. As will be confirmed later in this chapter when looking at the determinants of different types of employment, TVET is an important source of skills for those who hold wage employment, especially those working in the private formal sector. It also is connected with those creating their own jobs outside agriculture. Access to TVET, like that for secondary and higher education, favors those who come from better off families. The share of those who have been through a TVET program rises uniformly with the level of consumption for families. For example, the percentage of those in the highest standard of living quintile with a TVET background, 4.3 percent, is seven times the percentage of those in the lowest standard of living quintile.

Public	188
GES Technical Training Inst.	24
National Vocational Training Inst.	38
Integrated Community Centers for Employable skills (ICCES)	61
Social Welfare Centers	15
Leadership Training Inst.	9
Opportunities Industrialization Centers	3
Community Development Centers	24
Agriculture Training Inst.	3
Road & Transport Training Centers	1
Gratis Foundation	9
Private	252
Total	440

99. *The upgrading of instructors is important to public and private TVET institutions, as is the improvement of workshops.*

Only about half of TVET instructors hold the Teacher's Certificate A, with a slightly higher percentage in public than private centers, 57 versus 43 percent. About 84 percent of teachers in public and private centers have obtained the minimum technical qualification of a Technician II Certificate or above. Of the public centers responding, 46 percent of TVET instructors report they hardly ever have in-service training, and another 23 percent say they have this training only once a year. The figures for private TVET institutions are 43 and 23 percent respectively. Furthermore, in 2005/06, only 12 percent of public training centers and 29 percent of private training centers described themselves as "well-equipped". In contrast, thirty-seven percent of public training institutions and 12 percent of private institutions described their facilities as "poorly equipped" or with "no equipment." Public training sites in 2006/07 report that 18 percent of their classrooms need major repairs compared with 37 percent of private institutions. There are public and private institutions that offer high quality training, but these are exceptions.²³

²³ Such as the private Don Bosco training institutes in Tema/Ashiaman and Sunyani and some public training centers benefiting from Donors supports like the Netherlands. See Palmer (2007a), Chapter 5.

Table 30: Share of youth (15-30 age group) gone through TVET programs

	1991/92			2005/06		
	Urban	Rural	Total	Urban	Rural	Total
Gender						
Male	1.9	0.3	0.6	5.1	0.7	2.0
Female	2.4	0.4	0.9	3.6	0.7	1.6
Age group						
15-19	0.0	0.1	0.1	0.0	0.0	0.0
20-24	1.3	0.4	0.7	3.5	1.2	2.0
25-30	3.4	0.4	1.4	5.9	0.8	2.5
Type of employment						
Wage Public Sector	6.8	2.5	4.8	5.6	2.2	4.4
Wage Private Sector Formal	4.2	0.0	2.7	9.6	4.6	8.3
Wage Private sector Informal	3.1	0.0	1.9	2.6	1.7	2.3
Self-employed Agro, paid	0.0	0.3	0.3	1.7	0.4	0.4
Self-employed Agro, unpaid	0.0	0.1	0.1	2.3	0.3	0.4
Self-employed Non-Agro	1.6	0.7	1.2	3.5	1.4	2.6
Standard of living						
Lowest quintile	0.0	0.3	0.3	2.0	0.5	0.6
Second quintile	0.0	0.0	0.0	2.5	0.3	0.6
Third quintile	2.2	0.2	0.6	2.5	0.6	1.1
Fourth quintile	2.3	0.2	0.9	4.5	1.2	2.6
Highest quintile	2.6	1.1	1.9	5.6	1.7	4.3
All	2.2	0.3	0.8	4.3	0.7	1.8

Source: Authors using GLSS data.

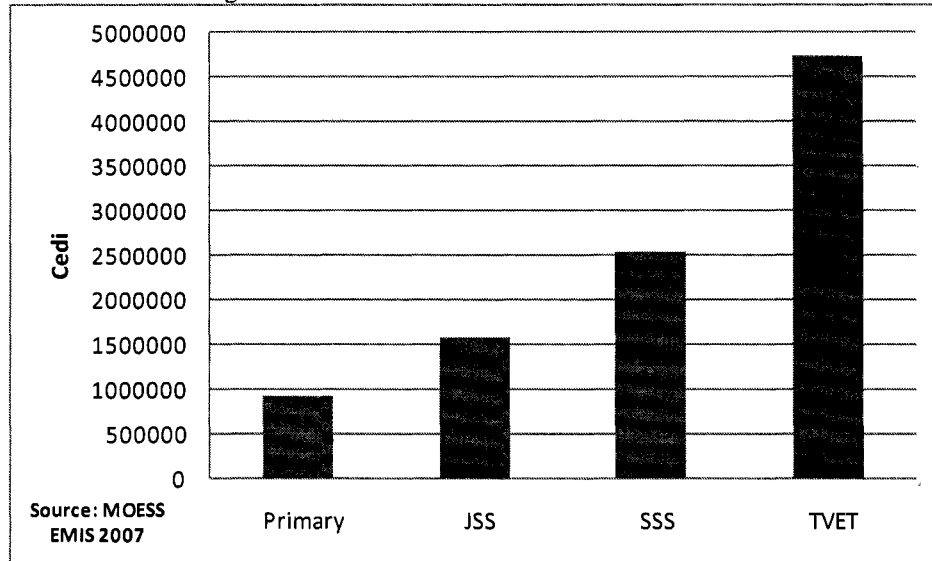
100. Programs available for helping youth make the transition to employment are not carefully evaluated. Rigorous evaluations using appropriate control and treatment groups are not available for training programs. Moreover, only a few programs have introduced tracer studies to track placement and earnings of graduates, and those that have lack adequate coverage. What evidence is available is largely anecdotal and is generally unfavorable, as reported in the White Paper. Furthermore, public training capacity in Ghana, like that in many other countries, is heavily focused on the skill needs of the small formal sector and, with few exceptions, does not address the need for entrepreneurial skills in the much larger informal economy.²⁴

101. Financing good quality TVET is costly, and spending on TVET remains low. The recurrent unit cost of TVET in 2006 was 5 times higher than that of a primary education and 2.7 times that of a senior secondary education. Internationally, the unit cost of TVET averages 2 to 3 times that of a secondary education due to the cost of workshops and lower teacher-pupil ratios. While falling within international norms, the unit cost for TVET hides quality issues. In 2004, this unit cost was only a fraction higher than that of

²⁴ Haan and Serriere (2002).

senior secondary education, implying there were inadequate levels of spending at that time. The higher unit cost ratio in 2006 is actually the result of enrollment in TVET declining from 21,424 in 2004 to 18,005 in 2006 creating underutilized capacity and higher unit costs. The MOESS allocates one percent of its education budget to the 14 percent of secondary students enrolled in TVET and the MMYE spends about 12 percent of its budget on VTIs (see Table 28). Smaller sums are spent by other technical ministries, like Roads and Local Government. Only 7 percent of donor spending on services went to TVET in 2006, and there was no allocation for investment in TVET.²⁵

Figure 17: Unit Cost of Education in Ghana: 2006



102. *With the diversity of TVET providers, it is surprising to find little coordination in the use of scarce public resources.* The National Coordinating Committee for Technical and Vocational Education and Training (NACVET) under the MOESS is charged with coordinating public and private providers, but there is little evidence of success with many different bodies and vested interests involved.²⁶ The legal framework surrounding the TVET sector is itself fragmented, and UNESCO reports a “dizzying array” of examinations.²⁷ The lack of a comprehensive policy for TVET development is apparent and is addressed in the ESP with the introduction in 2006 of the Council for Technical and Vocational Education and Training Act with a new coordinating body.

