Youth Labour Market in Africa: Characterizing the School–to–Work Transitions with a Cross-Country Analysis

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Introduction

Of particular recent research interest in the global labour market is the transition of young people from education to first-time employment, where this first-time employment is seen as an economic security for their social integration. This is because the time at which young people transit to the world-of-work is a critical period, as many of them enter simultaneously into the labor market and adulthoods. Nevertheless, despite the importance of early employment, it is very common to see nowadays that a significant number of young people remain long without finding jobs after leaving school or college. For instance, recent data released from International Labour organization (ILO, 2014) show that over 74.5 million young people aged 15-24 are globally looking for jobs, but unable to find any relevant vacancies—resulting in that young people are hit by unemployment two to three times higher than their adult counterparts in the current global labour market.

Coupled with an abject poverty, the youth employment crisis is particularly a complicated and deep-rooted issue in Africa and it has already become a challenging issue throughout the continent in both economic and social terms. Undoubtedly, Africa has recently seen a robust economic growth and its overall economic output increased by more than double between 2001 and 2010. Over this decade, Africa was also a home to six of the top ten fastest–growing economies in the world. Nevertheless, despite such noticeable economic progress and the fact that Africa's current young cohorts get better access to education and training opportunities than their parents' generation, a significant number of young Africans are in difficult times to find a living wage employment, not to mention the widespread underemployment and informal labour relations.

One of the main reasons why majority of the young school leavers get blocked at the entrance of labour market is because there are no definitive frameworks in many of the African countries that govern the transition from the education sector to the labour market. The transition rather seems to be a 'broken bridge', where a significant number of youth are trapped in between the two sectors. This signifies that a big challenge for the African governments and policymakers-alike is to ensure that there is a smooth, productive, and safe transition of young people from the world–of–learning to that of world–of–work.

In this way, aiming to systematically characterize the school–to–work transition and fully explain the culpable factors for the high youth unemployment among first-time jobseekers in Africa, this dissertation asks four interdisciplinary research questions:

i. How well is the African education system preparing young people for the ever changing demands of the labor market?
ii. How long specifically are the average durations of labor market transition gaps for young men and women; and what factors explain those transition gaps?
iii. How far are the existing macroeconomic conditions and labor market institutions suitable for productive employment, especially in time when the youths move from the world–of–learning to that of world–of–work?
iv. What role can early human capital improvements and skill formation play in smoothing the transition gaps in both the long term and short terms?

In an effort to answer those research questions, this dissertation comprises three broad chapters. While the first two chapters are case studies from Ethiopia using micro (econometrics) approaches, the third chapter broadens the scope of the study to a range of African countries with a macro perspective and cross-country analysis. More specifically, to examine and characterize the school-to-work transition with empirical evidence, the first chapter makes use of high quality data from the 2012 Ethiopian Urban Labor Market Survey that provides a detailed retrospective data on education and labour market status of 23,252 young people (aged 15-29), whose education attainments range from primary to post-graduate level. The second chapter uses micro-econometric models to examine youth unemployment descriptors and estimate the average durations of labor market transition for young men and women by identifying the factors that influence those transition gaps. This is done using logit and duration models. While the logit models deal with the incidence of youth unemployment and its determinants, the duration models do estimate the exit-rates of the school leavers and college graduates from unemployment state to first-time employment. In both models, analyses were made in connection to various socioeconomic variables such as gender, age groups, family background, human capital, job searching intensities and local labour demands. The methodologies used here are of high quality specifications that are able to come up with quite important insights for labour market policy formulation.

Having the results of the first two chapters as a background, the third chapter paints the picture of youth unemployment across a range of African countries by identifying the major macro challenges that are behind the high youth unemployment. This chapter also provides labour policy options that need to be put in place for promoting an inclusive labour market in the continent.

Taking everything into account, this dissertation research is important in three ways.

Firstly, as far as is known, no systematic empirical study was previously conducted on the challenges of African youth employment from the perspective of the school–to–work transition and first–time jobseekers. This implies that this research is perhaps the first of its kind in the African labour market that able to characterize the school-to-work transition using both micro and macro approaches at a time. Secondly, the outcomes of the research are expected to create awareness and will serve as a wake-up call for the African governments and policymakers–alike to conceive viable labour market policies that may make the African labour market more of inclusive by bridging the gaps existing between the education and the labour market sectors. Thirdly, when added into the research literature, the outcomes of this research may also serve as a good point of reference for further studies in the area.

CHAPTER I
THE SCHOOL-TO-WORK TRANSITION GAPS IN ETHIOPIA: A CRITICAL ANALYSIS OF SURVEY DATA

OUTLINES: *1.Introduction—2.Background of Country study—3.Education and labour market—3.1.Education—3.2.Labour market—4.Analyzing the gap between the education and labour market—4.1.Explaining the transition gap—4.1.1.Education Attainment of the youth—4.1.2.Current activities of youth—4.2.Measuring the transition gaps—4.2.1.Neither in Employment, Education and Training (NEET)—4.2.2.Combining work and education—4.2.3.Unrealistic-expectation and unemployment—4.2.4.Skills Mismatches—5.The pathway to productive employment—5.1.Status in employment—5.2.Terms of employment—5.3.Weekly Hours for main activity in Self-employment—5.4.Youth labour underutilization—6.Concluding Remarks*

"Quality of education is the passport to the future, as the future belongs to those who prepare for it today." - Malcolm X (1925)

1. Introduction

With a decentralized public sector, Ethiopia has recently made major strides in improving access to social services at the grassroots level. As the result of this, school enrollment rates have increased significantly at all educational levels: primary, secondary and tertiary. What makes things even more impressive is that such educational improvements have been accompanied by a robust economic growth for the last 10 years. Amidst of these enjoyable growth and educational strides, there remains one question, however. Are the young people coming out of high schools and colleges successfully entering into the labor market? The fact of the matter is that it is less clear whether many of those young graduates coming out of high schools and colleges have found it easy to get jobs at home.

Undoubtedly, Ethiopia has succeeded in generating a number of jobs over the last decade, yet those jobs are said to be insufficient to accommodate the rising number of ‘educated’ youthful population in the country. The official urban youth unemployment in 2012 was 23.25%, but in reality it is expected to be higher. According to Guarcello et.al.(2008), Ethiopia has one of the highest urban unemployment rates worldwide, at about 50% of the youth workforce, implying that youth unemployment is one of the core economic challenges that the country has faced today, not to mention the abject working poverty in the informal sector.

With more than 90 million, Ethiopia is the second populous country in Africa after Nigeria (173 million in 2014). And the number of youthful population is expected to bulge more and

more in few years to come. Especially, given the fact that a significant of number of youth are now getting access to basic education and beyond, there is an urgent need to develop an efficient and smooth transition system between the education and labour market sectors. Unless the school-to-work transition path of the youth is thoroughly examined and designed to a better future, Ethiopia otherwise seems to fail to make effective use of its youth and sustain its growth path.

So far, research works related to the school–to–work transitions are very scant in the country. As far as is known, no empirical study was previously conducted on the school-to-work transition of the Ethiopian youth. Authors like Krishnan et.al.(1998); Tekeste et.al. (2005); Haile (2003; 2005). Getachew et.al.(2005); Serneels(2002; 2007); Dendir (2008); Kassa (2011); Broussard and Tekleselassie (2012) and Kibru (2012) undertook researches on the Ethiopian labour market, but none of them has stressed on the school-to-work transition pathways. Many of them rather focus on the contributing factors to the general unemployment without considering the movement from education to the labour market. This implies that in spite of the soaring youth unemployment over recent years, the school-to-work transition issue has not got enough attention in the human development agenda of the country and has not clearly been characterized yet. This chapter then contributes towards filling this research gap.

To do so, this chapter makes use of high quality data from the 2012 Ethiopian Urban Labour Market Survey, which provides a detailed retrospective set of information on education and labour market status of 23,252 young people (aged 15-29). Particularly, in an effort to quantify the school–to–work transition gaps, five alternative measures are identified and thoroughly analyzed, namely (i) the proportion of younger people who are Nether at Employment, Education, nor in Training (NEET); (ii) the proportion of young people who combine work and education; (iii) level of unrealistic-expectation among the surveyed young graduates; (iv) level of skill mismatches; and (v) the proportion of employed young people who are on the move to productive employment from the informal sector.

The result of the analysis shows that more than a fifth (21.2%) of total surveyed young people aged 15-29 are neither at Employment, Education, nor in Training (NEET), with 27.9% for young women and 13.65% for young men. This indicates that the transition for young women is twice as difficult as for young men. Measured by the proportion of young

people combining education and work, the connection between the education and labour market is also found to be so weak, where only one-tenth of surveyed youth are found combining education and any kind of work activities, ranging from apprenticeship trainings to wage employment during the survey time. At urban level, the unemployment rate for young school leavers is 24.57% in 2012, with significant gender variation, where female school leavers face 32.82% versus 16.0% for males. In terms of age group, young people aged 15-19 and 20-24, have faced higher unemployment rates than those of young-adults aged 25-29, showing that unemployment in Ethiopia is dominated by first-time jobseekers.

Furthermore, quite unexpectedly unemployment does not improve with educational attainment. Rather, young people with primary education appear to experience lower unemployment rate than those with secondary education. Statistically, while those who only completed primary education face unemployment rate of 22.38%, the rates are much higher for these with lower secondary (29.38%) and upper secondary education (27.44%). This shows that unemployment in Ethiopia is predominantly concentrated among young people with middle level of education. But, this does not mean that university graduates are immune to widespread unemployment as 13.95% unemployment for university graduates by itself is very high for a country whose overall access to higher education is less than 5%. All in all, in absolute numbers, applying weighting average to the Survey data, it appears that more than ½ million young education leavers (ranging from primary to university graduates) aged 15-29 were actively looking for a job in the Ethiopian urban labour market as of 2012, while many others have already dropped out of the labor market being victim of a long–term unemployment.

Given the stagnant aggregate demand of the Ethiopian economy, two of the most important reasons that possibly explain for the higher unemployment rates of young people with upper educational attainment are found to be unrealistic exaptation and skill mismatches. The fact of the matter is that many of the young people with secondary education and above do search for government jobs and/or wage employment in the private sector by waiting a long queue with unrealistic expectations. But, practically, such employment expectations of the young education leavers cannot be easily met in today's labour market for two crystal clear reasons. Firstly, the public sector is so much more saturated and is no longer able to absorb them by creating white-collar jobs. Secondly, at the same time, as the labour market is very dynamic

by its nature, there is a tendency from private companies that recent graduates are less employable and adaptable to the labour market owing to lack of technical expertise such as effective communication, entrepreneurial spirit, critical thinking, as well as skills to work in specific occupations. As the result of those facts, the empirical finding from this research indicates that the probability to stay unemployed for a high school leaver is on average more than two times than young individual with junior education level, which has come to be known in the labour market literature as "vertical skill mismatch". Indeed, in addition to vertical skill mismatch, there seems also a "horizontal skill mismatch" in the Ethiopian labour market that might arise from dated educational curriculum that leads too few engineers and health professionals, but too many social scientists.

Moreover, analyses are also made on those young people who were on the move from informal employment to stable work conditions. This is because the study on the school-to-work transition will not be complete unless issues related to the qualitative nature of work such as job stability and satisfaction are closely investigated. Taking this into consideration and using selective indicators such as the status of employment, terms of employment, weekly working hours for main activities and perception of job satisfaction, the transition pathway to productive employment of the school leavers and college graduates is also fully assessed. The results show that majority of the employed youth are trapped in the informal sector with extreme poor employment relations that hinder them from making the most of their economic potentials. Economically speaking, youth labour misuse in the case of Ethiopia goes up to 57.57%. This highlights if left unchecked, the existing 'broken' school-to-work transition can pose a threat to the overall human development of the country by directly being translated into joblessness and scarring effects of the youth.

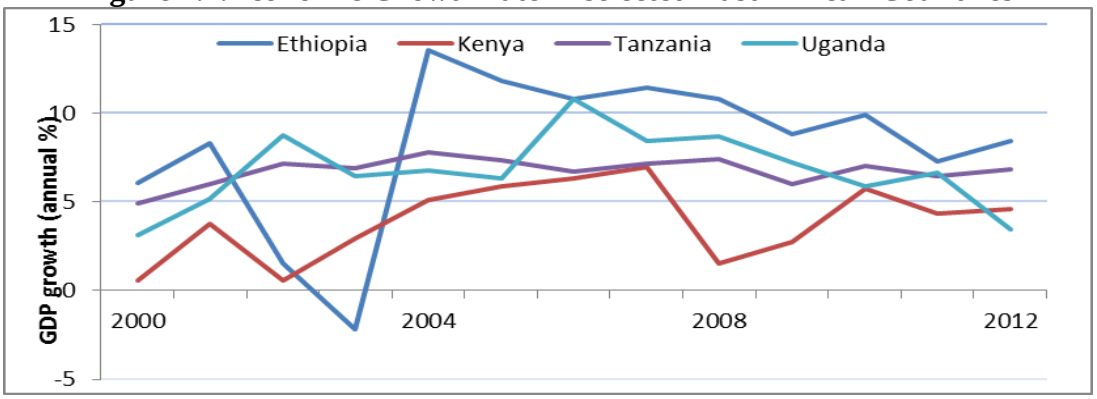
In what follows, section 2 presents the economic background of the country study (Ethiopia), while section 3 summaries the progress of education and historical trend of labour market. Section 4 briefly explains the nature of the data used in the study and characterizes the school-to-work transition gaps using alternative proxy measures. Section 5 furthermore investigates the nature of transitions from informal works to productive jobs. Section 6 concludes with some remarks.

2. Background of Country study, Ethiopia

Ethiopia is a low income country with GDP per capita of $981 in PPP in 2005 (World Bank, 2013). Nevertheless, despite its low income level and economic lull of decades, the country has shown a noticeable economic growth since 2004. Data taken from the World Development Indicators reveals that its growth rate has been much higher than the growth rates seen in neighboring East African countries such as Kenya, Tanzania and Uganda, over the last decade.

In an effort to achieve such growth, Ethiopia has been implementing a series of poverty-focused development strategies since the beginning of 2000s. More specifically, in 2001/2 an economic plan called Sustainable Development and Poverty Reduction Programme (SDPRP) was introduced. As this plan came to an end in 2005/06, it was replaced by the Plan for Accelerated and Sustained Development to End Poverty (PASDEP).

Figure 1.1.Economic Growth rate in selected East African Countries



Source: Elaboration on World Bank Data

Throughout this second economic plan (2005/06-2009/10), Ethiopia enjoyed double-digit economic growth rates. Particularly, a growth rate of 11 percent recorded between 2005 and 2008 was well above the planned target (see Table 1.1). The growth achieved was backed by improvements in all the three sectors of the economy, albeit with some degree of variability. Comparing to the three main sectors, the growth rate from the Service sector was very strong, with an average growth rate of 14.6% over 2005/06-2009/10, while the growth rates from the industry and agricultural sectors were 10% and 8.4%, respectively.

In 2009/10, Ethiopia further introduced a third economic plan—what has come to be called *Growth and Transformation Plan (GTP)*, which is now, as of 2014, in its fourth year. This has been very ambitious plan characterized by huge investment in infrastructural facilities

throughout the country. The US$ 4.8 billion worth of Grand Ethiopian Renaissance Dam (GERD) being constructed in the Blue Nile for energy production is a case in this regard.

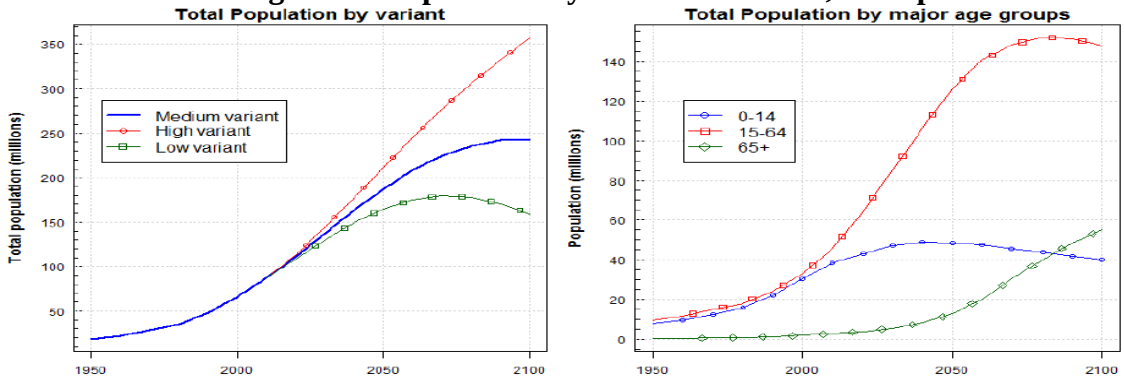
Table 1.1 Growth in GDP and Main Sector Share in PASDEP: Planned vs. Performance

Sector	Average growth target planned (2005/06-2009/10		Average growth Achieved (2005/06-2009/10	% share of Real GDP (2009/10)
	Base Case	High case		
Real GDP	7.0	10.0	11.0	100
Agriculture	6.0	6.4	8.4	41.6
Industry	11.0	18.0	10.0	12.9
Services	7.0	10.3	14.6	45.5

Source: MoFED (November 2010); Growth and Transformation Plan (2010/11 - 2014/15)

However, despite such noticeable economic progress over the last decades, Ethiopian has at the same time been facing several socio-economic difficulties such as inflation, fiscal and trade deficits, shortage of foreign reserves, population pressure, deterioration of education quality and labour market distress. Yet, as this study is mainly about youth employment challenges from the perspective of the school to work transitions, it is important to restrict this background study only to population dynamics and qualitative change of the workforce (migration of labour from rural to urban areas). To begin with population dynamics, Figure 1.2 illustrates the dynamics of Ethiopian population over 1950-2100. The Ethiopian population has changed dramatically over the last 50 years. As shown in panel (a), the population size was less than 23.5 million in 1960s, but increased to 53 million in 1984 and reached 90 million by 2012, which makes Ethiopia the second most populous country in Africa. The sharp population increase was mainly due to an increase in fertility rate and a decline in mortality (UN Population Division, 2013). As the result of this, majority of the population is very young, where the median of age is about 17.5 years of old.

Figure 1.2.Population Dynamics 1950-2100, Ethiopia

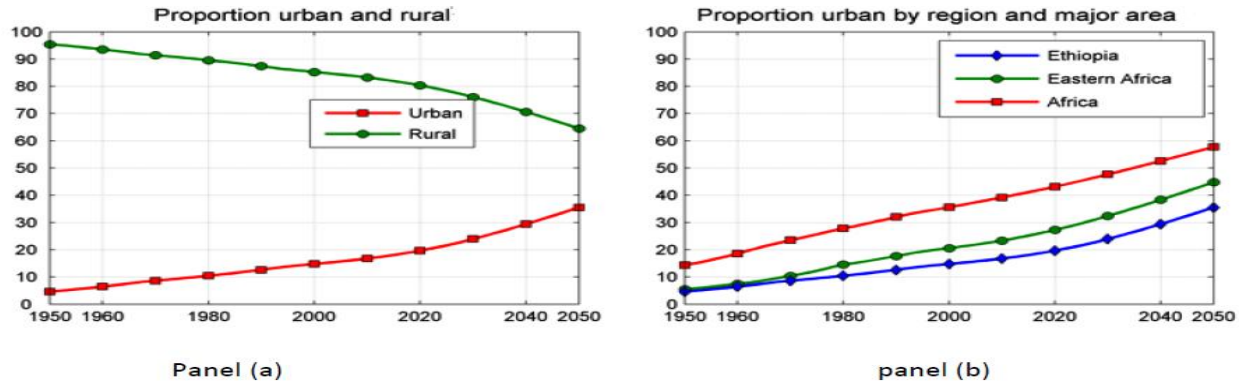


Source: UN Population Division (2010)

As seen in panel (b), about 45% of the total population is under age 15. Given the current growth rate of 2.6%, Ethiopia's population will more than triple to 278 million in less than 40 years, placing it in the top 10 most populous countries in the world (Ibd).

