

Youth and labour markets in Africa A critical review of literature

YOUTH AND LABOUR MARKETS IN AFRICA A CRITICAL REVIEW OF LITERATURE

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ABSTRACT

Young people in Africa are confronted with many difficulties when it comes to their integration in the labour markets and their research for decent and productive jobs. Youth unemployment, which is substantially higher than global adult unemployment, has been growing in the last decade. In spite of the dramatic economic, social and political consequences of African youth employment problems, few studies focus on this population.

This survey of literature stresses that a clear diagnosis of youth employment problems in African countries based on hard data and analytical research is badly needed. As shown by our research review, basic labour market indicators are lacking or are at best incomplete due to data availability and methodological problems. Worst, as illustrated in our paper, different sources lead to opposite diagnoses concerning youth unemployment and its trends. In order to contribute to this diagnosis, we present some new evidence based on the *1-2-3 Surveys* recently conducted in 10 African countries, which provide a consistent and comparable picture of the situation of youth employment in urban labour markets in these countries. We also underline the diversity of the situation of youth employment on the continent (Southern Africa vs. other African countries; Anglophone vs. Francophone countries, etc.). We emphasize the “urban bias” in economic research on this subject, partly due to the lack of data on rural areas.

Key Words : Youth, labour, unemployment, Africa

RESUMÉ

Les jeunes en Afrique sont confrontés à de nombreuses difficultés pour s'intégrer dans le marché du travail et pour y trouver un emploi décent et productif. Le chômage des jeunes, qui est substantiellement plus élevé que le chômage global des adultes, a crû au cours de la dernière décennie. En définissant une cible spécifique sur le chômage des jeunes dans les Objectifs du Millénaire pour le Développement, la communauté internationale a reconnu la gravité de la situation. Toutefois, malgré les dramatiques conséquences économiques, sociales et politiques des difficultés d'emploi des jeunes africains, peu d'études s'intéressent spécifiquement à cette population.

Cette revue de littérature souligne le fait qu'un diagnostic précis concernant l'emploi des jeunes en Afrique basé sur des données statistiques et une recherche analytique est cruellement nécessaire. Comme le montre notre étude, les indicateurs basiques sur le marché du travail manquent ou sont au mieux incomplets en raison du manque d'informations de bases et de problèmes méthodologiques. Pire, comme l'illustre notre papier, des sources différentes conduisent à des diagnostics opposés concernant le chômage des jeunes et ses tendances. Afin de contribuer à ce diagnostic indispensable, nous présentons de nouveaux résultats basés sur les *enquêtes 1-2-3* conduites récemment dans 10 pays africains, qui procurent une image cohérente et comparable de la situation des marchés du travail urbains dans ces pays. Nous soulignons également la diversité de la situation de l'emploi des jeunes sur le continent (Afrique australe vs autres pays d'Afrique, pays anglophones vs francophones, etc.). Nous montrons enfin le « biais urbain » de la recherche économique sur ce sujet, dû en partie au manque de données sur les zones rurales.

Mots clés : Jeunes, travail, chômage, Afrique

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1. INTRODUCTION

Young people in Africa are confronted with many difficulties when it comes to their integration in the labour markets and their research for decent and productive jobs. Youth unemployment, which is substantially higher than global adult unemployment, has been growing in the last decade (ILO, 2006). The situation is likely to keep deteriorating as the total number of youth is expected to keep increasing rapidly in the next ten years². By defining a specific target through the *Millenium Development Goal* concerning youth employment (Target 16) the international community has recognised the seriousness of the situation. However, in spite of the dramatic economic, social and political consequences (on poverty, social cohesion, migrations, etc.) of youth employment problems, the literature on African labour markets provides only very few studies focusing on this population. Following international standards, we define “youth” as people aged 15 to 24. This definition excludes children and therefore child labour issues.

This survey of literature focuses mainly on economic research done on Sub-Saharan Africa³, although some references are reviewed for North Africa. It stresses that an assessment of youth employment problems in African countries requires a (still missing) clear diagnosis based on hard data and analytical research on determinants of labour market participation and unemployment. Research on the links between formal education and on-the-job training and their economic returns are especially crucial in understanding inadequacy between labour supply and demand.

As shown by this research review, basic labour market indicators are lacking or are at best incomplete due to data availability and methodological problems. Worst, as illustrated below, different sources lead to opposite diagnoses concerning youth unemployment and its trends. In order to contribute to this badly needed diagnosis, we present some new evidence based on the *1-2-3 Surveys* recently conducted in 10 African countries, which provides a consistent and comparable picture of the situation of youth employment in urban labour markets in these countries.

The literature survey also underlines the diversity of the situation of youth employment on the continent (Southern Africa vs. other African countries; Anglophone vs. Francophone countries, etc.). It also shows the “urban bias” in economic research on this subject, partly due to the lack of data on rural areas.

Section two begins by pointing out the main difficulties of monitoring youth employment given lack of data as well as methodology discrepancies among different available sources. Taking these difficulties into account, this section is devoted to putting forward the main stylized facts concerning youth employment in Africa, using both international statistics and existing survey data.

Section three addresses the main causes of poor youth employment performance by reviewing research done on labour supply characteristics, in order to grasp changes in labour force composition, and the extent of upgrades on labour force education. The issue of returns to education and training is discussed in detail. Research on the relative disadvantage of youth in the labour market in terms of access to social capital, land and capital is also reviewed.

Section four summarizes the main findings concerning the role of labour demand in relation to institutions. We review the research on the impact of labour standards and regulations. While being an opportunity for creating higher quality jobs, they are often considered to be, together with the lack of economic growth and investment, one of the main obstacles in creating more jobs in African countries.

A review of policies and practices is carried out in the *fifth section*. African countries have been implementing several initiatives concerning employment for the last few years, some of them

² In 2005, 62 percent of the population was below age of 25 and the total number of the youth (aged 15-24) is forecast to grow by an additional 22 million between 2005 and 2015 (ILO, 2006:1). By 2010, the share of youth in the population in Sub-Saharan Africa will reach about 28 percent, making Africa the “youngest” region in the world (World Bank, 2006b: 2).

³ Some sociological and political science studies are also reviewed.

addressing the particular issue of youth employment. What can be said about the impact of these policies on improving labour market and income prospects for the youth? What are the lessons drawn from their successes or failures?

Sections four and five are more concise as the youth dimension is missing in most of the empirical literature relating to labour market institutions, growth and employment, and employment policies.

Section six concludes.

2. FACTS AND FIGURES: WHAT DO WE KNOW (AND DO NOT KNOW) ABOUT YOUTH EMPLOYMENT IN AFRICA

Youth unemployment is a hot issue in the political agenda of both developed and developing countries. In spite of this common feature, existing empirical evidence and research shows that the nature of the problem is quite different in these two groups of countries. While in developed countries the youth's difficulties to get a job are related to lack of minimum professional skills required in the context of sophisticated production environments, in the case of developing countries, unemployment is generally found to rise with education levels. In the absence of unemployment insurance, only those with family (economic, social and demographic) resources can afford to wait in order to find a good match between their level of qualification and their occupations in the labour market. Conversely, most unqualified workers cannot afford to be unemployed and end up in the informal sector where productivity and revenues are low.

What are the nature and the extent of the problems faced by the young in Africa's labour market? How have youth labour market outcomes changed in recent years? To these two questions, the picture provided by existing reports on the labour market situation of youth in Africa does not always provide clear answers. A noticeable exception concerns a recent World Bank report which is specifically devoted to this issue (World Bank, 2006b). Because reliable figures are lacking, most reports exploring the question of youth labour only focus on youth unemployment rates. This is doubly regrettable insofar as (1) unemployment rates are "*only the tip of the iceberg in terms of fully explaining the multitude of employment-related problems facing youth*" (ILO, 2004) and (2) the absence of regular data collections on employment and unemployment in many developing countries makes it impossible to estimate unemployment rates reliably. Notwithstanding these limitations, we present here some more detailed results on youth labour participation and labour characteristics stemming from comparable sources on a number of francophone Sub-Saharan countries. We also briefly review recent work on the consequences of youth unemployment.

2.1. Youth employment in Africa

2.1.1. The challenge of monitoring youth employment

Monitoring youth employment in Africa meets two kinds of difficulties. First, there are conceptual issues relating to the specificities of African economies and labour markets. Labour markets in developing countries, and particularly in SSA, strongly differ indeed from those in developed countries. In particular, it is widely acknowledged that there are four types of labour markets, namely rural, public, private formal and informal⁴. These markets each have their specific characteristics, such as job seasonality and uncertainty about the level of demand, the nature of contracts and the structure of wages and earnings (Adams, 1991; Schultz, 2004). Formal wage labour is far less important than informal self-employment. Besides, there is no unemployment insurance and job search relies heavily on social and family networks instead of formal institutions. Also, the frontiers between activity and inactivity are fuzzy and this has an incidence on the unemployed and economically active population figures.

⁴ According to the definition of the ILO, the informal sector includes all enterprises which do not possess an administrative registration number *and/or* do not keep accounts.

All this means that standard ILO labour indicators and methods should be adapted and complemented with other indicators in order to grasp the specificities of African labour conditions. For instance, according to the *1-2-3 Surveys* conducted in several West African francophone capital cities, only 34.6 percent of occupied workers are, on average, wage earners, the remaining 65.4 percent being self-employed workers who created their own employment (Brilleau, Roubaud and Torelli, 2005). Thus, most often, searching a job in Africa amounts to relying on informal networks and/or gathering enough funds to establish as an informal street vendor or open a small service business. Moreover, rural wage labour markets are very thin: almost all occupied workers are informal, self-occupied non paid family workers. They are also subject to important seasonal variations and short-term migration is not uncommon. This means that using one-week recall periods may be well-suited in urban settings but is definitely ill-suited in rural areas. More generally, analysis of labour markets has tended to neglect rural Africa because of “*an apparent lack of socio-economic phenomena that corresponds to the labour economists’ usual definitions of employment*” (Leavy and White, 1999).

Given the widespread importance of informal sector employment, research on the economic returns to education and, more generally, research focusing on wage income alone can only provide a partial and biased picture of income-generating processes. Informal production units (IPU) are characterized by not carrying accounts. As a result, asking an informal worker how much he earned over the last 30 days through simple one-question (as is usually done in existing surveys) gives a much distorted figure of his real labour income. Informal workers generally do not know how much they earned over the last month. Part of the reason they do not know is because intermediate productive consumption and value added are concepts that are difficult to define and to measure in the case of IPUs. Thus special survey design, such as the one used in *1-2-3 Surveys*, is needed in order to obtain a more accurate informal income measure (Razafindrakoto and Roubaud, 2003).

Apart from these conceptual issues, the lack of comprehensive, integrated and centralized databases on youth labour market and poverty outcomes in Africa remains a major barrier for analysing employment-linked poverty outcomes in the region. In the first place, it is important to recognize that when centralized databases with information on labour market outcomes exist, they usually contain stand-alone indicators of employment, unemployment and labour force, which do not allow a thorough analysis of youth labour market outcomes and the determinants of these outcomes. Moreover, one should be cautious with international comparisons, since data are generally comparable within countries but not necessarily across them (there is in particular a strong diversity in the definition of “youth” and unemployment).

Many reports from international agencies such as the United Nations (UN), the International Labour Organisation (ILO) and the World Bank (WB) have attempted to draw overall pictures of youth unemployment and underemployment in different parts of the world (ILO, 2006; UNECA, 2005; World Bank, 2006a; 2006b). In the case of Africa, however, lack of adequate and reliable data makes it difficult to properly assess youth labour force participation, youth unemployment and even more so youth underemployment (see Box 1). As an illustration, ILO’s main database on labour statistics, namely *ILO/LABORSTA*, which supposedly covers household income and expenditure statistics, economically active population, employment and unemployment by detailed occupational group and sex for more than two hundreds countries and territories only has data on youth unemployment for eleven African countries⁵, among which only seven are in SSA. Similarly, the UN Youth Employment Statistics section has data on youth unemployment for only few countries. Given such a poor geographical and temporal coverage of the African continent, few stylized facts emerge from this literature. In addition, the lack of reliability of the data often leads to contradictory conclusions.

⁵ Algeria, Botswana, Burkina Faso, Egypt, Ethiopia, Madagascar, Mauritius, Morocco, Rwanda, South Africa and Tunisia.

Box 1: Where do employment data come from?

Data used to measure unemployment, employment and underemployment are drawn from household surveys or population censuses. However, censuses in Africa are very infrequent (many African countries have not conducted a census for the last 20 years) which causes high sampling errors for household surveys.

1. Household surveys

Living Standards Measurement Surveys (LSMS). Promoted by the World Bank, these surveys have been an important tool in measuring and understanding poverty in developing countries for the last two decades. They collect data on many dimensions of household well-being, including consumption, income, savings, employment, health, education, fertility, nutrition, housing and migration. While the measurement of consumption is strongly emphasized in the questionnaires, the employment module is comparatively short and most questions have the last week as the reference period, which is not always adequate for rural work (CDPR, 2005). Because of the lack of other sources of information, these surveys are the most commonly used for employment analyses.

Labour Force Surveys (LFS). These surveys are standard household-based surveys of work-related statistics and should constitute as such the main source of employment data. However, they have been conducted on a very irregular basis and with substantial lags in many developing countries. Less than 10 African countries have conducted one LFS since 1990 (CDPR, 2005).

The World Bank is putting a lot of efforts to collect and harmonise micro-datasets on SSA through its Survey-based Harmonised Indicators Project (SHIP). The SHIP will provide comparable and comprehensive socio-economic indicators for African countries.

I-2-3 Surveys. In the case of French-speaking African countries, for which available evidence on youth labour market is particularly poor, the *I-2-3 Surveys* conducted recently in seven West-African economic capital cities (namely Abidjan, Bamako, Cotonou, Dakar, Lome, Niamey and Ouagadougou), in Madagascar (Antananarivo, where an annual series is available over more than ten years), in Cameroon and in the Democratic Republic of Congo are (to date) probably the most reliable data source providing harmonised labour market statistics in Africa⁶. Exploitation of the data has been undertaken by DIAL⁷ in collaboration with National Statistical Institutes (Brilleau *et al.* 2004) and a book entitled “Urban Labour Markets in Sub-Saharan Africa” is forthcoming.

2. International databases

International databases on employment use household surveys and census data when available. Such databases include the ILO database on Labour Statistics (LABORSTA), the World Development Indicators (WDI) computed by the World Bank, and the FAO labour statistics (FAOSTAT). Another problem with existing centralised databases is that information on youth outcomes is often incomplete for many African countries. For instance, the FAO database does not contain labour data by age group. And while the LABORSTA and the WDI databases contain specific indicators on youth employment and unemployment, these indicators are barely available for all countries in Africa and for more than a few years.

Besides the poor coverage of youth labour market outcomes, a further issue is that reported indicators of labour market outcomes are not always consistent across databases. For instance, there are non-negligible discrepancies between FAO and WDI data on the one hand, and ILO data on the other. This is probably due to the use of different data sources and methodology.

In fact, the main part of the problem is due to the lack of an integrated statistical programme addressing labour market issues on the continent. In most countries of the world, led by developed countries, but also in the developing countries of Latin America, Asia, North Africa, etc., i.e. everywhere except SSA (with the noticeable exception of South Africa), labour force surveys (LFSs) play a central role in the system of statistical information on household. This diagnosis formulated more than 15 years ago (Roubaud and Sérurier, 1991) is still relevant today, in spite of a constant advocacy to promote such a type of surveys (Rakotomanana, Ramilison and Roubaud, 2003). This

⁶ The first *I-2-3 Survey* was conducted in Yaoundé, Cameroon in 1993. The methodology was then applied to Antananarivo, Madagascar in 1995 and extended to the seven main urban centres of Madagascar in 2000 and 2001. Today, *I-2-3 Surveys* have been conducted in many parts of the world including Latin America (El Salvador, Bolivia, Colombia, Equator, Peru, Venezuela in 2002-2003), Africa (Morocco in 1999-2000, capital cities of the WAEMU in 2001-2003, and Madagascar in 1995-2006, Cameroon in 2005, Democratic Republic of Congo in 2004-2005) and Asia (China and Bangladesh).

⁷ DIAL is a research unit of the French Institute for Research on Development (IRD) and is in partnership with the AFD: www.dial.prd.fr

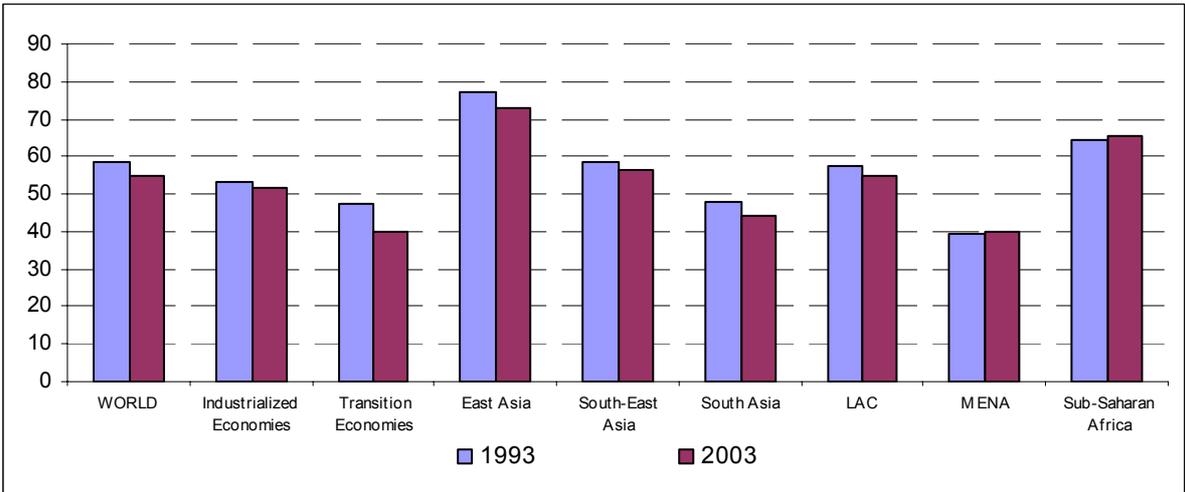
continental exception, which can be explained by historical reasons, is a surprising paradox, when one considers that most Africans, especially the poor, derive their income (be it in money or in kind) from work. One of the main objectives of the *1-2-3 Survey* is specifically to fill this gap. The recent key focus of development policies on poverty alleviation is a cogent argument for the inclusion of a permanent employment monitoring system, since access to paid and productive jobs is the best way of escaping poverty.

2.1.2. Youth labour force participation

Youth participation rates everywhere are found to be less than those of the adult population. However, due to data limitations, there is no definitive answer to the question of whether youth participation rate in SSA has increased or decreased over the recent period

According to ILO’s *Global Employment Trends for Youth 2004*, youth labour force participation rates decreased in the world as a whole by almost four percentage points between 1993 and 2003 (Figure 1a). This trend is mainly the result of an increasing number of young people attending school and/or staying in the education system for longer periods of time. In SSA, however, the youth labour force participation rate is found to have increased over the period even though it was already one of the highest in 1993. According to the report, this increase could be the result of an overall trend of women participating more in the labour market.

Figure 1a: Youth Labour Force Participation Rates by Region (1993 and 2003)



Source : Global Employment Trends for Youth, ILO Annual Report 2004

Existing evidence on such an increase in youth participation rates for the African continent is rather weak, though. Table 1 in Appendix reports youth and adult labour market participation rates for some selected African countries computed by the authors of the present report using the *ILO/LABORSTA* database. For most of the countries for which data are available⁸, the youth (15-24) participation rate is actually found to have decreased over time, while the adult (25-49) participation rate is found to have generally increased. Such a widening gap between youth and adult activity rates could reflect either the delayed entry of young in the labour market due to later school termination or an increasing number of young people too discouraged by limited job opportunities to even enter the labour force. Evidence on the former point is given by Antoine, Razafindrakoto and Roubaud (2001) in the capital cities of Cameroon, Madagascar and Senegal.

On the other hand, what clearly emerges from the data is the strong heterogeneity across African countries in both youth and adult participation rates. For example, Burkina Faso, Burundi and Rwanda

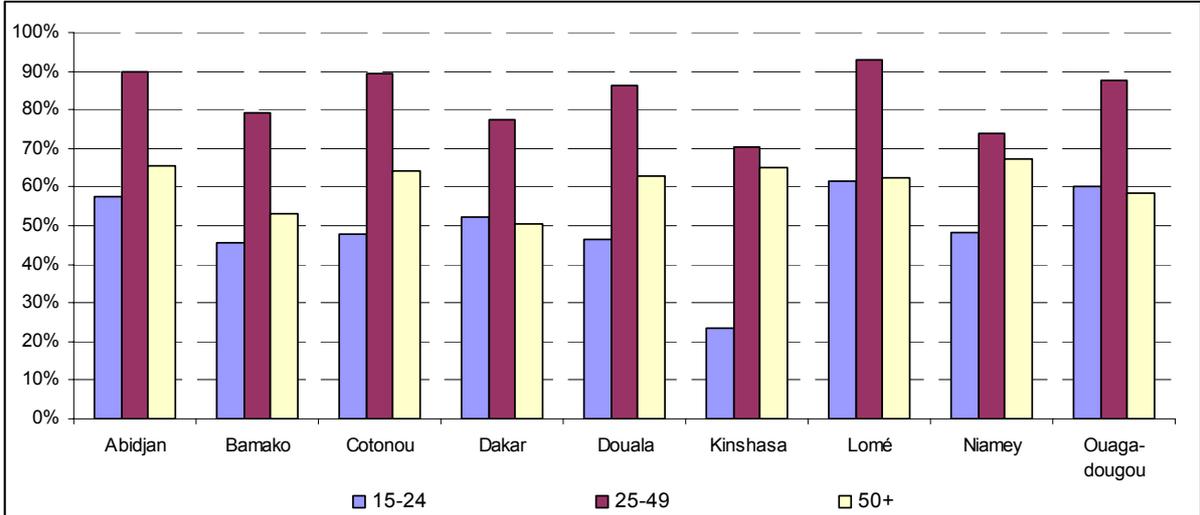
⁸ The list of included countries is: Algeria, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Congo, Côte d’Ivoire, Egypt, Ethiopia, Gambia, Ghana, Libya, Madagascar, Mali, Mauritius, Morocco, Namibia, Nigeria, Rwanda, Senegal, Sudan, Tanzania, Tunisia and Zimbabwe.

have rather high labour force participation rates while Botswana, Nigeria and Congo are clear outliers on the low side (see Table 1 in Appendix). However, the reasons for this variation are not immediately apparent and merit more detailed investigation even though we suspect that part of the differences between countries may be due to the lack of comparability in labour market definitions across surveys.

Measurement errors are not the sole explanation, however, as a variation in youth activity rates between countries is also observed using homogenized labour market statistics computed from the *I-2-3 Surveys*. As shown by Figure 1b, activity rates rapidly increase as the young leave school and enter the labour market. The proportion of young actives is the highest in Lomé, Abidjan and Ouagadougou while it is rather low in Kinshasa. In Abidjan and Cotonou, girls are much less likely to be enrolled in school than boys and this is reflected in labour market indicators as youth activity rates for young females are much higher than for young males (see Table 2a in Appendix).

In Cameroon and the Democratic Republic of Congo, where *I-2-3 Surveys* were conducted at the national level, there are sharp differences in youth and adult activity rates between rural and urban areas (see Table 2b in Appendix). Activity rates in rural areas are in particular more than twice as high as those in urban areas among individuals aged 15-19, suggesting earlier school termination and higher labour absorptive capacity in rural areas. However, high rural activity rates are often associated with a significant amount of underemployment (see below).

Figure 1b: Activities Rates by Age in Urban Labour Markets (%)



Source: *I-2-3 Surveys*. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

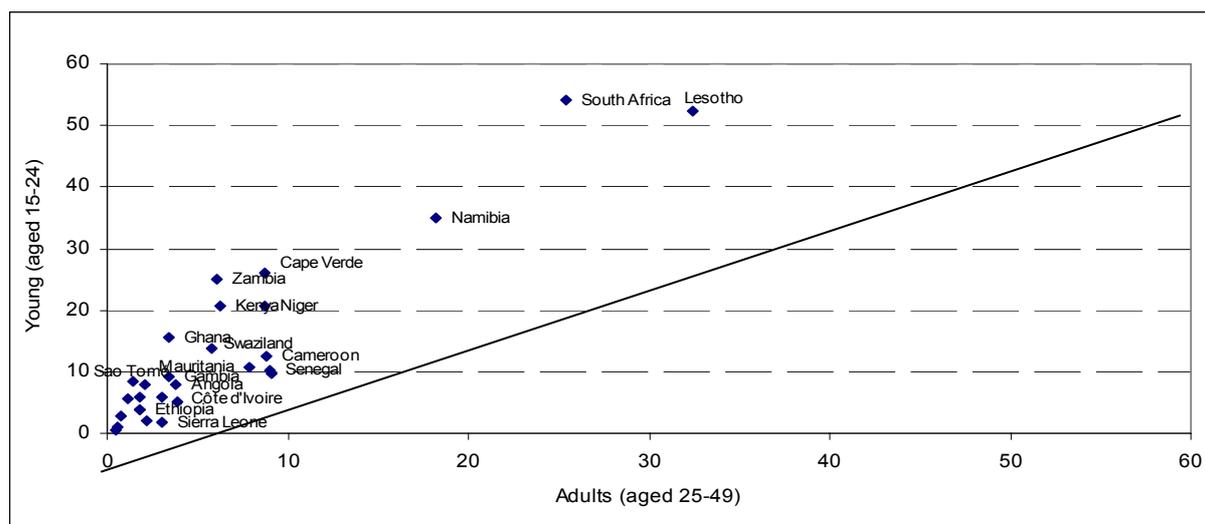
2.1.3. Youth unemployment rates

Evidence from international agencies reports

Five main observations concerning youth unemployment in Africa can be made.

- (1) In spite of the lack of consensus regarding SSA’s position relative to other parts of the world in terms of youth unemployment, the statement of the World Bank’s *World Development Report 2007* according to which SSA would have the lowest youth unemployment rate is likely to be correct.
- (2) Despite all the problems of consistency that afflict employment statistics in Africa, youth unemployment rates are consistently higher than overall unemployment rates with strong variation among countries (Figure 2a and Tables 3a and 3b in Appendix). The ratio of the former to the latter varies from 1.5 to as much as 4, although in most cases the rate of youth unemployment is about twice as high as the adult unemployment rate. For both the young and the adults, unemployment rates appear particularly strong in countries in Southern African and, to a lesser extent, in Cape Verde (see Box 2 for a detailed description of the South African case).