Formal and Traditional Apprenticeships

103. *Enterprises in Ghana, as in most countries throughout West Africa²⁸, are active trainers offering formal and traditional apprenticeships and training on-the-job.* Formal

²⁵ Ibid. Japan is the only major development partner currently engaged in TVET with its focus on helping develop the policy framework for TVET. JICA is currently upgrading five workshops, with plans to upgrade another five in 2007.

²⁶ UNESCO (2003).

²⁷ Ibid.

²⁸ Johanson and Adams, 2004; Batra, 2000; Tan and Savchenko, 2003; Tan 2005.

apprenticeships are found in the wage sector of the economy, which is small in Ghana, accounting for about 16 percent of employment based on the 2006/07 Ghana Living Standards Survey.²⁹ These apprenticeships are coordinated by the NVTI. Traditional apprenticeships, found in the informal sector of the economy, consist of private contractual arrangements between a parent or apprentice and a master craftsman who agrees to provide practical training in the workplace, ranging from several months to three or four years, and subsequently certify the training in return for a fee or reduced earnings while learning.³⁰

104. *Enterprise-based training reaches more persons than public training institutions.*

While numbers are difficult to come by, Atchoarena and Delluc (2001) report 80 to 90 percent of all basic skills training comes from traditional or informal apprenticeships in Ghana, compared with 5 to 10 percent from public training institutions. A 2006 urban-based labor market survey in Ghana conducted by the Centre for the Study of African Economies (CSAE) in conjunction with the Ghana Statistical Office found one-third of those 16 to 65 years of age had some form of training.³¹ Apprenticeship was by far the most common form with 55% being either current or past apprentices. Enterprises in the formal sector also provide short-term training to workers beyond formal apprenticeships, helping upgrade skills and introduce new technologies. On-the-job training was the second most common form of training in the 2006 survey with 25% having received such training. The training offered by enterprises favors those with higher levels of general education.³² Formal vocational training trailed in importance with 16% receiving their training from this source. Almost all training programs taken at VTIs can be mastered through traditional apprenticeship.³³

105. *Apprenticeship has become more important over time as a means to acquire skills for employment, especially for young women.*

According to the Ghana Living Standards Surveys of 1991/92 and 2005/06, the percentage of youth 20 to 30 years of age participating in an apprenticeship has increased over the survey period (see Table 30). Currently, about one of every three youth in this age group has experience as an apprentice. The percentage for young women overall has doubled during this period, a rate higher than that of young men.. Education influences the choice of an apprenticeship. A much smaller percentage of those with a senior secondary or post-secondary education are likely to choose an apprenticeship, while those with a primary or junior secondary education are more likely to participate in an apprenticeship. This is a pattern backed up by the CSAE 2006 urban labor survey.³⁴ While those with an apprenticeship are present in all types of employment, they are more frequently found in non-agricultural self-employment and wage employment in the informal sector. Significant numbers also show

²⁹ Coulombe and Woden 2007.

³⁰ Haan and Serriere (2002) estimate that fees for traditional apprenticeships average about US\$70 per year. ILO in 2006 estimated fees to average US\$160, ranging from US\$22 to US\$616. In 2005, Palmer estimated the average fee in the Ashanti Region to be \$42 with a range from \$13 to \$173.

³¹ Monk, Sandefur and Teal, 2007 (see Annex 2).

³² Rosholm, Nielsen, and Dabalen, 2007.

³³ Haan and Serriere (2002).

³⁴ Monk, Sandefur and Teal, 2007 (see Annex 2)

up in wage employment in the private formal sector. Like TVET, apprentices do not come from households with the lowest levels of consumption.

Table 31: Share of youth (15-30 age group) gone through Apprenticeships

	1991/92			2005/06		
	Urban	Rural	Total	Urban	Rural	Total
Gender						
Male	36.0	18.1	21.9	46.7	19.0	27.3
Female	21.1	11.1	13.9	40.7	20.1	26.3
Age group						
15-19	10.6	5.2	6.1	30.9	6.9	11.1
20-24	34.5	16.4	20.8	44.3	24.4	31.0
25-30	28.8	21.4	23.7	46.2	24.3	31.9
Education level						
No Education	15.1	5.8	7.5	21.4	6.9	8.7
Some Primary	16.7	15.9	16.0	42.1	16.6	21.4
Primary	25.4	10.5	13.3	54.1	25.5	32.6
Secondary (lower)	38.5	25.9	29.9	60.4	43.2	50.9
TVET	22.2	12.5	19.2	20.0	19.2	19.8
Secondary (higher)	14.7	13.5	14.3	29.6	17.5	25.7
Post Secondary	13.3	11.1	12.1	7.6	3.4	6.5
Type of employment						
Wage Public Sector	9.1	12.7	10.8	12.4	10.9	11.9
Wage Private Sector Formal	50.7	56.4	52.7	28.0	42.5	31.6
Wage Private sector Informal	53.8	57.5	55.2	36.0	49.6	41.2
Self-employed Agro, paid	12.2	16.3	16.0	32.2	18.8	19.7
Self-employed Agro, unpaid	16.2	7.6	8.4	22.1	8.4	9.2
Self-employed Non-Agro	27.0	24.2	25.7	56.8	44.1	51.2
Standard of living						
Lowest quintile	12.1	8.4	8.6	30.3	9.4	10.9
Second quintile	6.9	10.3	9.9	36.2	15.2	18.3
Third quintile	25.9	14.0	16.4	35.9	25.1	28.0
Fourth quintile	27.0	17.1	20.3	43.4	31.5	36.7
Highest quintile	31.4	28.4	30.0	49.6	41.3	46.9
All	26.9	14.4	17.5	43.5	19.6	26.8

Source: Authors using GLSS data.

106. Since traditional apprenticeships form a major source of skills for youth in Ghana, their quality is an issue.³⁵ In many countries and business environments, traditional apprenticeships serve the informal sector well, but are proving too narrowly focused to cope with the increasing pace of technological change, skills upgrading, and expanding markets.³⁶ Although traditional apprenticeships have not been carefully evaluated in cost-benefit terms, their main strengths lie in their practical orientation, self-

³⁵ Haans and Serriere (2002).

³⁶ Ziderman, (2003).

regulation, and self-financing. They cater to individuals who lack credentials for formal training, serve important target groups (rural populations and urban poor) and are generally cost-effective. However, traditional apprenticeships have many weaknesses: (i) they are gender-biased by occupation; (ii) they exclude applicants from the very poorest households unable to finance modest fees; (iii) they are based on traditional technologies as master craftsmen fail to keep up with technological change; and (iv) they depend on the master craftsman for their standards and quality assurance, which varies widely.