In fact, it is not only the size of the population that will see a huge change over the coming decades, but also in terms of urbanization. As seen in Figure 1.3-panel (a), albeit from a lower base comparing to other African countries, the urban population has been increasing from time to time. The figure indicates that the urban population more than doubled between 1990 and 2007, from about 6 million in 1990 to more than 13 million in 2011. If continued with this trend, the share of urban population is expected to jump from its current 16% to 35% by 2050, where such high rate of urbanization will be more likely to create a massive pressure on the wage employment sector as a significant number of young people are anticipated to dwell in slum urban areas.

Figure 1.3.Proportion of Urban Population in Ethiopia and Africa



Source: UN Population Division (2010)

3.1. Education and labour market

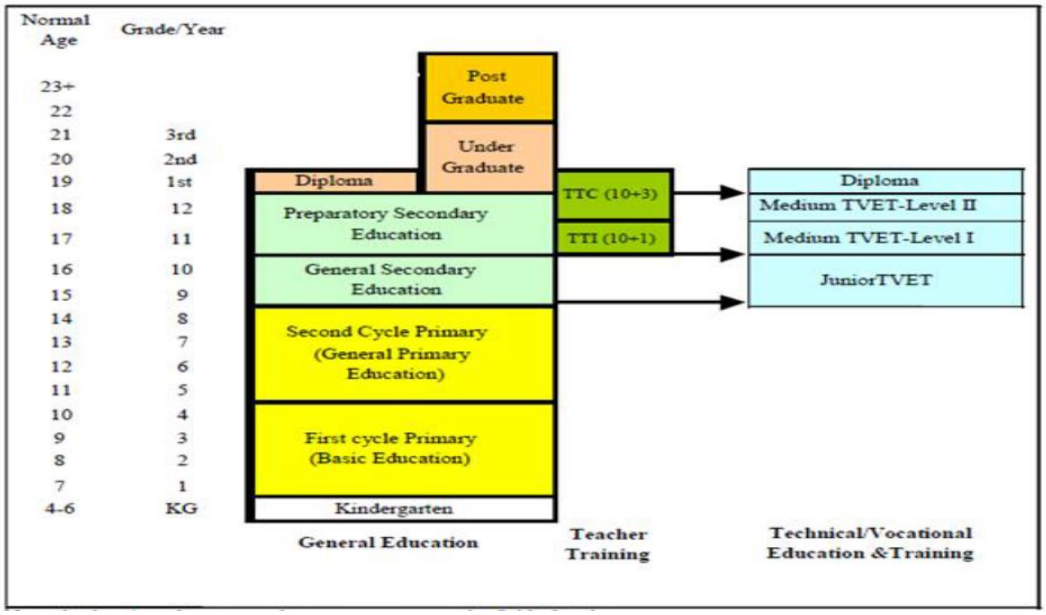
3.1.1. Education

Ethiopia has developed several education and training policies overtime, but the latest comprehensive education and training policy was formulated in 1994. Based on this educational structure, as exhibited in Figure in 1.4, primary education with 8 years of period is designed to provide students with general basic education to prepare them for further educational training. Following this is then secondary education, which takes four years with equal two years of lower and upper secondary educations. In this system, the lower secondary education is believed to be a critical educational level, where students' future

opportunity will highly depend upon the academic outcome of grade 10. This means that after taking general examination in the 10th grade, students based on their exam results will be placed either in vocational training (10+3) or in preparatory programme that leads to university. While the vocational training programs are framed to train students in more of practical works that help them enter into middle skilled jobs at the end of the day, the preparatory programme gives them the chances to choose study fields (either Natural Science or Social Science stream) so as to join institutions of higher learning. Ideally, higher education at all levels is research oriented that help students become problem-solving professional leaders in their fields of study and in overall societal needs.

In terms of educational outcome, Ethiopia has recently made major strides in improving access to social services at the grassroots level. As the result of this social service access, school enrollment rates have increased significantly at all educational levels. For instance, the net primary school enrolment rate increased from 68.5% in 2004/05 to 82% in 2010/11, and this is projected to increase to nearly 100% by 2015. Similarly, the rates for gross enrolment in general secondary education and functional literacy have also improved. And this is also accompanied by high enrollment in both upper high school and tertiary education. In particular, enrolment has grown at average annual growth rates of 15.5% for higher education-undergraduate and 32.6% for postgraduate.

Figure 1.4. Structure of the Ethiopian Education System



Source: Ethiopian Ministry of Education: Education Statistics Annual Abstract (2012/13)

In short, for better understating the change in the education sector of the country, it is worth taking the illiteracy rate as proxy variable here. Table 1.2 presents the Ethiopian literacy rate by age group over more than ten years. As the result of the education expansion, youth literacy rate rose from 33.6% in 1994 to 55% in 2007. The increase is especially dramatic for young men to 63%, up by 23%.

Table 1.2 Literacy rate in Ethiopia (%) 1994-2007

	1994			2007		
	Male	Female	Total	Male	Female	Total
Youth literacy rate	39.3	28.1	33.6	63	47	55
Adult illiteracy rate	34.2	13.6	23.6	41.2	19	30.1
Total illiteracy rate	36	18.5	27	49.1	28.9	39

Source: Elaboration on ILO Key Labour Market Indicators, 2014

Over the considered period the literacy rate for adult people also increased, albeit not as equal as to that of young peoples' rates. The high literacy rate among the young people is an indication of the fact that the current young generation has got more access to education than the generation of their parents. It also implies that changes in terms of quality and quantity of labour supply are happening in the Ethiopian labour market, where educated young people influx into the labour market on an annual basis. The challenge is still however to ensure that the expansion of the education sector matches the evolving human capital requirements of the economy in general and the labour market in particular.

3.2. Labor Market

The existing Ethiopian labor market institutions and policies are mainly confined to the formal wage employment sector although it is the informal sector that absorbs the huge share of the country's workforce. This implies that labour institutions and policies are weak to govern the labor relations of the country as there are inadequate legal frameworks and lack of social dialogue among institutions (Kibru, 2012). Of course, as mentioned by Wubie (2013) the development of legally regulated labour relations in Ethiopia is only a few decades old. The most recent details of labour provisions and legal entities are found in Article 55 of the 1993 Constitution of the Federal Democratic Republic of Ethiopia (FDRE), followed by three further amendments (revised labor proclamations no. 377/2003, 466/2005 and 494/2006).Those labour proclamations contains a number of provisions and legal entities in relation to employment relations such as job contract formation, severance payment,

extension, terminations, hours of work, leave permits, occupational safety, minimum working conditions and dispute settlement mechanisms (FDRE, 1993). Although there is no minimum wage law in Ethiopia, the interval of payment could be daily, weekly, bi-monthly, monthly etc., where normal hours of work shall not exceed 8 hours a day or 48 hours a week.

With regard to trade union, social partners in Ethiopia are not strong both in terms of membership and experience. All the labour unions and employee self-help associations in the country work under one umbrella organization called the Confederation of Ethiopian Labor Unions (CELU). However, the share of its members is only less than 1% of the more than 41 million workforce of the country. Some of the reasons that frequently cited for such low level of unionization are unorganized farming practices and the widespread informal nature of the economy.

Having this brief landscape of the Ethiopian labour market, it is now important to have an overview of Ethiopian key labour market indicators from historical perspective. To begin with the workforce, the size and speed of the workforce has significantly changed since the middle of the 1990s. More particularly, the workforce increased from 14.7 million in 1984 to 26.5 million in 1994; and further rose to 41.85 million in 2012. It is also expected that this workforce is to jump to 81.9 million by 2030, implying that nearly 2 million young workers will join the Ethiopian workforce each year over the next 15 years.

Table 1.3 presents the key labour Market Characteristics for total and youthful population from the National Labour Force Surveys of 1999 and 2005. As seen in the table, the workforce participation rate over the two national surveys rose from 82% to 86%. But after 2005 the government mainly collects data on urban labour market despite the fact that majority of the Ethiopian population resides in rural areas. One of the reasons for this is that unemployment is more often a problem of urban areas in Ethiopia (Kibru, 2012). In connection to this, a study from Guarcello et al, (2008) also shows that Ethiopia is one of the African countries that suffer from high urban unemployment, especially among the youth. This also seems currently evident, where urban youth unemployment has been historically high (see Table 1.3 for historical trend), where official urban youth unemployment was as high as 24% in 2011.

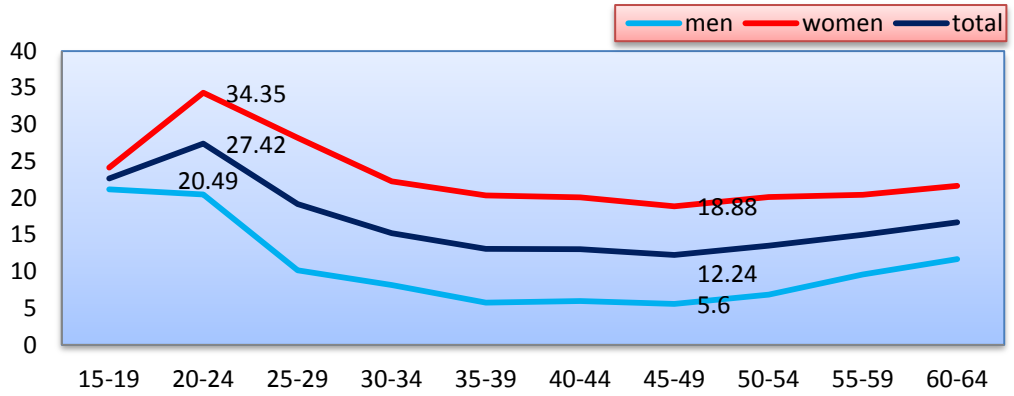
Table 1.3 National key labour Market indicators: 1999-2011

	URBAN					NATIONAL				
	LFP	EMP	UNEMP	UNDER EMP	INF SECT	LFP	EMP	UNEMP	UNDER EMP	INF SECT
(Age 15-65)										
1999	0.77	0.57	0.26	0.54	0.56	0.82	0.76	0.08	0.48	0.92
2005	0.73	0.58	0.21	0.34	0.42	0.86	0.81	0.06	0.28	0.90
2009	0.70	0.56	0.21	0.50	0.37					
2011	0.71	0.58	0.18	0.48	0.35					
(Age 15-29)										
1999	0.71	0.47	0.34	0.56	0.60	0.81	0.72	0.11	0.51	0.93
2005	0.65	0.48	0.27	0.33	0.43	0.82	0.76	0.07	0.27	0.90
2009	0.62	0.46	0.26	0.51	0.35					
2011	0.62	0.47	0.24	0.49	0.34					

Source: extracted from Broussar and Tekleselassie, 2012

The latest survey in the Ethiopian urban labour market was conducted in 2012. According to this recent data, the unemployment level has not shown improvements form the previous records. Figure 1.5 presents the urban unemployment rates by gender and age groups. It is found that unemployment rates are very high across all age groups, ranging from 27.42% for young workers aged 20-24 to 12.2% for adult workers aged 45-49. The gap of unemployment among the two age groups is more than two times, indicating that young workers are being hit hard by lack of employment opportunities. It also appears that there is a significant gender disparity.

Figure 1.5 Urban Unemployment rates (%) by sex and age group, 2012



Source: Urban Labour Market Survey, 2012

Comparing to men workers, the unemployment for women is much higher across all age groups, where it is 34.35% for young women aged 20-24 and 18.88% for women workers of 45-49 year old, while the corresponding rates for men workers are relatively lower at 20.49%

and 5.6%, respectively. Approximately, there is about 13 percentage point gender difference across all age groups, measured by the gap between the red and blue lines.

The issue of unemployment in reality is very wide to cover and has many dimensions to be studied and addressed, but as the main focus of this study is on the intertwining of education, training and labour market outcomes of young people, it is now imperative to fully discuss the school-to-work transition gaps of the Ethiopian youth using the 2012 Urban Labour Market Survey data in the following subsection.

4. Analyzing the gap between the education and labour market

4.1. Explaining the transition gap

To analyze the school to work transition pathways of the Ethiopian youth, this study makes use of high quality data from the 2012 Ethiopian Urban Labor Market Survey, administered by the Ethiopian Central Statistics Agency. This survey is the seventh series designed to provide a detailed retrospective data on education, employment and unemployment at national and regional urban levels. It follows a household approach and covers major towns with population size 100,000 from nine regional states and two autonomous cities. A total of 19,736 households were selected from 660 enumeration areas, using systematic random sampling method, in which 99.68% of the households were successfully covered by the survey. Within a total of 19,736 households, 70,973 individuals aged five years and above were interviewed for a set of information, including socio-demographic characteristics such as age, sex, marital status, level of education and employment history. In fact, the data is usable for a range of socio-economic studies, in addition to the school to work transitions. But, to be specific with the topic at hand, out of the total 70,973 individuals in the survey, 25,898 individuals aged 15-29 are extracted for this purpose. This selection is made based on the national definition of youth, where in the Ethiopian context, "youth" is defined as someone between 15 and 29 years of age. Where necessary, population weights are also applied to make the data nationally and regionally representative.

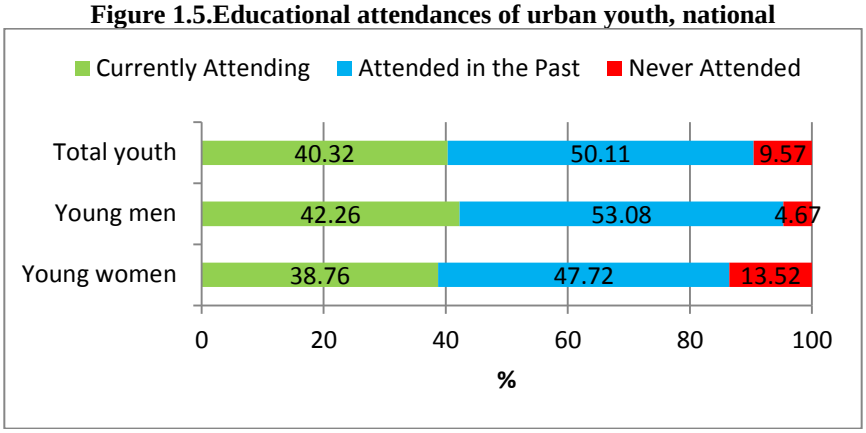
4.1.1. Education Attainment of the Surveyed youth

Based on the data indicated in Figure 1.6, majority of the surveyed young people attend any form of education at some point in their lives. While about 40.31% of them were attending any form education (primary to tertiary) during the survey time, other 55.11% had already

attended any form of education in the past. Only 10% of the sample youth have never attended any form of education or had left school without mastering basic literacy and numeracy.

There are, however, noticeable gender and regional differences. While young women's educational attainment is 86.48%, it goes up to 95.34% for young men, implying that young men have clear advantage over having access to education. In terms of region, the proportion of young people attending any form of education currently is higher in regions like Addis Ababa, SNNR, and Gambela, while in the other regions many of the youth already attended their education in the past. Only in regions of Somalie and Afar are majority of youth with no education at all (see Appendix, for regional education attainment).

Figure 1.5.Educational attendances of urban youth, national



Source: Elaboration form 2012 Urban Labor Market Survey, Ethiopia

The fact that many of the surveyed youth have attended any form of education either in the past or at present is very helpful for the analysis of the school to work transitions. Yet, before proceeding into the current activities of the surveyed youth, it is still quite important to single out the highest grade completed by each individual as this may also have crucial implications for further analysis.

Table 1.4 presents the proportion of young individuals in each educational level.

Table 1.4 Highest Grade Completed

Educational level	No.	Percent
Non Formal education	166	0.64
Elementary level (1-8)	10,400	40.15
Secondary level (9-12, old & current curriculum)	8132	31.40
Vocational school (secondary,10+1, +2)	1,261	5.0
Diploma level/Post-secondary vocational	2392	9.23
University	977	3.78
Post-graduate	90	0.34
Total	23,418	90.42

Source: Elaboration form 2012 Urban Labor Market Survey, Ethiopia

Of those who have attended any form of education at any time of their lives, about 40.15% of them are with primary education (grade 8 or below), whereas about 31.40% of them are at secondary level, ranging from grade 9 to grade 12. Other 5% and 9.23% are respectively with vocational education (secondary, 10+1, +2) and post-secondary vocational levels (diplomas), while the rest 3.78% and 0.34% have completed respectively university and post-graduate programmes. Only 0.64% of the surveyed youth are with non-formal educations such as literacy campaign, kindergarten and adult education.

Of particular interest for the analysis of school to work transitions here is also the type of educational training attended by those who are with secondary education and above. During the survey, young people who completed post-secondary or tertiary education were asked the type of education or training they took while they were at school/collage. The responses of 5879 college graduates are reported in Table 1.5. And it appears that about 5.07% of them are trained in fields related to education, humanities and arts; 7.83% in fields like social science, business and law; 2.77% in engineering, manufacturing and construction; 1.19% in agriculture and veterinarian sciences; 35.02% in senior and junior professions [most of them with diploma level/Post-secondary vocational programmes]; 41.89% in middle level skilled and technicians and other services [most of them with vocational school (secondary, 10+1, +2) programmes].

As shown in the table, the composition of university subjects amongst tertiary education graduates seems to be heavily skewed towards social sciences, business, and law; while the case of engineering, manufacturing and construction; agriculture and veterinarian sciences; health and welfare appear to be lower, with 2.77%, 1.19%, and 2.60%, respectively.

Table 1.5 Type of Education or Training

Education or training types	total	%		
		ALL	Man	women
Education, Humanities and arts	298	5.07	5.47	4.59
Social science, Business and law	460	7.83	8.39	7.15
Science, mathematics & computing	214	3.64	4.68	2.41
Engineering, Manufacturing and construction	163	2.77	3.33	2.11
Agriculture and & veterinarian sciences	70	1.19	1.57	0.74
Health and welfare	153	2.60	2.23	3.04
Senior and Junior Professions	2059	35.02	30.86	39.92
Middle level skilled and Technicians and other services	2462	41.89	42.10	40.43
Total	5879	100	100	100

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

With this educational status of the youth, it now is important to move to the labour market outcomes. However, there is a caveat that needs to be made here before going on into the labor market analysis: although a significant number of youth go to work directly, with little benefit of formal education and even majority of them start their working life in the form of child labour, this study mainly focuses on those youth who pass through education. For this, to be consistent throughout the analyses, those 2480 young people without any form of education and other 166 with non-formal education are to be excluded from the analysis of the school to work transitions. This means the sample size has changed on wards from 25, 898 to 23,252 young people, whose education attainments range from primary to post-graduate level.