Figure 2a: Youth vs. Adult Unemployment in Africa (%)



Source: World Development Report 2007, Table A3, pp. 274-275

(3) Although data are scarce, there is suggestive evidence in Africa in general that youth unemployment rates are higher in urban areas than in rural areas (see, *e.g.*, UCW preliminary report, p.13; World Bank, 2006b:27).

(4) Youth unemployment rates are generally found to be higher among females than males, but there are exceptions. Young males are more likely than females to be unemployed in São Tomé and Príncipe and Zambia, for example (World Bank, 2006b: 26)

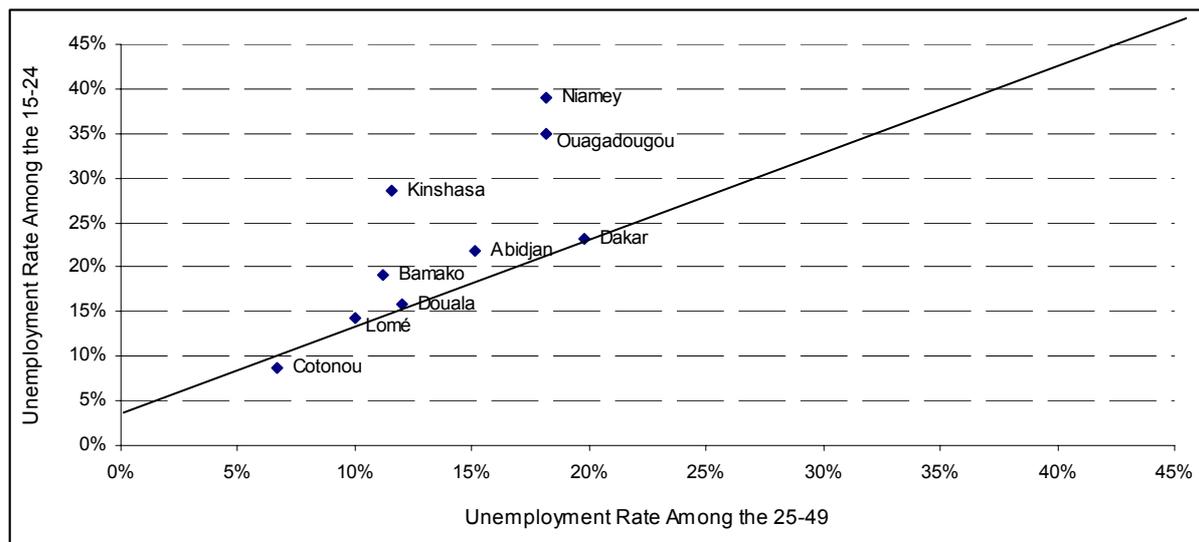
(5) Although the relationship between educational attainments and employment outcomes is not always clear (Kanyenze, Mhone and Sparreboom, 2000), higher educational attainment in the form of secondary and tertiary education does not lead to a decrease in the unemployment rate for youth (on the contrary, unemployment is sometimes found to increase with education, see World Bank, 2006b: 36).

Evidence from 1-2-3 Surveys

Recent labour force surveys (namely *1-2-3 Surveys*, Phase 1) conducted in the economic capital cities of seven West African Economic and Monetary Union (WAEMU) countries, in Cameroon and the Democratic Republic of Congo produce comparable and reliable labour market statistics. Concerning youth unemployment levels, data confirm the relative disadvantage of the young compared to the adults. In all capital cities, indeed, youth unemployment rates are consistently higher than adult unemployment rates, especially when the “young” category is restricted to the 20-24 years old (Figure 2b and Table 4a in Appendix). The youth disadvantage is particularly strong in Niamey, Ouagadougou and Kinshasa.

By contrast, gender differences are not uniform across countries. While Abidjan, Dakar, Douala, Niamey and Ouagadougou display higher proportions of female unemployment among the young, the reverse is true for Kinshasa, Lome and, to a lesser extent, Bamako and Cotonou. If we now turn to Cameroon and the Democratic Republic of Congo, Table 4b in Appendix shows that the difference in both youth and adult unemployment by location (rural vs. urban) is very large: the unemployment ratio for urban young people is respectively seven and five times higher than that of rural young people in the Democratic Republic of Congo and in Cameroon. These figures highlight the contrasted nature of rural and urban labour markets and the important role that the agricultural sector plays in absorbing young rural workers.

Figure 2b: Youth vs. Adult Unemployment in Urban Labour Markets (%)



Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

Evidence from country-case studies

Representative national or sub-national surveys provide a rich source of information on the situation of the youth on labour markets in African countries. However, country-case studies focusing on this specific issue are rather scarce. Exceptions, focusing on urban employment, include Burkina Faso, Ethiopia and South Africa⁹. Their results are consistent with the above mentioned studies. In the case of Burkina Faso, Calves and Schoumaker (2004)¹⁰ estimate that the unemployment rate among young men (aged 15-24) in the two main cities is about 40 percent, that is 2.5 times higher than that of men aged 25-34 and 8 times higher than that of men aged 35-44. For women, unemployment rates are higher than those of men at all ages, and the same youth disadvantage can be observed. The authors estimate that the youth unemployment rate among men was about 30 percent in 1980, which corresponds to an increase of 10 points in twenty years. In urban Ethiopia, Serneels (2004) estimates that 50 percent of active men aged 15-30 are unemployed. The incidence of unemployment is the highest at the ages of 19-20 (around 70 percent) and falls afterwards to reach a constant level beyond age 30 (around 20 percent).

⁹ The second volume of the 2006 World Bank Report entitled “*Youth in Africa’s Labor Market*” actually contains four other country case studies (Burkina Faso, Ethiopia, Tanzania and Uganda) based on representative national surveys. Due to space limitations, their results are not reported here.

¹⁰ The data they use come from a nationally representative retrospective survey entitled “*Migration Dynamics, Urban Integration and Environment Survey of Burkina Faso*” (MDUIE survey) conducted in 2000 in Burkina Faso on 8,644 individuals.

Box 2: Youth and unemployment in South Africa

The characteristics of unemployment in South Africa have several main specificities, compared with the rest of SSA (Burger and Woolard, 2005; Mlatsheni and Rospabe, 2002).

1/ The unemployment rate is extremely high (respectively 41 percent and 29 percent in 2002 according to the expanded or narrow definitions, among the highest worldwide), and the youth unemployment rate is even higher (70 percent using the expanded definition); the youth represent 76 percent of the unemployed. The very high unemployment rate indicates that the informal sector is not absorbing much surplus labour; it is not fulfilling as elsewhere its role of “last resort employer”.

2/ The wide gap between the narrowly-defined unemployment rate and the “expanded” one is due to the very high percentage (around 12 percent of the active population) of discouraged workers. Many of the non-searching unemployed live in remote areas with high unemployment rates (Kingdon and Knight, 2000). A survey (see Kanyenze *et al.*, 2000; du Toit, 2003) illustrates the discouragement of unemployed South African youth and the difficulties they face in searching for a job. The existence of a reservation wage is investigated by Natrass (2002a) in two Cape Town townships.

3/ Indeed, the percentage of workers employed in the informal sector is relatively low (28 percent), which is much smaller than in many other developing countries especially in Africa. Since 1995, about one third of the newly created jobs have been in the informal sector where jobs are poorly paid and insecure, so that the quality of employment has deteriorated. These jobs have been mostly taken by African unskilled and semi-unskilled females (Casale and Posel, 2002).

4/ South African workers are mostly urbanised (less than 40 percent of the labour force reside in rural areas); the unemployment rate is much higher in rural than in urban areas (48 percent vs. 37 percent); it is especially high in areas previously classified as homelands; subsistence agriculture plays a much less important role than in other developing countries, where unemployment is typically lower in rural than in urban areas; the existence of rural unemployment (virtually inexistent in the rest of SSA) is made possible by social (such as old-age pensions) and urban migrants transfers.

5/ Most unemployed workers are unskilled (or semi-skilled); having completed secondary or some form of tertiary education substantially reduces the probability of being unemployed. The reverse is true elsewhere especially in WAEMU countries.

6/ Last of all, unemployment has a strong racial dimension; the unemployment rate for Africans (who have on average the lowest qualifications) amounts to 48 percent, compared to only 10 percent for Whites, unemployment rates for Coloureds (32 percent) and Indians (25 percent) being in between.

These characteristics can be explained by the specificities of South Africa on the continent: development level, history and the heritage of apartheid, etc. It seems that other Southern African countries (Lesotho, Swaziland, etc.), which are strongly integrated with the South African economy and labour market, share some of these characteristics.

The issue of the so-called rigidities on the labour market and their impact on the labour content of growth are strongly debated in South Africa as in the rest of Africa: have the existing labour regulations a negative impact on job creations, leading to youth unemployment? Some surveys rank South African laws among the most rigid (World Bank, 2006a). However, the causal relationship between these rigidities and the high unemployment rate has not been well established yet. (A more detailed discussion on labour market rigidities is provided in Section 4.2).

2.1.4. Youth employment characteristics

Data on youth employment characteristics (underemployment, employment by sector and occupation, wage level, job satisfaction, etc.) are even scarcer than data on youth participation and youth unemployment rates.

Using World Bank Standard Files and Standard Indicators (SFSI) datasets, the UCW preliminary report provides some figures on the distribution of young workers by sector for a few African countries (see Table 5 in Appendix). Workers fall into four main groups: wage employment, informal sector employment, self-employment and other. Self- and informal employments account for the overwhelming majority of young workers in both rural and urban areas. The high level of informal employment in most countries may be a sign of labour market entry difficulties. It may also be

synonymous of low employment quality since informal jobs are generally less secure jobs in which labour and safety regulations do not apply.

Based on four country-case studies, namely Tanzania, Ethiopia, Burkina Faso and Tanzania, the 2006 World Bank Report entitled *Youth in Africa's Labor Market* provides some figures on youth time-related underemployment. According to the report, 6 percent of young men and more than 10 percent of young women report being underemployed in Tanzania. In Ethiopia, underemployment is high in rural areas, with the average worker working less than 30 hours a week, according to the 1999 Labour Force Survey. In Burkina Faso, about 16% of all workers feel that they are under-employed.

Using tracer surveys¹¹, Al-Samarrai and Bennell (2006) provide an in-depth description of the labour market outcomes of secondary school and university leavers in four Anglophone African countries (Tanzania, Malawi, Uganda and Zimbabwe). The authors find no evidence of widespread and growing open unemployment among educated youth. While the activity profile for university graduates has not changed for the last 20 years (with wage employment dominating), there has been marked changes during the 1990s in all four countries for the secondary school leavers (with wage employment opportunities declining over the period and self-employment becoming an increasingly important source of income).

In addition to providing harmonised data on youth participation and unemployment rates, one of the original features of *I-2-3 Surveys* is to make available rich and reliable information on the employment characteristics of the young. First, data reveal that in all capital cities the bulk of youth employment is in the informal sector (Tables 6a and 6b in Appendix)¹². While about three quarters of all the employed are found in the informal sector in each country (80 percent in Cotonou and Lome), this proportion is as high as 90 percent among the sole young, reflecting strong labour market entry difficulties. By contrast, almost no young people are found in the public sector. The young have indeed been strongly penalized by the freezing of new recruitments in this sector. Though their figures concern urban Burkina Faso and first jobs only, Calves and Schoumaker (2004) reach the same conclusion: while 13 percent of young men had their first job in the public sector in 1980, they were only 8 percent in 1990 and about 3 percent in 2000. The same evolution is observed for the formal private sector, with the share declining from 10 percent to 5 percent between 1980 and 2000. Back to *I-2-3 Surveys*, gender differences are mostly found in the proportion of young working in the formal private sector. The latter is always higher for young male workers than for young female workers.

Second, data suggest that the situation of the young and the adults is more or less the same with respect to time-related underemployment. Be they in their twenties or their forties, between 10 percent and 15 percent of the workers work less than the legal duration of working hours but are willing and available to work more, except in Douala and Kinshasa where this proportion is higher (Table 7a in Appendix). Young women fare worse than young men in all capital cities. In the case of Cameroon and the Democratic Republic of Congo for which data are available at the national level, the same feature prevails: the incidence of visible underemployment is as high for the young as for the adults (Table 7b in Appendix). It is however much higher in the Congo (around 32 percent) than in Cameroon (19 percent). Last, no clear pattern emerges when comparing the situation in rural and urban areas.

On the other hand, there are marked differences between young and adults in terms of invisible underemployment where invisible underemployment includes all workers earning less than the minimum hourly wage (Figure 3 and Table 8a in Appendix). Despite variation in levels between capital cities, the incidence of invisible underemployment among the young is almost twice as high as that of adults in most cities except Kinshasa where the difference is less strong. It is thus very likely that the share of working poor is higher among young people than among adults. As for visible underemployment, young women are found to be more concerned than young men. The cases of

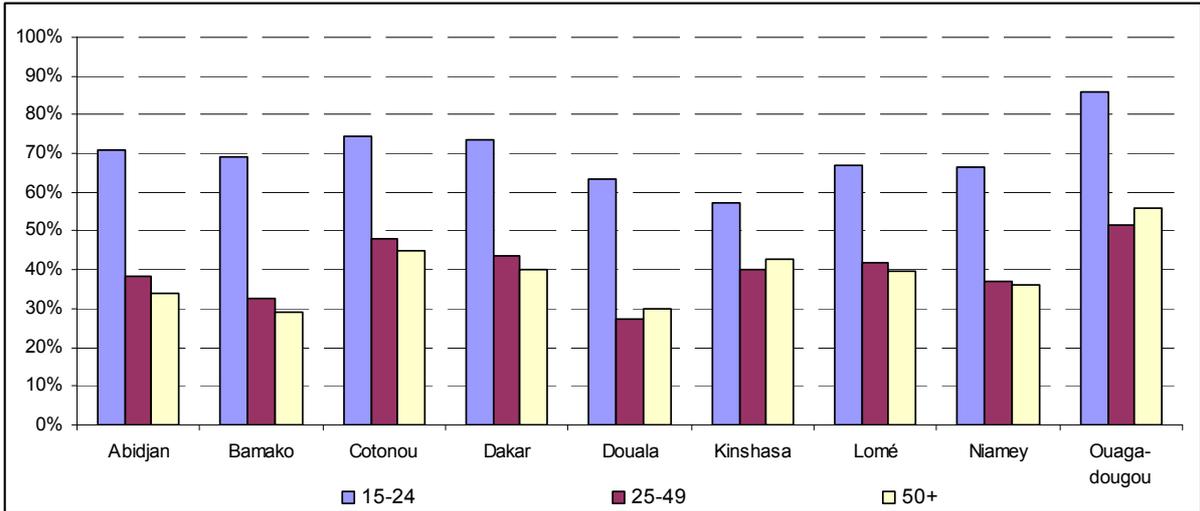
¹¹ Tracer surveys aim to track down a group of individuals with a specific education/training background and systematically gather information about their current and past employment histories. In Al-Samarrai and Bennell (2006), tracer surveys focused on locating and then collecting information from 1,000 secondary school leavers and 500 university graduates in each country.

¹² The informal sector in the *I-2-3 Surveys* follows the definition of the ILO (see note 4).

Cameroon and the Democratic Republic of Congo finally suggest that the incidence of invisible underemployment is higher in rural areas than in urban ones (Table 8b in Appendix).

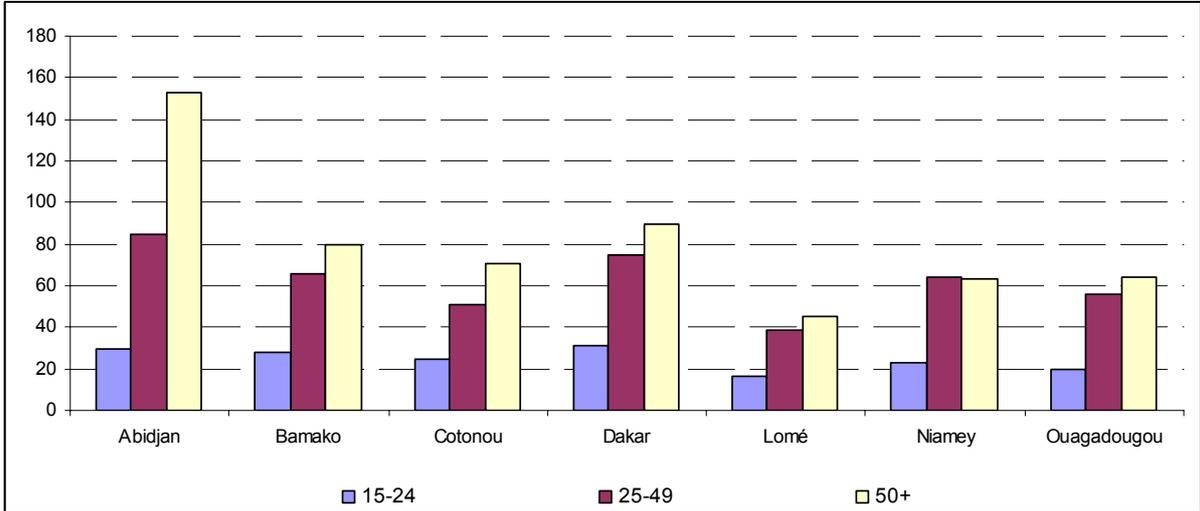
Third, being less experienced and working less hours than older workers, young people are also found to earn significantly less than their older counterparts (Figure 4 and Tables 9a and 9b in Appendix). However, as noted by ILO’s *Global Employment Trends for Youth 2004*, the question of how much ‘less’ is acceptable and how much ‘less’ reflects discrimination against young people is very hard to judge and requires more detailed statistical analyses that are beyond the scope of this report.

Figure 3: Incidence of Invisible Underemployment by Age (%)



Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

Figure 4: Mean Monthly Earnings by Age in PPA 1,000 CFA Francs (Main Activity)



Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2003. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

Last, 1-2-3 Surveys provide various indicators on youth and adult job satisfaction that complete the picture of labour market conditions for young people (Brilleau *et al.*, 2005). Among employed youth, 35 percent are satisfied with their job and do not plan to look for another job in the near future. Surprisingly enough, this proportion does not significantly vary between sectors: it amounts to 37 percent in the public sector against 36 percent in the informal sector. On the other hand, 51 percent of the employed young would like to get a new job. This proportion decreases with age and income in all capital cities. This means that pressure on the labour market comes not only from the unemployed but also, and in a substantial proportion, from those already employed but dissatisfied with their job. Finally, the wishes expressed by the young reveal a strong mismatch between their preferences and

real job opportunities. 27.2 percent of the young would like to get a job in the public sector whereas only 4 percent of new jobs were created in this sector during the year preceding data collection. By contrast, the informal sector appeals to only 48.4 percent of the young even though 81.7 percent of new jobs were created in this sector. The same kind of results is obtained by Serneels (2004) in the case of Ethiopia. According to the author, half of the young unemployed in urban Ethiopia are looking for a job in the public sector, in spite of the lack of new recruitments. These results suggest that strong disillusion among the young are to come, that could well give rise to severe political and social tensions.

2.2. What are the consequences?

The situation of youth on African labour markets has many economic, social and political consequences: first of all, the absence or weakness of labour income negatively affects the welfare of the youth in a broad sense¹³, while their vulnerability to negative shocks increases their probability of becoming or staying poor. According to ILO (2006), the number of youth working poor in Africa (near 60 percent of total youth employment) is increasing. However, this issue does not seem to have been studied in depth yet in the economic literature.

Other consequences include: a delayed social integration and modification of their demographic behaviour; disruptive social behaviour and participation to armed conflicts; migrations, etc. We review hereafter existing evidence and studies on these three other types of consequences.

2.2.1. Delayed social integration

Several recent studies provide evidence on the relationship between youth unemployment (or, more broadly, access to employment) and social integration.

The problem of delayed social integration has been analysed in the case of three African cities by Antoine *et al.* (2001). Using biographical data from surveys of inhabitants of Dakar, Yaoundé and Antananarivo, they show that social integration has been delayed for urban young adults with regard to three main events: access to the first job, marriage, and residential autonomy. The researchers put forward the hypothesis that difficult access to the first job and the lengthening of studies lead young men to put off their marriages by between 5-10 years. Because, contrary to many European countries, residential autonomy is the last step to be taken for young people before their independence, the percentage of those who have left the parental household at the age of 25 is falling sharply (only one fourth for the younger generation in Dakar).

In South Africa, Klasen and Woolard (2005) provide some evidence of similar mechanisms. Analysing household surveys conducted in 1993, 1995 and 1998, they find that the household formation response of the unemployed is the critical way by which the unemployed assure access to resources. In particular, unemployment delays the setting up of an individual household by young persons, in some cases by decades. It also leads to the dissolution of existing households and a return of constituent members to parents and other relatives and friends.

In rural areas, some evidence also supports the finding of delayed social autonomy for young adults. According to Ayalew, Dercon and Krishnan (2000), young adults in rural Ethiopia have more and more difficulties accessing to land. As a result, they end up dependent on their families and farm plots are subdivided into ever smaller parcels. In a village of North-Western Rwanda, André and Platteau (1998) also find that young adults have difficulties leaving their parents and setting up their own households. More specifically, they find that, between 1988 and 1993, the proportion of children in age of marriage (20 to 25 years old) but still living with their parents has increased more than two fold.

¹³ UNAIDS (2004) argues that unemployed young people are at a much higher risk of contracting HIV/AIDS than are employed young people. This is due to persistent behavioural risks, and lack of information, education and services. Young unemployed women are more vulnerable to HIV infection than are young men. However, this issue does not seem to be well documented yet.

2.2.2. *Disruptive social behaviour and armed conflict*

Social behaviours that have negative externalities on the economy are also frequently cited as a consequence of the situation of young people on the labour market.

The combination of poverty and reduced social contacts faced by unemployed young people, especially urban migrants, may lead them to engage in criminal activities, drug addiction or prostitution¹⁴. Apart from the fact that they increase health hazard, these activities further take young people away from the “normal” labour market. According to Nattrass (2002b), crime and violence have been increasing in many parts of SSA among unemployed young people. Youth gangs typically satisfy the economic and social needs of unemployed young people through violence. Sustained unemployment could cause young people to be hostile to the world of work and more receptive to drugs and crime. This has also been documented in the case of Rwanda before the civil war by Maton (1994).

While it would certainly be an exaggeration to claim that youth unemployment is directly responsible for the high prevalence of civil conflicts on the African continent, it is likely that the availability of young unemployed men, possibly involved in criminal activities or addicted to drugs, fuels these conflicts. In the context of the current age profile of African populations, the quite widespread shortages of opportunities for regular productive employment or self-employment create conditions in which it is hardly surprising if many youths do not need to be coerced to join in civil war (Austin, 1999). This fact has been mainly documented in the academic discussion of the Liberian and the Sierra Leonean wars which has focused on the role of the poor, socially marginal young males (see for instance Peters and Richards, 1998). In a recent study on Sierra Leone, Richards, Bah and Vincent (2004) show that the conflict was fought primarily by unemployed marginalized young men coming mainly from rural areas.

In a relatively recent paper, Urdal (2004) empirically tests the notion that “youth bulges” – historically large youth cohorts relative to the total population – make countries more susceptible to armed conflict. This assumption is tested in an event history statistical model covering a high number of countries and politically dependent areas over the period 1950-2000. The study provides support for the hypothesis that youth bulges increase the risk of domestic armed conflict, and that the combination of youth bulges and poor economic performance can be explosive. The authors also argue that the lack of support of the youth bulge hypothesis in previous World Bank studies (Collier, 2000; Collier and Hoeffler, 2001) results from an empirical misspecification of the youth bulge measure.

2.2.3. *International migrations and brain drain*

McKenzie (2006) shows that, generally, people around 20 years old have a higher propensity to migrate (in the case of the United States, the distribution curve of male immigrants’ age peaks at 20); but that skill immigration criteria, like those applied by Canada, tend to increase the age of immigrants. Moreover, he finds that young people represent a higher proportion of the flow of international migrants than the stock. In other words, the average youth immigrant is much more likely to have recently arrived in the host country than older migrants.

Narayan and Petesch (2006) show that, in Morocco, the difficulty of obtaining good jobs locally feeds emigration. Facing poor job prospects, young men and women see migration overseas as the best way to have a better life, and regularly save money to emigrate legally or illegally abroad. This positive view of migration is shared by adults who consider migration as one of the main factors helping the best-off households, and as a way out of poverty.

Based on two complementary databases made available only recently on the stocks of international migrants in OECD countries (Docquier and Marfouk, 2006; Dumont and Dumaitre, 2004), Gubert and

¹⁴ ILO (2005) reports that unemployment has driven many young women and girls into sex work. The lack of job opportunities and their disadvantageous social role, both in terms of assets (education and health) and cultural norms, make them more likely to end up as sex workers. The demand for commercial sex workers from international tourism flows to Africa is on the rise.

Nordman (2006) provide a detailed picture of the levels, trends, determinants and prospects of migration from the Middle East and North Africa (MENA) region to OECD countries. The authors show that the expatriation rates of the most educated migrants are the most reactive ones to the population density in the origin country. One interpretation of this finding is that the brain drain is responsive to demographic pressure in the origin country. In particular, the share of the young in the origin population is found to exert a positive influence on expatriation rates suggesting that migration flows are predominantly composed of young people.

Finally, some authors argue that skilled migration may induce positive effects on developing countries under certain conditions (Docquier, 2006; Docquier and Sekkat, 2006). From some macroeconomic studies reviewed in Docquier (2006), the author finds that the threshold emigration rate above which the brain drain becomes harmful for development can be prudently estimated between 15 and 20 percent in low-income countries. The average optimal emigration rate (which maximizes country gains) probably lies between 5 and 10 percent. Docquier (2006) finally observes that “*unfortunately, many poor regions such as Sub-Saharan Africa and Central America, are well above that "optimal" threshold*”.

Knowledge gaps:

There are still huge knowledge gaps to be filled. In particular and as suggested above, comprehensive and comparable data on urban and rural labour markets are missing and concepts and definitions appear to be ill-suited for studying labour market in rural areas. Also, little is known about the working conditions of employed young people. In rural areas, both agricultural and non-agricultural labour markets deserve more attention.

With regard to migration issues, the empirical literature remains poor to guide policymaking. As suggested by Docquier (2006:24), “it would be helpful to build new micro survey explicitly conducted to capture the relationship between emigrants and their country of origin, to collect more data and case-studies on the sectoral impact of the brain drain, to improve the time dimension in available macro data sets, and the quality of human capital indicators of residents”.