107. *Almost all apprentices and masters lack formal vocational or technical training and few have more than 9 years of formal schooling.* Labor force data for Ghana in 2000 show that there were 207,047 economically active persons (15 years and older) in apprenticeship training.³⁷ Over three-quarters of apprentices were 15 to 29 years of age, and 57 percent were males. Males were mainly in auto mechanics, carpentry, tailoring and driving, while females were primarily in dressmaking, hairdressing, and catering. Out of the total, only 5.3 percent had formal vocational or technical training.³⁸ According to the GLSS data, most apprenticeships are paid by parents or by youth themselves (either in cash or in kind) and the average length of the apprenticeships is about two to three years to complete. The 2006 CSAE urban-based labor market survey shows that the most common pattern for apprentices is to enter an apprenticeship after the end of junior secondary school. Of those who had been apprentices in the past, 74 percent entered at the junior secondary level. While 10 percent of apprentices had completed primary school and 9 percent had no education, only 7% had a secondary education or higher.³⁹ This pattern is consistent with the results of the GLSS data (see Table 31).

Economic Returns to Education and Training

108. *Education influences wages and earnings directly by raising the productivity of the worker and indirectly by promoting entry into more lucrative categories of employment.* This section estimates the economic returns to education and training using three Ghana household living standards surveys (GLSS) conducted in 1991/92, 1998/99, and 2005/06.⁴⁰ As a guide to future investment in skills, the returns highlight variation across levels of education and for different modes of training (covering institution-based TVET and apprenticeships.⁴¹). We look for indications of a tightening labor market for

³⁷ Ghana Statistical Service, (2005).

³⁸ Ibid.

³⁹ Monk, Sandefur and Teal, 2007. See Annex 2.

⁴⁰ The specification of the earnings function expresses education in categorical form, including TVET, along with experience and other job and demographic characteristics. Measures of apprenticeship by level of education are also included in binomial form testing for differences in returns to apprenticeship by level of education. Separate regressions are estimated for urban and rural areas to allow for interactions with education. Regression estimates are based on ordinary least squares methods controlling for selection bias. The regression coefficients for each education category reflect the percentage difference in log earnings from the omitted category of no education. These regressions can be found in the background paper prepared for this chapter by Adams, Coulombe, Wodon, and Razmara (2008) and attached as Annex 1.

⁴¹ For a historical review of the economic returns to education in Ghana, see Palmer (2007b). Recent evidence points to private economic returns for post-basic education that now exceed those for primary education.

skills as reflected through returns to investments in education and training in the three survey periods.

109. *The analysis begins by isolating the indirect impact of education on wages and earnings and estimating the likelihood of entry into each of three employment categories: wage employed, self-employed agriculture and self-employed non-agriculture.*

Is higher education, for example, a factor influencing entry to wage employment? What role do TVET and apprenticeship play in this choice and self-employment? Second, attention turns to estimating the direct effects of education on wages and earnings, controlling for other individual and family characteristics.⁴² The sample covers 25 to 64 year olds, excluding youth due to problems in coding employment in the 1998/99 survey for those still enrolled in school. To consider interactions of education with place of residence, separate regressions are estimated for rural-urban residence. And finally, to control for the risk of selection bias affecting the choice of wage and self-employment, controls are introduced in all earnings functions.

Table 32: Median Earnings per Hour Worked in 2005

Employment Status	
Wage workers	
Wage workers public sector	6,925
Wage workers private formal	3,930
Wage workers private informal	2,782
Self-employed Agriculture	2,033
Self-Employed Non-Agriculture	2,713
All	2,060

Source: GLSS 2005/06

110. *The three employment categories exhibit different mean earnings with additional differences observed for wage workers in the public and private sectors* (see Table 32). Wage employees in the public sector earn 2.6 times the earnings of the self-employed in non-agriculture and 3.4 times the earnings of the self-employed in the agriculture sector. In turn, wage workers in the public sector earn more than their counterparts in the private formal sector and the private informal sector. These differences are unadjusted for the education and training profile of workers in the different employment categories.

111. *Workers in the three employment categories each have different education and skill profiles.* Workers in all three employment categories show rising levels of education over the period with wage workers tending to have higher levels of education than both categories of the self-employed. See Table 1 in Annex 1. For a self-employed worker, a junior secondary education or less tends to be the educational norm, while for a wage worker the norm is likely to be a senior secondary or even a post-secondary education. A smaller share of wage workers and the self-employed in non-agriculture have a TVET background, but this share has also increased over the three surveys. Apprenticeship features prominently in the background of wage workers and the self-employed in non-agriculture, more so than does TVET.

⁴² The impact of education on the choice of employment category and on wages and earnings is done using a two-step procedure. We treat the employment choice as endogenous and first analyze this choice by using a multinomial logit procedure and then we analyze the determinants of wages and earnings taking into account selection bias from the multinomial logit equation. For a more detailed explanation of this methodology and the procedures for controlling for selection bias see Annex 1.

112. *Important changes have taken place over the three surveys with employment becoming less formal, less unionized, and less likely to be in the public sector.* The share of employment in each of the three employment categories (see in Annex 1, Table 1), has remained fairly stable over the survey period. However, other indicators show that important changes have taken place in employment, especially among wage workers. For wage workers, the share of employment in formal sector jobs has dropped. Consistent with this pattern, the percentage of unionized jobs has declined along with the percentage of jobs in the public sector. The share of wage employment in the public sector alone has fallen from 64.5 percent in the 1991/92 survey to 35.7 percent in the 2005/06 survey. Thus, while education and skill levels have risen in employment, there is evidence that much of this employment has shifted to the private sector and is no longer unionized. Employment in all three categories has become more urbanized over the survey period.

Education and the Type of Job Held

113. *Education influences earnings indirectly through the type of job held.* Figures 17 through 20 show the influence of education on the type of job held (See Tables 2 and 3 in Annex 1 for coefficients from the multinomial logit functions). As shown in Figure 17, the likelihood of becoming a wage worker in urban areas increases with the level of education, controlling for other personal characteristics.⁴³ This pattern, however, does not hold for non-agriculture self-employment in urban areas as seen in Figure 18. Instead, those with a basic education are more likely to be self-employed in the non-agriculture sector than those with higher levels of education. The larger effect of basic education observed in 2005/06 could well reflect the growing importance of this education to being able to establish one's own business, but it is also consistent with the hypothesis of expanding numbers of youth completing a basic education who are unable to find wage employment and are left to create their own employment. The results do not allow us to choose between these competing hypotheses.

114. *The relationship between education and the type of employment held is weaker in rural areas than in urban areas.* The likelihood of finding wage employment in rural Ghana, shown in Figure 19, rises with the level of education. The relationship of education to wage employment in rural areas shows evidence of strengthening in 2005/06 with the chances of finding wage employment with a post-secondary education increasing sharply. Though not reported here, the influence of education on the likelihood of becoming self-employed in agriculture, primarily in farming, is weaker than that for self-employment in non-agriculture. In general, having less than a secondary education raises the chances of self-employment in agriculture, but by substantially less than the chances of self-employment in non-agriculture. Investing in education is generally associated with movement out of the agriculture sector to wage or self-employment in the non-agriculture sector.