4.1.2. Current activities of youth

Based on the neoclassical economic theory, the current economic activities of the surveyed youth can be classified into three broad categories: employed, unemployed or inactive. Those categories are some of the key labour market indicators used to measure labour market performance in both developed and developing countries (Elder and Koko, 2104).While the employed and unemployed constitute the labour supply of a given economy, the inactive represents for those young people who are out of the labour market. With this sort of labour market categories, the current activities of the youth are presented in Table 1.6. Form this table; it is revealed that the youth workforce participation rate is about 63.79%, with employment and unemployment ratios of 48.75% and 15.05%, respectively. There is however a significant gender difference in the employment ratio, with 56.89% for young men and 41.54% for young women. The 15 percentage point difference in employment ratio indicates that young men have a clear advantage over getting jobs in the urban labour market. The difference in unemployed ratio between young men and women is also more than 8 percentage points, confirming that young women are less advantaged in the labour market than their men counterparts. However, it is important to note that, as the unemployed are divided by the total youth population, this percentage does not stand for the youth unemployment rate differential. The unemployment rate for young people aged between 15 and 29 is rather found to be about 23.57%, with 31.08% for young women and 16.08% for young men, indicating that young women are twice as likely to be unemployed as their men counterparties.

Table 1.6 Ratio of youth population by main economic activity (%), aged15-29

	Distribution of youth population (%)			workforce participation rate	Unemployment Rate (%)
	Employed (a)	Unemployed (b)	Inactive(c)	(a+b)	
All Youth	48.75	15.05	36.21	63.79	23.57
Young Men	56.89	10.09	32.21	67.79	16.08
Young	41.54	18.7	39.76	60.24	31.08

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

The inactivity rate, which is the inverse of the workforce participation rate, is about 36.21%, and it is slightly higher for young women than for young men. The inactivity rate is somehow high, but this should not come as a surprise given the fact that 40.12 percent of surveyed youth were attending any form of education during the survey time. Also, a significant number of young people, who are neither in Employment, Education or Trainings (NEET) are part of this inactive rate (we will see this more in detail below).

4.2. Measuring the transition gaps

Unlike the neoclassical economics theory that classifies the current activities of the youth into three categories as discussed above, the school to work transition model further needs a clear distinction and specific categories in such a way that it becomes suitable to thoroughly examine the labour market entrance of the youth. This means that in an effort to analyze the school to work transition gaps, there is a need for a holistic approach that splits the current economic activities of the youth into more specific categories.

In doing so, the total 23, 252 educated youth are grouped into the following categories:

1. *Working Students*,
2. *Working Non-Students*,
3. *Unemployed Non-Students*
4. *Inactive Students*,
5. *Inactive Non-Students*
6. *NEET*

These categories are very helpful to identify the proportion of the youth that are at *school*, *in transition period*, already *transited* into the labor market and *combing work and education*, which has an important implication for the school to work transitions.

Table 1.7 presents the proportion of these categories, and it appears that about *37.21%* of the surveyed youth found to be *working non-students*. *Inactive students* account for *30%*, while other *11.57%* have been *combining work and education*. There is significant gender dimension

in some of those categories such as in the share of working-none students and inactive none-student, where percentage points of gender differences are 13.59 and 6.37, respectively.

Table 1.7.Education and labour market outcomes of young people (%), by gender

	Working students	working non students	Unemployed non-students[1]	Inactive students	Inactive non students	NEET
All Youth	11.53	37.21	15.03	30.04	6.17	21.2
Young men	12.46	44.42	10.91	29.46	2.74	13.65
young	10.71	30.83	18.7	30.56	9.2	27.9

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

In addition to gender disparity, there also appears a regional difference [2][see Appendex 4A.2]. In regions like Afar, Benishangul and Oromia the proportion of working non-students is well above 40 per cent, but it is much lower in regions such as Addis Ababa (28.81%), Somalie (27.71%), Gambela (26.24%). But in the case of *working students* the opposite holds, where young people in regions with high working non-students combine work and education to a lower level. This is the case for Afar (8.41%), Dire Dawa (3.41%) and Oromia (8.59%). Moreover, the national urban share of unemployed non-students of the total youth population is 11.94%, but this is as high as 15% in regions like Tigray, Oromia, and Dire Dawa. On avarage, 21.2 per cent of youth at national urban level are found to be neither in Employment, in Education or in Trainings (NEET), with much higher proportion in regions like Afar, Dire Dawa, Tigray, and Somalie.

Having the above data categories of the surveyed youth, the next question is then how to specifically measure the transition gaps that young people face between the education and labour market. In fact, there is no a single way to measure the school to work transition gaps. This is because the route from education to labour market has never been a linear transition as young people oftentimes move in and out of the labour market (see, O'Higgins, 2003, Quintini et.al.2007). Similar to this, Ryan (2001) also states as the school-to-work transition involves much turnover and experimentation to find a right job, measuring it has never been a straightforward task and needs a holistic and condition specific approach.

In this way, in characterizing the school to work transition, this study uses some of the indicators presented in Table 1.8 and some other specific perceptions revealed from the surveyed youth. Those indicators and perceptions are the following:

[1] Proportion of unemployed *students was found to be very small and it is insignificant to report separately.*

[2] See appendix for regional Table

i. The proportion of younger people who are at NEET condition
ii. The proportion of young people who combine work and education
iii. Unrealistic-expectation and unemployment
iv. Level of skill mismatches
v. The proportion of young workers who are on the move to productive employment

4.2.1. Neither in Employment, Education and Training (NEET)

The proportion of surveyed educated youth, who are neither in Employment, further Education nor in Training (NEET), is a very important indicator in analyzing the school to work transitions. The higher proportion of NEET in a given economy indicates the poorer linkage exists between the education sector and the labour market, and the opposite is more likely to hold, as small share of young people in NEET condition implies a smooth transition into the labour market upon leaving school or college. But the problem with this indicator is that it is not easy to practically estimate the proportion of educated youth, who are trapped between the education and labour market, especially in a typical Sub-Saharan African country, Ethiopia, where readily data available are scarce.

Nevertheless, for the purpose of this study, this indicator is estimated from the 2012 Ethiopian Urban labour markets by summing up the proportion of the young people who are *unemployed non-students* and inactive non-students. In other words, the transition gap is approximately the proportion of young people who want to work, but unable to find work plus those who dropped out from the labour market due to discouragements in search of jobs (see Table 1.8 for each figures). Summing the two figures, the proportion of young people in NEET condition is found to be 21.2% of the entire population aged 15-29. The implication is that of total surveyed educated youth who passed through education, more than a fifth of them are unable to join the labour market and neither have they gone back to school for any second chance of educational training. They are rather just waiting for miracle to happen in their life.

In fact, things become worse when the NEET is seen from the gender perspective and age group. The index of trap for young women is 27.9%, but just 13.65% for young men, indicating that the transition for young women is twice as difficult as for young men.

With respect to age, it appears that the transition gap is much higher for the age group (20-24), followed by the age group of 25-29, with index of the transition gaps of 28.09% and

23.43%, respectively, while it is only 12.43% for the youngsters (15-19). The relative low share of those youngsters in the transition trap is not unexpected given the fact that majority of them are *inactive students*. This is also similar to a finding from Elder and Siaka Koné (2014) for Zambia as the student population becomes much smaller over the age of 19, while the share of working non-student youth increases across age groups.

Table 1.8 Education and labour market outcomes of young people (%), by age group

Age group	Working students	working non-students	Unemployed Non students	Inactive students	Inactive Non-students	NEET
15-19	11.21	14.13	8.19	62.00	4.44	12.63
20-24	11.32	41.41	21.2	18.96	7.09	28.29
25-29	12.13	59.59	16.27	4.45	7.16	23.43

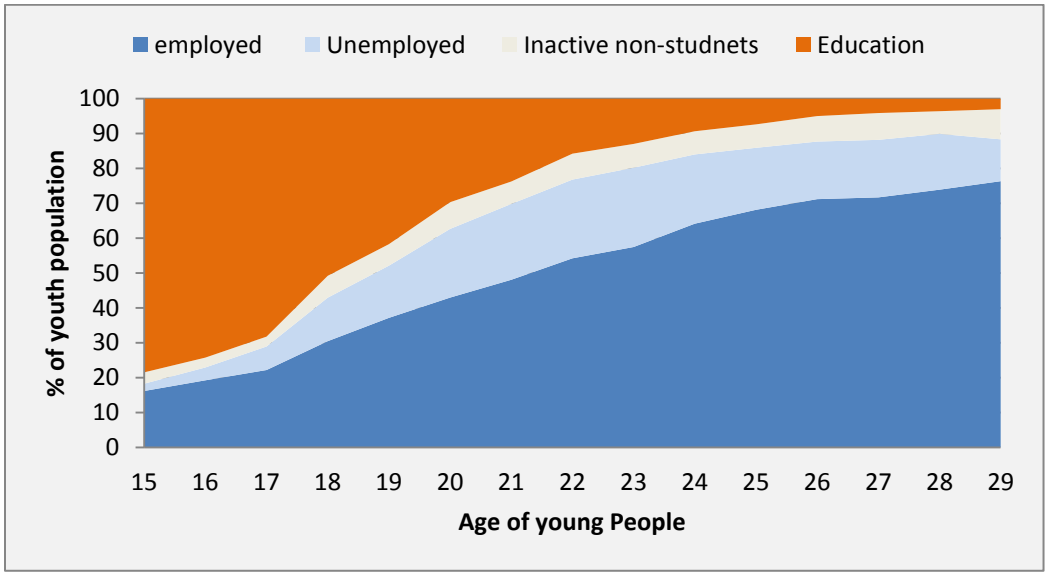
Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

The above measures of the school to work transition traps are gross indicators either, however. Tthe pattern of the school to work transitions can also be better examined by *a single age approach*. This single age analysis gives clearer picture where exactly the surveyed youth are in terms of all the economic activities, by plotting the percentage of youth who are in different stages of activities: *in school*, *inactive non-student and unemployed* against those who are at work by a single year of age, excluding those young people who combine *work and education* (this is discussed separately below).

Figure 1.7 exhibits the pattern of the school to work transitions by a single year of age, ranging from 15-29. The school to work transition gap is shown by the area between the "education" and the "employed". It is evident that with age the percentages share of youth in education contracts while the share of employed youth increases. More particularly, below the age of 17, majorities of the youth are at school, with very few working, but the transition gap gets wider and wider until the age of 23, where thereafter it continues with the same level of gap up to the age of 29. As pointed out earlier, the gap is basically made up of two components, the *share of unemployed* and *inactive non-students*. Throughout the age group (15-29) the share of unemployed is much higher than inactive non-students in the total youth population. The middle white gap in Figure 1.7 represents those youth who have given up looking for jobs, while the gray gap stands for the share of those youth who continue looking for work at each age. But, in sum, the transition gap gets wider and wider along with age, pointing out that a significant number of youth do not enter the labour market as they leave school, but rather being trapped in-between. By this measure, single year age approach,

young people aged 23 are with the widest school to work transition gap in the Ethiopian urban labor market. This result is somehow similar to that of South Africa researched by the African Development bank (2012), where young people aged 24 are trapped the most in-between the education and labour market.

Figure 1.7.The school to work transition gap, by a single age



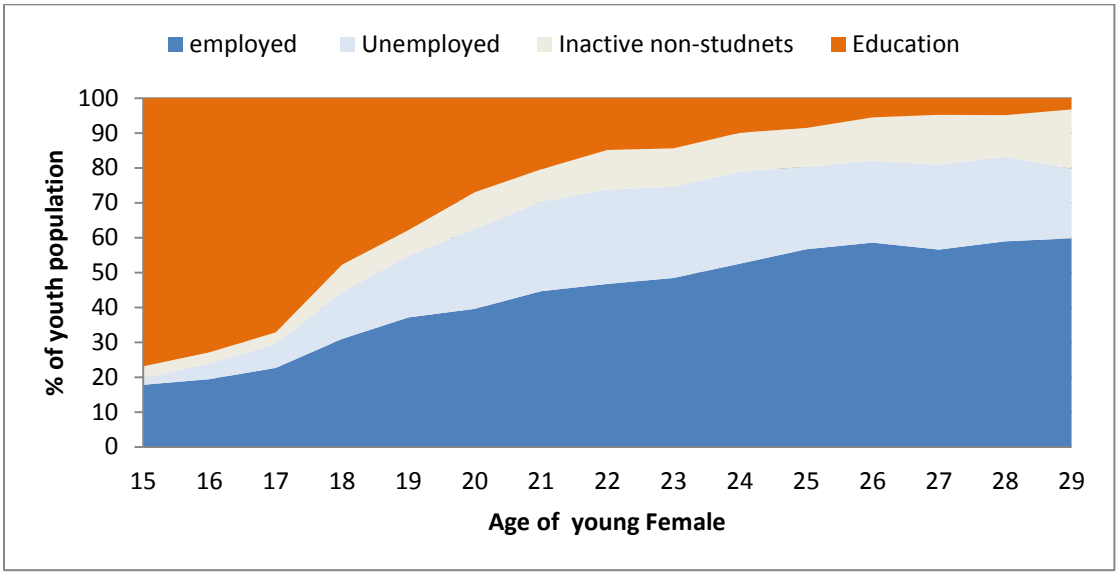
Source: Elabroation on 2012 Urban Labor Market Survey data, Ethiopia

Figure 1.7 however masks a significant gender disparity in the transition gaps by single age. As shown earlier, there is a wide gender disparity in the Ethiopian urban labour market, which seeks special attention of the government and policy makers-alike. To better understand, it is essential to investigate the gaps by a single year of age for young women[3]. Figure 1.8 exhibits the estimated transition gap of young women separately. It appears that the transition gap of young women is much wider than the transition gap of the total sample. Specifically, in terms of pattern, the transition gap is found to be much wider for the middle aged young women, than for the whole sample in Figure 1.7. This is because, after the age of 17, the proportion of non-students for young women increases at an increasing rate until the age of 23. It then increases at decreasing rate until it gets again much wider at the age of 27. This kind of trend results in a labour market where young women aged 23 and 27 encounter the largest transition gaps in their ways to the employment sector. In other words, young

[3] Estimated school to work transition path of young men is given in the appendix.

women do experience greater labour market difficulties, and the overall shape of the transition gaps are largely explained by the labour market outcomes of young women.

Figure 1.8 the school to work transition gap of young female, by single age



Source: CSA, 2012 Urban Labor Market Survey, Ethiopia

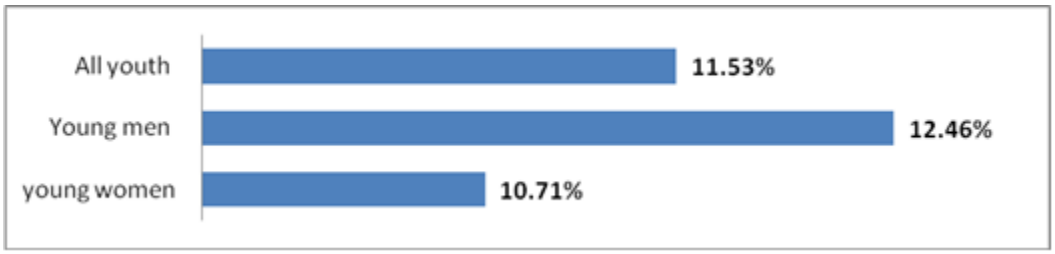
4.2.2. Combining work and education

The transition from education to the labour market becomes smooth if young people get the opportunity to have access to some sort of on-the-job training or practical work while they are at school. This is based on the assumption that a well-organized early labour market experience is expected to be crucial in giving young people the sense of work such as values and norms of work, discovering and developing area of interest for future career.

Although it is somewhat difficult to give a full picture of those young people who take a practical training in the Ethiopian urban labour market, insightful information can be extracted from the available survey data to indicate the interaction of the two sectors. In this way, the proportion of students combining work and education during the survey time is presented in Table 1.8. Measured by the share of working-students, it seems that the connection of the two sectors is not this much strong. Of the total surveyed youth, only 11.53% of them combine work and education. Such small proportion is a clear manifestation of the fact that there is huge gap in between the education and labour market. An alternative or complementary comment would be the relative low possibility of this practice in Ethiopia. The gender difference is not much to be focused on as the difference is less than 2 percentage

points, but the slightly higher proportion for young men could indicate that the recent vocational and technical training expansion by the Ethiopian government has been attracting more young men than young women.

Figure 1.9 Combining work and education, by gender



Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

There is however a caveat that is worth noting here. In order to have a more effective combination of work and education that serve as a springboard to better future career opportunity, those early work exposures have to be limited ones, in terms of actual working time, so that they do not result in dropping-out of the education or early school-leaving. Only a healthy combination of work and education is expected to have a positive impact on the future labour market outcomes of the young people (Ryan, 2001; Elder and Koko, 2014).

4.2.3. Unrealistic wage expectation and unemployment

In this study, school leavers stand for those young individuals who have just left the education system permanently or for a period of time after graduating from a specific level of education (primary, secondary or tertiary level). To have a full picture of the unemployment incidence after leaving school or college, Table 1.9 presents the unemployment of school leavers in connection with various important variables: gender, regional location, educational attainment and type of education field (for those with post-secondary and above).

As shown, at urban level, the national unemployment rate for school leavers was 24.57% in 2012, with significant variation by gender, age, educational level and location of area. In absolute numbers, applying weighting average to national level, the Survey data reveals that more than ½ million young school leavers (primary to university graduates) aged between 15-29 years old were actively looking for a job in the Ethiopian urban labour market in 2012.

In terms of gender, female school leavers face unemployment rate of 32.82% versus 16.0% for males, implying that female school leavers are unemployed as twice as their male counterparts. There could be various reasons that account for such large gender difference in post school-employment. Few of them could be due to the fact that females' lesser flexibility in terms of hours of work and the distance they have to travel. Indeed, young men have clear advantage of mobility and flexibility in the Ethiopian labour market (see, Dendir, 2006; Serneels, 2007).

In addition to gender difference, regional location shows a noticeable variation, ranging from 11.68% in Gambella region to over 30% in Tigray region. This implies that with a rate of 30%, Tigray region suffers the most form unemployment of school leavers, followed by the two largest regions, Oromia (27.35%) and Amhara (27.25%). In fact, the two administrative cities, Dire dawa and Addis Ababa (the political and economic capital of Ethiopia), have also experienced high rates to the extent of 29.59% and 26.47%, respectively.

Looking by age group also has important insights as to who the job-seekers are after all. In this way, it is found that unemployment rate decreases with age group, ranging from 29.22% for the youngest group (15-19 years old) to 18.91% to young-adults (25-29 years old). The high rate among the youngest group shows that unemployment in Ethiopia is dominated by first job-seekers, who directly enter into unemployment, rather than into employment, or alternatively signifying how challenging the transition pathway is.

Of another considerable interest also is to look at the post-school unemployment by human capital, approximated by the variation in educational attainments. In fact, it is obviously known that the type and quality of jobs searched by the school leavers do vary from one to another based on their level of education (say for example, a job searched by a primary achiever and a university graduate is quite different), but it is still important to examine the unemployment incidence by educational attainments following the works of Elder and Koko (2014). In some years back or a decade ago, people with higher education attainment are expected to face lower unemployment rate than young people with lower education level (see Dendir, 2006). Nonetheless, this does not presently seem to hold for majority of school leavers and university graduates in the case of Ethiopia. As shown in Table 1.9, the unemployment does not decline with educational attainment. Young people with primary education appear rather to experience lower unemployment incidence than those with

secondary education (9-10 and 11-12) and postsecondary education. The unemployment rates for lower secondary and upper secondary holders are respectively 29.38% and 27.44%, while it is 22.38% for those with primary education. Taking the reality what happens in the urban labor market into account, the result can be interpreted as waiting unemployment, where high school leavers do wait, with a very long queue, for a "good" job to materialize , with high and unrealistic expectations to attain work in the public sector or wage employment in the private sector, but at the same time companies showing a tendency to say that those school leavers are not employable due to several factors such as the lack of technical expertise that fit well to today's very dynamic labour market.