3. CAUSES OF THE YOUTH LABOUR MARKET DISADVANTAGE: A SUPPLY-SIDE PERSPECTIVE

In this section, we focus on the supply side of youth employment. We describe the main characteristics of the youth workforce (weight in total population, education, etc.) and review the evidence on the link between human capital (including on-the-job training) and access to employment as well as returns to education. Indeed, young people are often at the end of the job queue for the formal labour market because they lack adequate skills and experience, as well as efficient social networks (see Box 3). We also present the results of studies on the individual impact on employment of possessing some other forms of capital (social capital, land and physical capital).

Box 3: Why are youth unemployment rates higher than adult unemployment rates?

According to ILO (2006), there are many likely explanations¹⁵ (for the case of south-east Europe, see also Kolev and Saget, 2005),

- *The last-in, first-out explanation.* Youth are more vulnerable than adults in difficult economic times. They are likely to have less work experience than adults. Assuming that employers seek employees with past experience, the youth who is entering the labour force for the first time will be at a disadvantage and have a harder time finding employment vis-à-vis an adult with a longer history of work experience. In times of surplus labour competing for a limited amount of jobs, the youth will be the “last in”. Similarly, because a younger worker is likely to have less tenure than an adult worker, less company funds invested in them for training purposes and to have a temporary contract, it will be considered cheaper to let the younger worker go in times of economic downturns. Thus, young workers will be the “first out”.
- *The lack of job search experience explanation.* A young person often lacks both labour market information and job search experience. In many developing countries, it is only through informal placement methods – typically through family and friends – that a young person finds work. Beyond the word of mouth approach through families and friends, they simply might not know how and where to look for work. Adults, on the other hand, might have the possibility of finding future work through references from previous employers or colleagues and are more likely to know the “right” people.
- *The “shopping around” explanation.* Another possibility is that youth might take longer to “shop around” for the right job, meaning they might wait longer to find work that suits their requirements. This, however, implies that a support structure, such as the family, exists to economically support them while they search for work. In low-income countries, this support structure does not exist for the majority of young people and as a result, a young person simply cannot afford to be unemployed and is likely to take whatever work becomes available, regardless of working conditions or whether or not the job fits his/her education or skills-base.

The explanations given above are a mixture of demand-side causes and supply-side causes that are analysed in sections 3 and 4 together with more general analyses of unemployment in Africa and offer-demand mismatch. The “shopping around” behaviour explains well in our view (but not exclusively) the high unemployment rate of educated people.

3.1. Characteristics of the labour supply

3.1.1. Weight of the young generations in the population and its likely evolution

In a macroeconomic perspective, the weight of the young generations in the population is often invoked as one of the causes for the difficult insertion of the new generations on the labour market (UNECA, 2005).

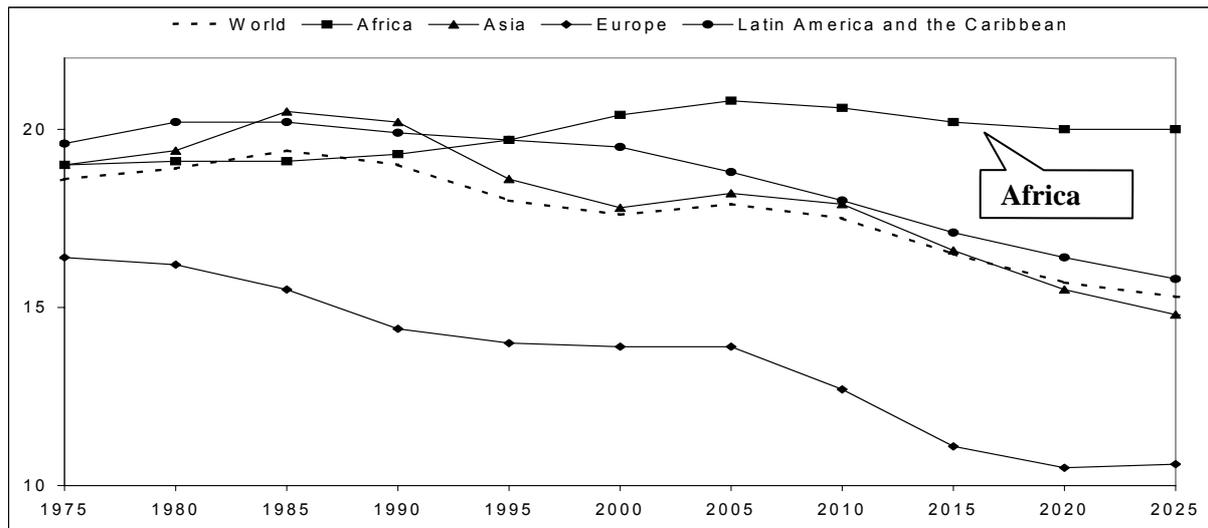
The youth currently represents 21 percent of the African population, compared to about 18-19 percent for other developing regions (Asia and Latin America) and 14 percent in Europe. Available country data indicate that some African countries have fairly higher youth’s shares than others.

While the share of the youth in the total population has started to decrease markedly in major developing regions and in the world as a whole since the mid-eighties, this is not the case in Africa, where the share of the youth can be estimated to stop increasing around 2005 (see Figure 5)¹⁶. No strong decline of the youth’s share in the labour force can therefore be expected in the medium run.

¹⁵ We only refer here to the explanations which seem adequate for African countries.

¹⁶ Source: UN estimations and projections.

Figure 5: Share of the youth (age 15-24) in the total population, 1975-2025, by region (%)



Source: UN World Population Prospects: The 2004 Revision

According to ILO calculations, in SSA “the youth labour force is expected to grow in pace with the adult labour force at least until 2015 despite the HIV/AIDS pandemic which seems to have a bigger impact on young people” (ILO 2004, p.3). There are however differences among African countries: the share of the youth declined in Morocco between 1995 and 2002, while it increased in Algeria during 1995-2000; over a comparable period, it rose sharply in Benin but fell in Mauritius, etc. These national differences are certainly worth investigating in conjunction with youth labour market outcomes, since they could help clarify the relative importance of this demographic factor as a cause of the youth labour market disadvantage. In the case of Ethiopia, Rosati (2006) finds that local labour markets with the largest share of youth in the population have the highest youth unemployment rates (see O’Higgins, 2003 for a study on 32 developing and transition countries).

3.1.2. Rural-urban distribution of the young population

We have stressed above the differences between urban and rural areas regarding the labour market situation of the youth. In terms of demographic structure, it is *a priori* unclear which have a higher youth share, and therefore face a potential higher excess supply of young people: rural areas because of higher fertility, or cities because of internal migration? Although there are exceptions, the youth’s share is generally found to be higher in urban areas, indicating that the challenges faced by urban labour markets regarding the insertion of youth may be higher than in rural areas. However, as we will see below, cities are also the location of potentially more diverse and more dynamic labour demand sources.

3.1.3. Education level of the workforce

Although education is the main factor of productivity, it remains desperately rare in Africa, even if progress has been made for the past 15 years. According to the EFA Report 2002, while the net primary enrolment rate amounted to 83 percent worldwide, it was only 57 percent in SSA, the lowest rate of any region. However, enormous progress is being made. According to the World Bank (2006b), since 1990, eight of the developing world’s ten top performers in annual increases in primary completion rates have been in Africa (Benin, Eritrea, Ethiopia, Guinea, Mali, São Tomé and Príncipe, Togo, and Malawi). Primary completion rates in these countries have grown by more than 5 percent a year, well above the low-income country average of 0.8 percent a year. Obviously, this global trend hides enormous national disparities with, on the one hand, countries like Rwanda where primary education is practically universal (NER of 97 percent) and on the other, Niger, where only 21 percent of children of primary school age are effectively in school. In addition to having the lowest enrolment

rates, Africa is also the region in the world where the girl/boy disparities are the highest, with an average gap of 20 points in enrolment rates to the detriment of women.

However, enrolment rates alone cannot provide a clear picture of the stock of human capital available because, on the one hand, knowledge gained from schooling (in this case reading and writing) is only completely acquired once the individual has achieved a minimum level of study (6 years in primary school) and, on the other, it is vital to take into account the total length of study. Figures from World Bank (2006a) indicate that in many countries the minimum mastery rate is lower than the net enrolment rate. It also shows that less than a third of children in Malawi, Namibia and Tanzania achieved minimum mastery in literacy by grades 4–6, even though the average net enrolment rate was about 65 percent. In Ghana and Zambia, half or fewer of all young women ages 15-24 can read a simple sentence after even grade 6.

Kuepie, Nordman and Roubaud (2006) examine this question using the *1-2-3 Surveys* on seven main West African cities (PARSTAT project). Their results indicate that even if the average individuals' level of education in each capital is much higher than that found for the overall country, the accumulation of education remains low in all seven cities: the average number of years of completed schooling is only about five years, and over half of the individuals aged 15 years or over (55 percent) either never attended school or attended school but did not complete primary cycle. Yet people are only considered to be literate as adults when they have completed primary school. On this basis, they estimate the proportion of literate individuals aged 15 and over in the WAEMU cities in the early 2000s at 45 percent. Moreover, these literate individuals' level of education was extremely modest since nearly half of them did not go beyond the Secondary College (first four-year cycle of secondary education), and less than a quarter completed the second secondary cycle (total of seven years of secondary education), with the possibility of enrolment in higher education.

Kuepie *et al.* (2006) highlight the fact that the distribution of individuals aged 15 and over by level of education in each of the cities taken separately is pyramid-shaped with a broad base and a very narrow summit. This is indicative of a high level of illiteracy (at least 44 percent) and high drop-out rates between and within the cycles. Possession of the minimum human capital (i.e. at least completed primary schooling) also varies markedly by gender. Women are largely disadvantaged in that nearly two-thirds (64 percent) did not complete primary school (as opposed to 45 percent of men). This rate rises to 68 percent in Dakar, Niamey and Bamako. Even in the cities with the longest-standing and most developed schooling (Cotonou and Lome), women remain largely on the fringes: 59 percent did not complete primary school.

When studied by generation, more under-35s (48 percent) have the minimum level of schooling compared to their elders aged 35 to 44 (44 percent) and especially those aged 45 and over (34 percent). This configuration reflects the steady development of the education system in the African countries. Yet the schooling dynamic is not the same everywhere. At one end of the scale, there are the cities with a long tradition of schooling. At the other end of the spectrum are those where the development of schooling has been stepped up more recently. The first group comprises Lome, Abidjan and Cotonou where, even among the individuals aged 45 to 59, a significant proportion (at least 45 percent) has the minimum level of schooling. In the second group (Bamako, Niamey and, to a certain extent, Ouagadougou), over 60 percent of the over-35s do not have the minimum level of schooling. Dakar stands out for its stagnation (at around 60 percent) in the proportion of individuals without the minimum grounding in education across all generations (15 to 59 years old).

A last point worth mentioning about the educational landscape of the major WAEMU cities is the low weight of vocational education, which never exceeds 2 percent of the over-15s with the notable exception of Mali where it comes to 6 percent. This is characteristic of an education system in which vocational training is left by the wayside.

3.2. Education, access to employment and returns to education training

In Africa, education is often seen as the main policy instrument in the fight against poverty because it may help individuals access better jobs and thus raise their labour earnings. However, in practice,

although the value of education is strongly reaffirmed as an intrinsic component of development and of the well-being of populations (through the Millennium Development Goals, the Education for All initiative, etc.), its economic efficiency, on the contrary, is more contested.

3.2.1. *Education and access to employment*

Does education helps young people get a job? The short answer to this complex question is: much less now than in the past. Before the era of structural adjustment, in a context where average education levels were very low and where the rising population and state involvement in active development strategies implied a growing public sector, diplomas were keys to obtain a job in this segment. However, since the end of the 80's, the economic crises and the limitation of public expenditure in most African countries have meant that these employment opportunities for educated young people have greatly shrunk. In the case of Burkina Faso, Calvès and Schoumaker (2004) compare the employment outcomes of three successive birth cohorts when they were aged 15-24¹⁷. One of their results concerns the nature of the first job held by young people. For uneducated young men and women, the first job is almost always in the informal sector (a bit more than 90 percent for men, slightly less than 100 percent for women), with little change across cohorts. In the case of the educated, however, striking changes have taken place: while the share of informal first jobs was respectively 56 percent and 74 percent for young men and women of the oldest generation, this percentage has jumped to 91 percent of men and 94 percent of women for the youngest cohort. This means that formal education no longer makes a difference in terms of initial access to modern sector employment. However, the subsequent experience of educated and uneducated individuals does differ. In a recent work based on the *1-2-3 Surveys*, Kuepie *et al.* (2006) show that the involvement in the informal sector decreases as the education level rises.

Regarding unemployment, the available evidence is that education does not have a protective effect. In Tunisia, the unemployment rate for youth with higher education is 1.6 times higher than for those with primary education (40 percent compared to 25 percent) (World Bank, 2003). In the late 1990s and early 2000s, in Côte d'Ivoire, Rwanda, and Senegal the unemployment rate for those with postsecondary education was seven to eight times higher than that for those with just primary education (World Bank, 2006a). In WAEMU countries, Kuepie *et al.* (2006) find that unemployment levels generally increase with the level of education, at least until the end of the secondary. This result is qualitatively similar to that of Serneels (2004) in the case of urban Ethiopia in 1994. Focusing on young men aged 15-30, who face an unemployment rate of 50 percent, he finds that the probability of being unemployed increases with education up to the senior secondary level, while the impact of tertiary education is insignificant. Serneels provides an explanation for this result: he shows that more educated young people have higher aspirations and therefore are willing to remain unemployed until they obtain the job they want, typically in the public sector. However, the World Bank (2006b) points out that, over time, as youth gain initial experience, higher education increases the employment incidence and enhances occupational mobility. From the 2000/2001 ILFS (Integrated Labor Force Survey) in Tanzania for instance, controlling for experience, the incidence of employment among urban men with the highest level of education is estimated to be about 26 percentage points higher than among men with no education.

Knowledge gaps:

The role of education in access to employment, and more generally the link between human capital investment, informal sector participation, and work trajectories are promising fields of research in the African context. Indeed, little is known on the complex mechanisms of over education for instance which may give birth to high unemployment rates of the skilled labour force (in North Africa for instance). Moreover, knowledge is lacking regarding possible gender specificities in access to employment, in particular in the informal sector.

¹⁷ The Calvès and Schoumaker (2004) study focus on the two main cities of the country, Ouagadougou and Bobo-Dioulasso. The first cohort are people born between 1955 and 1964 and who were living in the two cities when they were 15-24 y.o., the second cohort was born between 1965 and 1974 and the third cohort is made up of contemporary youth (born 1975-1984).

3.2.2. *The private rate of returns to education (RORE)*

Education policies can help reduce poverty by increasing the earned income of the most educated workers. It is therefore useful to know the private rate of return to education (RORE) for individuals with different living standards in different countries. If returns to education are high for individuals from poor families, poverty reduction policies designed to promote equal opportunities in access to schooling would be appropriate.

According to the standard human capital theory, private ROREs are thought to result from wage compensations for workers' different levels of human capital endowment. The Mincer earnings model derives directly from the theory's assumption that individuals are paid based on their marginal productivity. However, numerous objections and criticisms have been made regarding the assumption that education and productivity are the only determinants of differences in individuals' earnings. The premises of the human capital model were based on developed countries (mainly the United States). Yet many authors have demonstrated, particularly in an African context, that the traditional human capital theories postulating the levelling of income levels between individuals with identical levels of human capital endowments do not fit when markets are imperfect or segmented.

General findings on the RORE in Africa

From the latest regional assessment on the economic return to educational investments (Psacharopoulos and Patrinos, 2002), it emerges that Africa is the continent in which:

- private and social returns to education are high: one additional year of schooling provides an 11.7 percent increase in individual earning in Africa against an average of 9.7 percent for the rest of world;
- private and social returns to education are much higher in primary than in secondary or tertiary education: social returns amount to 25.4 percent in primary education against 18.4 percent in secondary education and 11.3 percent in higher education.

In addition, from Psacharopoulos' review, it emerges that private returns tend to decrease when the level of education improves (concave RORE) and that at a given level of education, private returns decrease with the level of development (and social returns follow the same trends).

However, many authors cast doubt on the validity of the available estimates of the ROREs in Psacharopoulos and Patrinos (2002) review. For instance, a recent study by Schultz (2004) shows that in six countries of SSA, private returns are higher in secondary and tertiary education. While the surveys used in Schultz (2004) are representative of the population, this is not true for many countries in Psacharopoulos and Patrinos (2002). In a critical review of the RORE literature in SSA, Bennell (1996a) also points out "*empirical shortcomings which seriously undermine the credibility of aggregate RORE estimates for the continent as a whole.*" A number of other recent studies have estimated the private RORE in SSA, using household level data or population surveys¹⁸.

Other studies make use of firm level and matched worker-firm data. Using panel data on manufacturing firms of Cameroon, Ghana, Zambia, Kenya and Zimbabwe, Bigsten *et al.* (2000) assess the importance of the returns to human capital relative to physical capital. They find that rates of return on physical capital exceed 20 percent and are much higher than the average return on human capital. Muller and Nordman (2004, 2005, 2006a) estimate the ROREs in Morocco and Tunisia using non-representative samples of workers in manufacturing plants. They account for the effect of the firms' wage policy on earnings and find that this affects the extent of the returns to human capital. More specifically, they show that accounting for within-firm human capital externalities with matched worker-firm data significantly reduces the extent of the ROREs in both countries.

¹⁸ These include Mwabu and Schultz (1996, 2000), Siphambe and Thokweng-Bawena (2001), Michaud and Vencatachellum (2003), Kazianga (2004), Lassibille and Tan (2005), Girma and Kedir (2005), Nordman and Roubaud (2005), Casero and Seshan (2006), Kuepie, Nordman and Roubaud (2006), Ewoudou and Vencatachellum (2006), Dragoset and Vilhuber (2006) and Parent (2006).

Another interesting study that makes use of matched worker-firm data for eleven African countries is carried out by Fafchamps, Söderbom and Benhassine (2006). Their results indicate that the education wage gap (the difference in earnings between workers at different levels of schooling) can be divided into three parts: sorting across firms, sorting across occupations within firms, and the rest from higher wages paid to better educated workers in the same firm and occupation. On average across the 11 countries, sorting across firms accounts for one fifth of education wage gap while sorting across occupations accounts roughly for one third. This suggests that most of the effect of human capital on earnings operates through job selection.

Differing ROREs across sectors of employment

Many studies referring to the RORE in these countries overlook the fact that the existence of different employment segments can have major implications as to the role of education in labour market insertion¹⁹. Several recent studies estimate the RORE in Africa with a cross-sector viewpoint: Lassibille and Tan (2005) in Rwanda, Casero and Seshan (2006) in Djibouti; Kazianga (2004) in the public and private formal sectors of Burkina Faso; in the last two papers, ROREs are found to differ substantially between the private and public sectors and between men and women (the latter is estimated only in Burkina Faso).

Kuepie *et al.* (2006) contribute to this research issue by providing estimates for the informal or self-employed sector (non-wage earners) in seven West African capitals and control for the endogenous sector choice selection as well. In five cities out of seven, the estimates show that the public sector is the sector in which education is given the most value. The modern private sector comes next (except in Niamey and Lome where it is the most rewarding) and, finally, the informal sector (with the exception of Ouagadougou where the informal sector comes before the formal private sector).

RORE in agriculture

Although there is little doubt that better educated workers earn higher wages in the modern sector, whether education raises farm productivity remains a debated issue. An often-cited (although rather dated) study by Jamison and Lau (1982) reviews the results of more than 35 studies that measure returns to the education of farmers in developing countries. Most of these studies suggest that education has a positive effect on farm production, but the statistical significance of this result is often weak. In particular, Jamison and Lau's review finds no support for the hypothesis that there are any returns to education for farmers in Africa.

This result is supported by evidence from some studies based on LSMS-type household surveys. One example is Glewwe (1990) who finds that the impact of education is rather weak in the rural areas of Côte d'Ivoire. The lack of a significant effect of schooling on farm profit has often been attributed to either the low technological level of production or the absence of technological change in Africa. Foster and Rosenzweig (1996) present evidence that technological change increases the returns to schooling. But Deaton and Benjamin (1988) find no impact of education on the use of modern inputs in cocoa and coffee production in Côte d'Ivoire. Jolliffe (1998) examines the impact of cognitive skills on the income of households in Ghana. His results show that cognitive skills have a positive effect on total and off-farm income but do not have a statistically significant effect on farm income. More recently, Cogneau *et al.* (2006), estimate farm income functions for Côte d'Ivoire, Ghana, Guinea, Madagascar, and Uganda. Their results indicate that the head of household's level of education only has a significant impact on agricultural productivity in Madagascar and Uganda, where it remains nonetheless limited.

¹⁹ Vijverberg (1995) observes that some types of employment, such as self-employed work, cannot be linked to the individuals' credentials, or to a pay scale of any sort, meaning that education can only play a minor role in explaining individual earnings levels. Bennell (1996a) notes that many studies on developing countries are based on data for formal-sector employees and do not take into account income in rural and informal sectors where returns to education are probably very low. Glewwe (1996) also reveals that the wage structures in the private sector reflects the impact of education on the workers' productivity more than they do in the public sector.

Returns to general vs. vocational education

Although the debate over the returns to vocational versus general education has become an important research issue in education (Bennell and Sergerstrom, 1998), adequate empirical work in Africa is still lacking. Kahyarara and Teal (2006) add new evidence to this debate by comparing returns to vocational and general education of workers in Tanzanian manufacturing firms. Whereas most of the previous evidences are based on cross sectional data, their paper provides a comparison of the returns to general and vocational education using firm level panel data with information that allows a control for time invariant firm attributes, endogeneity of education and other worker-firm characteristics. Findings are that general education is more rewarding than vocational education and on-the-job training.

Concave, constant or convex ROREs?

Much of the comparative work on the ROREs across countries uses a linear specification of the earnings function (e.g. Trostel, Walker and Woolley, 2002), implying that the average equals the marginal return to education. However, constant or decreasing ROREs are more and more challenged in both developed and developing countries (Card, 1999) and non-linearities (mostly convexity) in the returns to education have been put forward by some studies on Africa (Bigsten *et al.*, 2000; Schultz, 2004; Söderbom, Teal, Wambugu and Kahyarara, 2006; Kuepie *et al.*, 2006; Nordman and Wolff, 2006).

For instance, in the seven above-mentioned main cities of French speaking West Africa, Kuepie *et al.* (2006) find a non-constant rate of returns to education, with a convex profile. These convex marginal returns mean that education has a growing impact on remunerations in these urban labour markets. This result goes against the traditional model of human capital accumulation whereby the marginal return to education is assumed to be constant or even decreasing. This convexity has also been observed in English-speaking countries such as Kenya and Tanzania by Söderbom *et al.* (2006) on samples of employees in manufacturing firms and in Ghana (Schultz, 2004).

These results are important because whereas traditional theories assume constant or concave marginal returns to education, which ensure immediate, high profitability from the first years of schooling, current data in Africa (such as the *I-2-3 Surveys*) helped bring to light convex returns to education. Recommendations for policies aimed at promoting primary education in SSA were drawn up on the basis of this premise. These results mean that stimulating access to primary education is only effective in reducing poverty if the individuals concerned by this type of initiative can continue their studies in order to take full advantage of the high marginal returns related with long studies. However, this poses the delicate question of managing the flows of students leaving the general secondary and higher education cycles, which could certainly benefit from an in-depth review on the (too) general content of the schooling programmes, in order to readapt them to the labour market demands. Convexity may also be part of the explanation as to how rapid expansion of education in Africa has generated so little growth if expansion has been concentrated at lower levels of education (Söderbom *et al.*, 2006).

Does education still help young people earn more?

This question is of great importance to policy makers because the ability to increase the demand for education depends greatly on the households' opinion on how profitable it is on the labour market, i.e. its ability to provide attractive – well-paid – jobs. Yet, the results in the past few years are ambiguous in this respect. The idea of a widening education-job gap is widespread. Unemployment of qualified workers, worsened by the lasting freeze in civil service recruitment and the lack of vitality in the formal private sector, massive unemployment and an education system unsuited to the needs of the informal sector, and more generally the deterioration in the quality of public education under pressure from drastic budget restrictions, are all factors that tend to undermine the value of investment in schooling for young people.

Curiously, many studies do not take into account the fact that considering young and old individuals in the same estimates of the ROREs, or more generally individuals belonging to different age cohorts, is problematic if these two categories receive different rewards for their observed work characteristics

due to differentiated labour market conditions at the time they got their job. Kuepie *et al.* (2006) define as young people those below 30 years old. They find that generation effects are not significant when looking at the returns to education in three cases (Cotonou, Niamey and Lome). In the four other cases (Ouagadougou, Abidjan, Bamako and Dakar), there are significant differences in the earnings-education profiles across the two cohorts. More specifically, in the cases of Bamako, Ouagadougou and Abidjan, the convex earnings-education profile previously observed is more acute for young workers than for their elder counterparts. With the same definition of young workers, Söderbom *et al.* (2006) also find that, for both Tanzania and Kenya, earnings profiles differ across the two age groups.

Knowledge gaps:

Despite the huge variability of the estimates across sectors, and countries, returns evaluated in each employment sector are scarce in the overall literature on the ROREs in Africa. This may be explained by data limitation. More specifically, many studies do not attempt to estimate the returns to schooling in the informal sector arguing that earnings data from this sector also incorporate returns to physical capital and to risk borne by individuals, which are difficult to disentangle from returns to education in the absence of specific information (Kazianga, 2004).

3.2.3. Costs and benefits of vocational education and on-the-job training

Although vocational education and training (VET) was developed in most countries as a means of resolving the problem of access to employment of underachieving pupils and school drop outs, the poor condition of many African VET systems makes it difficult for young graduates to meet the private sector skill demands²⁰. This situation is due to underinvestment in the system, given the low esteem given to vocational training, the priority being given to the general education systems. Many French speaking African countries have also inherited education and training systems based on residential technical and vocational education and with little flexibility. Also, many African systems find it difficult to balance the dual purpose of the formal and informal sectors, i.e. to train high quality workers and to give second chances to school dropouts.

More generally, mechanisms for closing the skill gap across categories of workers in Africa have been articulated in terms of supply-side reforms: improving the educational system so that more young people become educated, and helping existing workers to enhance skills through formal learning, such as classes and accreditation services provided by vocational schools. However, such provision is often believed to be so much subject to supplier capture (as suggests the diversity of vocational schools and diplomas, either private or public) that it does not respond to employer needs. Quite recently, in developed countries, there is an increasing recognition within policy makers circles that the demand side of the skills equation also needs attention and that more effort needs to be directed towards the development of the skills of the existing workforce, in addition to improving the educational outcomes of learners in schools, colleges and higher education (Nordman, 2003). This view is also shared by VET practioners in Africa for whom the move towards a dual system of vocational learning for the youth cannot be achieved without improving training access of the adults (Walther, 2006h). Developing access to more efficient formal on-the job training systems might then be of crucial importance in Africa.