⁴³ The logit function coefficients are relative odds ratios, and thus, a value of 1.321 for a primary education in the wage earner regressions for 2005/06 means that workers with a primary education have a 32.1 percent higher likelihood of being a wage earner than a worker with no education at all.

115. TVET exerts a positive influence on wage and self-employment. The likelihood of holding wage employment in Figure 17 is slightly higher for those with a TVET education than for those with a senior secondary education. Similarly, by providing a technical skill, TVET increases the chances of establishing one's own job in the non-agriculture sector, as reflected in Figure 18, although the effect appears to weaken in 2005/06. TVET's impact on the likelihood of obtaining wage employment in rural areas is generally lower than that in urban areas. However, it appears to have become a major factor influencing non-agriculture self-employment in rural areas, as observed in Figure 19. The previous section on labor supply identified the weak capacity of TVET in school settings, including that offered by the MOESS and MMYE, but the results here confirm the importance of this training to finding wage employment or becoming self-employed. TVET exerts a positive influence on the probability of both types of employment. Its effect is particularly strong affecting the chances for obtaining wage employment.

Figure 18: Impact of Education on the Likelihood of Wage Employment (vs. no Education), Urban

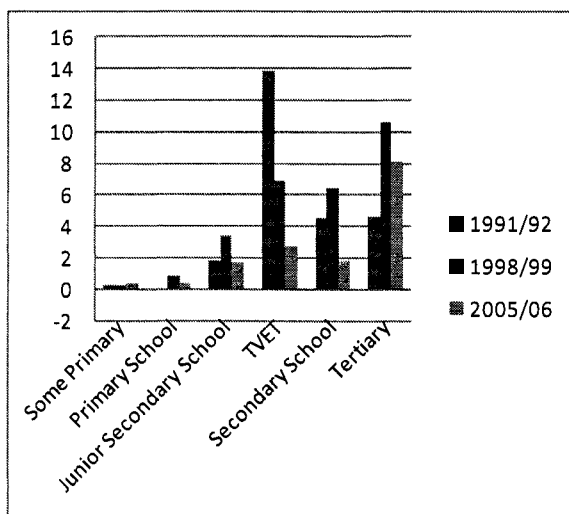


Figure 19: Impact of Education on the Likelihood of Non-Agriculture Self-Employment (vs. no Education), Urban

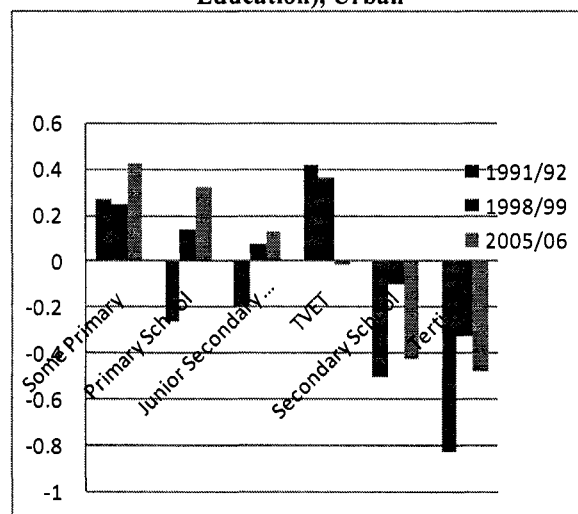


Figure 20: Impact of Education on the Likelihood of Wage Employment (vs. no Education), Rural

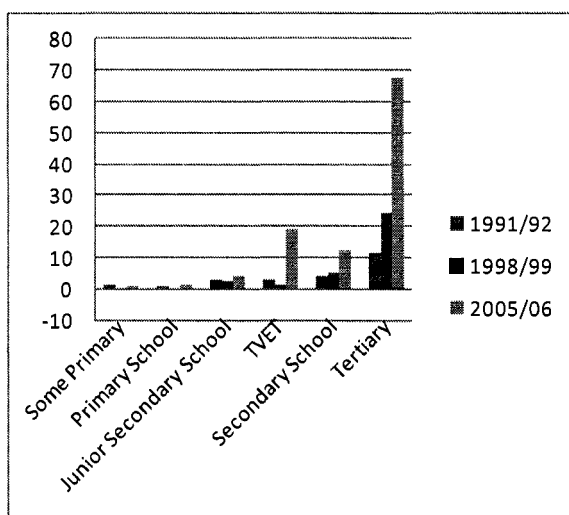
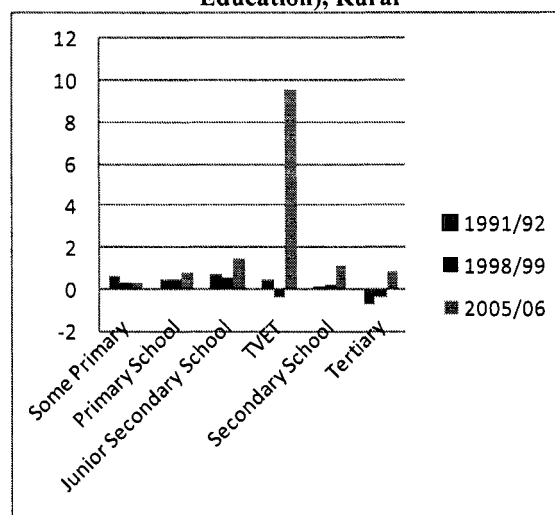


Figure 21: Impact of Education on the Likelihood of Non-Agriculture Self-Employment (vs. no Education), Rural



116. *Apprenticeship offers a pathway to self-employment, but is less effective than TVET in opening doors to wage employment.* As shown earlier in Table 1 of Annex 1, approximately 30 percent of the workers holding wage employment previously had been an apprentice, but when other factors are controlled in the logit function, an apprenticeship does not appreciably increase the chances for wage employment. There is evidence that it may have this impact for those with low levels of education, but not for those with higher levels of education. Formal education is a better investment for increasing the chances of obtaining wage employment. On the other hand, an apprenticeship does enhance the probability of becoming self-employed in the non-agriculture sector. The relationship has strengthened in the two later surveys for all levels of education. When compared with TVET likelihoods, however, TVET remains a more effective mechanism for opening doors to wage employment.

Education and Earnings

117. *Education influences earnings directly for wage and self-employment.* Higher levels of education for wage workers in rural and urban settings generally translate into higher earnings in all three surveys with earnings differences statistically significant for secondary and post-secondary education (See Figures 21 and 22).⁴⁴ The impact of education is thus two-fold affecting the likelihood of obtaining wage employment and the wage level received. The relationship is largely stable over the three surveys without any clear trends showing rising returns to education consistent with a tightening of labor markets and demand for skills. The relationship for education also holds true for the self-employed in non-agriculture in urban areas, but is weaker in rural areas where earnings differences tend to rise for junior secondary education and higher, but are less likely to be statistically significant (See Figure 22). Education's impact on the earnings of the self-employed in agriculture favors higher earnings with education, but mainly in rural areas.