Table 1.9 Unemployment rates of school leavers aged 15-29

		Post-school unemployment rates
National level (Urban)		24.29%
Gender	Male	16.0%
	Female	32.82%
Age group	15-19 years old	29.22%
	20-24 years old	28.71%
	25-29 years old	18.91%
Educational attainment	Primary (1-8)	22.35%
	Lower secondary school (9-10)	29.38%
	upper secondary school (11-12)	27.44%
	Postsecondary (vocational, diploma)	24.77%
	Tertiary level	13.95%
Type of education or training	Engineering, Manufacturing and	9.73%
	Health and welfare	12.17%
	Social Sciences	13.32%
	Science, mathematics & computing	16.91
	Agriculture and & veterinarian sciences	20.69%
	Senior, Junior Professions and diplomas	24.86%
	Vocational and Technicians professional	23.05%
Regional (Urban)	Tigray	30.4%
	Afar	13.44%
	Amhara	27.25%
	Oromia	27.35%
	Somalie	19.68%
	Benishangul-Gumuz	12.53%
	SNNPR	17.52%
	Gambela	11.68%
	Harari	16.51%
	Addis Ababa	26.47%
	Dire Dawa	29.59%

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

What can be inferred from such unexpected statistics is that unemployment is highly concentrated among young people with middle level of education that ranges from secondary to post-secondary (diploma holders). In this case, the failure of postsecondary schools to

produce positive outcomes as they are supposed to be may be attributed to the design and implementation of the educational program. In connection to this, Wang (2012) states that even vocational training in post-secondary schools may not give a student an advantage in the labor market if such education does not provide occupational skills nor particular subject knowledge. But this does not mean that university graduates are also immune to widespread unemployment. For a country where access to higher education is lower than 5%, unemployment rate of 13.95% for university graduates is very high by any measure and reason. Such unexpected unemployment incidence is rather explained by the theory of skills mismatches and/or theory of labor market segmentation (skills mismatches).

More particularly, another last point worth investigating here is looking the unemployment rate by a specific field of study or training of those tertiary graduates (post-secondary and university). To do so, those post-secondary leavers and university graduates are grouped into graduates of Engineering, Manufacturing and Construction; Health and Welfare; Social Science; Science, Mathematics and Computing; Agriculture and Veterinarian Sciences; Training in Senior, Junior Professions and Diplomas; Vocational and Technicians Professional.

Among the university graduates those with study field of Engineering, Manufacturing & Construction and Health &Welfare appear to experience relatively lower unemployment rates, 9.73% and 12.17%, respectively, whereas those graduates with degree of Social Science and agriculture and Veterinarian Sciences seem to face the two highest unemployment rates, 16.91% and 20.69%, respectively. The implication of such unemployment incidence by field of education and training could be an indication that the Ethiopian higher education system has been producing graduates in the wrong proportion for the labour market demand: too few engineers and health professionals, for instance, and too many Social Scientist. Another point that seeks a particular explanation is the unemployment among the Agricultural and Veterinarian Science degree holders, which is the highest among the university graduates (20.69%). This is unexpected result of the survey given the fact that Agriculture is the dominant economic sector in the Ethiopian economy and the largest employment contributor, where nearly 80% of the 90 million people earn a living. However, the possible reason could be the fact that university graduates with Agricultural and Veterinarian Science could be unwilling to move to rural agricultural activities where their

profession is demanded more. This indicates that there is unemployment of young graduates resulted from geographical mismatch, where graduates from agriculture fields are hesitant to travel and get employment outside of major cities. The unequal regional distribution of the unemployment is also one manifestation of this phenomenon, where urban dominated regions like Dire Dawa and Addis Ababa have experienced higher unemployment rates than the so-called 'emerging' regions like Somalie, Gambela, Afar and Benshangul-Gumuz, which are dominantly rural areas. As a response for such geographic mismatch in unemployment, there seems a need to improve public infrastructure in rural areas so that young graduates can easily move and find jobs that go with their academic interest and abilities.

4.2.4. Skills Mismatches

Until recently, given lower school enrollment rates in Africa, skills mismatches have been considered as a problem that prevails only in the developed world (ILO, 2013b). But this is not the case what has happened lately despite the fact that educational attainment levels are still much lower than those of developed countries. The argument is that following the recent educational expansion at all level, considerable skills mismatches have become to emerge in many of the African countries (Assaad, 2009; Elder and Koko, 2014). In line with this argument, it will be very informative to assess the level of skills mismatches in Ethiopia with the available data.

Table 1.10 presents the labour market outcomes of the young people along with educational attainments. It seems that young people with secondary education have lower employment ratio than those with primary education. While the employment ratio for those with primary education is about 47.71%, it is 41.61% for those young people with secondary education.

Table 1.10 Labour market outcomes, by education attainment (%)

Educational attainment	Employed	Unemployed	Inactive
Primary	47.71	12.56	39.73
secondary	41.61	15.74	42.64
Post-secondary	62.31	20.15	17.54
University	70.27	12.82	16.91

Source: Elaboration on 2012 Urban Labor Market Survey, Ethiopia

The inactivity rate for young people with secondary education is also the highest (42.64%) than young people with any other educational attainments. One of the reasons why young people with higher level of education are more exposed to widespread unemployment is that

because many of those graduates may not have the require skills to find job or to be self-reliant once they appear in the labour market. Such unemployment incidence is called skill mismatches, which is usually measured in the literature by comparing the employment and unemployment ratios (see ILO, 2013b). In other words, skill mismatches is captured if unemployment rates differ between workers with different levels of educational attainment. This is done by the following formula.

$$Skill^{Mismatch} = \frac{1}{2}\sum_{i=1}^{3} \text{abs}(\frac{E_i}{E} - \frac{U_i}{U}) |$$

Where: i: an indicator for the level of education (primary; secondary; tertiary); abs: the operator for the absolute difference; Ei/E: the proportion of the employed with education level i; Ui /U: the proportion of unemployed with education level

Substituting the employment and unemployment ratios from Table 1.11 in to the above formula, the index of the skill mismatches being experienced in the Ethiopian urban labour market is estimated to be

=1/2(35.15 + 25.36 + 57.18) =58.84%

The practical implication of this result is that the probability to stay unemployed for any high school leaver is more than two times than that of primary school achiever. Or, under qualification among high school leavers is widespread that might stem from a structural problem of the education and labour market sectors. The calculation also implies that young people with technical and vocational education are more employable than those with secondary education. The evidence also indicates that there is no over-education in Ethiopia that cause imbalance between the graduate supply and demand, but the problem is that the ones coming out of high school and college are practically under qualified to fit well for many of the exiting vacant jobs.

5. The pathway to productive employment

We have seen so far the labour market outcomes of young people in relation to their educational attainment and share of NEET young people trapped in between the education sector and the labour market. Nevertheless, in developing countries, especially in many of the African countries, getting employed is not enough by itself; given the fact that the majorities

of the employment relations are informal and pay very low wages (Assaad and Gadallah, 2009; Elder and Koko, 2014). This reminds one thing: to fully understand the school to work transition pathways of the youth, looking beyond the unemployment is very important. Of course, As mentioned by ILO (2009) when the school to work transition model was initially designed in 2003, it was basically to apply a stricter definition of "stable employment", which states that a person is not said to be fully "transited" if not able to settle in a job that meets very basic criteria of stability and satisfaction, defined by the duration of the employment contract and perception of that employed person. Accordingly, taking the job satisfaction and stability criteria into account, the transition pathway to productive employment is discussed using the following proxy indicators:

i. the status of employment
ii. terms of employment,
iii. weekly working hours for main activities of the self-employed and
iv. Perception of job satisfaction among the self-employed.

5.1. Status in employment

Like a labor market of any developing country, the Ethiopian urban labour market is segmented into regular and irregular[4] segments. While workers in the regular segment are wage and salaried employees with strong attachment to a firm, workers in the irregular employment are mainly regarded to be own-account workers and unpaid family workers. The economic risks between the two segments are also believed to be different, where own-account workers and unpaid family workers usually face high economic risks comparing to the wage and salaried employees.

The percentage distribution of the surveyed young people by status in employment is presented in Table 1.11. Wage and salaried workers, where they belong to the regular labour segment, account for about 48.86% of the total employed youth. There is however a noticeable gender difference in both segments of the labour market. In the regular segment, the employment ratios for young men and women are 54.2% and 43.1%, respectively, whereas it is the reverse in the irregular segment, with 45.76% and 56.9% for young men and women, respectively. It is also found that more than one-half of the survived youth are in

[4] irregular employment, defined as wage and salaried workers (employees) holding a contract of limited duration, i.e. set to terminate prior to 12 months, self-employed youth with no employees (own-account workers) and contributing family workers; young people in this category almost certainly fall outside of the framework of standard employment relationships.

self-employment, dominated by own-account workers (29.58%) and unpaid family workers (9.82%). A significant number of young women (16.03%) are also domestic workers. Only 0.59% of the self-employed are employers. A difference of more than 10.1 percentage points is a clear indication of the fact that young women are engaged in low-skilled jobs comparing to their men counterparts. In other words, while the self-employment is dominated by young women, the share of wage and salaried workers is comparatively high for young men.

Table 1.11. Status in employment of young people (%)

	All (%)	Men (%)	Women (%)
1. Wage and salaried workers	**48.86**	**54.24**	**43.1**
Employee-Government	18.82%	20. 41	17.12%
Employee-Private organization	29.21%	33.07	25.09
Employee-NGO (including International	0.83%	0.76	0.89
2. Self-employment	**51.14%**	**45.76**	**56.9**
Own-account workers	29.58%	32.22	26.76
Member of Co-Operatives	1.02%	1.24	0.78
Unpaid Family Worker	9.82%	8.06	11.71
Employee Domestic	8.13%	0.75	16.03
Employer	0.59%	0.78	0.40
Others	1.99%	2.71	1.22

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

However, being part of the wage and salaried workers by itself is not a guarantee for stable and satisfactory employment as most of the wage and salaried workers (29.21%) are employed in private-organizations where employment relations are irregular—without enough employment protections. Only those in the public sector, 18.82% of the total young workers, are said to be with permanent contractual arrangement, while other 0.83% who work in local and international NGOs are with unknown contractual arrangements.

5.2. Terms of employment

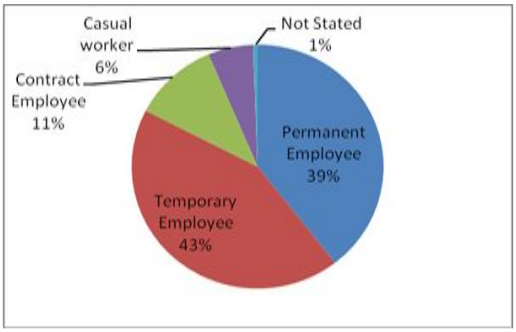
A term of employment is one of the indicators used in the labour market to identify whether a given employment relations is stable or temporarily**.** In a developing country, like Ethiopia, only workers in the regular segment of the labour market are expected to be with high possibilities of written agreements, i.e wage and salaried workers in this case, whereas those who are in the irregular labour market are dominantly believed to be without any written agreements.

The term of employment of the wage and salaried young workers is reported in Figure 1.10. It appears that majority of the wage and salaried young workers are not in a stable employment relation, where 43% of them work on a temporarily basis, 11% are contractual workers and 6% are casual workers. Only 39% of those wage and salaried workers are employed on the basis of a permanent contract, mostly in the public sector. From this, it is possible to conclude that even majority of the young paid employees are in precarious situations regarding their contract type and access to social benefits.

According to the ILO's school to work transition model, only those young employees with permanent terms of contract (more than a year), are said to be in a stable employment relations and so are transited in the labour market, regardless their level of job satisfaction. Given this criterion of stable employment arrangements and transitions, it is found that only 39% of the total wage and salaried young workers are in a stable employment relation and so do complete their labour market transitions, whereas the rest, about 61%, are still *in transition* from irregular employment to unforeseen employment arrangements.

The question to ask here is why such huge share of the wage and salaried workers are still *in transition* in the urban labour market? Although it is not such an easy task to reason out precisely as to why this is so, the answer might be more of the fact that because about 29.21% the total young workers who do earn regular wages and salaries are still in Small and Medium Scale Enterprises (SMSEs), where the level of job security and future opportunity are assumed to be bleak comparing to those who are in the public sector. Most of those young workers in the Small and Medium Enterprises (SMSEs) are always in search of transition to the public sector or other private wage employment, in which employment relations are relatively secure and rigid (less firing and hiring). In a nutshell, the dominance of temporary employment contract indicates that even having a "regular" job is not a guarantee of good quality employment in developing countries, especially in Sub-Saharan African countries like Ethiopia.

Figure 1.10 Terms of employment



Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

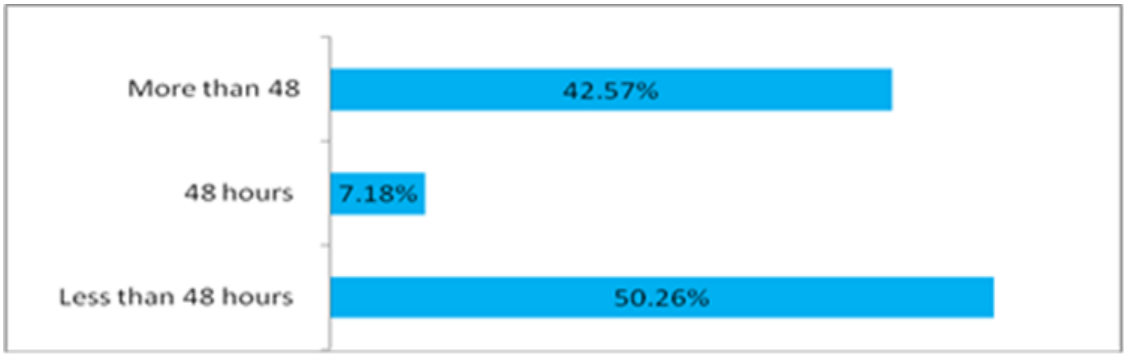
5.3. Weekly Hours for main activity in Self-employment

Based on the job-satisfactory criteria, self-employed young workers are said to be *transited* in the labour market if and only if their jobs are satisfactory regardless of the terms of employment. Of course, job satisfaction is a very difficult concept to measure, especially in a labour market where most activities are governed by traditional working guidelines. On the top of that, job-satisfaction is a subjective concept which might be varying from one worker to another based on individual's perception. However, in this study, in order to determine the stage of transition of the self-employed young workers, it is important to have a look at the weekly hours for main activities and how many hours of additional time they need to work, either in the job they already have or in another job to get satisfied. The number of additional hours in this case is an indicator whether a given self-employment is a satisfactory or not. According to the Ethiopian Labour Law Proclamation No. 377/2003, the normal hours of work shall not exceed eight hours a day or forty eight hours a week.

Taking this proclamation into account, the working hours for main activities of the surveyed self-employed young workers are reported in Figure 1.11. Only about 7.18% of the self-employed are found to be working according to the Ethiopian labour proclamation (8 hours per day or 48 hours per week), the rest young workers are either underemployed or engaged in long-working and unpaid family works. More specifically, while one-half (50.26%) of them are in condition of underemployment— working for less than 48 hours a week, the rest 42% of the self-employed seem to be working more than 48 hours a week, but it is true that the economic gain from such long hours of work is not sufficient to help them move out of the poverty. Most of those who work more than the normal hours are domestic and unpaid

family workers, where both constitute nearly 20% of the total surveyed employed youth, indicating that the long-working hours are nothing but economic risks for those self-employed both in terms of health vulnerabilities and income insecurity. As stated by Elder *and Koke* (2014) excessive hours, working more than 50 hours per week, can negatively impact the worker's health and can increase the risk of accidents.

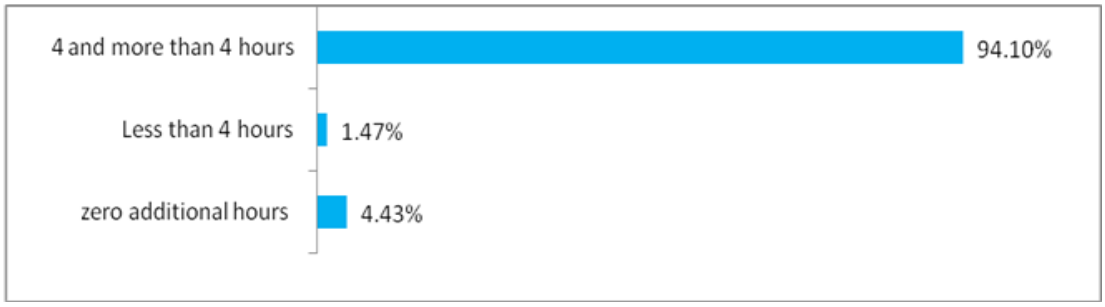
Figure1.11. Average weekly Hours for main activity



Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

In general, the time set in terms of working hours reveals that most of the self-employed young people are not satisfied with the job they have and are in need of working additional working hours. Figure 1.12 presents the share of those self-employed whether they are unsatisfied with their current jobs and if they have been looking for additional working hours during the survey time. The responses are disappointing, where nearly all (94.10%) of the self-employed young people seek to take 4 and above additional working hours per week outside their current jobs (work at hand, additional work, or other full time work).

Figure 1.12.Additional working hours

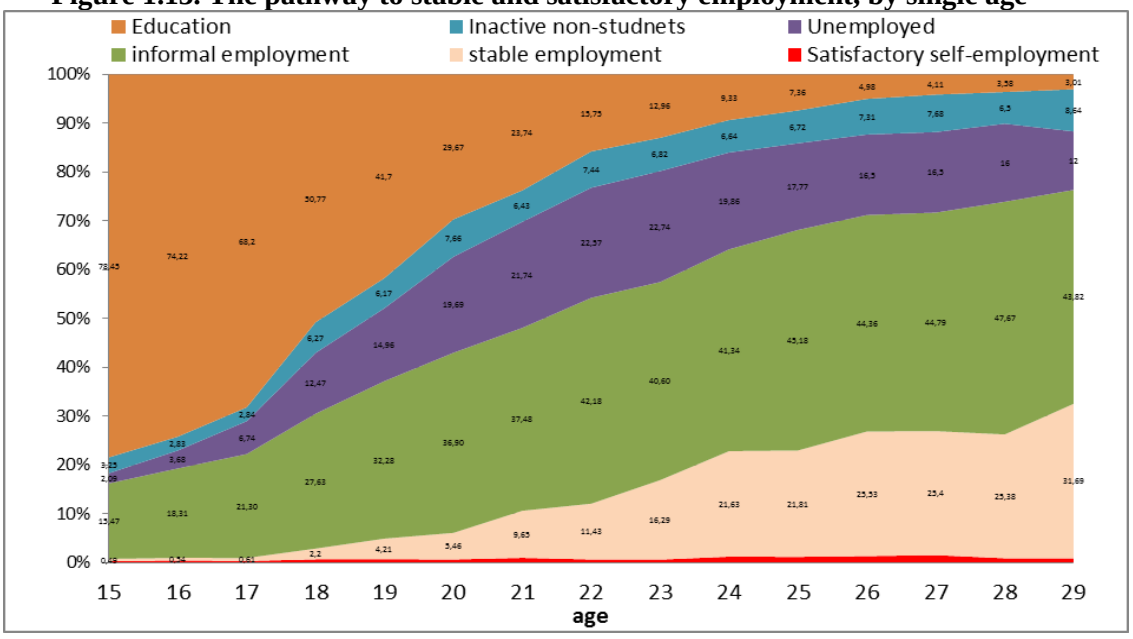


Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Only less than 5% of them are non-interested on any additional working hours, while other 1.47% of them are looking for less than 4 additional working hours.