Despite the lack of relevant data, the World Bank has commissioned an important report on the issue of skill development in SSA (Johanson and Adams, 2004). The main conclusion to be drawn from this report is that the private sector makes a far greater contribution than governments to skills development in the labour force in most countries in SSA. The skills developed in the labour force by the private sector come from three different sources: companies, private training providers and learning in the informal sector²¹. With respect to companies, they usually provide their own job training schemes without help from the government. The literature on training in developed countries seems to suggest that the existence of factors such as weaknesses in the capital market, the prevalence of small enterprises and large numbers of unskilled workers reduces the incentives for providing on-

²⁰ According to the 1-2-3 Surveys in seven WAEMU cities, the unemployment rates of individuals aged 15 and over who followed vocational schools are the highest (22 percent on average).

²¹ We get back to learning in the informal sector in the next section.

the-job training. Most workers need training, but this training could be too expensive for African firms. The weaknesses of the market for on-the-job training could therefore be greater in Africa than anywhere else in the world. Contrary to expectations, however, African firms tend to provide their own job training without support from the governments. In fact, trade liberalisation has resulted in growing competition in most countries in SSA.

Hence, a growing concern regarding the necessity to enhance the benefits of vocational learning appears to be the question of how to encourage employers in Africa to express specific needs and then to train more workers, while they are supposed – or sometimes required – to bear the costs of such training. This important question relates to the costs and the benefits of training in the workplace. The standard human capital theory suggests that an individual's decision to invest in training is based upon an examination of the net present value of the costs and benefits of such an investment. Individuals are assumed to invest in training during an initial period and receive returns to the investment in subsequent periods through increased wages. Purely general training – i.e. entirely transferable from one firm to another – is financed by workers, and the workers receive all of the returns to this training. On the other hand, if workers invest in entirely firm-specific on-the-job training, the theory suggests that the firm and the workers should share in the returns and the costs. Recent theoretical works have suggested that alternatives to the traditional human capital model should be considered. Empirically, in developed countries, it is observed that a certain number of firms participate in the financing of general training (Acemoglu and Pischke, 1999).

There is undeniably a lack of empirical evidence on the cost-sharing of training in African countries. This is due to strong data limitations. Amongst the few empirical works having examined these questions, Mengistae (2001), using data from manufacturing firms in Ethiopia, argues that on-the-job training is a significant source of individual wage growth, although this effect is only inferred from the impact of job tenure since on-the-job training itself is not explicitly observed in his data. In Burkina Faso and Uganda, returns to work experience are high for young workers and decline with age. At 20 years old, one more year of working experience increases wage by 6 percent in Burkina Faso and by more than 4 percent in Uganda. Returns drop to around 1.5 percent in both countries when workers reach 40 (World Bank, 2006a).

Using the RPED (Regional Program on Enterprise Development) surveys, Dabalén, Nielsen and Rosholm (2003) explore the current on-the-job training by enterprises in the manufacturing sectors of five African countries (Côte d'Ivoire, Ghana, Kenya, Zambia, and Zimbabwe). Unlike the predictions of the competitive models of training, they find that enterprises pay for and provide general and specific training. In the context of imperfectly competitive markets, concerns about enterprises failing to invest in general skills may then be over-emphasized. They also find that firms that are foreign or large provide more training than domestic and small firms. Among workers, those with more education receive more training. These findings point to the selectivity of access to training. This offers some guidance to targeting of training access on equity grounds to non-tradables and to workers with lower education levels. Finally, the authors show that despite non-competitive nature of labour markets, trained workers receive significant wage premiums.

Muller and Nordman (2006b) also investigate the cost sharing hypothesis in the case of manufacturing plants in Tunisia. They find evidence that, for the workers of their unrepresentative sample of garment and electronic firms, acquired human capital across firms over time is entirely general and is therefore transferable from one firm to another. More specifically, they show evidence of positive returns of past on-the-job training on wage growth as well as negative returns to ongoing on-the-job training, which is consistent with cost sharing between firm and workers. As a consequence, their findings are consistent with standard theory according to which workers bear the full cost of their *general* training spell in accepting a lower wage during their training period.

Another interesting study can be found in Frazer (2006). The author explores the institution of apprenticeship in Ghana and estimates a model where apprenticeship training increases an individual's productivity in the current firm, but not in any other firm. Apprenticed workers remaining within the firm are more productive than apprenticed workers from other firms. However, because their outside option is no better than apprenticed workers from elsewhere, their wages are not higher than

apprenticed workers from other firms. For this reason, the returns to apprenticeship are in self-employment, where a former apprentice basically replicates both the technology and business practice of the apprenticeship firm. Indeed, apprentices are very eager to enter self-employment, and are constrained only by capital from becoming apprenticed entrepreneurs.

3.2.4. *Non-formal training and training in the informal sector*

On-the-job training represents a major part of total training received by workers during their life. While allowing the completion of initial training in accordance with the precise needs of firms, on-the-job training also enables firms to correct the insufficient initial training of the oldest cohorts of workers or to adapt it when it becomes obsolete in a context of technical or organisational change. However, the difficulty in defining and measuring this type of training makes it unclear how to determine its impacts or how to evaluate its spread. Generally, within on-the-job training, we distinguish formal training from informal training (or non-formal). But the attempts aiming at measuring training provided by the employers tend to focus only on formal training and to neglect therefore the informal learning processes²². Indeed, formal training is relatively simple to measure since it is clearly identifiable: it is generally provided for a determined duration by a recognized trainer in a precise place. This is not the case for informal training that appears indistinguishable from the employee's productive activity. Informal training can be described as an unconscious or conscious process of knowledge acquisition when the worker operates in his(her) workplace and stimulates this learning during the repeated exercise of his(her) professional activity.

Hence, it is not sufficient to measure formal training provided by employers for estimating in an adequate way the whole training that they organise. The absence of assessment of informal training leads not only to an incorrect evaluation of total training supplied by the productive system, but also, it distorts international and intra-national comparisons since the combination of formal and informal training differs across countries, sectors, branches of activity, size of firms and occupations.

Some attempts have been made to assess the extent and efficiency of on-the-job training in Africa. Because of the overwhelming share of the youth in the informal sector (more than 80 percent in Francophone West Africa, see Table 6a and 6b in Appendix), studying on-the-job training in this sector is naturally a priority. This is all the more important given that public VET systems have generally failed in providing young workers of the informal sector with the necessary human capital to access stable and decent jobs. Johanson and Adams (2004) show, that in SSA, training by traditional learning is the most frequent form of organised training in the informal sector. Traditional learning probably makes a far greater contribution to developing the workers' skills than all the training providers taken together. Training by traditional learning is not as well-developed in Eastern and Southern Africa as in Western Africa. However, in all these countries, it is probably the largest source of technical and professional training for informal sector workers. In Ghana, for example, around 90 percent of the initial training of skilled personnel comes from traditional learning in the informal sector. This learning takes care of people who do not have the level of education required to do formal training and serves rural populations and poor people in rural areas. However, it perpetuates traditional technologies and lacks norms and quality assurance (see also Box 4).

²² For France for instance, there are the surveys *Formation et Qualification Professionnelle*, *Formation Continue* (CEREQ) or *Coûts de la Main-d'œuvre et Structure des Salaires* (INSEE) which focus only on the formal part of training.

Box 4: The AFD study on job training in the informal sector

The Research Department of the Agence Française de Développement (AFD) launched a study programme on job training in the informal sector in 2006 (Walther, 2006a, 2006e, 2006h). The study includes field surveys in several African countries including Angola, Benin, Cameroon, Ethiopia, Morocco, Senegal and South Africa. Preliminary survey reports are already available (Walther, 2006b, 2006c, 2006d, 2006f, 2006g).

On the subject of youth training, for young school-leavers this mainly consists of traditional learning taking place in small-scale workshops and micro and small enterprises. Such systems are still predominant in all the Sub-Saharan countries. They are characterised by on-the-job training that consists in acquiring, in a work situation, the basic techniques required to do a job. The different studies of the types of learning used show that the young people are confronted with two main difficulties (Walther, 2006a):

- the insufficient qualifications of the master craftsmen and their inability to explain the theory behind certain notions and techniques,
- the lack of organised progression in the teaching within the learning process, even though this may have distinct phases for assimilating behaviour, for the use of instruments and finally, for taking part in all the master craftsman's tasks.

Despite these shortcomings, according to the AFD's studies, traditional learning is a key factor in giving young people access to the job market. Recently, in countries that have set up technical assistance, particularly cooperation agreements with German cooperation, this has helped make certain traditional learning systems evolve towards dual learning methods and rhythms. According to Walther (2006a), the key role played by learning as a means of professional and social integration and its ability to change to a more organised means of training, argue in favour of giving it support and improving it with help from the local public authorities, but without the authorities including it in the formal sector regulations. Other recommendations can be found in Walther (2006h), some of them stressing the necessity to develop structured professional organisations, pre-apprenticeship schemes for children who dropped out school, and appropriate and long term funding instruments, etc. As Walther (2006d) underlines, these systems, certain of which are considered as examples of what can be done in the informal sector as a whole, go beyond the stakes of small-scale craft enterprises.

As for the evaluation of the impact of informal learning, economic literature comes up against a major difficulty inherent to the very *elusive* nature of training (Brown, 1990). An essential aspect of on-the-job training concerns therefore the analysis of the individual impacts of different processes of human capital accumulation in the workplace. Why is it important? It seems that formal and informal training could not only affect the same category of workers differently, but also, that each of them could play a very specific role in employers' training strategies: formal and informal training can either be substitute or complementary schemes. Moreover, one question remains: do formal and informal learning provide the same kind of economic outcomes for both workers and organisations that implement them? Finally, from the few attempts aimed at measuring informal training provided by firms (mostly in the United States), it appears quite clearly that not taking into account the informal component of training would lead to a huge under-estimation of the total amount of training provided to workers by the productive system. For these purposes, indirect measures of training are also very helpful²³. For instance, researches by Nordman (2000) and Destré and Nordman (2002), using matched employer-employee data on France, Mauritius, Morocco and Tunisia, have provided a means of measuring the effects of informal training on earnings. Using this approach, these studies were able to distinguish between the relative contributions of informal learning from observation and from experience (learning-by-doing).

²³ This includes using structural models of workplace learning in order to assess the relative importance of different types of on-the-job training (learning by watching, learning by experience, formal training, etc.).

Knowledge gaps:

The surveys carried out by the AFD in 2006 are a useful contribution as they help explore the systems that are being set up and organised in the field of training and qualifications for master craftsmen and apprentices from traditional learning schemes in the informal sector in Africa. However, they fail in providing useful quantitative data of training beneficiaries. To date, there is very little data available to determine the advantages and shortcomings of these different learning systems and, above all, to determine their impact on the job trajectories of young people in the labour market. Specific surveys on groups of beneficiaries of training programmes and initiatives should therefore be carried out. For Africa, the empirical literature is very meagre partly due to the lack of relevant data. In the field of enterprise training, finding comparable and homogenous indicators across countries is difficult because definitions and concepts of workplace training vary from one survey to another.

3.3. Access to other forms of capital

3.3.1. Social capital, ethnicity and access to employment

For developing countries, and the African countries in particular, we have found only two specific studies on the relationship between social capital and access to employment (Collier and Garg, 1995; Krishnan and Sciubba, 2005). Some work has also been done on the impact of ethnic belonging in Africa, which is easier to identify and to measure.

In Africa, the system of extended families ensures a certain form of solidarity but also leads to a number of reciprocal obligations on a wider scale. Arranged marriages are also part of networks of alliances and obligations. The dividing line between family in the strictest sense, lineage, belonging to a village or ethnic group is therefore vague, and identifying the “family network” is a complex matter. Urbanisation, demographic change and the impact of mortality rates, particularly relating to HIV, lead to modifications in the family structure and these networks of solidarity.

The study by Collier and Garg (1995) on Ghana concerns the impact of belonging to traditional initiation groups, organised by age group, on youth employment in the modern sector of the economy. This institution, which transcends the strict family framework, is an example of the complexity of “parental relationships” in Africa. Belonging to an age group is non-elective; its members are bound by a system of sharing, of mutual aid and reciprocal obligations under the threat of retaliation, of which exclusion is just one example. The authors question the ability of this traditional institution to introduce a system of preferences concerning the access to employment in the modern sector of the economy. Their results show first that the benefits received from belonging to an age group depend on the size of this group (locally dominant group), and second, that favouritism only works in the public sector, but on a large scale, and not in the private competitive sector. Krishnan and Sciubba’s work is mainly theoretical. It stems from the literature on the formation of endogenous networks with an application concerning the formation of work-sharing networks in rural areas in Ethiopia. No attention is paid to the age of the members who belong to these work-sharing networks.

Apart from Collier and Garg’s work, economic literature on social capital and access to employment for young people is practically inexistent. The place of adolescents and young adults in the family has not been studied to any great extent, nor has the beneficial role of family structures for the entry into active life and adult life. Studies made in economics on social mobility, inter-generational mobility or occupational mobility partly cover this gap (Cogneau *et al.*, 2006), but do not address specifically the question of social capital, which remains undefined and ignored in this context.

On the contrary, research on family networks is more forthcoming in demographics and sociology, as shown for instance by the proceedings of conferences on family transformations or on youth and employment (Pilon, Locoh, Vignikin and Vimard., 1997; Le Bris and Chauveau, 1993). It is also very abundant on the impact of the family or family networks on health, education and child labour (under 15s), where the family has a direct, determining role. Generally speaking, all the research that takes into account the family framework focuses on the role of women (and therefore health and education) and the well-being of children and ignores the other members of the household, such as young

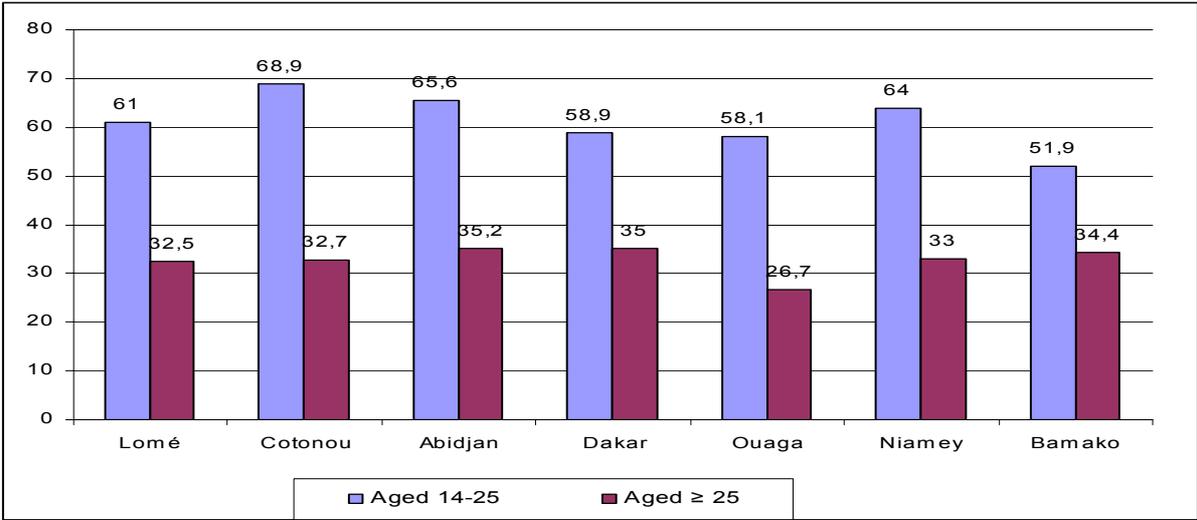
adolescents for example. It is possible that as far as young adolescents and access to employment is concerned, the role of the father could become decisive.

Although they do not directly concern the causal evaluation of the relationship between social capital and employment, there are a large number of studies on the more specific issues of migrations, the family or inter-ethnic relationships that take into account the impact of belonging to a group on employment. Many young people migrate from rural to urban areas expecting better opportunities there (Ogbu and Ikiara, 1995; Linden, 1996; Sommers, 2003). This has increased the urban population and the competition in the urban labour market (Schoumaker and Beauchemin, 2002). In a context where social relations are as crucial as qualifications, young urban migrants searching for a job face an uphill struggle of “surviving” with limited social networks (Lange and Martin, 1993). Increasingly, the informal sector provides employment to young educated people, whose access to modern sector employment is declining. With lower literacy rates, rural young people are at a disadvantage relative to more educated urban young people.

If we examine the way young active workers have obtained their employment, it can be seen that young people have access to their first jobs by family or personal relationships more than adults do. For young people, entering active life is therefore more dependent on relational networks (Figure 6).

In this perspective, the fact that individuals belong to ethnic groups is an important determinant of their ability to integrate and progress in the labour market. Indeed, the results of the *I-2-3 Survey* on seven capitals in West Africa show that between 30 and 40 percent of the individuals interviewed declare that they obtained their jobs through “personal relationships”. This is confirmed by a recent paper (Bossuroy, 2006), which shows empirically that the fact that a person has obtained a job through “personal relationships” is strongly and significantly correlated with the ethnicity weighting for individuals in urban areas, as measured by a question in the “Democracy” module. Studies based on Afrobarometer data also found that ethnicity is mobilised more for jobs in the modern labour market (Miguel and Posner, 2005) and that this mobilisation of network relationships is greater for individuals in highly competitive jobs (Bratton, Mattes and Gyimah-Boadi, 2004). Nonetheless, the relation of ethnicity to labour markets remains debated. In the case of Cameroon, which is a highly ethnically polarized country, Roubaud (1994a) finds neither an ethnic discrimination in access to employment nor in earnings.

Figure 6: Percentage of Active Individuals Who Have Obtained Their Employment through Family or Personal Relationships (%)



Source: *I-2-3 Surveys*. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

Knowledge gaps:

Although the social capital and correlatively the living area are widely recognised as a key to the first access to job for young people this is rarely investigated in developing countries. The reason may be that standard surveys do not capture the nature and range of these complex ties. The geographical mobility of young people or their inactivity in the waiting for better jobs are greatly facilitated by the solidarity acting through family links, village membership or along ethnic lines. Studies focus on children well being and the relationships between young adults' activities and environments are largely unknown. This quite new subject would deserve a better attention and specific surveys.

3.3.2. Access to land

In the rural villages of Africa, land is the central production factor for agrarian households and, in most countries, is mainly acquired through transmission from one generation to the other. Since access to land determines to a large extent the employment status of most youth in rural areas, an assessment of youth access to labour in rural areas should rely on an assessment of youth access to land. With that in mind, this section will focus on three main questions:

- Do young people have access to land in rural areas?
- Has the situation deteriorated for the youth in terms of access to land?
- If so, what factors could be responsible for this deterioration?

Few studies explore the issue of access to land for young people. While data on land holdings is available in most nationally-representative household surveys, it is seldom presented and analysed, and even less so according to age categories. Data from the *Enquête Permanente des Ménages* that was carried out in Madagascar in 1993 suggest that household with heads aged 15 to 24 operate land areas that are no smaller than those of older generations. Nevertheless, the most striking result is that only 3 percent of young people are actually independent from their family. This implies that the sample of young household heads – for which data on areas operated are available – represents a very small share of their age group and is bound not to be representative. Two other features emerge. First, the difference in average land areas bought across generations seems to support the life cycle accumulation hypothesis. Second, figures on average land areas inherited do not seem to indicate any significant trend. While this type of data provides a picture of the situation at a given point in time, it is difficult to conclude whether land access is less favourable than is used to be for the rural youth since the majority of them is still dependent.

More specific data is needed in order to assess the evolution of access to land for young adults. As mentioned above, cross sectional data on land holdings is not enough because land holdings are the subject of life cycle evolutions. What is needed is either repeated cross sections at different points in time, panel data or retrospective data where a sample of farm households are asked about how much land they inherited and how much land their parents inherited.

A couple of country-level or regional-level studies explore some features of land inheritance. Quisumbing, Estudillo and Otsuka (2004) study the factors affecting land inheritance and schooling across generations in the Philippines, Indonesia, and Ghana. Their results indicate that the average size of landholdings inherited by the respondents is usually smaller than that inherited by their parents, although that does not appear to be the case in Ghana. In the case of Madagascar, Senne, Gubert and Robilliard (2006) provide some evidence that, in some rural areas of the country, average rice land holdings have decreased between current and previous generations of farmers.

Another study by Ayalew *et al.* (2000) focuses on the case of access to land in Ethiopia in the context of soldiers' demobilization. Ethiopia's land tenure system is characterized by a high degree of instability. Since the revolution of 1975, land has been state owned but a number of reforms have been implemented since then, each time putting into question the conditions of access to land. The authors argue that current land tenure arrangements are flawed and that they marginalize young adults. According to the authors, younger generations cannot claim new fertile land nor invest in land. As a consequence, young adults end up dependent on their families and farm plots are subdivided into ever smaller parcels.

In a village of North-western Rwanda, André and Platteau (1998) also find that young adults have difficulties leaving their parents and setting up their own households owing to a lack of inheritable land and to insufficient opportunities of acquiring additional land through the market. Over a five year period, they find that the proportion of children in age of marriage (20 to 25 years old) still living with their parents has increased more than two fold.

Several factors could contribute to the worsening of the situation for African youth with respect to access to land. Two of these explanations are related to recent demographic trends. First, the well documented rapid population growth in Africa has induced a transition from land-abundant to land-scarce situations in many regions. Increased population pressure on land resulting from this transition could be expected to have resulted in a decrease in terms of areas available for younger generations. Second, increased life expectancy could have resulted in latter access to land for younger generations.

The decline of farm sizes as a result of increasing land scarcity over time is documented in some African countries by Jayne *et al.* (2003). Their analysis is based on data compiled from nationally-representative household surveys carried out between 1990 and 2000 in five countries: Ethiopia, Kenya, Rwanda, Mozambique, and Zambia. Their results indicate that farm sizes have declined and that land distribution within the small-farm sector appears to become more concentrated over time.

Other elements supporting the same stylized fact can be found in recent literature that has been driven by increased awareness of economic and political importance of land-related conflict in African countries. Examples include Rwanda (André and Platteau, 1998), Cote d'Ivoire (Chauveau, 2000), and Uganda (Deininger and Castagnini, 2006). André and Platteau (1998) report the findings of an in-depth study of a highly densely populated area in northwest Rwanda conducted during the period 1998-1993. They demonstrate that acute competition for land has resulted in increasingly unequal land distribution and rapid processes of land dispossession through both operation of the land market and evolution of indigenous tenure arrangements. In Cote d'Ivoire, Chauveau (2000) relates land conflicts to the political exploitation of the question of nationality surrounding the presidential elections. In Uganda, Deininger and Castagnini (2006) explore the incidence of land conflicts, the impact of legal changes on their frequency, and their impact on productivity. They argue that rapid expansion of the population, combined with either limited opportunities for non-agricultural employment or increasing non-agricultural demand for land, is a key factor that causes land to appreciate, resulting in higher competition for a limited or decreasing amount of land available.

Knowledge gaps:

While some empirical evidence at the local level support the stylized fact of a more difficult access land holdings from younger generations, general data is lacking to estimate the magnitude and seriousness of these stylized facts at the level of the African continent and to give the full picture on the transmission of land across generations in Africa. This lack is mainly related to the fact that land ownership systems in rural areas are complex and is further aggravated by the difficulty of measuring land plots, for both conceptual and technical reasons.

3.3.3. Access to capital

Given the size of informal and self-employment in most African countries, access to start-up capital is an important issue when dealing with the problem of youth employment. Unfortunately, to the best of our knowledge, no study has examined specifically the issue of youth access to start-up capital in African countries. More general studies on access to capital in some African countries do exist however (see for instance Aryeetey, Baah-Nuakoh, Duggleby, Hettige and Steel, 1994; Frazer, 1996). In Ghana, Aryeetey *et al.* (1994) report the fact that credit for start-up is rare. Also in Ghana, in a recent paper on apprenticeship, Frazer (2006) reports that for former apprentices one of the principal constraints is obtaining finance in order to start up their own business.

Knowledge gaps:

To the best of our knowledge no study has examined specifically the issue of youth access to capital in African countries.

4. CAUSES OF THE YOUTH LABOUR MARKET DISADVANTAGE: A DEMANDE SIDE PERSPECTIVE

In the context of economic stagnation and of rapid demographic growth that has characterized Africa on the whole over the last decades, this section studies the elements relating to labour demand and institutions that might explain the employment situation of African youth. We focus on the issue of wage flexibility and labour markets rigidities. Economic theory suggests that rigidities might be a cause of unemployment in the formal sector, but there is no consensus on the importance of these so-called rigidities and on their impact in practice in Africa. Although the issues addressed here are crucial for youth employment, this section is shorter than the others because of the small number of studies directly focusing on youth. For the same reason, we do not deal here neither with the sources and patterns of economic growth nor with the issue of the business climate, which are usually put forward by most studies on African employment.

4.1. Labour demand and wage flexibility

The Harris-Todaro model (1970) of labour migration and unemployment provides a way of addressing the issue of employment in Africa. In this model, the labour market is divided between the agricultural and the manufacturing sectors. Wages are supposed to be relatively high and rigid in the manufacturing sector, so that employment in this sector is determined by labour demand alone. Individuals in the rural areas compare their actual income with their expected income in the urban labour market, determined by the product of the manufacturing sector wage and the probability of employment, and migrate if the expected urban wage is higher than actual agricultural earnings. The main conclusion of this model is that any increase of the manufacturing sector wage or demand increases the expected income, therefore inducing more migration and more unemployment. This model can be adapted to reflect the duality of the urban labour market, divided between the formal and informal sectors (Kingdon, Sandefur and Teal, 2005a) and provides us with the theoretical framework necessary to identify the mechanisms underlying the allocation of workers between urban and rural areas and, in urban areas, between the formal and informal sectors and unemployment.

Whether or not labour markets are flexible is an important question to address when dealing with youth unemployment. Indeed, if wages in the formal and/or informal sectors do not adjust in face of unemployment, then it is likely that young workers will face a higher risk of being unemployed because, since they have less experience on the job, they have a lower productivity and because, as firms adjust to macroeconomic shocks by varying their labour demand, in times of recession the number of recruitment reduces, and this affects young people more strongly. Furthermore, when firms start redundancy procedures, it is cheaper to fire young workers rather than older workers.