⁴⁴ The regressions used in figures 21 - 22 are found in Annex 1 (see Tables 4 and 5).

118. *The private economic returns to primary education in Ghana are very low or even zero.* Evidence in the past has favored primary education over alternative investments in higher levels of education. Continuing to invest in good quality primary education remains important, but more from the perspective of the options it opens for further education. Alone, primary education, and in most cases junior secondary education, do not yield statistically significant earnings gains compared to those who have no education. However, the additional completion of a senior secondary education or TVET provides substantial earnings gains that are statistically significant in rural and urban areas and for virtually all categories of employment. Further gains are found for those with post-secondary education, especially for wage employment, supporting the argument for investment in post-basic education.

Figure 22: Wage Repressions with Sample Selection, Ghana 1991-2006, Urban

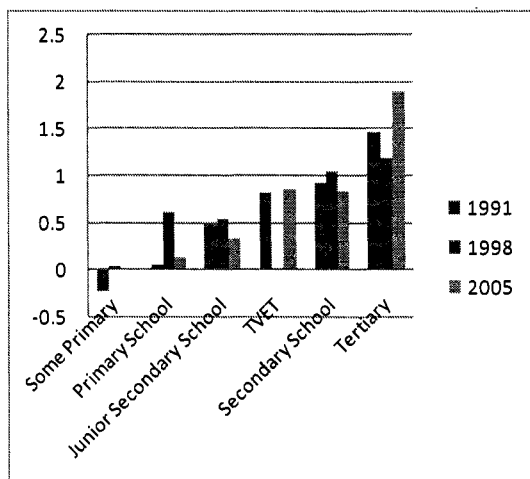
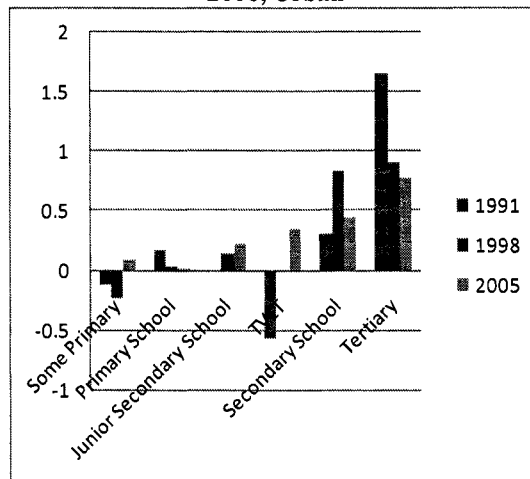


Figure 23: Non-Agriculture Self-Employed Regressions with Sample Selection, Ghana 1991-2006, Urban



119. *Wage workers in rural and urban areas with TVET show earnings differences that compare favorably with those of senior secondary education.* School-based TVET fares well in comparison with senior secondary education for wage workers (see Figures 21 and 22). The quality issues notwithstanding, incremental gains in log-earnings for those with a TVET education in 2005/06 largely match the gains in earnings for those with a senior secondary education. The earnings differences are statistically significant for wage workers in urban areas. This is an important finding when it comes to making choices for further investment in post-basic education.⁴⁵ However, the relationship of TVET to differences in the earnings of those self-employed in non-agriculture is not generally statistically significant in rural or urban areas, and thus, TVET's impact on self-employment is largely indirect through its positive impact on the likelihood of self-

⁴⁵ While the private rates of return may place TVET and senior secondary on an even footing, the higher unit cost of TVET, shown above in Figure 16, would lower the social rate of return to TVET in comparison with senior secondary education.

employment. Although not shown here, these results also hold for TVET's impact on self-employment in agriculture.

120. *Participation in an apprenticeship is not statistically associated with higher earnings in rural or urban areas.* While apprenticeships do influence the likelihood of having a job by increasing the chances of becoming self-employed, they do not translate into higher earnings when compared to those without an apprenticeship. The relationship is examined for those with an apprenticeship and different levels of education without identifying a positive impact of apprenticeship on earnings. Instead, for the three categories of employment, apprenticeship is frequently associated with having a lower level of earnings when compared to those without an apprenticeship. Monk, Sadeur and Teal (2007) (see Annex 2) offer an exception to this in their analysis of the 2006 CSAE urban-based labor force survey in Ghana. They report that workers with the lowest levels of education (junior secondary or less) and an apprenticeship have a 42 percent higher income than those with the same level of education and no apprenticeship. We find a similar result only when using regression analysis that does not control for self-selection into type of employment choice.

121. *Beyond education and skills, other social and economic factors influence earnings.* Men earn more than women with the differences being smaller in the case of wage employment than self-employment in rural and urban areas. As observed in Table 1 of Annex 1, men are a majority of those employed in the wage sector and agriculture self-employment and a minority of those employed in non-agriculture self-employment. Women dominate this latter employment category. Only one out of four persons in non-agriculture self-employment in urban areas is male, yet their earnings are higher than those of women in this employment category and differences are statistically significant. The decline of formal employment, unionization, and public sector employment in the wage sector, noted earlier, also has implications for earnings. The first two of these features of wage employment enjoy an earnings premium while holding other factors like education constant. The declining share of workers in wage employment with these features translates into fewer workers who will realize the higher earnings associated with this employment.

122. *Controlling for selection bias reduces the observed impact of education, including TVET, on wages and earnings.* There is a debate in the literature as to whether the two step procedure outlined earlier and the control for selection bias is the best way to proceed. Puhani (2000) offers a good survey of this literature showing that the procedure can be harmful where it is difficult to obtain good identifying variables that are statistically significant in the multinomial logit equation. Since this problem is observed in our regressions, we have estimated separately the same earnings equations using the recommended ordinary least squares method without adjusting for selection bias (see Annex 1 and Tables 6 and 7). There are differences in the results, but especially for education. We find there are positive returns to junior secondary education in urban and rural areas, which were not observed uniformly in the regressions controlling for selection bias. And second, we find much stronger effects for TVET in urban and rural areas for

wage employment, but also for non-agriculture self-employment in urban areas. These results strengthen the conclusions about the importance of education and skills.

STRATEGIES FOR REFORM

123. *Ghana launched the reform of its education and training systems early in the decade.* The findings of the previous section point to the importance of post-basic education and skills to obtaining employment, and depending on the type of employment, to the wages and earnings received. TVET plays an important role, especially in influencing the type of employment acquired. The White Paper, introduced in 2004, refers to the mismatch of skills and jobs with an education and training system that is poorly connected with the skills that employers need. This section examines the strategy Ghana has adopted to address the skills problem, first in the ESP and then in the White Paper. This section places the strategy alongside other country reformers in the Region and globally and, in the context faced by Ghana, reflects on priorities for the reform program that would prepare youth with the skills needed for overcoming poverty and raising living standards.