By combining the criteria for stable and satisfactory employment of the above figures, the pathways to productive employment of the surveyed young workers, by a single age of year, are outlined in Figure 1.13. As seen in the Figure employment relations are far from being stable and satisfactory across all ages of the young workers, implying that the exit from education occurs with massive precarious employment in the irregular segment of the labour market for each age category of the school leavers. The irregular employment ranges from 15.47% for school leavers aged 15% to 43.52% for those aged 29. This implies the majority of school leavers, if they are lucky, enter into low-skilled jobs that pay only a poverty wage. The share of stable and satisfactory employment is very narrow across youngsters (15-19). Especially, young workers aged 15-19 are all in precarious employment. The trend of stable employment starts to emerge from age 20, where about 5.48% of the employed youth are in stable employment, and reaches maximum for young people aged 29, which is about 31.9%, implying that the percentage of the secure employment continues to grow from one age cohort to another in Ethiopia, which is more or less similar to the findings by Elder and Koke (2104) in Zambia from the 2012 ILO's School to Work Transition Survey (SWTs) data.

Figure 1.13. The pathway to stable and satisfactory employment, by single age



Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

5.4. Youth labor underutilization

The large proportion of irregular employment indicates that there is a widespread of youth labor underutilization. Youth labour underutilization in this case is measured by the share of young people who are unemployed, inactive non-students and underemployed. While the unemployed and inactive non-students are added up to the NEETs, those in underemployment are those who work, but neither in a stable employment nor in a satisfactory job. This implies that youth labour underutilization rate is a measure that aims to capture all young people whose economic potentials are not being fully realized, either because they work in a non-standard employment arrangement or not in Employment, Education nor in Training (NEETs). The overall youth labour underutilization in the Ethiopian urban labour market is about 57.57%, which can further be broken down into NEET (21.22 %) and underemployment (36.35%).

Table 1.12. Youth Labour Underutilization (%)

	Employed	Regular employment	Irregular employment	Unemployed	inactive student	Inactive non-students	workforce participation rate	Unemployment rate (%)	Youth labor underutilization (%)
Total Youth	48.75	12.4	36.35	15.05	30.04	6.17	63.79	23.57	57.57
Young Men	56.89	14.57	42.32	10.09	29.46	2.74	67.79	16.08	55.15
Young Women	41.54	10.46	31.08	18.7	30.56	9.2	60.24	31.08	58.98

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

The outcome by gender seems somehow different. While young men take more shares in an underemployment than their women counterparts, the opposite is the case with respect to the NEET. The underemployment for young men and women are 42.32% and 31.08%, respectively, but in the case of NEET condition, 27.9% of young women are neither in employment, education nor in training. The NEET for young men is only about 12.83%. But combing the two, underemployment and NEET, the gender difference on labour underutilization seems to disappear as the female–male gap comes down to 4 percentage points. The overall implication is that youth labour misuse in the case of Ethiopia goes up to 57.57%, and majority of the employed young people are in underemployment and poor employment relations that hinder them from making the most of their economic potential.

6. Concluding Remarks

Using retrospective data extracted from the 2012 Ethiopian Urban Labour Market Survey, this study thoroughly examine the school-to-work transition pathways of the Ethiopian youth aged 15-29. The main findings show that in spite of the fact that Ethiopia has recently made major strides in education at all levels, a significant number of those young people coming out of high schools and colleges have found it very hard to get jobs at home and are being forced to drop out of the labour market. To characterize the school-to-work transition of the Ethiopian youth, alternative proxy measures used are (i) the proportion young people at NEET condition, (ii) the proportion of young people who combine work and education, (iii) the level of unrealistic-expectation among the school leavers, (iv) the level of skill mismatches prevailing in the labour market, and (v) the pathway to productive employment from poor employment relations.

The results of the analysis indicate that the movements of young people form the education to the labour market is found to be a road with many barriers, which is oftentimes renamed as a 'broken-bridge'. This is manifested by the fact that more than a fifth (21.2%) of surveyed young people aged 15-29 are found to be at Neither Employment, Education, nor in Training (NEET). The transition is especially very difficult for young women as their proportion being at NEET is found to be more than two times than that of young men (27.9% vs 13.65%). Measured by the proportion of young people who blended schooling and working at a time, the linkage between the two sectors is also found to be so weak, in which only about one-tenth of the surveyed young people can blend education and work activities, ranging from apprenticeship trainings to wage employment.

A separate treatment of analysis for those young people who have left education shows that the unemployment rate of youth school leavers is slightly higher than the general youth unemployment (24.57% vs 23.25%, respectively). This indicates that youth unemployment does not seem to improve with educational attainment until some levels. The unemployment among female school leavers is especially very high to the extent of 32.82% comparing to 16.0% for males, implying that female school leavers are unemployed as twice as their male counterparts. Age wise, young school leavers aged 15-19 and 20-24, face higher

unemployment rates than those of young-adults aged 25-29, indicating that many of the jobseekers are beginners in the labour market.

In addition to the general comparison of unemployment highlighted above, a vertical analysis as to how unemployment among the school leavers is related with education is also made. And the result indicates that unemployment does not decline with educational level. This is evidenced by the fact that the unemployment rate for those who completed primary education is found to be 22.38% comparing to 29.38% for young people with lower secondary education and 27.44% for those who attended upper secondary. This signifies that unemployment is predominantly concentrated among young people with middle level of education, but this does not mean that university graduates are immune to widespread unemployment, as unemployment rate of 13.95% for university graduates by itself is very high, for that matter, for a country whose overall access to college is well below 5%.

For college graduates, type of educational training is also matters in getting employment. An analysis of unemployment by educational training shows that young graduates from fields related to engineering, manufacturing and construction and health have higher probability of being employed in the labour market than those graduates who study in many fields of Social Science stream. It then seems the case that there is a problem of educational curriculum that leads to too few engineers and health professionals, but to too many social scientists. Unemployment resulted from geographical mismatches is also absorbed among graduates of fields related to agriculture and husbandry, mainly due to their reluctances to move out of major cities to rural areas where their educational specialization fits well

Two of the most important reasons that possibly explain for the higher unemployment rates of young people with upper educational attainment are labour market duality and skill mismatches. The fact is that the number of young school leavers has been rising over recent years until a point where the public sector is not able to absorb them by creating white-collar jobs that many of the school leavers have been expecting for years. Many of the young people with secondary education and above do search for government jobs and/or wage employment in the private sector by waiting a long queue with unrealistic expectations. But at the same time there is a tendency in the labour market that recent school leavers/graduates are not employable citing underqualification and lack of technical expertise including

effective communication, critical thinking, as well as skills to work in specific occupations. As the result of those facts, the empirical finding form the skill mismatches indicates that the probability to stay unemployed for a high school leaver is on average more than two times than that of primary school achiever

In addition to the unemployment nature of those young school leavers, the pathway to stable and satisfactory of those employed young school leavers is also thoroughly examined. This is because studying the school to work transition will not be complete without further looking at the working condition of those employed and measuring the proportion of those who are with stable and satisfactory employment using the status of employment, terms of employment, weekly working hours for main activities and perception of job satisfaction. The overall analysis reveals that youth labour misuse in the case of Ethiopia goes up to 57.57%, and majority of the employed young people are in underemployment and poor employment relations that hinder them from making the most of their economic potential.

In tackling the causes of youth unemployment rate, the following important insights are forwarded to the concerned body.

- How efficiently young people find jobs is dependent on how well the labor market is prepared to receive them, and how well youth are prepared for the labor market. Based on this fact, reconsidering the school-to-work transition pathway, possibly with introduction of internship (or practical works) that helps young people to upgrade their multidimensional-skill before they join the world-of-work is a fundamental task in overcoming the problem at hand.
- The creative genius of youngsters and their entrepreneurship are perhaps some of the least-used resources of the country's youth. Given proper training, access to credit and creating the most business-friendly environment, youth entrepreneurship can promote the economic potential of young people. In view of that make financial resources available for the youth, possibly form small and micro-finance institutions so that unemployed young people may open their own a "One birr" business, which may lead them to self-employability, is really another window of opportunity in talking the massive youth unemployment.

- To address such huge imbalance of young graduates, there seem to be a considerable interest to shift educational resources form Social Science fields to areas related to Engineering, Manufacturing, Construction and Health for better integration of young graduates to the working life. In this way, investing in field of studies like engineering, manufacturing and construction and health seem to be more convenient for future employment opportunity of the young people, whereas students investing their time and money in field of studies like Social Science seem to have bleak employment opportunity in the labour market. Moreover, encouraging and facilitating of labour mobility among regions is also expected to have significant impact on downsizing the regional unemployment variations. Otherwise, without urgent action to such broken school to work transition of the young people, Ethiopia may risk wasting the tremendous potential that can be offered by its youth.

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CHAPTER II

DETERMINANTS OF UNEMPLOYMENT INCIDENCE, DURATION AND EXIT TO FIRST–TIME EMPLOYMENT: AN ECONOMETRIC ANALYSIS

OUTLINES: *1. Introduction—2.Analyzing socioeconomic determinants of youth unemployment incidence—2.1.Specification of Logit Model—2.2.Logit Regression results—2.2.1.Effects of Individual Characteristics—2.2.2.Effects of family backgrounds—2.2.3.Effects of human capital—2.2.4.Effects of Job-Searching Behaviors—2.2.5.Regional effects—2.2.6.Educational policy shift and training effects—3.Analyzing the duration and exit rate to first-time employment—3.1.Specification of duration model—3.2.Results of duration model—3.2.1.Non-parametric analysis—3.2.2.Hazard Ratio Analysis—3.2.3.Sensitive analysis—4.Concluding remarks*

"A child born today must master skills and knowledge that were needed only by elites a century ago." O'Gara (2013)

1. Introduction

This chapter uses micro-econometric models to examine the main socioeconomic determinants of youth unemployment incidence and exit-rates. Those micro-econometric models are logit and duration models. While the logit models deal with the incidence of youth unemployment and its descriptors, the duration models do estimate the exit rates of the school leavers from unemployment state to first-time employment. The use of duration model in addition to logit model is because it is not only the probability of entering into unemployment that matters, but also the duration of time in which young people remain without a job in the labour market.

Results from the logit models show that there exists variability on youth unemployment incidence in Ethiopia by gender, age group, family background, human capital, job searching behavior. For example, being young female is significantly associated with 10.89% higher probability of unemployment, while being a married is associated with 5.35% lower probability of unemployment than those who never got married. With respect to age groups, being youngsters (15-19) increases the probability of unemployment by about 4.4% in reference to young adults (25-29), indicating that most of the unemployed are first-time job seekers and they enter directly into unemployment state in most cases. Regarding family background, young people staying with their parents and living as spouse to household heads face much higher probabilities of unemployment, suggesting that the possibility of relying on parental support often make unemployment a less painful alternative for young school

leavers/university graduates in Ethiopia. Educational wise, young people with lower secondary and upper secondary school face probabilities of 7.15% and 4.28% higher than those with primary education, respectively. This reaffirms that unemployment among secondary school leavers is more widespread and critical, though unemployment among university graduates is also a major labour policy concern. In term of job searching methods effectiveness, searching methods using assistance of friends and relative are found to be more effective for employment. There is no wonder with this result as it is very common to see that young school leavers with family at higher level of positions have more employment opportunities than young school leavers coming from lower socio-economic backgrounds. The other side of this result is that labour market information in Ethiopia is unorganized and spondaic, which make very difficult for young people to search jobs through modern information outlets (as they are not available).

Result from the duration model also reveal that the school-to-work transition is a protracted and difficult pathway, in which a significant number of high school leavers and university graduates are being trapped at the entrance of the labour market with no hope in sight. Measured by the average duration of unemployment and unemployment exit rates, the path seems to be a stony, where on average the school leavers have to wait for about four years. This result is also thoroughly analyzed in connection to several categorical variables such as gender, age group, family background, educational attainment, education curriculum, field of studies and trainings (for those with post-secondary and above), job searching intensity and local labour demand. And it shows that young people with middle level of education from both lower and upper secondary schools suffer the most from long-term unemployment, while young people with vocational and technical education have seen the highest exit rates from unemployment and hence are with the shortest school to work transitions. This might be because of vocational and technical training centers are more titling to preparing and stimulating young people for entrepreneurial activities with specific skills that help them easily integrate into the labour market

The rest of the chapter is organized as follows: Section 2 specifies a simple logit model used to estimate the youth unemployment incidence and reports the main results. Section 3 also

models the empirical framework for duration estimation and presents the main findings from both non-parametric and parametric estimations. Section 4 provides concluding remarks.

2. Analyzing Socioeconomic determinants of youth unemployment incidence

2.1. Specification of Logit Model

When the response variable in a research is a binary outcome (more precisely, a 0/non-0 variable), it is the logit model that works well in explaining the cause and effect relationships (Hosmer and Lemeshow, 2000). In fact, such estimation of relationship can also be done with a probit model. But the reason why a logit model often takes advantage over the Probit model is that logit model neither assumes linearity in the relationship between the explanatory and the outcome variable nor does it needs normally distributed variables (Hilbe, 2009). Logit model is also less sensitive to outliers and easy to check a bias than the Probit model. Based on this ground, logit model is preferred to probit model in studying the incidence of youth unemployment in this section. Methodically, the logit model is specified as

$Y_i = \beta X_i + \varepsilon_i$

$$Y_i = \begin{cases} \mathbf{1} \textit{ if Individual i is unemployed} \\ \boldsymbol{0} \textit{ if Individual i is employed} \end{cases}$$

Where Y_i is labour market status, which gets value of 1 if the school leaver/university graduate is unemployed and 0 if employed during the survey time. X_i stands for explanatory variables, and the error term, e_i, is stochastic and assumed to have a binomial distribution. As mentioned earlier, the advantage of employing logit models is that they do not require strict assumptions about the distribution of the response variable, youth unemployment in this case, implying that the results of the logit models are estimations on the probabilities of unemployment of the school leavers. Having specified logit model in this way, it is now essential to pass on to the regression results straightforwardly.

2.2. Logit Regression results

To examine the socioeconomic determinants of youth unemployment incidence from various perspectives, five survey logit models are estimated in this section. While the results from the first three models are presented in Table 1.1, the other two are reported in Table 1.2. Furthermore, while Model 1 in the first column of Table 1.1 deals with the total sample of

the school leavers, model 2 and 3 stand for the sub-sample regressions, for male and female school leavers, respectively. All models are run against exogenous variables that typically explain labor supply such as gender, age group, family background, educational qualification, training participation, job searching mNethods and regional location (a proxy for local labour demand).

Regarding the nature of the data, the dataset has 30 strata of households, where each stratum contains 11 Primary Sampling Units (PSUs). The PSUs vary in size with 11431 young school leavers in the total sample. There are no missing data in the weight variable. The reported standard errors are based on a first-order Taylor series linear approximation and hence they are linearized variance estimator, where in a non-survey context, referred as robust variance estimator. Also, as the numbers of young male and female are nearly equal in proportion in the sample, the reported coefficients are marginal effects from the mean unemployment baselines of 20.58%. The effects of each related variables are presented as follow:

2.2.1. Effects of Individual Characteristics

Table 1.1 in its first column shows the factors affecting the probability of being unemployed immediately after school or university. As exhibited in Model 1, there is a significant gender differential effect on the incidence of unemployment. Females are more likely to be unemployed than their male counterparts. Empirically, being young female is significantly associated with 10.89% higher probability of unemployment, *holding others constant*. There seems also a statically significant difference by marital status, where being a married is associated with 5.35% lower probability of unemployment than those who never got married at least once. With respect to age groups, the effect is more pronounced on youngsters (15-19) and middle age group (20-24) than with young adults (25-29), where being a young adult decreases the probability of unemployment by about 4.4% in reference to a youngster. Higher unemployment of the youngsters reveals that most of the unemployed are first-time job seekers, pointing out that young school leavers in urban Ethiopia enter directly into unemployment state in most cases.

2.2.2. Effects of family backgrounds

In addition to the individual characteristics, family backgrounds of the school leavers/university graduates are also expected to have a noticeable differential effect. It is however worth noting that some important household welfare variables are not included in the survey data. For example, no information is available on the income-wealth and consumption-expenditure of the households that could have considerable implications on the employment of the young school leavers. Also, important information variables such as parental educational level are missing. The only information found in the data that might serve as proxy for family's socioeconomic background is the relationship of the school leavers with the *Heads* of the households.

Hence, in the absence of household income and parental educational levels, household headship status is expected to provide an important insight as to how family backgrounds might affect the incidence of youth unemployment. Indeed, in developing countries like Ethiopia, nature of family ties could be more important than family's income and expenditure, as their quantification is hardly correct for slum urban poor households as there is no annual income flow registration by tradition. The logic behind is that in developing countries where there are no unemployment insurance, unemployed school leavers are expected to be more dependent with their family until they find jobs that fit their interests and abilities. But such expectation of dependency is believed to be lower for school leavers who act as household heads themselves as they may have more family responsibility. Taking this concept into account, the family headship statuses of the surveyed school leavers are grouped into four clear categories: *head of household* (where the school leaver is a head him/herself); *spouse of the household head*; *son/daughter of head/spouse of the household head*; and *brother/sister/ relative/other* to the household head. While interpreting the results, those who are household heads by themselves are used to be a point of reference.

The results of the regressions are as expected, where young school leavers who are *spouse of the household head* encounter much higher probability of unemployment (40.4%) than those who are heads of household themselves. Much in the same way, those who live with their parents as sons/daughters face a 39.09% of higher probability of unemployment than the reference group. Those who are brothers, sisters or relatives to the household head also suffer

from a 27.98% higher probability of unemployment. The overall result is that young school-leavers who stay with their parents and live as spouse to household heads do experience much higher probabilities of unemployment, indicating that the possibility of relying on parental support often make unemployment a less painful alternative for young school leavers/university graduates in urban Ethiopia.

2.2.3. Effects of human capital

Of particular interest is the employment effect of human capital, measured in this case by the level of educational attainment. Although it is obviously known that the type and quality of jobs searched by the young school leavers do vary from one to another based on their educational levels, it is important to see the incidence of unemployment by educational attainment as things might not go as they are supposed to be. To do this, five educational dummy variables are created in the analysis, namely primary level (1-8), lower secondary school (9-10), upper secondary school (11-12), postsecondary (vocational, diploma) and tertiary level (first degree holders and postgraduates).The results are interpreted with a reference to those primary achievers.