Kingdon *et al.* (2005a) provide an overview of labour market flexibility in Africa. They identify three dimensions of flexibility: the ability of real wages to decline over time; the tendency for wages to adjust in the face of unemployment; and the extent of wage differentials between sectors and/or firms of different size. Most of what follows in the next three subsections is taken from their survey. We resume their findings and indicate how they shed light on the issue of youth unemployment.

4.1.1. Ability of wages to decline over time

Evidence, based on data from Kenya, South Africa and Ghana, suggests that in English speaking African countries, real wages are flexible over time. Milne and Neizert (1994) conclude that, in Kenya, real wages were quite flexible in the modern sector through the two oil shocks, a severe drought in 1984 and subsequent stabilization programmes. In Ghana, Beaudry and Sowa (1994) note that sector wages were quick to respond to demand shifts brought about by structural adjustment during the 1980s and that this “probably helped achieve the macroeconomic improvements observed”. Casale, Muller and Posel (2004) find that, even though unions are an important part of the wage setting process in South Africa, real wages for Africans have fallen between 1995 and 2003. However, a different picture emerges from French speaking African countries. Rama (2000a, 2000b), in his

study of wage setting in CFA franc economies, concludes that wages in these countries showed some evidence of real rigidity, in that they closely tracked public sector wages and consumer price indices.

4.1.2. Tendency for wages to adjust in the face of unemployment

The apparent lack of real wage flexibility in CFA franc economies might let believe that real wages are unresponsive to unemployment level in these countries. However, surprisingly, this is not the case. For Côte d'Ivoire, Hoddinott (1996) finds a wage-unemployment elasticity of -0.1, a result similar to that found in Canada and the United States. Kingdon and Knight (1999) find the same result in South Africa.

This evidence remains to be interpreted. In some countries, it is possible that the apparent flexibility of real wages results not from changes in nominal wages, but from mistakes being made by workers in negotiating their wage, when they cannot accurately predict the rate of inflation. This might be what happened in Ghana, since the declines in real wages occurred in a period of a highly variable rate of inflation. Côte d'Ivoire tells another story. The wage flexibility found by Hoddinott cannot result from unexpected high inflation, since the country is subject of the rule of the Franc Zone (Collier and Gunning, 1999). Lavy and Newman (1989) found that mean earnings figures, which showed apparent rigidity, hide the fact that during the recession of the 1980s, newly hired and, therefore, low-wage workers were the first to loose their jobs. In fact, the earnings function had shifted down by around 25 percent over a four years period.

4.1.3. Wage differentials between sectors and/or firms of different size

Kingdon, Sandefur and Teal (2005a) review several surveys that evaluate wage differences between the formal and informal sectors in African countries, controlling for differences in workers personal characteristics. In all reviewed studies a sizeable formal sector earnings premium is found, that ranges from 9.6 percent in Mali to 60.3 percent in Cameroun (see Kindgon, Sandefur and Teal, *ibid.*, for a detailed list of countries and references). Other studies have compared the wage of workers with similar characteristics, but working in firms of different size. This has the advantage of providing a clear base for comparison between studies, since the definition of the formal and informal sectors can be subject to variation amongst authors. Looking at data from four Anglophone African countries, Kindgon *et al.* (2005) find that firms that have 100 employees, when compared to firms with only 20 employees, offer a wage premium between 16 percent and 38 percent. Recent work in this area has investigated whether this size effect is due to heterogeneity in unobserved skills of the workforce hired by firms of different size. Until recently it was very difficult to answer this question due to the lack of suitable data. The collection of matched worker-firm panel data has made this possible. Söderbom, Teal and Wambugu (2002) find that the size effect is only slightly reduced when one holds account of unobserved skills. While the firm size effect is not attributable to workers skills differences (either observable or not), it is consistent with a range of other possible explanations towards which we now turn.

The “New Keynesian” economics insists on the importance of imperfect information and/or imperfectly competitive labour and goods markets to explain involuntary unemployment. According to the so-called “efficiency wage hypothesis”, firms set wages higher than the market clearing level, in response to asymmetrical information and in order to reduce monitoring or labour turnover costs. Few studies have examined the applicability of efficiency wage models in Africa. Fafchamps and Söderbom (2004a) use worker-firm matched data across ten African countries from the World Bank’s Africa Regional Program on Enterprise Development (RPED) surveys to establish a connection between firm size and wages. They show that worker effort and productivity increase with both the level of supervision and wages, which is consistent with the efficiency wage hypothesis.

In rent-seeking models, wage differentials between large and small firms result from imperfect competition on the goods market and from the ability of workers to extract part of the rent from the owners of capital. In the insiders-outsiders theory of wage negotiation (see e.g. Lindbeck and Snower, 1988), the number of employed workers (insiders) has a negative effect on their average wage, so that the hiring of previously unemployed workers (outsiders) contradicts the interest of insiders. Evidence

of rent-sharing effects on wages has been found for a wide range of African countries, including Ghana (Teal, 1996) and Zimbabwe (Velenchik, 1997).

The power of unions in setting higher than market clearing wages has been evaluated both in Francophone and Anglophone African countries. Evidence is mixed. For Francophone countries in the Franc Zone, Rama (2000a, 2000b) finds that “*members [of unions] usually have lower wages than similar, non-unionized workers, which probably reflect the ‘subordinate’ nature of the labour movement*”. According to Alby, Azam and Rospabé (2005), this counterintuitive result might be due to not taking into account selectivity effects. On the contrary, in Anglophone countries, several studies point to a positive premium paid to union members (Kingdon *et al.*, 2005a).

Box 5: The informalisation of urban employment following crisis and structural adjustment

The stabilisation, liberalisation and structural adjustment reforms introduced in all the African countries were aimed at reducing market distortions and changing incentives (relative prices), in a view to redirecting production to the tradable sectors and diversifying these sectors and the sources of growth. As the public sector and State-based organisations were seen as a source of inefficiency, their weight in the economy was to be reduced. In the private sector, the structural adjustment reforms were not only supposed to diversify and redirect activities to the tradable sectors, but were also designed to improve firms’ productivity and competitiveness. The challenge was to establish the right conditions to favour the development of small and medium-sized enterprises capable of providing jobs not only for the labour force made available by the re organisation of the major private and public formal companies but also for the newcomers to the labour market. Following the East Asian model, the overall objective was to promote labour intensive growth (World Bank, 1990).

Public employment

The public sector reforms were sequential in SSA. First, they undertook to reduce the number of public sector workers with voluntary redundancy programmes and freezes on civil service recruitment (end of 1980s). Next, public companies in the productive sectors were privatised. Companies in the public services such as water, electricity and transport were privatised later, during the second half of the 1990s. All these measures led to a sizeable reduction in public employment, concomitant with that of formal jobs due to re organisation in the major formal companies²⁴. Since the adoption of the poverty reduction programmes and the new awareness that public intervention was needed to widen the provision of basic services to reach the most needy, public employment programmes have been launched, particularly for teachers. For example, in Madagascar, there were as many civil servants in 2000 as at the beginning of the 1980s (Razafindrakoto and Roubaud, 2001). These new jobs that concern the young generations are, however, based on a revised status for civil servants, with the gradual introduction of contract workers, and new salary scales, often lower than the existing ones. The “under categorisation” of the new civil servants poses the problem of the quality of their work and of the new recruits’ motivation.

Private formal employment

The RPED (Regional Program on Enterprise Development) surveys conducted by the World Bank during the 90’s reveal that at the beginning of the structural adjustment reforms, large enterprises (over 50 employees) reduced the number of jobs, even raising the question of the countries’ de-industrialisation. Although many small and medium-sized enterprises (between 10 and 49 employees) did increase their numbers of employees (Biggs and Srivastava, 1996), the total number of jobs created was not sufficient to reduce unemployment. In the same surveys, but over a longer period from 1993 to 1998-1999, formal employment apparently even decreased in Ghana, Kenya and Tanzania (Harding, Söderbom and Teal, 2004). Micro enterprises seem to have created very few salaried jobs during the 1990s. For example, these studies show that in Cameroon, Ghana, Kenya and Zimbabwe, the probability of micro enterprises becoming enterprises with over 10 employees is practically nil (Biggs and Srivastava, 1996). This result is qualified by Marniesse (2000) who shows that about a third of micro enterprises with 5 to 9 employees surveyed in Abidjan, Cotonou and Antananarivo between 1991-92 and 1995-96 had become small enterprises with 10 to 30 employees. Moreover, she observed that the micro enterprises had increased their jobs, as most of them had gone from the category of 2 to 5 employees to that of 6 to 9 employees.

²⁴ For example, the share of public employment in Ethiopia fell from 4 percent in 1984 to 2.9 percent in 1999; in Kenya the percentage fell drastically from 36 percent in 1990 to 11.4 percent in 2000 (UNECA, 2005, p.67).

Box 5: The informalisation of urban employment following crisis and structural adjustment (Contd.)

It is difficult to conclude from the different perceptions resulting from the surveys carried out in English-speaking and French-speaking countries that adjustment policies have a different impact on the dynamics of micro enterprises and of small and medium-sized enterprises. It would also be interesting to update these studies, as in many French-speaking countries the reforms designed to deregulate the internal and external markets were, in practice, introduced relatively late in the day.

SMEs have not really emerged in most of the countries in black Africa. Although the structural reforms and the emergence of new business sectors such as ICT and tourism have helped create some SMEs, they are still the exception.

Growth of the informal sector

The informal sector has absorbed the surplus of urban labour over the last decades. Time series data are generally missing on this subject. In the case of Burkina Faso, Grimm and Gunther (2006) consider that the share of informal sector in the total urban employment has not increased, contrarily to what is usually claimed. Growth still has a strong but differentiated impact on informal sector dynamics. In Madagascar, where annual LFSs are available since 1995, Razafindrakoto and Roubaud (2003) show that the macroeconomic growth registered during the second half of the 1990s was accompanied by a continuous reduction of the informal sector share in the urban labour force. On the contrary, the political and economic crisis of 2002 immediately reversed this positive trend, the informal sector “recolonizing” the labour market. The case of Cameroon presents a different pattern. While the informal sector burst out during the phase of sharp recession (between 1987 and 1993; see Roubaud, 1994b), the renewed growth trend after the 1994 CFA Franc devaluation has provoked a simultaneous light reduction of employment in the informal sector and a strong growth of informal employment on the whole. What seems to have happened though is a massive informalisation of employment in the formal sector, that is to say a surge of employees without proper contracts or social protection.

4.2. Labour standards in Africa

Labour regulations in Africa are considered to be the most rigid in the world (World Bank, 2005 – see Table 10 in Appendix; UNECA, 2005). According to World Bank (2005), there is a strong correlation between youth unemployment and rigid labour regulations, especially difficulties of hiring (the World Bank takes the example of Burkina Faso, where employers cannot write term contracts, women can work no more than 8 hours a day, etc.): “*With rigid regulation, common in developing countries, employers choose conservatively. Some workers benefit – mostly men with years of experience on the job. But young, female and low-skilled workers often lose out, denied job opportunities*”.

4.2.1. Enforcement and coverage of labour standards

Most African countries have ratified the International Labour Standard Conventions (abolition of child labour, right of association, minimum wage, interdiction of discriminations, of forced labour, etc.). But as noted by Alby *et al.* (2005), there exists a substantial gap between the ratification of ILOs conventions and national laws on the one hand and between national laws and their enforcement in practice on the other hand.

Even at the beginning of the 1990s, when the policies aimed at reforming regulations for the labour market, foreign exchange and the product markets had only just begun, the manufacturing firms questioned in RPED surveys (1993 Burundi, Cameroon, Ghana, Kenya, Tanzania, Zambia, Zimbabwe) did not consider that constraints relating to market regulation were among the key constraints to their development (Biggs and Srivastava, 1996; Teals, 1996). The lack of credit, infrastructures and services to support their activities together with weak demand were far greater obstacles in their view. It should be noted, however, that in certain countries such as Kenya and Zimbabwe labour legislation (minimum wage, redundancy regulations, and restrictions on definite term employment contracts) was given as a constraint to the hiring of new workers by 15 to 30 percent of the companies surveyed. However, the large companies indicated that foreign exchange constraints, which were lifted to a great extent by the stabilisation reforms, were far more restrictive than those

relating to labour market regulations. Generally speaking, market regulation constraints seem to affect larger companies more than smaller ones.²⁵

According to UNECA (2005), labour regulations have not a significant negative impact on employment creations, detrimental to youth employment, for the three following reasons:

- “- *first, the effect of these regulations is limited to the formal sector, which accounts for only a small share of the labour force; for example, in the countries forming the Communauté financière d’Afrique (CFA), only about 5 percent of the labour force is effectively covered by labour regulations, which are some of the most inflexible regulations in Africa (Rama, 1998);*
- *second, even when the regulations are in place, they often are not enforced; as a consequence of limited coverage and poor enforcement, very few workers are effectively protected by labour regulations (...);*
- *third, some regulations provided by the labour code are not binding; case in point: minimum wage in the formal sector; in many countries minimum wages are set at levels below actual starting wages, which may explain why individual as well as cross-country studies have found no significant effect of the minimum wage on employment in Africa (Saget, 2001; Teal, 2000)”.*

Recent studies based on surveys on the investment climate in seven African countries (Eritrea, Ethiopia, Kenya, Mozambique, Nigeria, Uganda and Zambia) highlight the fact that the low productivity rates and high production costs in African firms compared with Asian countries, can only be attributed to a small extent to labour costs. “*Labour costs account for a relatively small share of the total costs of African firms*” (Eifert and Ramachandran, 2004). Furthermore, it is shown that real wages are relatively low: “*Competitiveness must come from increased productivity and largely from lower non-labour costs and greater development of worker skills*”.

Legislation on minimum wages does not appear to be the main explanatory factor for high nominal wage costs or low downward real-wage rigidity. Rama (2000a, 2000b) believes that the public wage policies are a more convincing reason for the observed wage gaps, together with the obstacles to competition on the product market. In the French-speaking countries he studied, private wages follow the fluctuations in public wages, and few branches have a competitive organisation; product prices are therefore set by the dominant firms in the market at higher prices than if there was competition. This low competition on the product market is one of the elements that explain the low productivity of firms in Africa and the small size of the formal segments of the economies.

The positive impact of foreign direct investment (FDI) on employment (both directly and indirectly through “knock-on effects”), wages and labour standards has often been emphasized (Asiedu, 2004; Freeman, 2001). However, Africa suffers from a lack of FDI, which is mostly concentrated in the mining and oil sectors (except from in South Africa). Export Processing Zones (EPZs), which correspond to a particular model of FDI, have been a failure in Africa with two exceptions: Mauritius and Madagascar. EPZs are often considered as “sweatshops” which encourage a “race to the bottom” in terms of labour standards and create unskilled and low-paid jobs. In the case of Madagascar, EPZs managed to create many jobs for the youth while also contributing to improving labour standards (see Box 6).

²⁵ Due to the sampling method used for the RPED surveys, the authors of the report warned against the possible under-representation of large enterprises, which could lead to an underestimate of the impact of the legislative constraints on the development of large companies.

Box 6: Export processing zones in Africa, better job opportunities for youth?

Madagascar is one of the few “success stories” of export processing zones in Africa. The *Zone Franche* specializes in textile-clothing exports to the US and UE markets, benefiting from trade preferences (*African Growth and Opportunity Act, Everything but Arms* initiative, etc.) on these markets. It employs around 100,000 workers, mostly based in the capital Antananarivo.

Several studies have analysed the labour market impact of the *Zone Franche*, based on the urban labour force surveys (*I-2-3 Surveys*) implemented by the Malagasy national statistical office with the support of DIAL (Glick and Roubaud, 2006; Cling, Razafindrakoto and Roubaud, 2005). These studies show that on the one hand Madagascar conforms to several typical patterns of EPZs in developing countries (see Madani, 1999): the prevalence of women (more than two thirds of the workforce); the use of a young, semi-skilled workforce who gets better paid than in alternative jobs. On the other hand, *Zone Franche* avoids the egregious patterns of discrimination against women reported for some EPZs and its labour standards appear globally better than in the rest of the economy.

Zone Franche workers average 8 years of schooling, significantly less than other formal sector workers but more than private informal wage workers (6 years) and the self-employed (6.6 years). Differences by gender within each sector are not large. *Zone Franche* workers are younger on average (26 and 28 years old for male and female employees) than workers in all other sectors. This is similar to experiences with EPZs elsewhere. Most *Zone Franche* employees are in their first job, more than in any of the other wage sectors.

Also as seen in other contexts, *Zone Franche* employment represents a significant step up in pays (especially but not only) for women, those with low but not zero levels of schooling who would otherwise be found in very poorly remunerated informal sector work. Econometric estimates on individual data show that the remuneration paid by the *Zone Franche* companies is not significantly different, other things being equal, to that paid by the other industrial firms in the formal private sector. Moreover, they do not find any statistically significant wage discrimination for women, after controlling for worker characteristics (and no discrimination against married women and mothers as seen elsewhere).

By drawing women from the low wage informal sector (where the gender pay gap is very large) to the relatively well paid export processing jobs (where pay is not only higher but also similar for men and women with similar qualifications), *Zone Franche* has contributed to improved gender equity in earnings in the urban economy.

Further, along many dimensions (except for the long working hours) – availability of paid leave and health care, access to union membership, etc. – jobs in the *Zone Franche* are “high quality” jobs, comparable to or even superior to other parts of the formal sector. To sum up, the poor image of EPZs in terms of labour issues (“sweatshops”) does not adequately apply to Madagascar.

The final dismantling of MFA customs quotas since January 1, 2005 (although some other quotas have almost immediately been reinstalled both by the USA and the EU) has mainly benefited Asian countries and especially China. The remarkable growth of *Zone Franche* exports and employment has stopped since then and its future is under threat. One of the main sources of employment opportunities in the formal sector for the youth might disappear, as it might be the case in other African countries (Kenya, Lesotho, Mauritius, etc.) which have also relied on textile-clothing exports.

4.2.2. Example of Francophone West Africa

African francophone countries are considered be the most rigid in the continent. The World Bank *Doing Business Report* (World Bank, 2005) lists the ten countries where the labour market is the most rigid and the most flexible, according to four criteria: difficulty of hiring, difficulty of firing, rigidity of hours, and rigidity of employment. Table 11 in Appendix shows that six French-speaking African countries are listed among the countries where hiring is the most difficult, two are listed among the countries where firing is the most difficult, six among the countries where working hours are the most rigid, and eight among the countries where employment as a whole is the most rigid. On the contrary, there are only four African countries in the list of countries where labour markets are the least regulated: Mauritius (difficulties in hiring); Tunisia (rigidity of working hours); Zambia and Uganda (rigidity of employment).

However, data from PARSTAT surveys on seven West African capitals illustrates the argument of the UNECA (2005) report regarding the low coverage and lack of application of labour legislation:

- on average in all seven cities, only 13 percent of jobs are in the formal private sector where labour legislation applies;
- over a quarter of full time employees do not earn the guaranteed minimum wage and the figure varies little from one country to another; the percentage exceeds half the employees in the informal sector and nearly 10 percent on average in the formal private sector. This percentage is all the more surprising that, as remarked by UNECA (2005), the level of the guaranteed minimum wage is much lower than the starting salary in general, given that this level has often not been upgraded for several decades;
- in the same way, whereas the weekly working hours are set at 40, over half the labour force actually works more than 40 hours and this percentage exceeds three-quarters in the informal sector (usually with no payment for overtime).
- the rate of activity of children under 14 (below the legal minimum age for work) ranges between 9 percent (Ouagadougou, Dakar) and 17 percent (Lome); most of these children work in the informal sector.

Knowledge gaps:

Evidence on real wage flexibility remains scarce and contradictory. Understanding the extent and the mechanisms of labour market adjustment is important in assessing the effect of adjustment policies on the labour force. This is particularly the case for the youth, as they are likely to be among those who directly bear the burden of adjustment, through lower levels of employment and/or lower wages. More research is needed to identify the logic underlying the setting of high wages in African firms of the modern sector. The theoretical model presented at the beginning of this section suggests that, despite the small size of the formal sector, the hiring practices of firms in this sector have implications on the behaviour of workers, either employed or unemployed, that go far beyond its limits. For young workers, the issue is important as they are more likely than others to be outsiders on the labour market and to have difficulties sending the good signal to future employers.

5. PUBLIC AND PRIVATE RESPONSES

Available evidence presented in this literature survey suggests that the labour market conditions faced by the young differ sufficiently from those faced by adults so that special policies should be targeted at them.

Nonetheless, there are very few active labour market policies on a significant scale in Africa except in South Africa and in some North African countries like Tunisia where self-employment assistance (largely through micro-financing) and youth training constitute the bulk of the active labour market programmes (Betcherman, Olivas and Dar, 2004). An analysis of 21 African Poverty Reduction Strategy Papers (PRSPs) conducted by UNECA (2005) reveals that only half (11) have a section analysing youth employment and 17 have specifically targeted employment creation for young people, mainly through training and education, macroeconomic policies and the development of the private sector. However, according to UNECA, the actions planned in these fields are very general and not well targeted (e.g., the educational skills required for on-the-job training are not identified).

This section reviews recommendations, policies and practices, at the international and national levels, that have tried to ease youth inclusion in the labour market, improve their labour market and income prospects, as well as policies that have supported the creation of more and better jobs. These experiences (as well as experiences on other continents) could usefully enrich African PRSPs²⁶.

²⁶ We do not present here international initiatives such as the Youth Employment Network, sponsored by the United Nations. Of the 10 lead countries having adopted a National Action Plan on youth employment, five are from Africa (UNECA, 2005). Though the actions plans are country specific, their main thrust is based on the four E's: employability, equal opportunity, entrepreneurship and employment creation. We do not have information on their actual implementation, which seems to be still at an early stage.

5.1. Active labour market policies in Africa

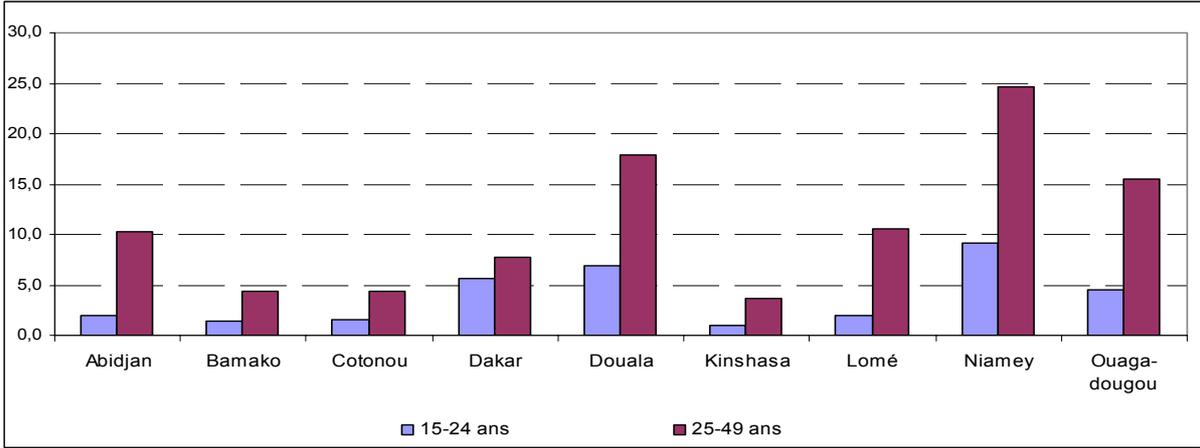
UNECA (2005) deals with the issue of ALMPs in a study conducted by the Poverty and Social Policy Team dealing with “Youth, Education, Skills and Development”. Before describing some local experiences, the study stresses that ALMPs would be inefficient if they are designed to tackle short term unemployment due to business cycle negative trends. It also insists on the fact that the success of ALMPs will also depend on other needed reforms to enhance growth and remove labour market rigidities.

In response of governments to youth unemployment, Livingstone (1989) distinguishes different types of policies relying on changes in education and training system and specific projects providing for direct employment. Our presentation of Programmes for Unemployed Youth in Africa follows in part his classification which is also close to that in Kanyenze *et al.* (2000). This categorization is made for analytical purposes, as in practice programmes may not be mutually exclusive.

5.1.1. Public employment services

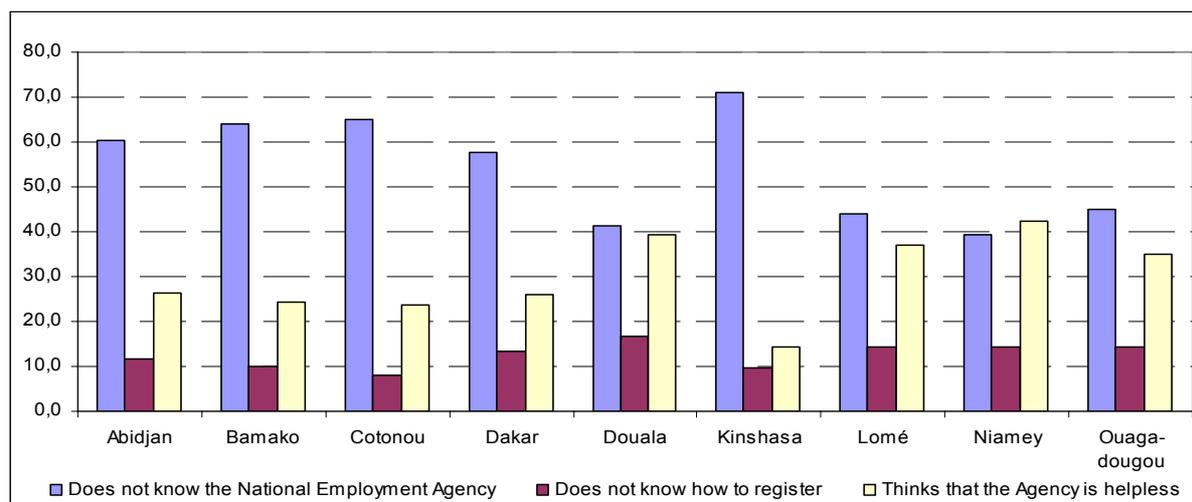
Public employment services have three major tasks: placement, vocational information and guidance, and labour market information. The results of surveys on discouraged workers (see Kanyenze *et al.*, 2000) constitute a strong argument for developing job search assistance programmes (writing job applications, preparation for interviews, etc.). Employment services could build a strong link with the private sector from which both sides would benefit. Vocational guidance and individual counselling activities would complete the picture of the modern public employment services. As it stands, however, some available evidence suggests that very few countries provide reasonably good services and that the target population is not fully aware of the availability of such services (see, *e.g.*, Schultz and Klemmer (1998) for a study on public employment services in English-speaking African countries). Using data from the *I-2-3 Surveys*, Figure 7 shows that the proportion of the unemployed who are registered at the National Employment Agency is particularly low among the young. Furthermore, the main reason for not being registered appears to be a lack of knowledge regarding the existence of Employment Agencies (Figure 8).