Government's Reform Strategy

124. *The White Paper calls for accelerating the ESP goals for education and placing increased emphasis on the expansion of TVET.* The White Paper laid out plans to elevate TVET at the secondary level as a credible alternative to senior secondary education, and open access to apprenticeship for junior secondary school leavers who do not continue to senior secondary schools.⁴⁶ The paper calls for a ten-fold increase by 2015 in technical and agricultural training in secondary schools from a gross enrolment rate of 1.5 percent to 15 percent, and an increase in apprenticeships, beginning in 2008, from a gross enrolment rate of 2 percent to 20 percent. In this context, traditional apprenticeships are to be brought into the formal system. The TVET sub-committee identified the following strategies to implement the reform: (i) a structure for implementation and coordination of the reforms; (ii) the development of a National Apprenticeship System; and (iii) a sustainable funding base for TVET. The objective was to improve the impact and image of TVET, which was generally considered second-class education, and align TVET more closely with the needs of industry and trainees for skills.

125. *The TVET strategy of the White Paper contains a holistic view.* To achieve the goal of a more market responsive training system, the strategy calls for reforms at school and market levels: (i) improving linkages of providers with industry; (ii) shifting to an outcomes focus with competency-based training; (iii) improving infrastructure and instructor training; and (iv) strengthening sector management and leadership. Plans were announced for development of a national qualifications framework that would grant academic credit for past learning and open pathways to further education and training options as part of a lifelong learning system. The framework would be extended to traditional apprenticeships. With TVET receiving only one percent of the public education

⁴⁶ The White Paper identifies four curriculum streams for senior secondary students: general, vocational, technical, and agricultural.

budget, the strategy calls for an increase in public expenditure on TVET and the introduction of additional sustainable sources of financing.

TVET Reform: a Regional Perspective

126. *Lessons learned from experience.* There is a rich record of reform experience in the Africa region. This record serves as a benchmark and guide for the reform of TVET in Ghana.⁴⁷

- The importance of building on a solid foundation of basic education. Good training requires young people who have the requisite general education for acquiring skills for the workplace. Knowledge of basic math, sciences, and communications is essential to acquiring job-specific skills and encouraging employers to invest in workers.
- The importance of maintaining sound macroeconomic policies and sustaining a favorable investment climate for job creation.⁴⁸ Training itself does not create jobs and is dependent on investment to produce these jobs. Government and donors can only provide so much of the investment and the remainder has to come from the private sector. Creating an investment-friendly climate is important alongside policies that provide access to good quality skills training and encourage youth to invest in themselves. In Ghana, this includes improving the business climate in the informal economy.

127. *Ghana's awareness of the education and training system's weaknesses and the potential adverse consequences for growth and poverty reduction place it on a familiar path traveled by other countries.* TVET reforms are observed throughout Sub-Saharan Africa, and also worldwide, with nations seeking to improve the performance of training systems to smooth the transition of young people from school to work and create a more competitive workforce for the global economy.⁴⁹ While these reforms vary from country to country, they share many features and are divided into two categories: (i) reform of technical and vocational education (TVE) at secondary and tertiary levels of education, which is applied mainly to ministries of education and influences when TVE is first offered and the design of curricula for vocational and general education; and (ii) reform of non-formal training, which includes a more diverse set of providers and objectives outside ministries of education including technical ministries (e.g. agriculture, health, labor), for-profit and non-profit institutions, and employers.

(i) Reforming TVE: Issues to Consider⁵⁰

⁴⁷ Johanson and Adams (2004)

⁴⁸ World Bank (2005)

⁴⁹ Johanson and Adams (2004); Adams (2007); CINTERFOR/ILO (2000); Gill, Fluitman, Dar (2000); Atchoarena and Delluc (2001); OECD (2000)

⁵⁰ Adams (2007); Unevoc (2006)

128. *The timing of the TVE introduction is important.* The pattern emerging worldwide is to defer vocational specialization until senior secondary education, with advanced countries moving vocational content even later. Ghana's White Paper finds efforts to vocationalize JSS programs unsuccessful. Delaying vocational content provides room for a solid basic education foundation and avoids pressuring students to make career choices prematurely. Ghana is part of this trend with its focus on TTIs for junior secondary school leavers and the availability of polytechnics for those seeking more advanced vocational content. However, low enrolment rates in secondary education means that there are large numbers of youth in Ghana (nearly 90 percent of the 15-17 year age group) who cannot follow this pattern of skills development. The option for these youth is: (i) a VTI which provides a pathway back to the formal system in TTI's; or (ii) one of the other non-formal sources of TVET available from public and private providers, including traditional apprenticeship.

129. *It is critical to expand choices for youth, enabling them to recover from situations in which further education was not possible, or had to be abandoned.* Within the current TVET strategy in Ghana, VTIs appear to be the main instruments for providing this choice, but they are severely limited in capacity. Though youth benefit from other options, like traditional apprenticeships, which help them acquire skills, these options do not offer a second chance to return to formal education, and this places a ceiling on the future for these youth and the human resources capacity of the economy.

130. *Governments are improving the articulation of education and training.*⁵¹ TVET is often the option offered students where there is inadequate space for continuing in general secondary education. As such, TVET has gained the reputation of being a dead-end, or a 'second-class' education. Countries are taking steps to change this image allowing students to move to other vocational programs or even back to general education and vice-versa without losing time in studies. Curricula that give vocational students more academic content and general students more practical exposure provide for this flexibility.⁵² Ghana's education system does not offer this flexibility. Leaving JSS at age 15, students face a choice of SSS or a TTI, or alternatively, to leave formal schooling and pursue skills through non-formal means of training, including apprenticeship. Once out of the education system, it is difficult to re-enter and continue one's formal education.

131. *More attention is being given in developed countries to the combination of schooling and work experience, including apprenticeship.* Sweden and Australia are examples of countries that include work experience in the secondary curriculum. In the United States, career academies in secondary schools are providing schooling and work options. The long standing example of this is found in the "dual system" of Germany where students divide time between school and work. These programs work well in advanced countries with large formal sectors that are creating jobs, but may not work as well in developing countries like Ghana where the formal sector is much smaller. Ghana is, however, moving forcefully with plans for a more active role for apprenticeship. With

⁵¹ Adams (2007)

⁵² Bowers, Sonnet, Bardone (1999:27)

its large informal sector, the attention Ghana is giving to traditional apprenticeships is more consistent with the nature of its economy.

132. *Few countries, however, have been successful in formalizing traditional apprenticeships as Ghana proposes.* The White Paper calls for Government to assume the cost of the first year of the apprenticeship program.⁵³ Government will want to proceed carefully to avoid destroying what works well in traditional apprenticeships. A review in West Africa points to actions that could improve traditional apprenticeships, including: (i) providing literacy and basic education for master craftsmen and apprentices; (ii) improving access to technology for master craftsmen; and (iii) offering further technical and pedagogical training for master craftsmen.⁵⁴ The ILO expects to release soon the proceedings of its May 2007 workshop on informal apprenticeship training in West Africa, which contains more examples of how traditional apprenticeships can be improved.