Empirical estimates from the logit model, as indicated in the first column of Table 1.1, show that young school leavers with more education have higher probability of unemployment than those with primary level. In its simplest manner, although the quality of job is another issue that seeks further analysis, the current regression outcome implies that moreeducation does not mean higher probability of being employed in urban Ethiopia. This is especially true among lower-secondary and upper-secondary school achievers as it is evident to observe that they are the ones who have experienced much higher unemployment than young people with junior education (primary or less). More particularly, young people with lower secondary face a probably of 7.15% higher unemployment incidence, while the probabilities for those with upper school is 4.28% higher than those with primary education. This reaffirms that unemployment among secondary school leavers is more widespread and critical, though unemployment among university graduates is also a major public policy concern. The question here is then why young people with middle level of education have encountered higher probability of unemployment incidence than young school leavers with junior education level. This can be seen from two angles.

Table 1.1. Analysis of determinants of post-school youth unemployment: Marginal effects

		Survey Logit(1)	Survey Logit(2)	Survey Logit(3)
References	**Variables**	**Total sample (school leavers)**	**Sub-sample (Female)**	**Sub-sample (Male)**
Male	Female	.1089 (.0114)***	----------	----------
15-19 year olds	20-24 year olds	.0182 (.0163)	.0632 (.0272)**	-.0175 (.0172)
	25-29 year olds	-.0440 (.0162)**	-.0262 (.0269)	-.054 (.0191)**
Never married,	Married (at least once)	.0535 (.0163)**	.1204 (.0264)***	-.0133 (.0185)
Household	Son/Daugther of head/Spouse	.3901 (.0233)***	.4071 (.0310)***	.2787 (.0342)***
	Brother/Sister of Head/Spouse, Relative, Paid Domestic workers and others	.27989 (.0273)***	.2785 (.0386)	.1982 (.0378)***
	Spouse	.4040 (.0262)***	.4458 (.0308)***	.1813 (.0749)
Primary (1-8)	Lower secondary school (9-10)	.07151 (.0138)***	.0823 (.0211)***	.0732 (.0169)***
	upper secondary school (11-12)	.0428 (.0263)*	.0772 (.0432)**	.0463 (.0351)
	Postsecondary (vocational, diploma)	.03348 (.0159)**	.0163 (.0255)	.0766 (.0211)
	Tertiary level (First degree and postgraduates)	-.0499843 (.0220)**	-.1055 (.0373)**	.0099 (.024)
Seeking assistance of parents, friends, relative	Looking at notice boards and direct application	-.15032 (.0104)***	-.2992 (.0134)	.0367 (.0165)**
	Through newspaper, Radio & TV, Checking at work sites and others	-.07334 (.0140)***	-.1455 (.0184)	.0122 (.0212)
	Using unemployment card by registering at public employment center	-.0481 (.0354)	-.1170 (.0452)	.0612 (.066)
Addis Ababa	Tigray	.0416 (.0217)*	.0227 (.02664)	.0363 (.0307)
	Afar	-.0638 (.0276)**	-.0854 (.0406)**	-.0493 (.0381)
	Amhara	.0212 (.0199)	.0158 (.0267)	.0151 (.0216)
	Oromia	.0086 (.0178)	-.0002 (.0236)	.0186 (.0204)
	Somalie	.0086 (.0178)	-.0493 (.0391)	-.0280 (.0426)
	Benishangul-Gumuz	-.0402 (.0306)	-.1631 (.0262)***	-.0356 (.0220)
	SNNPR	-.0452 (.0164)*	-.0783 (.0231)**	-.0111 (.0207)
	Gambela	-.1019 (.0228)***	-.1195 (.0334)***	-.0903 (.0266)**
	Harari	-.0723 (.0209)**	-.0927 (.0345)**	-.0446 (.0241)
	Dire Dawa	.0365 (.0254)	.0222 (.0341)	.0489 (.0338)
y = Pr(unemployment) (predict)		20.58%	26.73%	13.59%
`goodness-of-fit test		F(9,292)=19.93 Prob>F= 0.000	F(9,292)= 48.82 Prob>F= 0.000	F(9,292)=37.19 Prob>F= 0.000

*** *, ** and * are linariazed standard errors & statistically significant at 1%, 5%, and 10% level respectively*

Firstly, those young school leavers with middle level of education may go out of the education sector with inadequate skills to the current labour market, which has recently become very dynamic with a need of flexible skills for employability and adaptability. This points out that there is a sort of horizontal skill mismatches in the Ethiopian urban labour market, which might be resulting in polarization of skills for young people with secondary level of education.

Secondly, it is also very common to see that unlike young people with junior education level, those school leavers with middle level of education oftentimes intend to enter into the formal labor market (mostly to the public sector). To get government jobs they have to keep waiting a long queue with their middle level of human capital. But, given their little human capital accumulation, this could be the opposite for young people with junior level of education as they have no the option to look for better payment and secured jobs in the public sector. For one or another reason, the incidence of unemployment of those young people with middle level of education is a critical problem that seeks urgency from the government and policy-makers alike with due emphasis on the education sector as to how they need to get prepared for the current dynamic labor market.

2.2.4. Effects of Job-Searching Behaviors

Job searching methods employed by the young school leavers may also have important differential effect on the probability of unemployment incidence. In fact, given the sparse and sporadic labour market information, it is possible to imagine that many of the school leavers use family connections while they are looking for jobs. But, to test whether this presumption is valid or not, job searching methods used by the school leavers are also included in the analysis by dividing into four categories. While the first dummy variable includes those young school leavers who use traditional methods such as assistance of family, relatives and friends, the second dummy variable comes from those who look at notice board and apply directly to companies. Thirdly, checking at work sites, newspaper, Radio and TV advertisements are grouped into another third dummy variable, while the fourth dummy variable is derived from those who use unemployment card by registering at public employment center. In interpreting the results those who use traditional way of searching are considered as reference (the first dummy variable mentioned above).

The differential effects from the logit regression are shown in the first column of Table 1.1. The first evident from the regression result is that looking for job using unemployment card is insignificant to affect the probability of employment in urban Ethiopia. This is expected result a priori given the unorganized labour market, where there barely are public or private unemployment registrations centers for unemployed youth. But, the partial effect of the other two methods (notice boards and direct application) and (checking at work sites, newspaper, Radio & TV) seem to result in lower probability of unemployment in the total sample, but such effects disappear soon when the analyses are made by sub-group, for male and female separately (see model 2 and 3 of the same Table). The statistically insignificant coefficients in model 2 and model 3 indicate that searching methods using assistance of friends and relative are more effective for employment in urban labour market of Ethiopia. There is no wonder with this result as it is very common to see that young school leavers with family at higher level of positions have more employment opportunity than young school leavers who come from lower socio-economic backgrounds. This is somehow similar to a study from Steels (2008) where families and relative serve as insurance for searching job, especially when young workers enter into long unemployment spells.

2.2.5. Regional effects: a proxy for local labour demand

The variables so far included in the logit models stand for supply labour market or individual characteristics or level of human capital of the school leavers. But at the same time controlling the demand side of the labour market is very important while analyzing any incidence of unemployment. In this way, the best proxy variable for controlling local labour demand is to use regional dummies that able to capture any difference in job opportunities among the regions. Young people living in major cities such as in Addis Ababa and Dir Dawa are expected to have greater access to job offer than those who live in other regional cities. To check this hypothesis, Addis Abba—the political and economic capital of Ethiopia, is used as a reference in controlling the local labour demand.

The results, as appeared in the lower part of Table 1.1, indicate that youth unemployment incidence in Tigray, Oromia, Dire Dawa and Amhara are not significantly different from Addis Ababa. This is to mean that Addis Ababa is commonly known for its widespread open youth unemployment and so do those major regions. It is important to remember that in Chapter One, regions like Tigray, Amhara, Oromia and Dri Dawa are characterized by

slightly higher unemployment rates than Addis Ababa city. But after controlling the local demand, the results of the logit model indicate that the unemployment rates in those regions are not statistically significant to be different. In this case, only small and rural dominated regions like Gambela, Afra, Benshangul Gumuz have shown lower unemployment incidence than Addis Ababa. This demonstrates that youth unemployment is a very serious issue in urban areas comparing to rural areas of the country, where major cities of more urbanized regions are branded by pervasive open youth unemployment. But it is still vital to recall that the rural youth are vastly engaged in a widespread underemployment of substance farming and in most case they flock to nearby urban areas to make the urban unemployment much worse off by congregating idly in the main streets of major cities.

2.2.6. Educational policy shift and training effects

The next issue that is essential to deal with the logistic regression results is whether the education policy shift made in 1994, which changed the education structure from 6-2-4-4 to 8-2-2-3, has a differential impact on the employability and adaptability of the young people. To elaborate this more: before 1994 the Ethiopian education system had comprised of 6 years of primary school (1-6), 2 years of junior education (7-8), 4 years of secondary school (9-12) and four years of university education(for many of the social and natural science subjects). But in 1994, the Ethiopian government introduced a new policy that changed the education system to 8 years of primary education (1-8), 2 years of lower secondary education, 2 years of upper secondary education (11-12) and 3 years of university education (see the diagrammatic representation of the new education system in chapter one). Having introduced such educational system, the first batch of the new education system left secondary school in 2003/4 and started to come out of university in 2006/7 for the first time. In this way, to evaluate the differential impact of this educational policy on the employability and flexibility of the school leavers, an educational policy shift dummy variable is introduced into the logistic model for those who completed their education based on the new curriculum.

The regression results are reported in the second column of Table 1.2. The sign of the dummy coefficient form the education policy shift is positive. The positive sign may reveal that those school leavers of the new education policy are more at risk of unemployment than the graduates of the old curriculum. But at the same time it is statistically insignificant, and this statically insignificant of coefficient could be a sign of long-term of unemployment

incidence in the Ethiopian labour market, where even school leavers from the old educational curriculum are still unable to penetrate the labour market and are subject to long-term unemployment either due to rank order that comes from hiring firms or other specific reasons such as absence of definitive skills demanded by the labour market.

Table 1.2 Impact of educational policy shift and training type: Marginal effect

References	Variables	Survey Logit(1) school leavers (Secondary and above)	Survey Logit(2) school leavers (Secondary and above)
Male	Female	0.0951 (.0150)***	.0945 (.0149)***
	20-24 year olds	0-.0517 (.0218)*	-.0598 (0218)**
15-19 year olds	25-29 year olds	-0.1363 (.0222)***	-.1424 (.0227)***
Never married	Married (at least once)	0.05224 (.0235)**	.0545 (.0235)**
Head of Household	Son/Daugther of head/Spouse	0.3297 (.026) ***	.3351 (.0273)***
	Brother/Sister of Head/Spouse, Relative, Paid Domestic workers and others	0.2897 (.0354) ***	.2983 (.0348)***
	Spouse	0.2349 (.0435) ***	.2406 (.0434)***
	Vocational and junior professional (vocational, diploma)	-0.0323** (.0143)	-------
	Engineering graduates	-0.0970** (.0419)	-------
	Health professional graduates	-0.1008*** (.0379)	-------
Social science	Agriculture and husbandry graduates	0.0040 (.0736)	-------
	Natural science graduates	-0.0560 (.0478)	--------
	Education policy shift(2006, university graduate)	--------	.0129 (.0176)
Seeking assistance of friends, relative	Searching vacancy advertising boards	-0.0179 (.0187)	-.0217 (.0185)
	Through newspaper, Radio & TV, Checking at work sites and others, direct application	-0.0477 (.0209) ***	-.0508 (.0207)
	unemployment card	0.1016 (.0835)	.0941 (.082)
	Tigray	0.0197 (.0285)	.0193 (.0284)
Addis Ababa	Afar	-0.0583 (.0434)	-.0584 (.0443)
	Amhara	0.04353 (.0235) *	.04286 (.0235)*
	Oromia	0.0296 (.0225)	.0285 (.0228)
	Somalie	-0.0909 (.0322) **	-.0950 (.0317)**
	Benishangul-Gumuz	-0.1110 (.0266) ***	-.1130 (.0266)***
	SNNPR	-0.0233 (.0232)	-.0246 (.0231)
	Gambela	-0.1073 (.0348) **	-.1082 (.035)**
	Harari	-0.0610 (.0289) **	-.0613 (.0288)**
	Dire Dawa	0.0404 (.0371)	.03521 (.0367)

*** *, ** and * are linearized standard errors & statistically significant at 1%, 5%, and 10% level respectively*

It is also important to discover whether there are specific impacts on the unemployment incidence of higher education graduates by subject specialization or trainings. In doing so, six dummy variables that able to capture the various educational subjects and trainings are formed from the survey data. While the firs dummy variable is made of those young people with vocational and junior professional (vocational, diploma) education, the second dummy variable is derived from engineering graduates. By the same fashion, those who are with health profession, agriculture and husbandry, natural science and social science including business, economics and law disciplines are grouped into respective dummy variables. Interpreting is made against the dummy variable that comes from the Social Science and humanity graduates.

As indicated in the first column of Table 1.2 graduates of Engineering, Health and Vocational and junior professional graduates have higher employment probability than graduates of social science (business, law and humanity). In terms of magnitude, the differential impact on employment for health graduates is higher, with marginal effect of more than 10%. Graduates from engineering filed also enjoy higher employment than those who come from social science and humanity, with about a 9.7% of higher probability in getting jobs. Similarly, young people with vocational and junior professional training have a 3.23% of higher probability of getting employment than those with social science and humanity degree holders, implying that having a firm specific skill is very important for employability than generic knowledge in today's labour market.

The implication is that as long as university graduates form social science streams seem to have less probability of employment than other disciplines, there is a need to relook at the current education curriculum. This is also signified by the fact that vocational trained young workers have more likelihood to be employed than young people who trained in social science at degree level. The employment of graduates form agricultural fields is not statistically different, but still their employment incidence might be improved if appropriate labour market policies are put in place, where they can get work in areas related to their fields by moving to other potential agricultural areas across the country.

All in all, applying weighting average to national level, the Survey data indicate that more than ½ million young school leavers (primary to university graduates) aged 15-29 were

actively looking for a job in the Ethiopian urban labour market in 2012. This absolute figure is especially dominated by young people who are with secondary and university educations, while the relative unemployment of those who with primary education and technical & vocational schools are somehow small, which is broadly consistent with the result obtained in Chapter One and indicating that the results are robust to alternative methodological approaches.

3. Analyzing the duration and exit rate to first-time employment

The Logit models of the previous section are very helpful in identifying the main determinants of unemployment incidence at a given point of time. But, what is equally important to investigate in the meantime is how much time does the unemployed young school leavers spend in a state of unemployment? And how does the duration of unemployment vary among different groups, for example, by gender and educational attainment? To answer these questions, unemployment duration models are systematically analyzed using retrospective data of the school leavers. However, before looking at the results of the duration models, it is till imperative to specify and define what duration models are all about.

3.1. Specification of duration model

Built up on the seminal work of Mortensen (1970), the model of unemployment duration is derived from the Job–Search–Theory. Assuming two-states (unemployment and employment) in the labour market, this model focuses on the conditional probability of leaving unemployment over the course of time, where such probability is estimated based on the Cox proportional hazard function (Kiefer, 1988). The transition might be affected by various socio-economic variables such as individual characteristics, educational attainment, work experience, family background, job search intensity and local labor demand conditions. Taking such explanatory variables into account, the hazard function assumes that absolute differences in covariates result in proportionate differences in the hazard at each *t* period of time. This can be written symbolically as:

$$\lambda_i(t)=\exp(\beta' X_i)\,\lambda_0(t),$$

Where X_i a vector of time invariant covariates for individual i, β a vector of estimates, and $\lambda_0(t)$ is the 'baseline' hazard explaining the hazard duration dependence. Also, as the data

through which the duration of unemployment measured in this study are in terms of whole months completed, the hazard model needs to be in its discrete—time hazard function, which can be restated as complementary log-log form in the following way.

$\lambda_i(t)=1-\exp[-\exp(\beta' X_i + \psi(t)]$,

Where $\psi(t)=\ln\left[\int_1^{t+1} \lambda o(u)du\right]$ is the functional form that sums up the nature of duration dependence in the assumed discrete time hazard model. In such model, the shape of the baseline hazard is done on monthly basis with no specific restrictions as to how ψ varies from time to time. In other way of saying, in doing the analysis, a non-parametric model of the baseline hazard is firstly estimated and then to further substantiate the result of the baseline hazard, a flexible parametric that take into account the effect of the covariates are estimated.

3.2. Results of duration model

3.2.1. Non-parametric analysis

Table 1.3 reports the average years of unemployment duration of the school leavers by gender and educational attainment. The overall results indicate that young school leavers face long spells of post-school unemployment in urban Ethiopia. There however is a variation by gender and educational attainment. While the average duration of single unemployment spell for young men is 3.92 years, it is one year longer for young women (4.98 years). With respect to education, for equal level of education, young women encounter much longer duration of unemployment than young men. For young men, the longest average unemployment duration (4.8 years) is experienced by those who are with lower secondary education, whereas the relatively shortest duration (3.2 years) has come from those who are with vocational and diploma level. Why young people who come up from vocational and technical school show a relatively lower average duration of unemployment than young people with university degree may stem from the fact that vocational schools may have the advantage to equip young people with practical works that make them more employable and adaptable in the labour market.

The pattern of unemployment duration by education is observed for young women too, but much longer for each educational level than for young mean. With nearly 8 years of

unemployment duration, young women with lower secondary school face the longest unemployment duration in the sample survey. However, similar to those of young men, young women with vocational and technical education have shown shorter duration of unemployment than young women with university level (3.7 years versus 4.6 Years). The reason can be the same to that of young men's experiences as vocational schools may train students with more applicable skills in the job market than universities can do.

Table 1.3 Average unemployment duration for a single complete spell, by Gender and Education (Years)

		Educational level				
	All	primary	Lower secondary school	Upper secondary school	Postsecondary (vocational & diploma)	University graduates
Male	3.92	3.8	4.8	4.0	3.2	3.8
Female	4.98	5.1	7.8	6.7	3.7	4.6

Note: The reported means are calculated as *extended means* using STATA commands stci, emean (Cleves *et al.* 2008)

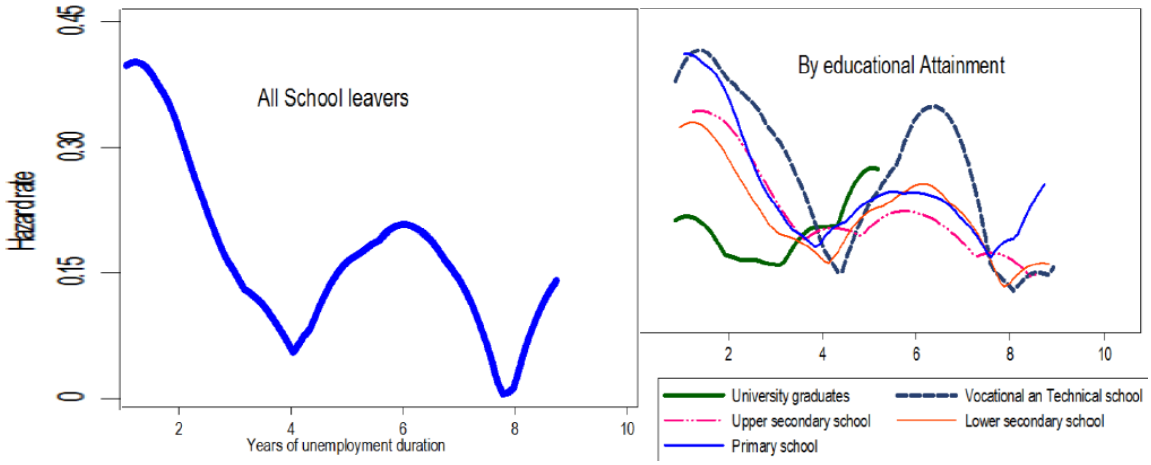
All in all, what is evident from the table is that it is not only higher unemployment incidence that the Ethiopian youth face, but a longer unemployment spells as well. Based on the ILO criteria, if average unemployment duration lasts more than a year, it is said to be a long-term unemployment. By this definition, it appears that majority of the Ethiopian school leavers face a very long-term of unemployment, with a significant human capital and skill losses.