Figure 7: Share of the unemployed who are registered at the National Employment Agency (%)



Source: *I-2-3 Surveys*. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

Figure 8: Reasons for not being registered (%)



Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL ; authors' computations.

5.1.2. Schemes to provide direct employment

Programmes to provide direct employment usually target unskilled young people and are often used as safety nets. The idea is to provide short term employment to poor youth and contribute to improving a country's infrastructure at the same time.

In Senegal, the AGETIP (*Agence d'Exécution des Travaux d'Intérêt Public*) programmes combine efforts to build public infrastructure such as roads, buildings, and sanitation systems, with efforts to provide jobs and training for unemployed youth. Construction firms that get the contracts also agree to use relatively labour-intensive practices to use local inexperienced youth who receive training funded by AGETIP. After seven years, the number of engineering firms more than tripled, the number of construction firms increased fivefold and 35,000 person-years of employment were generated (World Bank, 2006a). However, the main criticism of these programmes is their implementation in urban areas only.

Kenya's labour-intensive Rural Access Roads programme is cited as an example of a successful scheme that produced concrete benefits in the form of infrastructural works while also economising on scarce capital. Development Works Corporation in Mauritius in 1970 is an example in which public work construction has been combined with vocational training in the basic trades. Another example is the Revolutionary Youth Association (REYA) in Ethiopia, which was created in 1980 by a small group of youth associations and had three million members (out of nine million young Ethiopians). REYA undertook a large number of public works programmes and had a positive impact on promoting schooling. However, the association had limited importance as a means of reducing unemployment because of the situation of its members: they were young people who were unemployed, but also under-employed or students, and therefore occupied part time jobs.

South Africa, which allocates an estimated US\$800 million of its current budget to labour-intensive infrastructural programmes, has probably one of the best public works programmes anywhere. Its Community Based Public Works Programme (CBPWP), launched in August 1994, was regarded as surpassing anything that the ILO members of an evaluation team had encountered in more than thirty developing countries. Its broad aims are to reduce unemployment, educate and train beneficiaries, create, rehabilitate and maintain physical assets, and build the capacity of communities. The CBPWP comprises 599 projects, most of which are situated in and providing employment opportunities to residents of some of the most impoverished areas in the country. It has been difficult to assess with confidence the achievements of the project in terms of disbursements and employment generated. Two different evaluations refer to 2.5 million work-days created by July 1997, or to 1.4 million. This divergence reflects the practical difficulties of making accurate assessments of the socio-economic effects of such programmes.

Egypt established also a public works programme in 1991 which focused on generating jobs for youth in poor rural areas. The projects cover productive infrastructure (irrigation, drainage, protection of agricultural land); economic infrastructure (roads, channels); social infrastructure (public building restoration, potable water provision) and complementary projects (related to health and education). By 1997 (to 2000), slightly over 42,000 jobs were created, 90 percent of which were temporary and workers were almost exclusively young men.

5.1.3. Schemes to provide employable skills

Another category of scheme starts from the assumption that in order to secure employment young people must be equipped with specific employable skills of a blue-collar nature.

This type of initiative was introduced in **Kenya** (village polytechnic programme in 1963), in Zambia (integration programmes through industrial qualifications, in particular), in Botswana (the Brigade Movement in 1976-1984) in the building sector, but also in Somalia and Mauritius. One of the problems with these initiatives (noted in the case of Mauritius) is the fact that no real preference can be noted on the part of entrepreneurs to employ skilled people rather than individuals with a general education. In the industries in question, it takes very little time to train a young person and the companies therefore recruit very few people who are already qualified. The problem of youth unemployment has been partly solved in Mauritius, particularly for women, by the massive production of exportable products (textiles).

Among the programmes used to reduce the skills mismatch problem in the African labour markets, Adams (1997) and Godfrey (2003) cite the voucher system adopted by the **Kenyan** Government. This programme called “training voucher for workers under the sun” targeted established firms and workers in order to identify businesses with the most promising potential. 37,666 vouchers were issued during the 1997-2001 period. UNECA (2005) considers this programme as a success even if its impact has not been assessed.

Job training programmes are more likely to be successful if they are part of a package that includes basic education, employment services, and social services (World Bank, 2006b). Betcherman *et al.* (2004) show in a review of 19 training programmes targeting youth that in the absence of such a package, training programmes rarely improve the employment and earnings of young participants.

Among schemes promoting vocational skills, formal apprenticeship schemes or traditional apprenticeships could be a way to ensure that the skills offered fit the needs of employers and as a result to enhance youth employment. In Germany, France, the United Kingdom, and the United States, formal apprenticeships are associated with an increase in employment for young men, and on earnings for young women. However, they are hardly applicable in Africa because the small share of employment in the modern wage sector, the slow growth of jobs for new apprentices, and the weakness of institutions. Van Eekelen, de Luca and Ismail (2001) show, studying the Mubarak-Kohl initiative launched in 1995 in **Egypt**, the difficulty of introducing formal apprenticeship in African countries.

In order to better take into account economic demand, recent reforms have been undertaken in countries such as **Tunisia**, **Morocco** or **Algeria**. These reforms led to the creation of strong partnerships with professional organisations and to the reorganisation of sectoral training centres (Clement, Walther, Bougault and Filipiak, 2005). Initiatives aiming at promoting life-long learning have also been carried out in North Africa, such as the vocational tax for employers in Morocco in 1997 whose purpose is to finance continuous vocational training (CSF, *Contrats Spéciaux de Formation*). A quantitative impact evaluation of the CSF programme has recently been achieved and shows a significant positive impact on the firms’ performance over the period 1997-2003 (European Training Foundation, 2006).

In SSA, especially in the Western part, traditional apprenticeships, in which a craftsman trains trainees in his workshop, are the most common way for youth to acquire skills (see section 3.2.4). Atchoarena and Delluc (2001) find that in **Ghana**, 80–90 percent of all basic skills training comes from traditional

apprenticeships, compared with 5–10 percent from public training institutions and 10–15 percent from nongovernmental sources. According to Haan and Serriere (2002), in West Africa it is common to find more apprentices than wage employees in the informal sector firms.

The major strengths of traditional apprenticeships, while not carefully evaluated, are their practical orientation, their relative independence from government funding and regulations and their cost effectiveness. However, traditional apprenticeships have three main drawbacks: they do not reach young women and very poor young people and they perpetuate traditional technologies (Johanson and Adams, 2004). Strengthening the pedagogical and technical skills of master craftsmen is certainly a key step to improve the quality traditional apprenticeships. Evidences from **Kenya**'s informal sector ("Jua Kali"), suggest that vouchers increased the access of master craftsmen to new technologies and upgraded their skills, and as a result improve the quality and relevance of their training (Riley and Steel, 1999).

Another example of an attempt at linking education and training and the workplace is the National Open Apprenticeship Scheme in **Nigeria** (NOAS). Under this scheme, vocational education and training is provided to unemployed youth in over 100 occupations. Unemployed youth and school-leavers are given an opportunity to train for a period of 6 months to 3 years under reputable Master Craftsmen. Since its inception in 1987, nearly 600,000 unemployed youth have received training in 80 different trades under the scheme. Around 400,000 of these started their own micro-enterprises, while an additional 32,000 unemployed youth are currently undergoing training.

5.1.4. Schemes to promote self-employment

Nafukho (1998) studied the programmes designed to develop entrepreneurial talents that were introduced in many African countries from the 1970s onwards. Following unsuccessful attempts in the domain of professional training, certain governments tried to absorb youth unemployment by promoting the creation of small enterprises, thereby favouring entrepreneurial talents. The different initiatives taken in Africa include:

- the promotion of education targeted on technical or farming techniques (Zimbabwe, Uganda, Kenya, Gambia),
- expert advice for young entrepreneurs (Nigeria, Gambia, Malawi),
- assistance with project financing (Malawi, Swaziland),
- and even incentives to adopt a business spirit (Uganda, Kenya).

The initiatives aimed at developing entrepreneurship gave encouraging results, but these were insufficient to reduce youth unemployment since, apart from political will, they require educational, administrative, financial and legal conditions and a favourable business climate that the African countries find it hard to provide. Nafukho also mentions the importance of the content of the apprenticeship if the entrepreneur is to succeed. The effectiveness of this type of policy focusing on entrepreneurial talents is yet to be proved.

Perhaps the most familiar initiatives that have been undertaken in virtually all countries in Africa are those concerning the promotion of micro-, small- and medium-scale enterprises (MSMEs), including informal sector development. However, while almost every country in Africa has committed itself to the promotion of MSMEs, it is not always clear to what extent these programmes cater to the needs of unemployed youth.

The **South African** approach to the development and support of small business is an example of a comprehensive, integrated national strategy. It was born out of a national consultative process, which started with the President's Conference on Small Business held in March 1995. Many initiatives targeted at developing MSMEs with an interesting approach based on the central role accorded stakeholder participation and the fact that social partners contributed to the financing of the job creation programmes. The public sector in some countries provides financial support to young entrepreneurs. In South Africa, the government created the Umsobomvu Youth Fund so as to ease

access to information and public funding and to support skills development for people under age 35. Unfortunately, Kanyenze *et al.* (2000) do not give any success appreciation because all initiatives are still at an early stage of implementation.

Another example of support to young entrepreneurs is the “Youth Business International helping young people become entrepreneurs” programme that was set up to help young people overcome the barriers they can face in setting their own business (Chambers and Lake, 2002). The two African countries involved in the programme are **Nigeria** and **Mauritius**. The authors consider this programme as a success, basing their assessment on the number of beneficiaries.

The programmes and policies adopted to deal with youth unemployment often reflect the particular diagnosis made of its underlying causes (Livingstone, 1989). Where the wrong attitudes of part of young population have been pointed, back-to-the-land projects with re-education in agricultural values have been implemented like in Somalia, Zambia and Malawi. Where the problem have been seen essentially to be a lack of practical, employable skills, the emphasis has been on craft training, like in Zambia, Botswana and Kenya.

5.1.5. *Other schemes*

Somalia's Agricultural Crash Programme (ACP) was launched in 1970. Its aim was to promote the building of collectivist farming cooperatives with technical production assistants, replacing the former system of small, family-run subsistence farms with elementary equipment. In 1979, seven farms were operational, involving 7,254 young voluntary settlers. The programme also provided for the presence of qualified personnel: in 1979, 11,000 young farm technicians had been trained, 20,000 in 1984. However, technical efficiency and returns remained low: nearly all the State firms were loss-making and weighed heavily on the State budget. This policy was therefore not a total success.

National service has sometimes been used (Kenya, Zambia) as a solution to the problem of youth unemployment. However, it remains a short-term solution as the length of national service is limited, generally to one year, and it has many objectives (military preparation, patriotism, etc.). The advantage highlighted in terms of the fight against youth unemployment is that the young people learn discipline. Another argument in favour of national service is the training it offers in terms of qualifications, as long as this fits in with the individual's previous training

5.2. Evaluation

The main issue examined in this section is whether active labour market policies are effective or a waste of public funds. Given the scarcity of public funds in Africa, this issue is even more relevant in the policy debate than elsewhere. The World Bank Social Protection Unit (Betcherman *et al.*, 2004) has realized a study to assess the impact of these programmes in Developing and Transition Countries²⁷. The study focuses on seven categories of programmes namely employment services, training for the unemployed, training for workers in mass layoffs, training for youth, public works, wage and employment subsidies and self-employment assistance.

The conclusions of the study for the seven categories of programmes is that there is very little evidence of an impact in developing countries for employment services, training for workers in mass layoffs, wage and employment subsidies and public works. The effects of training for unemployed seem to be not positive, but the authors note that there are very few studies available. Training for youth seems to have a positive impact, but the evaluations concern exclusively Latin American countries. Finally, there are not enough evaluations to determine the impact of self-employment programmes on employment and earnings.

²⁷ The sample of countries studied is not indicated in the paper, but it seems that very few developing countries are included, mainly Latin American and East Asian.

The World Bank (2006b) reviews several evaluation studies of youth policies and programmes in Ethiopia, Burkina Faso, Tanzania, and Uganda. The report shows that the programmes are rarely targeted (they focus mainly on urban unemployment, neglecting other challenges), and that the quality of interventions is low. Several evaluation studies of these interventions have been conducted, but they report only outcomes, not *impact*. The World Bank study shows that there is an urgent need for active labour market policies evaluations in Africa. These evaluations can be of two kinds:

- *ex ante* evaluations which would stress the potential benefits and risks of the different programmes before their implementation; these evaluations need to be conducted in a general equilibrium framework to allow taking into account the direct effects of each policy on the labour market and the Government budget but also the indirect effects on the various actors and sectors of the economy;
- *ex post evaluations* which would assess the cost-effectiveness of the already implemented programmes; these evaluations based on available surveys analysis or experiments would help deciding whether these policies should be reinforced, pursued, reshaped or abandoned.

Knowledge gaps:

It is essential to stress the need for evaluations to have an objective assessment of the effectiveness of these programmes. Economic evaluations of employment policies in Africa using experimental or quasi-experimental techniques are badly needed. However, the cost-benefit analysis must not only focus on income. It should also take into account the potential negative impact of unemployment on health, violence, etc.

6. CONCLUSION

Although international institutions are beginning to pay more attention to it, the subject of youth employment and, more broadly, the integration of young people in African society, is still widely neglected. In terms of research, our review of the literature clearly highlights the knowledge gaps. To a certain extent, these can be explained by the lack of quality data on the labour market, a point which is specific to Africa. The most elementary information is lacking. For example, what is the youth unemployment rate? Has it increased or decreased in the past decade? The answers to these questions differ from one source or from one author to another. As for policies, despite recurrent attempts, actions in favour of the integration of young people have only played a marginal role, probably due to their limited scale. However, putting aside particular national cases, the few stylised facts that emerge clearly show that young people have been the main victims of the continent's poor economic performances in recent decades. They have paid a heavy price for weak (or even negative) growth and the shortcomings of the labour market (urban/rural segmentation; inappropriate legislation; lack of wide-scale proactive policies). They have acted as adjustment variables between an ever increasing labour supply – despite progress in schooling rates and the beginnings of demographic transition - and sluggish demand. The cutbacks in the public sector have not been made up for by the formal private sector, which suffers from poor levels of competitiveness. This has left room for a prolific informal sector with low average productivity rates and bad working conditions, which young people have been obliged to turn to en masse. This unfair treatment contains the seeds of a “clash of generations”. Although, overall, this has not in fact taken place, the lack of prospects has nonetheless encouraged some of the younger generation to adopt high-risk or illegal behaviour: taking part in the criminal economy, growing role in armed conflicts, etc., whereas some see south-north migration as a solution.

The recent awareness at the highest political levels of the challenge posed by the integration of young people in Africa should be a stimulus to acquiring better knowledge of the situation and to more effective, sustained action in the years to come. The results of this study offer a certain number of paths for research on this subject. First and foremost, to cater for the need for pertinent, reliable, real-time data on the labour market, it is absolutely vital to introduce a durable system of employment surveys, to be included in the National Statistical Systems (NSS), and thus put an end to the “African exception” in this domain. In the meantime, it is possible to take more advantage of the high analytical potential of a secondary exploitation of the existing sources. The example given in this study using the *I-2-3 Surveys* shows that it is possible, at a low cost, to clarify the situation and to extend the analysis by introducing the different age groups. Theme-based programmes could be launched rapidly in this

direction. Finally, the probable extension of employment policies in favour of young people should give rise to the more systematic introduction of monitoring and assessment mechanisms to gauge the impact of the policies, as these are still very scarce in Africa. Recent methodological progress in this field of research, which has been particularly fruitful in the past few years, could be applied with great benefit in Africa.

Without listing all the knowledge gaps presented at the end of the sections of this report, we would like to focus on a few main lines of research that we consider being priorities. For instance, we believe that it is a priority to make up for the most glaring knowledge gaps in order to establish a true picture of the major trends underway.

1. A special effort must be made in rural areas, for which the concepts used to describe labour markets are generally irrelevant (individual incomes, wages, number of hours worked on a weekly basis) and for which there is little data.
2. Less attention should be paid to unemployment, which is not a very relevant indicator of the tensions in the labour market in Africa, and more should be paid to under-employment and to the quality of jobs.
3. Given its importance, studies should focus on the informal sector, in order to gain a better understanding of how it works, but also in a view to thinking up policies aimed at increasing productivity whilst also protecting the people who work in the sector. In this respect, the link between formal and informal job training and professional trajectories is crucial.
4. Particular attention should be paid to the most vulnerable groups, such as women, young and uneducated workers. Understanding the roots of gender discrimination is a prerequisite if one wants to design efficient policies to counter gender inequalities (Goal 3 of the MDGs). There is much to learn about the discrimination practices of all kind, in access to schooling for instance, but also about the demand-side factors that may influence employers when they make decisions concerning hiring and promotions or use gender to predict future work commitment.
5. In order to understand why formal labour markets are not able to absorb the increased labour supply, most studies focus mainly on the supply side, little attention being paid to the links between supply and demand. In this objective, systematic use of data linking information on production units and their workers – matched employer-employee – is essential.
6. In the same vein, the links between economic growth, labour demand and the quality of jobs being created remain insufficiently investigated.
7. Alongside these badly needed micro-economic and sectoral studies, we believe there is also a need for macro-economic studies on issues such as the content of growth in terms of youth employment, the impact of demographic dynamics, the prospects of formal and informal education systems and the distributive effects of policies.

REFERENCES

- Acemoglu D. and J. S. Pischke (1999), "The Structure of Wages and Investment in General Training", *Journal of Political Economy*, 107, 539-572.
- Adams A.V. (1997), "Assessment of the Jua Kali Pilot Voucher Program", mimeo, Washington, DC: The World Bank.
- Adams J. (1991), "The Rural Labour Market in Zimbabwe", *Development and Change*, 22(2), 297-320.
- Alby P., J.-P. Azam and S. Rospabé (2005), *Labor Institutions, Labor-management Relations and Social Dialogue*, German Trust Fund Project "Job Creation, Core Labor Standards & Poverty Reduction in Africa", Washington, DC: The World Bank.
- Al-Samarrai S. and P. Bennell (2006), "Where has All the Education Gone in Africa? Employment Outcomes Among Secondary School and University Leavers", *MRPA Paper*, 128, Munich: University Library of Munich.
- André C. and J.P. Platteau (1998), "Land Relations Under Unbearable Stress: Rwanda Caught in the Malthusian Trap", *Journal of Economic Behavior and Organization*, 43, 1-47.
- Antoine P., M. Razafindrakoto and F. Roubaud (2001), "Contraints de rester jeunes ? Evolution de l'insertion urbaine dans trois capitales africaines : Dakar, Yaoundé, Antananarivo", in *Les jeunes, hantise de l'espace public dans les sociétés du Sud*, Autrepart, 18, IRD-Editions/Editions de l'Aube.
- Aryeetey, E., A. Baah-Nuakoh, H. Duggleby, H. Hettige and W.F. Steel (1994), "The Supply and Demand for Finance among SMEs in Ghana", *Africa Technical Department Discussion Paper*, 251, Washington, DC: The World Bank.
- Atchoarena D. and A.-M. Delluc (2001), "Revisiting Technical and Vocational Education in Sub-Saharan Africa: An Update on Trends, Innovations, and Challenges", IIEP/Prg.DA1.320, Paris: International Institute for Educational Planning.
- Austin G. (1999), "Background Note on Civil Strife and Poverty in Sub-Saharan Africa", Background paper for the World Development Report 2000/2001", Washington, DC: The World Bank.
- Ayalew D., S. Dercon and P. Krishnan (2000), "Demobilisation, Land and Household Livelihoods: Lessons from Ethiopia", *CSAE Working Paper*, 2000-135, Oxford: Centre for the Study of African Economies.
- Beaudry P. and N. K. Sowa (1994), "Ghana", in Susan Horton *et al.* (eds), *Labor Markets in an Era of Adjustment*, Vol. 2., EDI Development Studies, Washington, DC: The World Bank.
- Bennell P. (1996a), "Rates of Return to Education: Does the Conventional Pattern Prevail in Sub-Saharan Africa?", *World Development*, 24, 183-199.
- _____ (1996b), "Using and Abusing Rates of Return: A Critique of the World Bank's 1995 Education Sector Review", *International Journal of Educational Development*, 16, 235-248.
- Bennell P. and J. Sergerstrom (1998), "Vocational education and training in developing countries: Has the World Bank got it right?", *International Journal of Educational Development*, 18, 271-87.
- Betcherman G., K. Olivas and A. Dar (2004), "Impact of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries", *Social Protection Discussion Paper Series*, 402, Washington, DC: The World Bank.

- Biggs T. and P. Srivastava (1996), “Structural Aspects of Manufacturing in Sub-Saharan Africa: Findings from a Seven Country Enterprise Survey”, *Africa Technical Department Discussion Paper*, 346, Washington, DC: The World Bank.
- Bigsten A., A. Isaksson, M. Soderbom, P. Collier, A. Zeufack, S. Dercon, M. Fafchamps, J.W. Gunning, F. Teal, S. Appleton, B. Gauthier, A. Oduro, R. Oostendorp and C. Patillo (2000), “Rates of return on physical and human capital in Africa’s manufacturing sector”, *Economic Development and Cultural Change*, 48, 801-827.
- BIT (1985), *Les programmes spéciaux d’emploi et de formation de la jeunesse. Une étude comparative du PECTA*, Rapport de synthèse, ILO: Addis Abada.
- Bossuroy, T. (2006), “Déterminants de l’identification ethnique en Afrique de l’Ouest”, *Afrique Contemporaine*, 220, forthcoming.
- Bratton M., R. Mattes, E. Gyimah-Boadi (2004), *Public Opinion, Democracy and Market Reform in Africa*, New-York: Cambridge University Press.
- Brilleau A., F. Roubaud and C. Torelli (2005), “L’emploi, le chômage et les conditions d’activité, enquêtes 1-2-3 Phase 1”, *Statéco*, 99, 43-64.
- Brown C. (1990), “Empirical Evidence on Private Training”, *Research in Labor Economics*, 11, 97-113.
- Burger R. and I. Woolard (2005), “The State of the Labour Market in South Africa after the First Decade of Democracy”, *CSSR Working Paper*, 133, Cape Town: Centre for Social Science Research.
- Calvès A.-E. and B. Schoumaker (2004), “Deteriorating Economic Context and Changing Patterns of Youth Employment in Urban Burkina Faso: 1980–2000”, *World Development*, 32, 1341-1354.
- Card D. (1999), “The Causal Effect of Education on Earnings”, in O. Ashenfelter and D. Card (eds), *Handbook of Labor Economics*, vol. 3A, pp. 1801-1863, Netherlands: Elsevier Science Publishers BV.
- Casale D. and D. Posel (2002), “The Continued Feminisation of the Labour Force in South Africa: an Analysis of Recent Data and Trends”, *South African Journal of Economics* 70(1), 156-184.
- Casale D., C. Muller and D. Posel (2004), “Two Million Net New Jobs: A Reconsideration of the Rise in Employment in South Africa?”, mimeo, Durban: University of KwaZulu-Natal.
- Casero, P.A. and G. Seshan (2006), “Public-Private Sector Wage Differentials and Returns to Education in Djibouti”, *World Bank Policy Research Working Paper*, 3923, Washington, DC: The World Bank.
- CDPR (2005), *Labour Supply*, German Trust Fund Project “Job Creation, Core Labor Standards & Poverty Reduction in Africa”, Paper 1, Washington, DC: The World Bank, Available at (www.worldbank.org/labormarkets).
- Chambers R. and A. Lake (2002), “Youth Business International: bridging the gap between unemployment and self-employment for disadvantaged youth”, *ILO Skills Working Paper*, 3, Geneva: ILO.
- Chaveau E. (2000), “Question foncière et construction nationale en Côte d’Ivoire”, *Politique Africaine*, 78, 94-125.
- Clement S., R. Walther, H. Bougault and E. Filipiak,(2005), “Les mécanismes de financement de la formation professionnelle : Algérie, Maroc, Sénégal, Tunisie”, *AFD Notes et Documents*, 14, Paris: Agence Française de Développement.

- Cling J.-P., M. Razafindrakoto, F. Roubaud (eds) (2003), *New International Poverty Reduction Strategies*, London and New York: Routledge.
- Cling J.-P., M. Razafindrakoto, F. Roubaud (2005), "Export Processing Zones in Madagascar: a Success Story under Threat?", *World Development*, 33 (5), 785-803.
- Cogneau D., T. Bossuroy, P. De Vreyer, C. Guénard, V. Hiller, P. Leite, S. Mesple-Somps, L. Pasquier-Doumer and C. Torelli (2006), "Inégalités et équité en Africa", *Notes et Document AFD*, 31, Paris: Agence Française de Développement.
- Collier P. (2000), "Doing Well Out of War: An Economic Perspective", in Mats Berdal and David M. Malone (eds), *Greed and Grievance: Economic Agendas in Civil Wars*. Boulder, CO and London: Lynne Rienner, pp. 91–111.
- Collier P. and A. Garg (1995), "On Kin Groups and Employment in Africa", *CSAE Working Paper*, 1995-16, Oxford: Centre for the Study of African Economies.
- Collier, P. and J. W. Gunning (1999), "Explaining African Economic Performance", *Journal of Economic Literature*, XXXVII, 64-111.
- Collier P. and A. Hoeffler (2001), "Greed and Grievance in Civil War," *Policy Research Working Paper Series*, 2355, Washington, DC: The World Bank.
- Dabalén A., H.S. Nielsen and M. Rosholm (2003), "Labor Markets and Enterprise Training in African Manufacturing", Background paper for a regional report, Washington, DC: The World Bank.
- Deaton A. and D. Benjamin (1988), "The Living Standards Survey and Price Policy Reform: a Study of Cocoa and Coffee Production in Côte d'Ivoire", *LSMS Working Paper*, 44, Washington, DC: The World Bank.
- Deininger K. and R. Castagnini (2006), "Incidence and Impact of Land Conflict in Uganda", *Journal of Economic Behavior and Organization*, 60, 321-345.
- Destré G. and C.J. Nordman (2002), "The Impacts of Informal Training on Earnings: Evidence from French, Moroccan and Tunisian Employer-Employee Matched Data", *L'Actualité Économique*, 78(2), 179-205.
- Docquier F. (2006), "Brain Drain and Inequality across Nations", Paper presented at the EUDN-AFD conference on "Migration and Development", Paris, November 8, 2006.
- Docquier F. and A. Marfouk (2006), "International Migration by Educational Attainment (1990-2000)", in Ozden, C. and M. Schiff (eds), *International Migration, Remittances and the Brain Drain*, Chap 5, Palgrave-Macmillan.
- Docquier F. and K. Sekkat (2006), "The Brain Drain: What Do We Know?", Research report prepared for the AFD, Paris.
- Dumont J.-C. and G. Dumaître. (2005), "Counting Immigrants and Expatriates in OECD Countries: a New Perspective", OECD Social, Employment and Migration Working Papers n°25, 39 p.
- Du Toit R. (2003), "Unemployment in South Africa: the Distressed Generation?", Paper presented at the *Minnesota International Counselling Institute*, 27 July - 1 August.
- Dragoset L. and L. Vilhuber (2006), "Schooling and Early Work Experience in Uganda", in *Youth in Africa's Labor Market (Vol. II Country Case Studies)*, Chapter 3, Washington, DC: The World Bank.
- Eifert B. and V. Ramachandran (2004), "Competitiveness and Private Sector Development in Africa, Cross Country Evidence from the World Bank's Investment Climate Data", RPED, 33665, 53 p, Washington, DC: The World Bank.