(ii) *Reforming non-formal training, (the second “T” in TVET): Issues to consider*

133. *Non-formal training is offered by technical ministries (labor, agriculture, health); private for-profit and non-profit institutions; and employers.* Non-formal training is frequently of short duration, competency-based rather than time-based as found in schools, and delivered by skilled craftsmen rather than instructors with teaching degrees. Non-formal training does not necessarily open pathways to further formal education, although NQFs are beginning to open this door. The goals of non-formal training go beyond preparation of youth for first employment to preparation of youth and adults for coping with changes found in a market economy. The objectives include skills upgrading for the employed as new technologies are introduced, equipping the unemployed with skills to search for employment, facilitating occupational mobility, and providing at-risk youth and young adults with “second chance” opportunities for skills missed in early education.

134. *Faced with a diverse public and private provider community for TVET, countries have focused on governance frameworks to integrate the system and improve links to the market and efficiency.* The creation of COTVET as a coordination body is a familiar tool for this and is found in countries like Cote d’Ivoire, Mozambique, South Africa, Tanzania, Zambia, and in other countries world-wide. These coordination bodies, either embedded in ministries or established as autonomous bodies, bring employers and government together in decision-making and allocation of public expenditure on TVET. Both parties can be joined by representatives of workers and civil society. Different governance models are found with powers ranging from advisory to decision-making and responsibilities covering different activities supporting a market-led training system.

135. *Decentralization of delivery is placing training decisions closer to the market.* Countries are moving away from centralized TVET systems and bringing decisions on instructor hiring and firing, curriculum and course offerings, choice of pedagogy, and management of locally generated resources closer to the market at the training institution

⁵³ See White Paper (2004):13

⁵⁴ Haan and Serriere (2002)

level. Managers of training institutions, rather than ministry officials far from local markets, are taking responsibility for these decisions, with the expectation they will be held accountable for performance. This decentralization, while an important tool for reform, requires building capacity of local managers, who must become skilled in reading local market demand for skills and organizing resources to meet this demand. Ghana's plans for strengthening educational management are consistent with this, but could usefully be extended to private providers, improving their performance and reducing pressures on public provision.

136. *Other than financing, the most important issue in TVET reforms is quality assurance.* Quality can vary widely in training systems and efforts to promote the integration of public and private provision, placing them on the same level of performance, require introducing quality assurance frameworks.

- Providing certification of skills. In advanced countries and some developing countries, National Qualification Frameworks (NQFs), as proposed in Ghana, have been created. These frameworks give individuals credit for past learning from different modes of delivery and offer a widely-accepted credential. Whether the skill is acquired in the workplace or in a school setting, the learning can be measured and credit given, placing all forms of training on a level playing field. However, NQFs require considerable capacity to develop and manage and may not be suitable for all countries.⁵⁵
- Involving employers in setting standards. This approach may work better than a NQF in improving quality and standards for traditional apprenticeships. Education and training institutions frequently set standards for skills development without engaging employers. Reforms that bring employers into this process can improve the relevance and quality of the training offered. Independent testing and certification of trainees can determine if the standard has been met. In Ghana, though employer engagement in standard setting is not emphasized in the ESP, it is expected to be part of the reform.
- Shifting attention to outcomes. Building a standards-based training system balances attention given to the input side with attention to the impact of training on employment, earnings, and further education and training. Ghana can proceed with development of a NQF and should link this with other regional efforts to promote the portability of skills. However, giving a higher priority to development of a standards-based training system and a focus on training outcomes is likely to provide a faster payoff to quality improvements.
- Building a quality assurance framework. This is essential and a priority for Ghana with its large non-government provider base. Other instruments, such as licensing, can help improve quality by setting minimum standards for training

⁵⁵ Young (2005)

providers, while accreditation can establish even higher standards. One of the most glaring omissions from the TVET strategy in Ghana is its monitoring and evaluation plan. The TVET sub-committee's logical framework identifies results, timetables, and agencies responsible for activities, but says little about the monitoring of key performance indicators or the conduct of impact evaluations. Effective TVET systems are developing "learning cultures," whereby performance is monitored carefully for lessons to guide ongoing policy development and investment.

137. *Diversification of financing is important.* Ghana's public expenditure on TVET (slightly over one percent of the education budget) is well below spending in similar country settings. Post-conflict Sierra Leone spends over 4 percent of its education budget on TVET, with other low-income countries like Ethiopia spending up to 10 percent. The education budget for TVET will be increased to 7.5 percent, while the ministry of labor budget will rise to 20 percent. In view of the low level of public expenditure, private financing from households and enterprises will continue to play an important role in spending on TVET. Other sources of financing can be sought from sale of contract training services, sale of products produced by trainees, community contributions, and external donor assistance. Payroll and turnover taxes are used in some countries where there is a stable, formal economy as well as tax expenditures where there is an effective tax collection system.

138. *Beyond the mobilization of resources for the system, a more important issue is how these resources are spent and the incentives created for good performance.* Ghana's TVET strategy focuses on resource mobilization, and says little about how resources will be spent or performance incentives. Countries like Chile have separated financing from provision. The national training agency, SENCE, buys training services on the open market from public and private providers (rather than providing it itself), using competition to reduce costs and get the best training for the money spent. In Sub-Saharan Africa, Mauritius has recently adopted this model. Performance-based budgeting, competitive procurement of training and vouchers can all improve training institutions' incentives for performance, yet none are part of the Ghana TVET reform. Improving management capacity for TTIs and VTIs and holding managers accountable for results would be necessary to make a performance-based system work.

An Overview of Findings and Policy Implications

139. *Ghana has taken important steps toward opening access to education and introducing TVET reforms.* While progress has been made in opening access to basic education, quality remains a challenge. As reflected in completion rates, a large majority of youth leave the formal education system without a good educational foundation. The expansion of access for basic education is now creating a pipeline of youth with demand for further education. The pressure for expansion is backed by analysis of household data in the previous section providing evidence of positive economic returns to post-basic education that open access to better paying jobs and higher earnings. In this analysis, TVET plays an important role influencing access to wage and self-employment.

Opportunities for further education, however, are limited. Of those successfully completing nine years of basic education, only one out of ten will find a place in senior secondary education and fewer than this will find their way into a TVET program. A much larger number will pursue skills through a traditional apprenticeship or by learning on the job.

140. *For a country that aspires to middle-income status, tackling the problem of education and skills is a priority.* Ghana plans large infrastructure investments in the future covering energy, water and sanitation, rural roads, and ICT as part of its broader strategy for promoting growth and private investment.⁵⁶ Assuring a skilled workforce for constructing, managing and maintaining this infrastructure is important, but also for creating incentives to introduce new technologies in other sectors that can raise productivity and incomes. A skilled workforce is a necessary, though not a sufficient condition, to achieve the goal of becoming a middle-income country. Promoting better access to good quality education and skills has to be accompanied by policies that are friendly to private investment. Against this background, the education and TVET reforms Ghana has launched are an important step toward achieving the middle-income goal and, as such, merit support. Box 11 summarizes recommendations related to education and skills development and next steps.