Such scenario is also confirmed by the small and slow hazard rates being experienced by majority of the school leavers. Figure 1.1 exhibits the smooth hazard rates, which indicate the pattern of leaving unemployment to first-time employment. In Panel A, it seems that the unemployed school leavers experience negative duration dependence until the 4^{th} year. However, thereafter non-negative duration dependence comes to happen until 6^{th} year, implying that exit rate increases at increasing rate for two years after the 4^{th} year, and then come to decline until the 8^{th} year.

Although it is not easy to exactly figure out as to why the school leavers experience a mixed kind of duration dependence over the 8 years. This duration dependence may stem from the dual nature of the labour market, where young school leavers prefer to wait a long queue to enter into wage employment, mostly in the government sector jobs. The fact is that in dual labour market, where good and bad jobs coexist, the hazard rate may be non-decreasing as a substantial number of the unemployed young people may queue for a good job. However, if they do not find the good job at a certain point of time, they are forced to accept a low quality

job, suggesting that career is still a dynamic game, where young school leavers postpone the employment in case of the informal sector, but when they enter into long-term unemployment spell, they intend to accept any kind of job regardless of its quality. At a time, where most school leavers accept even low quality of job, there exists non-negative duration dependence.

Figure 1.1 Smooth hazard rates for all school leavers and by completed education



Panel (A) Panel (B)

However, the observed hazard in **Panel A** masks important difference among young school leavers with different level of education. The magnitude of exit rate is quite different by educational attainment. In the first two years the magnitude of hazard rate for a university graduate is much lower than others'. The hazard rate for university graduate gets momentum at the 3rd year, where all young people with university education seem to find a job thereafter, but soon, with no turn into negative duration dependence. This confirms that the exit rate for university graduates in the first few years is very low as they tend to wait for public jobs in the government sector, which has an important implication to the lengthy school to work transition of the youth. It also appears that young graduate form vocational and technical schools have shown the highest exit rate of probability in the first three years, though it declines dramatically at the 4th year. But surprisingly, this decline rises again until the 6th years, where afterwards all young people with this level of education leave unemployment with a negative dependence trend. In sum, comparing to others school leavers, throughout the 8 years of unemployment, young people with lower secondary education do experience the lowest exit rates.

3.2.2. Parametric Analysis

In addition to the non-parametric analysis, some semi-parametric and parametric analyses also give important insights to the school to work transitions. Table 1.4 reports the result of semi-parametric and parametric analysis of survival models. While model 1 shows the result from Cox Proportional hazard ratio in its discrete-time form, model 2 and 3 stand for the regression coefficients of parametric survival analysis that take into account the unobserved individual heterogeneity. Interpreting is begun with the hazard ratio of model 1.

3.2.2.1. Hazard Ratio Analysis

In Cox proportional hazard model of discrete-time, the effects of the explanatory variable on the leaving unemployment are provided by the hazard ratios (λ_0). In such model, a unit change in an independent variable, or a shift from 0 to 1 for dummies, results in a proportional shift in the conditional probability of exit rate. While a hazard ratio greater than one implies the explanatory variable has a positive impact on the exit rate, a hazard ratio less than one indicates a negative effect, *other thing remaining constant*.

Given this conceptual framework, the hazard ratios presented in the first column of Table 1.4 are always interpreted by deducting form one, implying that the smaller hazard ratio is the longer unemployment duration in the labour market. For instance, the hazard ratio 0.821 for young women implies that young women are 17.9% less likely to leave unemployment to their first-time jobs than the young men. The same is true with the impact of the age variables, though different in direction as age has a positive effect on leaving unemployment state in this case. Both middle age and old cohort youth have about 25% higher exit rate than the teenagers (15-19). Married school leavers are also 16.8% more likely to exit unemployment than those who never married at least once. This may come from the fact that singles are less likely to have significant responsibilities than their married ones, and their job search may not be this much intensive comparing to those who are married ones.

Quite expected, young school leavers who live as spouse of the head of the household, Son/Daugther of head/Spouse and Brother/Sister of Head/Spouse, Relative, Paid Domestic workers are, respectively, 39.5%, 32.82% and 21.6% less likely to get their first jobs than those who act as head of household themselves. This indicates that co-habitation choices of the school leavers significantly affect unemployment duration in Ethiopia.

By educational attainment, it appears young school leavers from vocational and technical school have the higher exit rate from unemployment than those who are with secondary and university education. This might be because of vocational and technical training centers are more titling to preparing and stimulating students for entrepreneurial activities with some specific skill that help them easily integrate in the labour market. Regarding others, it seems that upper secondary school holders (11-12) are 22.9% less likely to exit unemployment than junior education achievers, whereas those with lower secondary education (9-10) are 27% less likely to leave unemployment comparing to the reference group.

University graduates are 61.8% less likely to get employment than primary achievers, showing that as the public sector lags in hiring young people, it takes long time for university graduates to accept an informal job. Only few new university graduates immediately seek in the informal sector and many of them rather enter into "wait unemployment". In general, the result indicates that educational training of the country suffers from lack of connection with the labour market needs, and a significant proportion of the school leavers and university graduates remain in unemployment state for a prolonged period of time.

With respect to method of job searching used by the school leavers also plays a role. Young school leavers who look for jobs using modern searching methods such as newspaper, Radio & TV, websites, have much higher probability of leavening unemployment than those who use relative and family connection. School leavers who find with modern ways of searching jobs are 39.3% more likely to leave unemployment than those who use traditional way of looking for jobs. Unfortunately, however, the coverage of modern methods is very limited in scope and only accessible for young people with advantaged backgrounds, and mostly in very big cities like Addis Ababa. And this could be another reason as to why methods of looking jobs like searching vacancy through advertising boards and having unemployment card are insignificant determinants of unemployment exit rate in urban Ethiopia. Even it appears that those who go through background connection seem to be advantaged in accessing jobs more early than those who look through notice board. Lastly, although the result is positive, there is no significant difference between Addis Ababa and other major cities in terms of exit rate from unemployment.

Table 1.4. Estimates of Exit Rates to first-time employment

	Discrete-time Cox Proportional hazard MODEL 1	**Parametric survival MODEL 2**	**Parametric survival MODEL 3**
	Haz. Ratio Std. Err.	Coef. Std. Err.	Coef. Std. Err.
Young women	.821** (.0591)	.233** (.093)	.232** (.093)
20-24 year olds	1.266** (.119)	-.301** (.117)	-.313** (.115)
25-29 year olds	1.258** (.123)	-.255** (.123)	-.257*** (.122)
Married (at least once)	1.168 (.117)	-.237* (.131)	-.2332* (.130)
Spouse of household head	.605*** (.056)	.806*** (.135)	.799*** (.135)
Son/Daugther of head/Spouse	.6718*** (.068)	.513*** (.131)	.502*** (.130)
Brother/Sister of Head/Spouse, Relative, Paid Domestic workers and others	.784** (.089)	.303*** (.149)	.274*** (.149)
Lower secondary school (9-10)	.730*** (.053)	.466*** (.096)	.455*** (.096)
upper secondary school (11-12)	.771** (.099)	.372** (.169)	.381** (.167)
Postsecondary (vocational, diploma)	.796** (.073)	.330** (.118)	.335** (.117)
Tertiary level (First degree and postgraduates)	.382*** (.089)	1.179*** (.248)	1.176*** (.241)
Searching vacancy advertising boards	1.094 (.088)	.002 (.104)	.036*** (.102)
Through newspaper, Radio & TV, websites and others	1.393*** (.117)	-.364** (.114)	-.327*** (.114)
unemployment card	.9421 (.287)	.2408 (.387)	.253 (.387)
Addis Ababa	.09405 (.091)	.065 (.129)	.051 (.129)
Constant	-	2.712 (.184)	2.517*** (.191)
Gamma variance	-	.858	.7755
Log likelihood	-8445.4023	-3079.6467	-3075.416
Number of observation	2777	2777	2777
Indivdual hetroginity	-	Yes/Gamma	Yes/Gaussian
P-value of LR test for individual heterogeneity		0.001	0.000

***Notes: Robust standard errors are shown in p parenthesis, with* *significant at 10%; **significant at 5%; ***significant at 1%**

3.2.2.2. Sensitive analysis

The influence of other explanatory variables on the hazard rate could be underestimated without controlling unobserved individual heterogeneity. This is because in leaving unemployment, unobserved individual heterogeneities like health status and other similar variable can influence the process of transition to a large extent. Hence, it is important to check the sensitivity of the results using parametric survival analysis.

In doing so, it is assumed that the unobserved heterogeneity among the school leavers is distributed with either Gamma or Gaussian distribution. Based on those distribution assumptions, model 2 and 3 are respectively estimated and reported in Table 1.4. The likelihood-ratio test of normal distribution variance of Model 2 reveals that the null hypothesis that there is no unobserved heterogeneity among the school leavers is rejected. By the same token, the Gaussian distribution in Model 3 also strongly rejects the null hypothesis, implying that it is appropriate to consider unobserved heterogeneity in the analysis. In this way, Model 3 is selected for interpreting the estimates as the null hypothesis of no unobserved heterogeneity is fully (100%) rejected in this model.

But, it is still worth noting that although the sign of the coefficients in the last two columns are opposite to those hazard ratios of the first column, the qualitative interpretation and implication remains the same across all the models, and hence it is advisable to deal with only the implications of the coefficients afterwards, instead of the magnitudes.

To begin with, the first variable of interest in Model 3 is the dummy for gender and it appears that even taking unobserved heterogeneity into account women tend to wait longer unemployed than their men counter parts. This is in fact expected given the general presumption regarding the different roles at home of males and females that could differentially impact their job search intensity and mobility. Age group also brings a differential impact, where the duration of unemployment is shorter for the 20-24 and 25-25 years old than young people with 15-19 years old, signifying age can partly capture experience as young people with work experience can have shorter durations of unemployment. Much in the same way, married young people have significantly shorter unemployment spells than those who never get married. Possible reason for this is that married people are likely to have more responsibilities and dependents, which may force them to increase their job search intensity once they get into unemployment state. It is also

possible to imagine that married school leavers are less likely to decline job offers. The effects of other explanatory variables such as educational attainments and job search methods don't also systematically differ when individual unobserved heterogeneity is taken into account in the analysis, showing that the results are still robust to alternative methods of analysis.

4. Concluding Remarks

Employing several micro-econometric models such as logit and duration models, this chapter anew confirms that the school to work transition of the Ethiopian youth is a protracted and difficult pathway, in which a significant number of high school leavers and university graduates are being trapped at the entrance of the labour market and waiting for miracle to happen.

Measured by the average duration of unemployment and unemployment exit rates, the school to work transition is found to be a 'broken bridge' for many of the school leavers, where on average they have to wait for about four years without employment. The unemployment duration is also thoroughly analyzed in connection to several categorical variables such as gender, age group, family background, educational attainment, education curriculum, field of studies and trainings (for those with post-secondary and above), job searching intensity and local labour demand. And it shows that young people with middle level of education form both lower and upper secondary schools suffer the most from protracted unemployment duration while young people with vocational and technical education experience the highest exit rate form unemployment and hence are with the shortest school to work transition gaps than other young school leavers.

Given such widespread incidence and lengthy duration of youth unemployment, it is worth taking actions that help shorten the duration of youth unemployment and minimize any possibilities of long term unemployment and scaring effect of the youth. Among others, it could be especially important to create organized labour market information system so that new school leavers and university graduates will have the desired knowledge as to how search for their suitable jobs, and then they will be able to transit timely to the world of work.

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CHAPTER III

WHAT EXPLAINS THE HIGH YOUTH UNEMPLOYMENT IN AFRICA? ACROS-COUNTRY ANALYSIS

OUTLINES: *1. Introduction—2.An overview of the African youth Labour market—3.What makes the transition to first-time employment more difficult for the African Youth?—3.1.Demographic explosion and Lack of aggregate demand—3.1.1.Youth Bulge and Growing youthful workforce—3.1.2. Lack of aggregate demand—3.2.Education and skills mismatches—3.3.Labour market information shortage—3.4.Low labour productivity and over expectation of the youth—3.5.Rigid employment regulations and Institutional Setbacks—3.6.Ineffectiveness of Youth Employment Interventions and Absence of Youth Policies—4.What policy options for an inclusive labour market—5.Concluding Remarks*

'The man asks whether he will be allowed in.
"Possibly", says the doorkeeper, "but not at the moment." Kafka (1924)

1. Introduction

Of particular recent research interest in the African labour market is the transition of young people from education to first-time employment. This is because the time at which young people transit to the world of work is a critical period, where such first-time employment serves as an economic security in their effort to enter simultaneously into the labor market and adulthoods. Nonetheless, despite such importance of first-time employment and the fact that Africa's current young cohorts get better access to education and training opportunities than their parents' generation did, it is very common to see nowadays that a significant number of young Africans remain long without finding jobs after leaving schools or colleges; and disproportionally affected comparing to their adult counterparties. Subsequently, youth unemployment has become a severe economic and societal problem in the continent. Taking such scenarios into account and using comparative analysis of several national data sources, this chapter tries to identify and explain the major culpable factors for the high unemployment among first-time jobseekers in Africa.

The findings show that Africa has recently drowned in trouble to create productive jobs for a population that is predominantly young, poorly educated and growing rapidly. With a proportion of 60% of the total unemployed people, young people in Africa have faced bleak employment opportunities, where official youth unemployment rates exceed 40% in

countries like South Africa, Nigeria, Reunion and Tunisia as of 2012. It also surpasses 30% in countries like Mauritius, Egypt, Algeria, Morocco, and Zambia. Young women are also disproportionally exposed to higher unemployment than their male counterparts, where the rates are as high as 56.9% in South Africa, 54% in Egypt and 38.2% in Algeria for the same year. Youth unemployment rate also is more than three times of adult unemployment rate in countries like Mauritius, Algeria, Tunisia, Gabon and Cape Verde, implying that with widespread open unemployment, "there are no jobs" is probably the most potent and widespread sentiment among young Africans today.

It is also worth noting that it is not only in terms of incidence, but the duration of unemployment is also a protracted one. Long term unemployment is felt by majority of unemployed youth in many of the African countries, with far reaching consequences on their human and social capitals. For instance, share of unemployed greater than 12 months account for 59.5% in Botswana, 61.7% in Lesotho, 64.8 % in Morocco, 78.3 % in Mozambique and 82.2 % in Namibia. As the result of this long-term of unemployment, many young Africans are going out of the labour market, where nearly one-third (29%) young people became neither in Employment nor Education, or Training (NEET) in both Egypt and Liberia as of 2012. Also, nearly half of young female in Egypt, 44.2% in Liberia, 34.2% in Zambia and 31.5% in Benin were at NEET condition. Indeed, youth unemployment does not tell us the whole story of the new labour market entrants. Even for these who find a job, the quality is also untold. Millions of new labour market entrants are trapped in temporary and precarious jobs that fall short of legal protection and future opportunities, but live with only a poverty wage. This makes Sub-Saharan Africa the only region with the highest working poverty in the world, with 64% workers receiving less than US$ 2 per day.

Regretfully, the employment status of the African youth does not also improve much with education. Unemployment of young people with secondary and territory education is even more serious for some countries. In South Africa and Zimbabwe, say for example, the share of unemployment people with secondary education to total unemployment is above 80% for both young men and women. The share of unemployment in total unemployment for workers with tertiary education, particularly among young women, is also very high in countries like Algeria (46.8%), Morocco (33.50%), Botswana (29.8%) and Tunisia (23.30%).

The implication is that the transition from education to first-time productive employment is very long for those young people with secondary and university education. In connection to this, surveys conducted by the ILO (2012) and World Bank (2012) in 17 African countries show that the average duration to complete the school to work transition pathway is more than 4 years, ranging from 1 year in Côte d'Ivoire to 8 years of lag in Togo.

Although causality is not tested empirically in this chapter, a situational analysis and data obtained from various international organizations such as the *ILO's KILM database 8th edition, African Economic Outlook,* and *the World Bank database*, reveals that the most important factors contributing to massive high youth unemployment, by blocking new labour market entrants, are lack of aggregate labour demand to meet the rapidly growing youthful population; skill deficits and mismatches; labour market information shortage; low productivity, attitude of employer and perception of the youth, labour market regulations and overall poor governance.

The point is that with nearly 1 million new lanour market entrants each month, Africa is currently experiencing a youth bulge (with more than 35% youth to population ratio) than any other region of the world. Due to this pressure, the number of unemployed youth is further expected to increase by 28 % in the next 15 years, equivalent to about 30 million people. Given the pervasive informality and narrow industrialization base of the African economies, this trend is expected to cause a persistent youth unemployment that might not improve in sight.

What is more disappointing is that even education does not seem to help for majority of the young people. Although the rapidly growing African youth are at the same time getting unprecedentedly access to education, the unemployment among university graduates is also a growing concern. This is because the supply of qualified youth exceeds the capacity of the modern economy to produce white-collar jobs that youth have been dreaming for years, implying that even for the educated African youth, a productive and stable job is just a dream. The chance of employment especially exacerbated by skills mismatches, where imbalance between the supply of and demand for skills among young people aged 15-29, for example, have reached as high as 40.5% in Benin and 27% in Egypt in 2012. Such skill mismatches also makes many employers to be reluctant to hire recent fresh graduates, referring to their absence of technical expertise and little previous work exposure.

Lack of relevant labour market information and ineffective public information services are also other factors that explain the problems of first-time jobseekers. Labour market information is unorganized and many of the job information systems designed are ineffective in getting the first-time jobseekers connected to the job market. According to the African Economic Outlook (2012) public information services implemented in 21 African countries are reported to be able to serve just for less than 25% of young job seekers in each country. In place, majority of the African youth use traditional ways of finding jobs, such as family, friends, and social networks, which are very costly for low-income young workers as they are more vulnerable due to limited guidance from family members. In fact, it is not only the job searching method that matters, but also international Key Indicators of Labour Market (KILM) that are believed to be very useful for labour market policy formulation are very fragile, with little improvement over the last two decades, even comparing to other similar regions such as East Asia and the Pacific or Latin America and the Caribbean.

Extreme low labour productivity and unrealistic young people's expectation to governments' jobs are other major obstacles too. The low productivity embodied within the young people, as new comers to the working life, results a high unit-labour cost for African firms than in any other region in the world. For instance, labour productivity in Sub-Saharan Africa is 4.5 times lower than the world average. This makes hiring young labour more difficult. And, as they don't need to invest in additional workable and adaptable skills, the attitude of employers to new labour markets entrants is almost negligible. In connection to this, a study by the African Economic Outlook (2012) in 19 African countries indicate that nearly 65% employers are reluctant to hire first time job-seekers on long-term contracts, while more than 50% of them are also hesitant to offer employment for young job seekers without previous work experiences.