- European Training Foundation (2006), *Impact Assessment Studies and Policy Learning*, ETF Publication on CEVT Projects, Turino: ETF, forthcoming.
- Ewoudou J. and D. Vencatachellum (2006), “An Empirical Analysis of the Rates of Returns to Education in Cameroon”, Communication at the CSAE Conference 2006, Oxford.
- Fafchamps M., M. Söderbom and N. Benhassine (2006), “Job Sorting in African Labour Markets”, *CSAE Working Paper*, 2006-02, Oxford: Centre for the Study of African Economies.
- Fafchamps, M. and M. Söderbom (2004a), “Wages and Labour Management in African Manufacturing”, *CSAE Working Paper*, 2004-02, Oxford: Centre for the Study of African Economies.
- Fafchamps M. and M. Söderbom (2004b), “Climate for Job Creation”, GPRG, Centre for the Study of African Economies, University of Oxford.
- Foster A. and M. Rosenzweig (1996), “Technical Change and Human Capital Returns and Investments: Evidence from the Green Revolution”, *American Economic Review*, 86(4), 931–53.
- Fox L. and M. Sekkel (2006), “Job Creation and the Quality of Growth in Africa”, Discussion draft, Poverty Reduction and Economic Management Department, Washington, DC: The World Bank.
- Frazer G. (2006), “Learning the Master’s Trade: Apprenticeship and Human Capital in Ghana”, *Journal of Development Economics*, forthcoming.
- Girma S. and A. Kedir (2005), “Heterogeneity in Returns to Schooling: Econometric Evidence from Ethiopia”, *Journal of Development Studies*, 41(8), 1405-1416.
- Glewwe P. (1990), “Investigating the Determinants of Household Welfare in Cote d’Ivoire”, *LSMS Working Paper*, 71, Washington, DC: The World Bank.
- _____ (1996), “The Relevance of Standard Estimates of Rates of Return to Schooling for Education Policy: A Critical Assessment”, *Journal of Development Economics*, 51, 267-290.
- Glick P. and F. Roubaud (2006), “Export Processing Zone Expansion in Madagascar: What are the Labour Market and Gender Impacts?”, *Journal of African Economies*, forthcoming.
- Godfrey M. (2003), “Youth Employment Policy in Developing and Transition Countries – Prevention as Well as Cure”, *World Bank Social Protection Discussion Paper*, 320, Washington, DC: The World Bank.
- Grimm M. and I. Gunther (2006), “Inter- and Intra-household Linkages between the Informal and Formal Sectors: A Case Study for Urban Burkina Faso” in Guha-Khasnobis B. and Kanbur R., *Informal Labour Markets and Development*, London: Palgrave.
- Gubert F., C.J. Nordman (2006), “Migration from MENA to OECD Countries: Trends, Determinants and Prospects”, Background Paper for MENA Department, Washington, DC: The World Bank, 78 p.
- Haan H. C. and N. Serriere (2002), *Training for Work in the Informal Sector: Fresh Evidence from West and Central Africa*. Turin: International Training Centre of the International Labour Organization.
- Harding A., M. Söderbom, F. Teal (2004), “Survival and Success among African Manufacturing Firms”, *CSAE Working Paper*, 2004-05, Oxford: Centre for the Study of African Economies.
- Harris J. and M. Todaro (1970), “Migration, Unemployment and Development: A Two-Sector Analysis”, *American Economic Review*, 60(1), 126-142.
- Hoddinott J. (1996), “Wages and Unemployment in an Urban African Labor Market”, *Economic Journal*, 106, 1610-26.

- ILO/JASPA (1986), “Youth Employment and Youth Employment Programmes in Anglophone African Countries. A Comparative Sub-regional Study”, Synthesis report, Addis Abada: ILO.
- ILO (2004), *Global Employment Trends for Youth*, Geneva: International Labour Office.
- (2005), *Youth: Pathways to Decent Work. Promoting Youth Employment-Tackling the Challenge*, Geneva.
- (2006), *Global Employment Trends for Youth*, Geneva: International Labour Office.
- Jamison D.T. and L.J. Lau (1982), *Farmer Education and Farm Efficiency*. Washington, DC: The World Bank.
- Jayne T.S., T. Yamano, M.T. Weber, D. Tshirley, R. Benfica, A. Chapoto, B. Zulu (2003), “Smallholder Income and Land Distribution in Africa: Implications for Poverty Reduction Strategies”, *Food Policy*, 28, 253-275.
- Johanson, R. K. and A. V. Adams (2004), *Skills Development in Sub-Saharan Africa*. Washington, DC: The World Bank.
- Jolliffe D. (1998), “Skills, Schooling, and Household Income in Ghana”, *World Bank Economic Review*, 12, 81-104.
- Kahyarara G. and F. Teal (2006), “General or Vocational Education? Evidences from the Returns to Education in Tanzanian Manufacturing Firms”, mimeo, Oxford: Centre for the Study of African Economies.
- Kanyenze G., G.C.Z. Mhone and T. Sparreboom (2000), “Strategies to Combat Youth Unemployment and Marginalisation in Anglophone Africa”, *ILO/SAMAT Discussion Paper*, 14, Harare: ILO.
- Kazianga H. (2004), “Schooling Returns for Wage Earners in Burkina Faso: Evidence from the 1994 and 1998 National Surveys”, *Economic Growth Center Discussion Paper*, 892, New Haven: Yale University.
- Kingdon G. and J. Knight (1999), “Unemployment in South Africa: a spatial approach, Centre for the Study of African Economies”, *CSAE Working Paper*, 1999-12, Oxford: Centre for the Study of African Economies.
- _____ (2000), “Are Searching and Non-searching Unemployment Distinct States when Unemployment is High? The Case of South Africa”, *CSAE Working Paper*, 2000-02, Oxford: Centre for the Study of African Economies.
- Kingdon G., J. Sandefur and F. Teal (2005a), “Labor Market Flexibility, Wages and Incomes in Sub-Saharan Africa in the 1990s”, GPRG-WPS-30, Centre for the Study of African Economies, University of Oxford.
- _____ (2005b), “Patterns of Labor Demand in Sub-Saharan Africa: A Review Paper”, GPRG, Centre for the Study of African Economies, University of Oxford.
- Klasen S. and I. Woolard (2005), “Surviving Unemployment Without State Support: Unemployment and Household Formation in South Africa”, *CSSR Working Paper*, 129, Cape Town: University of Cape Town.
- Kolev A. and C. Saget (2005), “Understanding Youth Labour Market Disadvantages: Evidence from South-East Europe”, *International Labour Review*, 144, 2.
- Kondylis F. and M. Manacordia (2006), “Youth in the Labor Market and the Transition from School to Work in Tanzania”, *World Bank Social Protection Discussion Paper*, 0606, Washington, DC: The World Bank.

- Krishnan P. and E. Sciubba (2005), "Links and Architecture in Village Network", *Cambridge Working Paper in Economics*, 462, Cambridge: University of Cambridge.
- Kuepie M., C.J. Nordman and F. Roubaud (2006), "Education and Labour Market Outcomes in Sub-Saharan West Africa", *DIAL Working Paper*, 2006/16, Paris: DIAL.
- Lange M., and Y. Martin (1993), "La socialisation par l'éducation et le travail : l'itinéraire incertain", In B. Le Bris and F. Chauveau (eds), *Jeunes, ville, emploi. Quel avenir pour la jeunesse africaine ?* Paris: Ministère de la Coopération.
- Lassibille G. and J. Tan (2005), "The Returns to Education in Rwanda", *Journal of African Economies*, 14(1), pp. 92–116.
- Lavy V. and J. L. Newman (1989), "Wage Rigidity: Micro and Macro Evidence on Labor Market Adjustment in the Modern Sector", *World Bank Economic Review*, 3(1), 97-117.
- Leavy, J. and H. White (1999), "Rural Labour Markets and Poverty in Sub-Saharan Africa", mimeo, University of Sussex: IDS.
- Le Bris E. and F. Chauveau (eds) (1993), *Jeunes Ville Emploi, Quel avenir pour la jeunesse africaine?*, Paris: Ministère de la Coopération, 353p.
- Lindbeck A. and D.J. Snower (1988), *The Insider-Outsider Theory of Employment and Unemployment*, Cambridge (Mass.): The MIT Press.
- Linden E. (1996), "The Exploding Cities of the Developing World", *Foreign Affairs*, 75, 1, 52–65.
- Livingstone I. (1989), "Unemployed Youth: Alternative Approaches to an African Crisis", *International Labour Review*, 128, 389-407.
- Madani D. (1999), "A Review of the Role and Impact of Export Processing Zones", *World Bank Policy Research Working Paper*, 2238, Washington, DC: The World Bank.
- Marniesse S. and C. Morrisson (2000), "La dynamique des microentreprises dans les pays en développement : de nouveaux enseignements", *Revue d'économie du développement*, 4, 3-34.
- Maton, J. (1994), "Développement économique et social au Rwanda entre 1980 et 1993. Le dixième décile face à l'apocalypse", Department of Economics (University of Gent, Belgium).
- McKenzie D. J. (2006), "A Profile of the World's Young Developing Country Migrants", Background paper for the WDR 2007, Washington, DC: The World Bank.
- Mengistae T. (2001), "Skill Formation and Job Matching Effects in Wage Growth in Ethiopia", *Journal of African Economies*, 10(1), 1-36.
- Michaud P.-C. and D. Vencatachellum (2003), "Human Capital Externalities in South Africa", *Economic Development and Cultural Change*, 51(3), 603-628.
- Miguel E. and D. N. Posner (2005), "Sources of Ethnic Identification in Africa", mimeo, Berkeley and Los Angeles: University of California.
- Milne W. and M. Neitzert (1994), "Kenya", in S. Horton *et al.* (eds), *Labor Markets in an Era of Adjustment, Vol. 2*. EDI Development Studies, Washington, DC: The World Bank.
- Mlatsheni C. and S. Rospabé (2002), "Why is Youth Unemployment So High and Unequally Spread in South Africa?", *Development Policy Research Unit Working Paper*, 02/65, Washington, DC: The World Bank.
- Muller C. and C.J. Nordman (2004), "Which Human Capital Matters for Rich and Poor's Wages? Evidence from Matched Worker-Firm Data from Tunisia", *DIAL Working Paper*, 2004/09, Paris: DIAL.

- _____ (2005), "Human Capital and Wages in Two Leading Industries of Tunisia: Evidence from Matched Worker-Firm Data", *Brussels Economic Review*, 48(1), 745-768.
- _____ (2006a), "Wages and Human Capital in Exporting Firms in Morocco", *DIAL Working Paper*, 2006/06, Paris: DIAL.
- _____ (2006b), "Sharing the Costs of On-the-Job Training in Tunisia", mimeo, Paris: DIAL.
- Mwabu G. and T.P. Schultz (1996), "Education Returns across Quintiles of the Wage Function: Alternative Explanations for Returns to Education in South Africa", *American Economic Review*, 86(2), 335-339.
- _____ (2000), "Wage Premiums for Education and Location of South African Workers by Gender and Race", *Economic Development and Cultural Change*, 48(2), 307-334.
- Nafukho F.M. (1998), "Entrepreneurial Skills Development Programs for Unemployed Youth in Africa: A Second Look", *Journal of Small Business Management*, 36, 100-103.
- Narayan D. and P. Petesch (2006), "Moving out of Poverty: Some Preliminary Results", World Bank, PRMPR. Washington, DC Processed.
- Nattrass N. (2002a), "Unemployment, Employment and Labour-Force Participation in Khayelithsa/Mitchell's Plain", *CSSR Working Paper*, 133, Cape Town: Centre for Social Science Research.
- _____ (2002b), "Should Youth Unemployment be Targeted as Part of a Comprehensive Welfare Policy in South Africa?", *Social Dynamics*, 28(2), 207-236.
- Nordman C.J. (2000), "La formation sur le tas par diffusion du savoir : estimation sur données marocaines et mauriciennes", *Revue d'Économie du Développement*, 4, 79-103.
- _____ (2003), "On-the-Job Training: a Critical Review of its Economic Features and Measures", *SKOPE Working Paper*, Oxford: University of Oxford. Report for the *Learning and Skills Development Agency* (LSDA), London.
- Nordman C.J. and F. Roubaud (2005), "Reassessing the Gender Wage Gap: Does Labour Force Attachment Really Matter? Evidence from Matched Labour Force and Biographical Surveys in Madagascar", *DIAL Working Paper*, 2005/06, Paris: DIAL.
- Nordman C.J. and F.-C. Wolff (2006), "Is there a Glass Ceiling in Morocco? Evidence from Matched Worker-Firm Data", Communication at IZA/World Bank Conference 2006, Berlin.
- O'Higgins N. (2003), "Trends in the Youth Labor Market in Developing and Transition Countries", *Social Protection Discussion Paper*, 321, Washington, DC: The World Bank.
- Ogbu O. and Ikiara G. (1995), "The Crisis of Urbanization in Sub-Saharan Africa", *Courier*, 149, 52-59.
- Parent D. (2006), "Youth Labor Market in Burkina Faso: Recent Trends", in *Youth in Africa's Labor Market (Vol. II Country Case Studies)*, Chapter 4, Washington, DC: The World Bank.
- Peters K. and P. Richards (1998), "'Why We Fight': Voices of Youth Combatants in Sierra Leone", *Africa*, 68(2), 183-210.
- Pilon M., T. Locoh, E. Vignikin and P. Vimard (1997), "Ménages et familles en Afrique, approches des dynamiques contemporaines", *Les Etudes du Ceped*, 15, Paris : Ceped,.
- Psacharopoulos G. and H.A. Patrinos (2002), "Returns to Investment in Education: A further Update", *World Bank Research Working Paper*, 2881, Washington, DC: The World Bank.

- Quisumbing A. R., J. P. Estudillo and K. Otsuka (2004), *Land and Schooling: Transferring Wealth across Generations*. Baltimore and London: The Johns Hopkins University Press.
- Rakotomanana F., E. Ramilison and F. Roubaud (2003), “The Creation of an Annual Employment Survey in Madagascar. An Example for Sub-Saharan Africa”, *InterStat* 27, September, 35-58.
- Rama M. (1998), “Wage Misalignment in CFA countries: Are Labor market Policies to Blame?”, *World Bank Policy Research Working Paper*, 1873, Washington, DC: The World Bank.
- _____ (2000a), “Déséquilibre salarial dans les pays de la zone CFA : les politiques de l’emploi sont-elles responsables ?”, *Revue d’économie du développement*, 4, 35-78.
- _____ (2000b), “Wage Misalignment in CFA Countries: Are Labor Market Policies to Blame?”, *Journal of African Economies*, 9(4), 475-511.
- Razafindrakoto M. and F. Roubaud (2001), “Vingt ans de réforme de la fonction publique à Madagascar”, *Autrepart*, 20, 43-60.
- _____ (2003a), “Two Original Poverty Monitoring Tools: the 1-2-3 Surveys and the Rural Observatories”, in J.-P. Cling, M. Razafindrakoto and F. Roubaud (eds), op. cit., chapitre XIII, pp. 313-339.
- _____ (2003b), “Urban Poverty and Recession in Sub-Saharan Africa: Elements for an Assessment”, in J.-P. Cling, M. Razafindrakoto and F. Roubaud (eds), op. cit., chapter IV, pp. 98-125.
- Richards P., K. Bah and J. Vincent (2004), “Social Capital and the Survival: Prospects for Community-Driven Development in Post-Conflict Sierra Leone”, *Social Development Papers*, 12, Washington, DC: The World Bank.
- Riley T. and W. Steel (1999), “Kenya Voucher Program for Training and Business Development Services”, processed, Washington, DC: The World Bank.
- Rosati F. (2006), “Child Labour and Youth Employment: Ethiopia Country Study”, In World Bank (ed), *Youth in Africa’s Labor Market*. Washington, DC: The World Bank, forthcoming.
- Roubaud F. (1994a), “La question ethnique sur le marché du travail à Yaoundé : discrimination ou solidarité ?”, *DIAL Working Paper*, 1994/14, Paris: DIAL.
- _____ (1994b), “Dynamique du marché du travail à Yaoundé 1983-1993 : la décennie perdue”, *Revue Tiers-Monde*, Tome XXXV, 140, 4ème trimestre, 751-778.
- Roubaud F. and M. Séruzier (1991), “Economie non enregistrée par la statistique et secteur informel dans les pays en développement”, *Statéco*, 68.
- Saget C. (2001), *Is the Minimum Wage an Effective Tool to Promote Decent Work and Reduce Poverty? The Experience of Selected Developing Countries*, Geneva: ILO, Employment Strategy Department.
- Schoumaker B.C. and B.D. Beauchemin (2002), “Les migrations à Ouagadougou : tendances récentes (1990–2000)”, *Ouaga Focus*, 30, Ouagadougou: Unité d’enseignement et de recherche en démographie.
- Schultz, T. P. (2004), “Evidence of Returns to Schooling in Africa from Household Surveys: Monitoring and Restructuring the Market for Education”, *Journal of African Economies*, 13, 95-148.
- Schultz G. and B. Klemmer (1998), *Public Employment Services in English-speaking Africa: Proposals for Re-Organisation*. Harare: African Regional Labour Administration Centre (ARLAC), ILO.

- Senne J.N., F. Gubert and A.S. Robilliard (2006), “Stratégies matrimoniales et legs à l’occasion du mariage: Application au cas des ménages ruraux malgaches”, Paper presented at the “7èmes journées scientifiques du réseau AED de l’AUF”, Paris, 7-8 September 2006.
- Serneels P. (2004), “The Nature of Unemployment in Urban Ethiopia”, *CSAE Working Paper*, 2004-18, Oxford: Centre for the Study of African Economies.
- Siphambe H.K. and M. Thokweng-Bawena (2001), “The Wage Gap Between Men and Women in Botswana's Formal Labour Market”, *Journal of African Economies*, 10(1), 127-142.
- Söderbom M., F. Teal, A. Wambugu and G. Kahyarara (2006), “Dynamics of Returns to Education in Kenyan and Tanzanian Manufacturing”, *Oxford Bulletin of Economics and Statistics*, 68(3), 261-288.
- Söderbom M., F. Teal and A. Wambugu (2002), “Does Firm Size Really Affect Earnings?”, *CSAE Working Paper*, 2002-08, Oxford: Centre for the Study of African Economies.
- Sommers M. (2003), *Urbanization, War and Africa's Youth at Risk: Towards Understanding and Addressing Future Challenges*, Washington, DC: United States Agency for International Development.
- Teal F. (1996), “The Size and Sources of Economic Rents in a Developing Country Manufacturing Labor Market”, *Economic Journal*, 106, 963-76.
- _____ (2000), “Employment and Unemployment in Sub-Saharan Africa: An Overview”, mimeo, Oxford: Centre for the Study of African Economies.
- Trostel P., I. Walker and P. Woolley (2002), “Estimates of the Economic Return to Schooling for 28 Countries”, *Labour Economics*, 9, 1-16.
- UCW (2005), *School-to-Work Transitions in Sub-Saharan Africa*, Preliminary Report, ILO, UNICEF and the World Bank, 56p.
- UNAIDS (2004), *Report of the Global AIDS Epidemic*, Geneva: United Nations Programme on HIV/AIDS.
- UNESCO (2002), *EFA Global Monitoring Report, 2002: Is the World on Track?* UNESCO.
- UNECA (2005), *Economic Report on Africa 2005: Meeting the Challenges of Unemployment and Poverty in Africa*, Addis Ababa: UNECA.
- Urdal H. (2004), “The Devil in the Demographics: The Effect of Youth Bulges on Domestic Armed Conflict, 1950-2000”, *Social Development Paper*, 14, Washington, DC: The World Bank.
- Van Eekelen W., de Luca, L. and Ismail, N. (2001) “Youth Employment in Egypt. InFocus Programme on Skills, Knowledge, and Employability Skills”, Genève: International Labour Office.
- Velenchik A. (1997), “Market Power, Firm Performance and Real Wage Growth in Zimbabwean Manufacturing”, *World Development*, 25(5), 749-762.
- Vijverberg W.P. (1995), “Returns to Schooling in Non-Farm Self-Employment: An Econometric Case Study of Ghana”, *World Development*, 23(7), 1215-1227.
- Walther R. (2005), *Financing Vocational Training : a Europe-Africa Comparison*, *AFD Notes et Documents*, 13, Paris: Agence Française de Développement.
- _____ (2006a), “La formation professionnelle en secteur informel : Note de problématique”, *AFD Working Paper*, 15, Paris: Agence Française de Développement.

- _____ (2006b), “La formation professionnelle en secteur informel : Rapport sur l’enquête de terrain au Maroc”, *AFD Working Paper*, 16, Paris: Agence Française de Développement.
- _____ (2006c), “La formation professionnelle en secteur informel : Rapport sur l’enquête de terrain au Cameroun”, *AFD Working Paper*, 17, Paris: Agence Française de Développement.
- _____ (2006d), “La formation professionnelle en secteur informel : Rapport sur l’enquête de terrain au Bénin”, *AFD Working Paper*, 19, Paris: Agence Française de Développement.
- _____ (2006e), “Les mécanismes du financement de la formation professionnelle : une comparaison Europe-Afrique”, *AFD Working Paper*, Paris: Agence Française de Développement.
- _____ (2006f), “La formation professionnelle en secteur informel : Rapport sur l’enquête de terrain au Sénégal”, *AFD Working Paper*, Paris: Agence Française de Développement.
- _____ (2006g), “La formation professionnelle en secteur informel : Rapport sur l’enquête de terrain en Afrique du Sud”, *AFD Working Paper*, Paris: Agence Française de Développement.
- _____ (2006h), “Conclusion provisoires de l’étude ‘formation professionnelle en secteur informel’ ”, *AFD Working Paper*, Paris: Agence Française de Développement.
- World Bank (1990), *World Development Report 1990: Poverty*, Washington, DC: The World Bank.
- _____ (2003), *Republic of Tunisia: Employment Strategy. Report #25456-TUN*. Washington, DC: The World Bank.
- _____ (2005), *Doing business in 2006; Creating jobs*, Washington, DC: The World Bank.
- _____ (2006a), *Development and the next generation*, World Development Report 2007, Washington, DC: The World Bank.
- _____ (2006b), *Youth in Africa’s Labor Market*, Vol. I and II, Draft for discussion, June 14, Washington, DC: The World Bank.

STATISTICAL APPENDIX

Table 1: Activity Rates by Age for Some Selected African Countries, Various Years (%)

Country	15-24	25-49	Country	15-24	25-49	Country	15-24	25-49	Country	15-24	25-49	Country	15-24	25-49
MENA			Sub-Saharan Africa											
Algeria			Benin			Congo			Mali			Sudan		
1987	34.6	53.3	1992	66.3	77.4	1974	44.5	78.1	1976	49.7	55.1	1993	38.1	56.8
1996	40.7	54.4	2001	45.3	88.0	1984	29.2	76.6	1987	61.8	71.1	1996	35.4	61.1
Egypt			Botswana			Cote d'Ivoire			Mauritius			Tanzania		
1999	34.0	58.6	2000	38.9	75.3	1978	65.6	86.7	2000	49.4	72.6	1978	61.6	95.2
2002	29.9	57.1	2001	37.6	73.7	1988	55.6	73.3	2004	46.0	74.1	2001	80.9	96.1
Libya			Burkina Faso			Ethiopia			Namibia			Zimbabwe		
1964	32.9	51.1	1985	82.3	88.4	1999	78.2	87.6	1991	40.1	77.9	1997	54.3	87.3
1973	26.8	58.1	1991	79.0	90.0	2004	47.2	83.6	1994	36.0	75.2	1999	52.2	84.3
Morocco			Burundi			Gambia			Nigeria					
2002	41.7	61.7	1986	78.2	95.9	1983	66.4	84.1	1983	32.6	67.0			
2003	43.1	63.0	1990	81.6	97.3	1993	40.7	68.2	1986	30.4	68.2			
Tunisia			Cameroon			Ghana			Rwanda					
1997	38.8	61.6	1982	51.5	75.0	1970	54.9	84.0	1978	91.5	97.9			
2005	32.8	68.4	1985	48.1	76.4	2000	53.8	88.7	1996	79.0	95.2			
			Chad			Madagascar			Senegal					
			1988	52.7	61.0	1975	72.2	88.5	1985	68.8	84.9			
			1993	56.5	80.6	2003	67.6	92.0	1988	44.6	58.6			

Source: ILO database LABORSTA

Table 2a: Activity Rates by Age and Sex (%)

	Abidjan	Bamako	Cotonou	Dakar	Douala	Kinshasa	Lome	Niamey	Ouaga- dougou
Males									
15-19	37.1	37.8	26.9	48.2	34.1	17.9	41.1	48.9	51.8
20-24	69.2	56.6	57.5	72.4	72.3	40.2	72.6	70.1	74.7
25-49	95.7	88.3	93.7	89.4	95.3	82.4	95.1	90.7	94.0
50+	70.7	60.7	61.7	57.1	70.3	75.6	66.5	77.1	68.4
Females									
15-19	53.2	40.4	43.5	37.6	28.6	9.7	56.7	34.7	48.4
20-24	65.6	53.9	64.5	55.0	47.6	30.9	74.0	46.7	69.6
25-49	83.0	70.6	85.3	66.3	76.1	59.2	90.7	58.1	80.8
50+	58.3	42.8	66.2	43.8	53.6	52.5	59.0	53.6	46.7
All									
15-19	46.9	39.2	35.9	42.3	31.0	13.8	50.1	41.1	49.9
20-24	67.2	55.1	61.1	63.3	59.6	35.2	73.3	57.2	72.3
25-49	89.9	79.3	89.3	77.3	86.3	70.5	92.9	74.0	87.7
50+	65.4	53.2	64.0	50.6	62.8	65.2	62.4	67.4	58.2

Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL; authors' computations.