Box 11: Summary of recommendations on education and skills development and next steps

In respect to skills development, Ghana has adopted a strategy for further development of technical and vocational education and training and created a coordination body known as the Council for Technical and Vocational Education and Training (COTVET). It now needs to translate the strategy into an expenditure program and action plan setting priorities for implementation of the strategy. In this context the findings of this report provide a framework for further development of the sector and setting of implementation priorities.

The recommendations of the report can be divided into policy reforms for school-based skills development and post-school development of skills. The former addresses the needs of youths now coming through the education system, preparing them for entry to the world of work, while the latter reaches out to a wider set of beneficiaries covering those who are entering the labor market and need skills, those with work needing to upgrade their skills, and those who have lost jobs and need skills to improve their employability.

The recommendations for school-based reforms in TVET set the priority on improving quality in basic and post-basic education with the latter including technical and vocational education. Improving quality is given a higher priority than expansion of coverage because the low demand that now exists for TVE in schools, private and public, is attributed to the low quality and relevance of the programs available. Before expansion of any program, attention needs to be given to enhancing the quality of the training offered.

For those seeking skills after leaving school, establishing COTVET and building its capacity to coordinate skill development activities is recognized as a priority. This includes strengthening the quality assurance system that sets standards for training with industry input and provides for testing and certification of skills and for licensing and accreditation of providers. These steps are important to improve the use of public expenditure that is now fragmented among different providers and to provide the marketplace with information about the quality of skills training offered by a diverse set of providers.

The majority of workers have used traditional apprenticeships to prepare themselves for employment in

⁵⁶ World Bank (2007)

Ghana. This report identifies quality as an issue for these apprenticeships and offers a number of recommendations to improve the quality of traditional apprenticeships. Given the scope of apprenticeship programs, improving the quality of these programs should be given a high priority among post-school reforms, second to that of establishing COTVET. Ongoing donor initiatives to create a new Skills Development Fund can be useful to promoting an expanded role for enterprises in the delivery and financing of training, but given the small size of Ghana's current formal sector which is expected to be the primary beneficiary of the Fund, its impact on skills development is likely to be small.

Therefore, next steps call for preparation of an expenditure program implementing Government's strategy for skills development. This report provides a useful framework of investments and activities for consideration as part of the expenditure program to help Ghana establish a flexible, market-driven TVET system that offers equitable access to skills for all and prepares beneficiaries for productive wage and self-employment.

141. *The challenge will be sustaining the gains made in basic education and improving quality, while responding to growing demand for post-basic education.* Alongside this is the challenge of promoting choice and strengthening the role played by TVET, both for pre-employment and in-service training needs. Current quality notwithstanding, a school-based TVET investment compares well in employment and earnings outcomes with the alternative of a senior secondary education for those who expect to enter the labor market on completion. Currently, less than one percent of the education budget is spent on the approximately 14 percent of secondary students in a school-based TVET program. Given the expected higher unit cost of these programs, reforms need to focus on strengthening their linkage with market demand, ensuring a good match of skills and jobs in an economy that is increasingly led by the private sector, and in providing incentives for the efficient use of resources for skills development.

142. *Benchmarked against regional and international experience, Ghana's TVET reforms adhere to good practices, but as shown above, there are also missed opportunities.* This review has highlighted challenges that face skills development in Ghana and provided evidence from household surveys of the economic benefits that can be realized from meeting these challenges. The findings support expanded attention to post-basic education, and therein, the reform of TVET. Addressing school-based TVET's image as "second-class" education is not featured as part of current reforms and unless this is included, the proposed reforms are likely to fall short of their goal. Entering TVET after lower secondary school offers few pathways back into the general education system for further education, and as such, reinforces the image of TVET as a dead end. This can be addressed in two ways. *First*, improving the quality and relevance of the TVET offered can enhance its image and outcomes. *Second*, improving articulation within the education and training systems and opening vertical and horizontal pathways between these two systems can open choices to youth to move between general secondary and vocational programs and from TVET to higher levels of education. Curriculum reforms that blend general and vocational content can do this as can accelerating development of the National Qualifications Framework (NQF). Development of an NQF will take time, however, and intermediate steps can be taken by engaging employers in setting skill standards and building capacity to test and certify the training available against these standards, including skills in traditional apprenticeships.

143. *While strengthening traditional apprenticeships can improve their quality and outcomes, caution needs to be exercised in trying to formalize this mode of skills development.* Apprenticeships are by far the most frequent means used for skills development in Ghana. We have shown their importance in opening employment for youth outside the farm sector. Yet, while referring to the benefits of apprenticeships, we have also highlighted their weaknesses. Traditional apprenticeships are probably not the future for skills development in Ghana with its aspirations for becoming a middle-income country, but they are an important means for improving the current welfare of workers. Government initiatives to intervene and finance the first year of apprenticeship and create a regulatory framework open Ghana to the risk of distorting the incentives that make the system work well. The proposed cost of this is probably not affordable and comes at a very high opportunity cost for other reforms in TVET and in education more generally. There are steps, however, that can be taken that would lower the risk of destroying the conditions that make traditional apprenticeships work well. These include: (i) bringing literacy to master craftsmen and apprentices, (ii) upgrading the technical and pedagogical skills of master craftsmen, (iii) opening access to new technologies for master craftsmen, and (iv) certifying apprenticeship skills as a guide to their quality.

144. *The attention given to financing TVET is important, but incentives for using resources effectively are even more important. This is currently missing from the TVET reform program.* Introducing greater accountability for performance is needed especially within the public sector. Subjecting institutions to competition for public financing and placing public and private institutions on equal footing for receiving this financing can change the incentives for performance. Vouchers, for example, can subject training institutions to competition for resources directly from the beneficiary. Performance-based budgeting is another tool requiring training institutions to compete for public financing where performance may consider training outcomes such as reduced dropouts, higher skill certification rates, and job placement, along with training inputs such as the number of classes and workshops, number of instructors, and number of programs offered. By moving to funding formulas that focus as much on the outcomes and performance of the providers as on inputs, and by holding managers accountable for results, the incentive can be changed in a meaningful way to alter the outcomes. Moreover, encouraging public training institutions to earn more revenue through their design and delivery of customized training for employers can further improve incentives for performance.

145. *Building a “learning culture” around TVET reforms will improve policy development and the use of public spending on skills in a setting of limited resources.* What works in one country setting may not work as well in another. Monitoring and evaluating outcomes is necessary to determine if goals have been met and programs are performing as expected. Ghana’s TVET reform program has a results framework, but does not offer a plan for monitoring and evaluation and without this, little can be said about the effectiveness of the reforms and modifications that may be needed. This is a missed opportunity. Experience in other countries shows that TVET reform is an extended journey of 10 to 15 years. The program demands a strong champion in government to lead the way and a good strategy. The ESP and the follow-up White Paper provide this strategy, but a “learning culture” needs to be built around the strategy to guide future

investments. This paper provides justification for support of the TVET reforms proposed by Ghana. These reforms can be strengthened by addressing the missed opportunities above.

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MAP SECTION