Table 2b: Activity Rates by Age and Sex in Congo (Dem.Rep.) and Cameroon. 2005 (%)

	Democratic Republic of Congo				Cameroon				
	Kinshasa	Urban	Rural	National	Douala	Yaounde	Urban	Rural	National
Males									
15-19	17.9	17.0	33.9	29.3	34.1	25.1	35.7	68.6	56.6
20-24	40.2	42.7	61.6	56.1	72.3	61.7	67.5	85.2	76.2
25-49	82.4	88.4	95.6	93.7	95.3	92.7	95.1	97.9	96.7
50+	75.6	78.3	89.3	86.7	70.3	71.1	71.7	88.1	83.8
Females									
15-19	9.7	17.6	50.3	40.6	28.6	18.0	28.5	66.8	50.8
20-24	30.9	40.3	75.9	65.7	47.6	48.5	49.2	80.2	67.1
25-49	59.2	68.6	90.6	84.9	76.1	73.5	76.5	90.6	85.5
50+	52.5	60.4	82.0	76.9	53.6	53.5	58.7	81.2	75.8
All									
15-19	13.8	17.3	41.9	34.9	31.0	21.2	31.8	67.7	53.7
20-24	35.2	41.5	69.3	61.3	59.6	54.8	58.4	82.3	71.3
25-49	70.5	78.2	93.0	89.1	86.3	83.6	86.1	93.9	90.8
50+	65.2	69.8	85.8	82.0	62.8	62.7	65.5	84.6	79.8

Source: 1-2-3 Surveys. Phase 1 (labour force survey). Kinshasa (2004). national (2005) and EESI 2005.
Sample includes all individuals aged 15 or more.

Table 3a: Youth and Overall Unemployment Rates in Selected Anglophone African Countries, Various Years

Country	Year	Total			Youth age range (years)	Youth			Ratio of unemployment rates: Youth/overall	% of youth in labour force
		Labour force	No.unemployed	%unemployed		Labour force	No.unemployed	%unemployed		
Botswana	1991	441.203	61.265	13.9	15-24	122.871	31.463	25.6	1.8	27.8
	1993			21.6	15-24			41.2	1.9	
	1995			21.5	15-24			37.9	1.8	
Egypt	?	17.118.000	1.768.000	10.3	15-30	5.992.000	1.652.000	27.6	2.7	35
Mauritius	1990			5.6	20-24			11.3	2	
	1995	483.958	47.646	9.8	15-24	103.881	24.693	23.8	2.4	21.5
Namibia	1991	479.780	91.765	19.1	15-24	118.730	45.200	38.1	2	24.7
	1997	498.324	97.121	19.5	15-24	97.418	36.062	37.0	1.9	19.5
Nigeria	1998			3.9	15-24			15.5	4	
Urban	1998			5.5	15-24			23.4	4.3	
Rural	1998			3.5	15-24			13.8	3.9	
South Africa	1997			22.9	15-30			35.0	1.5	
Tanzania. U.R.	1990	11.294.930	405.722	3.6	15-24	3.297.161	237.395	7.2	2	29.2
Uganda	1997			7.4	18-30					
Zambia	1990	2.296.000	285.000	12.4	12-24	868.000	181.000	20.9	1.7	37.8
	1996	4.037.000	644.000	16	12-24	1.347.000	435.000	32.3	2	33.4
Zimbabwe	1990			11.3				27.0	2.4	
	1992	3.501.798	764.199	21.8		1.164.973	516.083	44.3	2	33.3

Source: Table extracted from Kanyenze *et al.* (2000). "Strategies to Combat Youth Unemployment and Marginalisation in Anglophone Africa". ILO/SAMAT Discussion Paper No.14. 54p. Data come from the ILO/SAMAT database (ILO/SAMAT. 2000) for all countries except Egypt (ILO/NAMAT. 1999. Table 17). Nigeria and Uganda (Kanyenze tables).

Table 3b: Youth and Adult Unemployment Rates in selected African Countries, Various Years

Countries by Region	Adult (25-49)	Young (15-24)	Year	Countries by Region	Adult (25-49)	Young (15-24)	Year
WAEMU countries				SADC countries			
Benin	3,0	5,9	2003	Angola	3,8	8,0	1999
Burkina Faso	1,8	3,8	2003	Lesotho	32,4	52,4	2002
Côte d'Ivoire	3,9	5,0	2002	Malawi	2,1	7,9	1997
Niger	8,7	20,8	2002	Mozambique	0,6	1,1	1996
Senegal	9,0	10,1	1995	Namibie	18,2	35,1	1993
Other West-African countries				South Africa			
Cape Verde	8,7	26,1	2000	Swaziland	5,8	13,8	2000
Gambia	3,4	9,2	1998	Tanzania	0,8	2,8	2000
Ghana	3,4	15,7	1998	Zambia	6,1	25,0	2002
Guinea	2,2	2,1	1994	East-African countries			
Mauritania	7,9	10,8	2000	Burundi	0,5	0,4	1998
Nigeria	1,1	5,6	2003	Kenya	6,3	20,7	1997
Sao Tomé	1,4	8,5	2000	Rwanda	9,1	9,6	1997
Sierra Leone	3,0	1,8	2003	Uganda	1,8	6,0	2002
CAEMU countries				Other			
Cameroon	8,8	12,6	2001	Ethiopia	1,8	3,9	2000

Source: World Development Report 2007, Table A3, pp. 274-275

Table 4a: Unemployment Rates (*) by Age and Sex (%)

	Abidjan	Bamako	Cotonou	Dakar	Douala	Kinshasa	Lome	Niamey	Ouagadougou
Males									
15-19	15.8	16.2	4.9	11.7	8.7	29.1	12.5	35.6	24.0
20-24	22.2	18.3	10.1	16.4	14.6	34.6	20.4	31.5	31.7
25-49	13.5	7.4	6.9	13.4	9.6	13.9	10.4	11.5	13.5
50+	8.4	5.9	8.0	12.6	13.2	10.8	17.7	15.6	9.5
Females									
15-19	18.7	14.9	4.7	30.8	18.1	25.6	8.7	43.3	35.6
20-24	26.4	27.3	12.4	34.7	20.4	22.7	14.5	47.9	47.0
25-49	17.4	15.9	6.5	27.8	15.5	8.6	9.6	28.0	24.2
50+	10.3	9.5	3.7	10.4	2.2	0.7	4.2	19.5	7.3
All									
15-19	17.8	15.5	4.8	21.2	13.6	27.8	10.0	39.1	30.3
20-24	24.4	22.9	11.4	24.8	17.0	29.0	17.2	38.9	38.9
25-49	15.1	11.2	6.7	19.8	12.0	11.6	10.0	18.1	18.1
50+	9.1	7.1	5.8	11.7	9.0	7.2	10.6	16.9	8.7

Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL; authors' computations.

(*) The unemployed are broadly defined as those individuals who had no employment during the reference week, were available for work, and had made specific efforts to find employment. Discouraged workers who have lost a job, but do not make an effort to find a new job in a given week are also included.

Table 4b: Unemployment Rates (*) by Age and Sex in Congo (Dem.Rep.) and Cameroon (%)

	Democratic Republic of Congo				Cameroon				
	Kinshasa	Urban	Rural	National	Douala	Yaounde	Urban	Rural	National
Males									
15-19	29.1	21.5	3.8	6.6	8.7	17.5	12.2	3.0	5.1
20-24	34.6	20.1	3.6	7.2	14.6	22.0	14.3	5.5	9.5
25-49	13.9	9.4	1.0	3.2	9.6	9.1	7.5	1.8	4.2
50+	10.8	6.1	0.9	2.0	13.2	5.4	6.7	0.7	2.0
Females									
15-19	25.6	18.0	2.3	4.3	18.1	21.8	14.9	1.8	4.9
20-24	22.7	15.8	1.2	3.7	20.4	33.6	24.5	4.3	10.5
25-49	8.6	8.0	0.6	2.1	15.5	16.4	12.6	1.4	5.0
50+	0.7	3.9	0.3	1.0	2.2	4.5	1.6	0.1	0.4
All									
15-19	27.8	19.7	2.9	5.3	13.6	19.5	13.6	2.4	5.0
20-24	29.0	17.9	2.2	5.2	17.0	27.4	18.6	4.8	10.0
25-49	11.6	8.8	0.8	2.7	12.0	12.2	9.7	1.5	4.6
50+	7.2	5.2	0.6	1.5	9.0	5.0	4.6	0.4	1.2

Source: 1-2-3 Surveys. Phase 1 (labour force survey). Kinshasa (2004), national (2005) and EESI 2005

(*) The unemployed are broadly defined as those individuals who had no employment during the reference week, were available for work, and had made specific efforts to find employment. Discouraged workers who have lost a job, but do not make an effort to find a new job in a given week are also included.

Table 5: Employment Characteristics of the Young (15-24), by Country

Country	Rural				Urban			
	Wage	Informal	Self	Other	Wage	Informal	Self	Other
Burkina Faso	0.4	94.8	4.8	0	27.9	57	14.4	0.7
Burundi	1.8	83.3	14.8	0.1	31.3	19.6	43.3	5.8
Cameroon	6.3	18.1	68.8	6.8	15.3	56.9	22	5.9
Ethiopia	55.6	24.8	16.2	3.4	16.2	38.2	23.3	22.3
Gambia	1.2	53.1	45	0.8	42.3	20.7	34.7	2.4
Kenya	16.4	40	43.6	0	21.1	53.3	25.4	0.2
Madagascar	5.9	69.7	23.5	1	19.3	58.7	18.2	3.8
Malawi	15	7.1	74.5	3.3	63.8	6.8	19.8	9.5
Mozambique	11.8	--	86.7	1.5	40.2	--	53.5	6.3
Sao Tome	59.5	34.3	--	6.2	66.3	24.3	--	9.5
Zambia	3.1	60.4	36.1	0.4	40.9	9.6	46.1	3.5

Source: Table reproduced from "School-to-work transitions in Sub-Saharan Africa". Preliminary Report. UCW project. Nov. 2005. Wage employees are workers in paid employment who are remunerated by wages and salaries. Workers employed in the informal sector are those employed in a semi-organised unit. Self-employed workers are those who perform some work for own or family business and who are remunerated either in cash or in kind. See UCW report for more details.

Table 6a: Distribution of Employed Young Workers (15-24 years old) by Institutional Sector (%)

	Abidjan	Bamako	Cotonou	Dakar	Douala	Kinshasa	Lome	Niamey	Ouaga-dougou
Males									
Public Administration	0.5	1.5	1.9	0.8	0.3	1.9	0.5	2.7	2.0
State-Owned Enterprises	0.1	0.3	0.6	0.4	0.4	0	1.1	0.3	2.4
Formal Private Sector	15.0	13.7	6.0	9.9	31.1	7.8	12.6	14.5	12.7
Informal Private Sector	81.8	83.7	89.6	88.1	66.5	89.0	84.0	81.8	81.4
Non-Profit Organisations	2.5	0.8	1.9	0.8	1.7	1.4	1.9	0.8	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females									
Public Administration	0.0	0.3	0.6	0.7	0.0	0.6	0.2	3.8	1.3
State-Owned Enterprises	0.0	0.0	0.9	0.2	0.6	0.8	0.2	0.0	1.2
Formal Private Sector	4.7	2.0	3.7	6.0	13.6	7.4	9.3	5.9	4.4
Informal Private Sector	95.2	97.5	94.3	92.6	85.8	89.4	90.3	87.7	91.8
Non-Profit Organisations	0.1	0.2	0.5	0.5	0.0	1.8	0.0	2.7	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All									
Public Administration	0.2	0.9	1.1	0.8	0.1	1.3	0.3	3.1	1.7
State-Owned Enterprises	0.1	0.2	0.8	0.3	0.5	0.4	0.6	0.2	1.9
Formal Private Sector	9.0	7.5	4.6	8.2	23.7	7.6	10.6	11.0	9.0
Informal Private Sector	89.6	91.0	92.4	89.9	74.7	89.2	87.8	84.2	86.1
Non-Profit Organisations	1.1	0.5	1.1	0.7	1.0	1.6	0.8	1.6	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL; authors' computations.

Table 6b: Distribution of Employed Young Workers (15-24 years old) by Institutional Sector in Congo (Dem. Rep.) and Cameroon, 2005 (%)

	Democratic Republic of Congo				Cameroon					
	Kinshasa	Urban	Rural	National	Douala	Yaounde	Urban	Rural	National	
Males										
Public Administration	1.9	3.8	2	2.3	0.3	3.6	1.5	0.6	0.9	
State-Owned Enterprises	0	1.7	0.4	0.6	0.4	0.3	0.7	0.4	0.5	
Formal Private Sector	7.8	5.3	1.1	1.8	31.1	29.3	28.3	8.9	15.1	
Informal Private Sector	89.0	87.7	94.8	93.6	66.5	61.4	66.7	89.8	82.5	
Non-Profit Organisations	1.4	1.5	1.7	1.7	1.7	5.4	2.8	0.3	1.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Females										
Public Administration	0.6	1.8	0.6	0.8	0.0	0.5	0.7	0.2	0.3	
State-Owned Enterprises	0.8	0.5	0.1	0.2	0.6	0.3	0.3	0.0	0.1	
Formal Private Sector	7.4	2.0	0.4	0.5	13.6	17.0	13.3	1.6	4.4	
Informal Private Sector	89.4	94.3	98.5	98.0	85.8	80.6	85.1	97.9	94.9	
Non-Profit Organisations	1.8	1.4	0.4	0.5	0.0	1.6	0.6	0.2	0.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
All										
Public Administration	1.3	2.7	1.2	1.4	0.1	2.3	1.2	0.4	0.6	
State-Owned Enterprises	0.4	1.0	0.3	0.4	0.5	0.3	0.5	0.2	0.3	
Formal Private Sector	7.6	3.6	0.7	1.0	23.7	24.0	22.0	5.1	9.8	
Informal Private Sector	89.2	91.2	97.0	96.2	74.7	69.7	74.4	94.0	88.6	
Non-Profit Organisations	1.6	1.5	0.8	1.0	1.0	3.7	1.8	0.3	0.7	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: 1-2-3 Surveys. Phase 1 (labour force survey). Kinshasa (2004). national (2005) and EESI 2005.

Table 7a: Incidence of Visible Underemployment (*) (%)

	Abidjan	Bamako	Cotonou	Dakar	Douala	Kinshasa	Lome	Niamey	Ouaga- dougou
Males									
15-19	5.6	8.5	4.3	5.2	15.6	24.3	15.8	9.9	6.8
20-24	12.5	7.6	11.4	12.5	12.8	20.7	13.9	11.9	6.9
25-49	10.0	9.0	10.9	10.9	9.1	14.9	12.4	8.9	5.8
50+	8.7	6.4	8.1	11.2	16.9	13.4	12.2	6.4	3.9
Females									
15-19	9.1	12.1	8.6	11.4	32.5	29.2	12.7	21.1	9.4
20-24	9.2	20.6	12.7	18.0	23.6	27.3	16.2	23.4	14.1
25-49	10.9	23.3	13.0	20.1	20.1	16.3	18.3	22.5	15.5
50+	9.5	12.3	11.4	16.8	11.3	21.3	11.4	15.8	12.2
All									
15-19	8.0	10.5	7.1	7.9	24.0	26.1	13.7	14.7	8.1
20-24	10.8	14.0	12.1	14.7	17.0	24.1	15.2	16.3	9.8
25-49	10.4	15.1	11.9	14.6	13.4	15.5	15.3	13.7	9.7
50+	9.0	8.3	9.9	13.6	14.6	16.5	11.8	9.4	7.1

Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL; authors' computations.

(*) Visible underemployment consists of workers who work less than the normal duration of working hours but are willing and available to work more.

Table 7b: Incidence of Visible Underemployment (*) in Congo (Dem. Rep.) and Cameroon (%)

	Democratic Republic of Congo				Cameroon				
	Kinshasa	Urban	Rural	National	Douala	Yaounde	Urban	Rural	National
Males									
15-19	24.3	28.6	24.6	25.1	15.6	8.9	17.2	14.6	15.2
20-24	20.7	19.0	32.2	29.7	12.8	14.1	13.7	11.5	12.4
25-49	14.9	20.0	33.8	30.5	9.1	7.5	9.6	10.9	10.4
50+	13.4	20.9	38.6	34.9	16.9	5.3	15.8	21.8	20.5
Females									
15-19	29.2	28.1	35.7	34.9	32.5	22.4	31.8	18.9	21.7
20-24	27.3	32.8	39.6	38.6	23.6	15.8	25.3	27.0	26.6
25-49	16.3	24.4	34.6	32.6	20.1	15.7	23.8	20.1	21.2
50+	21.3	28.9	38.6	36.9	11.3	9.8	20.1	29.7	28.0
All									
15-19	26.1	28.3	31.2	30.8	24.0	15.0	24.1	16.7	18.2
20-24	24.1	26.3	36.6	34.9	17.0	14.8	18.2	20.3	19.6
25-49	15.5	22.0	34.2	31.6	13.4	10.7	15.5	15.8	15.7
50+	16.5	24.2	38.6	35.8	14.6	7.1	17.7	25.7	24.1

Source: *I-2-3 Surveys*. Phase 1 (labour force survey). Kinshasa (2004), national (2005) and EESI 2005.

(*) Visible underemployment consists of workers who work less than the normal duration of working hours but are willing and available to work more.

Table 8a: Incidence of Invisible Underemployment (*) (%)

	Abidjan	Bamako	Cotonou	Dakar	Douala	Kinshasa	Lome	Niamey	Ouaga- dougou
Males									
15-19	77.0	66.8	74.7	81.3	72.7	63.5	65.2	76.9	88.0
20-24	51.0	59.2	60.1	59.8	47.8	52.1	49.5	54.8	79.5
25-49	25.0	21.5	32.5	32.5	19.7	34.7	25.8	30.4	41.4
50+	17.8	16.6	22.6	25.7	22.1	31.7	22.2	23.5	40.2
Females									
15-19	90.1	80.2	88.8	85.9	80.5	55.4	84.4	79.1	95.4
20-24	72.2	66.7	80.7	74.8	72.2	59.8	68.5	64.5	84.8
25-49	58.2	47.3	64.0	59.1	39.5	47.1	58.9	48.8	66.1
50+	61.2	54.0	64.6	58.3	41.7	60.3	53.7	61.9	82.2
All									
15-19	87.0	74.9	84.4	84.0	76.6	60.4	77.9	77.9	91.8
20-24	61.6	63.0	71.3	66.5	57.4	56.1	60.4	58.8	82.0
25-49	38.3	32.7	48.2	43.5	27.5	40.2	41.9	37.2	51.6
50+	34.1	28.9	44.8	39.9	30.1	42.8	39.8	36.0	55.7

Source: 1-2-3 Surveys, Phase 1 (labour force survey), 2001-2005, National Statistical Institutes, AFRISTAT, DIAL; authors' computations.

(*) Invisible underemployment consists of workers who earn less than the minimum hourly wage.

Table 8b: Incidence of Invisible Underemployment (*) in Congo (Dem.Rep.) and Cameroon (%)

	Democratic Republic of Congo				Cameroon				
	Kinshasa	Urban	Rural	National	Douala	Yaounde	Urban	Rural	National
Males									
15-19	63.5	60.8	72.4	70.9	72.7	72.9	76.8	91.9	88.7
20-24	52.1	57.7	68.9	66.7	47.8	53.8	56.5	80.7	70.4
25-49	34.7	41.2	62.2	57.2	19.7	24.1	26.8	58.2	45.4
50+	31.7	49.3	61.7	59.1	22.1	24.7	30.3	63.2	56.2
Females									
15-19	55.4	70.6	77.3	76.6	80.5	94.4	86.4	94.9	93.1
20-24	59.8	68.0	82.3	80.1	72.2	69.0	73.2	85.5	82.3
25-49	47.1	59.8	82.7	78.2	39.5	37.9	46.1	79.5	69.6
50+	60.3	67.6	80.1	77.8	41.7	48.8	56.6	83.8	78.8
All									
15-19	60.4	66.1	75.3	74.2	76.6	82.6	81.3	93.3	90.8
20-24	56.1	63.2	76.8	74.5	57.4	60.3	63.0	83.4	76.4
25-49	40.2	49.6	72.8	67.8	27.5	29.6	34.9	69.6	57.4
50+	42.8	56.9	70.1	67.5	30.1	34.5	41.8	73.2	67.0

Source: 1-2-3 Surveys. Phase 1 (labour force survey). Kinshasa (2004), national (2005) and EESI 2005.

(*) Invisible underemployment consists of workers who earn less than the minimum hourly wage.

Table 9a: Mean Monthly Earnings by Age in PPA 1,000 CFA Francs (Main Activity)

	Abidjan	Bamako	Cotonou	Dakar	Lome	Niamey	Ouaga- dougou
Males							
15-19	28.3	26.6	20.5	29.8	15.3	18.3	18.0
20-24	43.8	57.1	33.7	42.5	24.1	33.2	27.9
25-49	104.0	86.8	69.4	93.6	51.3	75.1	68.1
50+	193.9	102.5	114.1	122.5	70.4	77.7	85.8
All ages	101.9	80.8	70.3	85.7	48.0	68.1	61.9
Females							
15-19	15.5	13.2	17.3	19.1	10.0	12.2	10.9
20-24	29.3	17.2	21.4	27.4	15.8	20.5	16.9
25-49	55.7	37.0	32.2	48.3	24.9	43.1	37.4
50+	83.8	33.7	32.1	47.3	25.1	31.4	27.5
All ages	47.6	30.3	29.9	41.2	22.1	36.0	30.3
All							
15-19	18.7	18.6	18.3	23.7	11.7	15.6	14.2
20-24	36.4	37.3	26.9	35.8	19.3	28.1	23.1
25-49	84.4	65.5	50.9	75.1	38.5	63.9	55.7
50+	152.5	80.1	70.4	89.8	44.9	63.1	64.1
All ages	77.6	58.4	49.4	66.4	34.6	56.6	48.8

Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL; authors' computations.

Table 9b: Mean Monthly Earnings by Age in Congo (Dem. Rep.) and Cameroon (Main Activity)

	Democratic Republic of Congo				Cameroon				
	Kinshasa	Urban	Rural	National	Douala	Yaounde	Urban	Rural	National
Males									
15-19	10.4	8.8	3.8	4.5	14.5	16.5	13.1	5.1	6.8
20-24	12.5	11.7	5.8	6.9	34.3	27.5	28.4	14.4	20.4
25-49	23.4	22.3	9.3	12.3	94.1	97.6	83.8	34.3	54.4
50+	30.9	19.9	9.1	11.3	108.0	149.4	92.5	26.2	40.5
All ages	23.7	20.2	8.4	11.0	81.3	87.1	70.1	25.4	40.9
Females									
15-19	6.3	5.7	3.6	3.8	11.6	5.5	7.0	3.4	4.2
20-24	11.1	7.6	3.5	4.1	20.3	20.6	17.2	7.2	9.8
25-49	15.0	11.1	4.5	5.8	52.9	65.8	46.0	15.0	24.3
50+	9.8	8.5	5.1	5.7	48.6	61.5	36.4	10.9	15.7
All ages	13.3	9.9	4.3	5.3	43.8	53.9	36.9	11.5	18.1
All									
15-19	8.9	7.1	3.7	4.1	13.1	11.5	10.2	4.3	5.6
20-24	11.8	9.5	4.4	5.3	28.8	24.6	24.1	10.3	15.0
25-49	19.7	17.2	6.8	9.0	77.8	85.1	68.4	24.0	39.5
50+	22.7	15.2	7.3	8.8	83.7	113.6	70.1	18.8	28.7
All ages	19.2	15.5	6.3	8.1	66.2	73.7	56.1	18.2	29.7

Source: 1-2-3 Surveys. Phase 1 (labour force survey). 2001-2005. National Statistical Institutes. AFRISTAT. DIAL; authors' computations.

Table 10: Rigidity of employment in Africa

Region or Economy	Difficulty of Hiring Index	Rigidity of Hours Index	Difficulty of Firing Index	Rigidity of Employment Index	Hiring cost (% of salary)	Firing costs (weeks of wages)
East Asia & Pacific	23.7	25.2	19.6	23.0	9.4	41.7
Europe & Central Asia	34.2	50.7	37.1	40.8	26.7	26.2
Latin America & Caribbean	34.0	34.8	26.5	31.7	12.5	59.0
Middle East & North Africa	29.7	44.7	32.9	35.8	15.6	56.9
OECD	27.0	45.2	27.4	33.3	21.4	31.3
South Asia	41.8	25.0	37.5	34.8	6.8	71.5
Sub-Saharan Africa	44.3	52.0	44.9	47.1	12.7	71.2

Source: World Bank, *Doing Business* (<http://www.doingbusiness.org/>; accessed 9th November 2006)

Table 11: Who regulates employment the least – and who regulates employment the most?

Difficulty of hiring

Least	Most
Australia	Iran
Georgia	Burkina Faso
Hong Kong, China	Mozambique
Israel	Central African Rep.
Malaysia	Congo, Rep.
Mauritius	Sierra Leone
Namibia	Congo, Dem. Rep.
Russia	Mauritania
Switzerland	Morocco
United States	Niger

Rigidity of hours

Least	Most
Canada	Chad
Hong Kong, China	Congo, Rep.
Jamaica	Egypt
Lebanon	Mongolia
New Zealand	Niger
Serbia Montenegro	Brazil
Singapore	Burkina Faso
Tunisia	Congo, Dem. Rep.
United States	Moldova
Chile	Guinea

Difficulty of firing

Least	Most
Costa Rica	Angola
Hong Kong, China	Cameroon
Iceland	Egypt
Japan	Lao PDR
Kuwait	Sri Lanka
Oman	Togo
Saudi Arabia	Ukraine
Singapore	India
Thailand	Nepal
Uruguay	Tunisia

Rigidity of employment (average of the 3 other indexes)

Least	Most
Hong Kong, China	Iraq
Singapore	Chad
Hong Kong, China	Mauritania
New Zealand	Central African Rep.
Malaysia	Togo
Zambia	Congo, Rep.
Jamaica	Sierra Leone
Saudi Arabia	Burkina Faso
Uganda	Congo, Dem. Rep.
United Kingdom	Niger

Source: World Bank, Doing Business (<http://www.doingbusiness.org/>; accessed 9th November 2006)