But, much to the contrary, those young people with higher level of education are not much interested in the informal job market, but prefer to wait a long queue for governments' jobs. This situation is especially very common in the North African countries, where high proportions of youth prefer to have government jobs over private sector or self-employment. This is as high as 53% in Egypt, 46% in Tunisia, 45% in Djibouti and 44% in Mauritania. Stemmed from this wrong-headed ambition, a significant number of educated youth have started to develop a disillusion as to how to get job and started complaining that connections

and relatives matter, than skills and abilities, to get government employment in Africa. Many of them are frustrated and devoid of hope, and being forced to exit from the workforce on a continuous basis. As of 2012, there was estimation that about 22 million out of 40 million African young jobseekers became inactive and fearful of their future opportunities.

Weak and inefficient labour market institutions; and quality of governance are also identified as major barriers. Although data about labour market regulations and quality of governance indictors are scant in many of the African countries, some proxy data obtained from the 2013 World Economic Forum's Global Competitiveness index shows that Africa has the lowest labour market efficiency measured by cooperation in labour-employer relations; flexibility of wage determination; hiring and firing practices; redundancy costs; pay and productivity etc. In studying this efficiency, countries like South Africa, Nigeria, Ghana, Kenya, Tanzania, Ethiopia, Morocco, Algeria and Egypt were taken as examples and found among the countries with a low rank in the world.

Additionally, the African business environment is not actually friendly for private sector to attract potential domestic and foreign direct investors. According to the *2013 World Bank's Doing Business* report, African private sector suffer from several constraints that discourage entrepreneurship and firm creation, including barriers to entry, high transaction costs, and difficulties in securing finance for start-ups. For example, the requirement cost for setting up new businesses in Sub-Saharan region is 8 times higher than in OECD countries and 4.5 times higher than in Europe and Central Asia. It also takes, on average, 37 days to start a business in the Sub-Saharan Africa comparing to just 12 days on OCED member countries. Moreover, Sub-Saharan Africa is the only region in the world with the least legal protection for business investors, where investor protection indexes average is 4.5 out of 7.0 in 2013.

The poor quality of governance is also another cause for the persistent youth unemployment and massive working poverty. Information form the World Bank (2014) indicates that Sub-Saharan Africa has lowest scores with four of the six measures of quality of governance: voice and accountability, government effectiveness, rule of law, control of corruption, political stability, and regulatory quality.

In fact, some African countries have been launching a considerable number of youth employment initiatives aiming to help young jobseekers, but practically most of the initiatives are reported to be ineffective and even sometimes dysfunctional at all. Another

survey in 19 African countries by the African Economic outlook (2012) indicates that 69% of interviewed young people believe that their government handles job creation badly, while only 27% find that their government is dealing well with job creations. What makes matters worse is that even there are a number of African countries that don't have National Youth Policy at all. As of 2014, only 23 out of 54 countries (43%) had a National Youth Policy. This clearly implies that, in many of the African states, youth employment in particular and youth development in general have been receiving little attention for years, which might be part of the factors that explain the open youth unemployment and abject working poverty throughout the continent.

The rest of the chapter is organized as follows: section 2 paints the picture of African youth labour market from the perspective of the school-to-work transition from macro perspective. Section 3 identifies and explains the main culpable factors for the pervasive youth unemployment across a range of African countries. Section 4 presents a range of public policies than need to be put in place in an effort to address the mounting youth unemployment in the continent. Section 5 concludes with remarks.

2. An overview of the African Youth Labour Market

Before looking at the major challenges of youth employment across the African countries, it is firstly worthwhile to give a bird's-eye view of the African labour market form the perspective of school to work transition. In fact, it is true that the concept of school to work transition, which is defined by the ILO (2009) as the passage of a young person aged 15-29 from the end of schooling to the first productive job, is an intricate pathway that greatly varies among countries to a large extent, especially in the African countries where existing labour market institutions are so weak and inefficient in governing the transitions. However, in an effort to demonstrate how the journey to first-time employment is a rocky road for majority of the African youth, this chapter makes use of various *Key Indicators of Labour Market (KILM)* such as the level of youth unemployment, duration of unemployment, underemployment, proportion of youth neither in Employment, Education, or Trainings (NEET) and level of working poverty. Those indicators are very important to consider as the transition gaps exist between the education sector and the labour market is nothing, but

simply a reflection of those key labour market outcomes. For example, high unemployment among first job-seekers in majority of the African countries can serve as a signal to show how the labour market entry is very challenging for young people. By taking the ratio of unemployment rates into account, it can also be used to show the disadvantageousness of the youth in the labour market relative to their adult counterparts. The same is true with other indicators, as large proportion of youth in neither in Employment, Education, or Trainings (NEET) shows simply how the school to work transition is a "broken bridge". In the same manner, while long duration of unemployment may result in a scary effect and a high dropout of young people form the labour market; underemployment shows the level of working poverty, where young people may be only in disguised unemployment and working out of necessity. Conceptualizing this way, it is now essential to see each of the indicators in detail.

i. Youth unemployment

"There are no jobs" is probably the most potent and widespread sentiment among the African youth today, which is simply a manifestation of how finding a stable job has become a very daunting task for majority of the youth. This perception is also in conformity with the data obtained from AEO (2012), where it shows that young people aged 15-29 account for 60% of the unemployed people in the continent. Data taken from the *ILO's Key Indicators of the Labour Market (KILM)* and other National Statistics Bureaus also tell the same story, where official youth unemployment rate exceeds 50% in countries like South Africa, Nigeria, and Reunion in 2012 (see Table 1.1). It also appears to be more than 20% in Ethiopia, Zambia and Mauritius. If not worse, the youth unemployment rates are also very high in the North African countries; with 42.3% in Tunisia, 24.8% in Egypt and 17.4% in Morocco in 2012.

There is also huge gender disparity in the African labour market, where the rates for young women are much higher than their men counterparts in the countries with data available. For example, young women in Egypt and Algeria are exposed to 54% and 38.2% of unemployment rates, respectively. This also is not much different in countries of the Sub-Saharan region as the unemployment rates for young women range from 20.1% in Senegal to 56.9% in South Africa.

Table 1.1 Youth Unemployment in Africa (2012)

Selected SSA	Youth unemployment rate (%)			Ratio of youth to adult unemployment rate		
	Male	Femal	Total	Male	Female	total
Cape Verde	-	-	41.2	-	-	3.35
Gabon	-	-	41	-	-	3.23
Ethiopia,	19.5	29.4	24.9	2.3	1.6	1.9
Lesotho	29	41.9	34.4	1.4	1.8	1.6
Mauritius,	20.4	28.4	23.7	5.3	2.7	3.7
Malawi	-	-	9.1	-	-	2.76
Nigeria*,	-	-	54	-	-	-
Namibia,	29.4	40.1	34.3	2.6	2.8	2.7
Reunion,	52.8	56.6	54.2	2.4	2.1	2.2
Senegal,	11.9	20.1	14.8	1.9	1.8	1.8
South Africa,	47.1	56.9	51.5	2.5	2.5	2.5
Swaziland	-	-	44.8	-	-	3.01
Tanzania,	-	-	7.1	-	-	-
Uganda,	-	-	5.4	-	-	-
Zambia,	-	-	23.4	-	-	2.1
Zimbabwe			7.6			2.81
North Africa(selected)						
Algeria,	19.1	38.2	22.4	3.2	3	3.1
Egypt,	14.7	54.1	24.8	-	-	-
Morocco,	18.4	19.2	18.6	2.9	2.4	2.7
Sudan	21.2	25.7	22.9	2.1	1.5	1.9
Tunisia	-	-	42.3	-	-	3.1

Source: Elaboration ILO (KILM) Data*; National Bureau of Statistics of Nigeria**

It however seems the case that there are some countries with low youth unemployment rates. For instance, Tanzania, Malawi, Uganda and Zimbabwe record youth unemployment rates of less than 10%. It is not such an easy task to reason out precisely as to why the data from those countries show much lower rates of youth unemployment than the other African countries. But given the local labour market condition of these countries, it is possible to provide two explanations here.

Firstly, the measurement criterion of youth unemployment in some of the selected countries is based on the *'restrict unemployment'* definition of the ILO that takes into account all the three criteria of unemployment *(not working, willing to work and searching for work).* This implies that had the unemployment rates been measured based on the definition of "*relaxed unemployment*", which disregards the "searching criteria", the youth unemployment could be much higher than the reported rates. The very fact is that in developing countries, unemployed youth do not look actively for job continuously as result of discouragement or unable to get registered in some employment centers. Given such unorganized local labour

market, if strict definition unemployment of the ILO is applied, there is no doubt that there will be underestimation in reporting the youth unemployment rates in some of the countries.

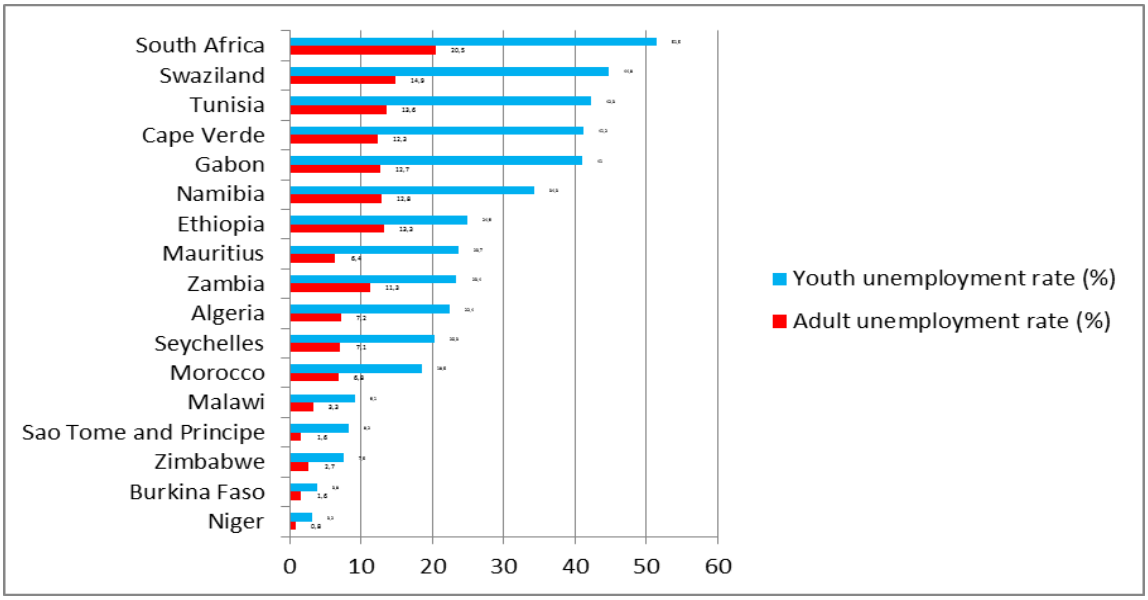
Secondly, other reason that may account for the reported low unemployment in some of the selected countries can be because many of the African youth cannot any more afford to stay unemployed as they do not benefit from any social protection systems. For many African youth, employment is a necessity. Regardless the quality of jobs, they need to work to meet their basic needs. Especially, for many of the uneducated youth there is no differentiation between 'good' and 'bad' jobs, though the end result of such employment is to live with a poverty wage, in which underemployment becomes as painful as unemployment, if not worse. Put it differently, given an employment of whatever quality is a necessity for majority of the uneducated African youth, it would not be a surprise to see that some of the reported unemployment rates are unexpectedly lower.

Inequality of opportunity resulted from age is also very high in the African labour market. In all the countries with data available, young workers are disadvantageous and disproportional affected in terms of employment. Such disparities can be illustrated either by taking the ratio or the difference in percentage points of the youth and adult unemployment rates. The first illustration is shown in the last column of Table 1.1, where it appears that the ratio of youth to adult unemployment rates is more than two times in many of the African countries. Say for example, young workers are hit more than three times in countries like Mauritius, Algeria, Tunisia, Cape Verde and Gabon. One of the possible reasons as to why young people are hit as high as three times is that because most the youth are first job-seekers with little previous work experience and lack of adequate skills for available jobs.

The second labour market disparity indicator also shows a huge inequality between young and adult workers. As seen in Figure 1.1 the difference in percentage points exceed 20% in South Africa, Tunisia, Gabon, Morocco, Cape Verde, Gabon, and Reunion. By this measure (with a percentage point difference of 31%), South Africa have seen the most unequal labour market in Africa, but this should not come as a surprise given the fact that this country is one of the top African countries that suffered from extremely high youth unemployment (51.5% in 2012). As mentioned above, such huge labour market inequality may stem from the fact that the young workers possess less human capital pertinent to a specific firm and less general work skill in the overall internal labour market. Differences of unemployment rates

between youth and adult are smaller in countries categorized as Low-Income Countries by the AOE (2012). This is particularly true for Niger, Burkina Faso, and Zimbabwe.

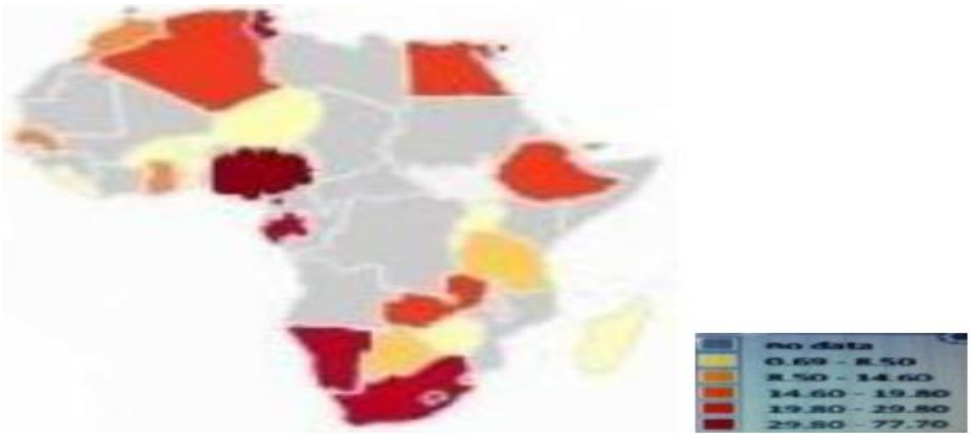
Figure 1.1 Youth and Adult unemployment rates, 2012



Source: Elaboration ILO (KILM) data

As a summary to the youth unemployment distribution, Figure 1.2 exhibits a distributional map of youth unemployment for countries with data available. The dark red represents for countries that are affected by more than 30% of youth unemployment. Some of those countries include South Africa, Nigeria and Namibia. The light red color represents for countries with youth unemployment of 20% to 30%, which includes Ethiopia, Egypt, Libya and Zambia.

Figure 1.2 Distribution of youth unemployment in Africa (% of total workforce ages 15-24)



Source: World Data bank, 2014

ii. Length of unemployment

Another important dimension of the youth unemployment worth investigating also is its duration. When unemployment gets longer and longer, it may have far reaching consequences on the human and social capital of the unemployed youth, and in most cases, in retrievable (ILO, 2014). This is especially true in Africa where there are no unemployment compensations to minimize the effects of being unemployed for a long period of time. Of course, like in other developing regions, short periods of unemployment in Africa can normally be managed through assistance from family members and relatives. However, when unemployment takes long periods, it might result in substantial financial hardship for both the unemployed youth and their families. Actually, the consequences is not only confined to financial difficulties, but it can also impair future employability and access to quality jobs by causing loss of skills and self-confidence over a period of time.

Table 1.2 shows the duration of unemployment for African countries with most recent data available. It appears that the share of unemployed more than 12 months is high in majority of the sample countries, indicating that the incidence of long-term of unemployment is widespread and persistent. This especially is very pervasive in countries like South Africa, Namibia, Lesotho, Morocco, Mozambique, Botswana, Mauritius, and Ethiopia, where the share of long-term unemployment (more than a year) ranges from 25.1% in Ethiopia to 82.2% in Namibia. Particularly in South Africa, about 44.1% of the total unemployed in 2012 were unemployed for unknown period of time.

Table 1.2 Incidence of long–term unemployment (2013)

Country	Total unemployed ('000)	Share of unemployed < 1 month (%)	Share of unemployed > 1 month and < 3 months (%)	Share of unemployed > 3 month and < 6 months (%)	Share of unemployed > 6 month and < 12 months (%)	Share of unemployed > 12 months (%)
Botswana	114.041	8.70	11.10	9.00	11.4	59.5
Ethiopia	1653.685	14.20	38.10	22.80	-	25.1
Lesotho	192.119	13.40	-	12.10	12.8	61.7
Mauritius	46.099	-	29.10	16.10	25.4	29.5
Morocco	1028.25	3.50	12.10	11.20	8.1	64.8
Mozambique	663.322	2.90	8.00	4.80	6	78.3
Namibia	199.5700	3.30	3.90	4.00	6.6	82.2
South Africa	4403.600	-	8.00	5.90	9.1	32.9 (+44.1*)

Source: Elaboration on ILO (KILM) data*; share of unknown time (%)**

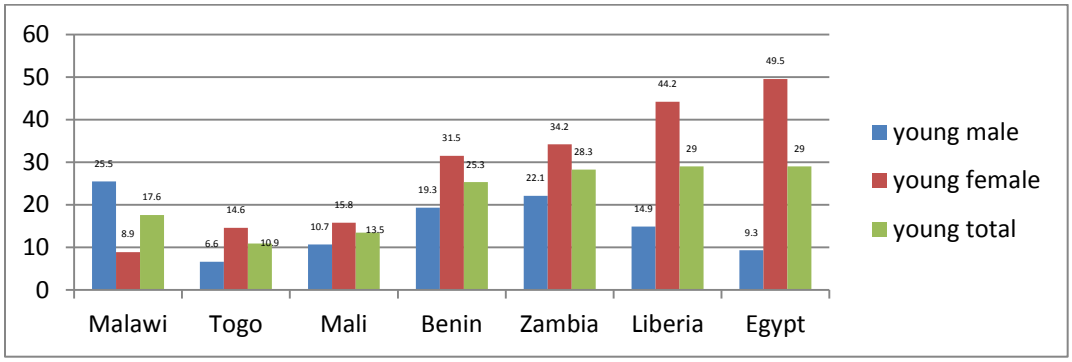
Such incidence of long-term of unemployment causes millions of young Africans to drop out of the labour market with a determinate consequence in their future career development.

iii. Youth neither in Employment nor Education, or Trainings (NEET)

The high proportion of lengthy unemployment shown above reveals that the standard unemployment measures may not be adequately capturing the problems faced by the African youth. This is because when the duration of unemployment lasts longer, majority of the unemployed youth tends to drop out of the workforce. And then when a number of young people give up actively searching for jobs they may not be counted while measuring the unemployment rate in the strict sense of the ILO's definition. Accordingly, the share of youth who are neither in Employment nor in Education or Training (*NEET*) is another important proxy to measure the school to work transition gap experienced by majority of the African youth.

Data obtained from the 2012 ILO's School to Work Transition Survey (SWTS) from Seven African sample countries indicates that the magnitude of NEET young people is very high, especially among young women (See Figure 1.3). Among the countries with data available, Egypt and Liberia are found to be two among the African countries with very large school-to-work transitions gaps, where nearly one-third (29%) of their youth are neither in Employment nor Education, or Training (NEET). Comparing to NEET young men, the proportions of NEET young women are reported to be very large in all the sample countries of the School-to-Work Transition Survey, where nearly one-half (49.3%) of young women in Egypt aged 15-29 are NEET as of 2012. In the same year, NEET young women are also found to be as high as 44.2% in Liberia, 34.2% in Zambia and 31.5% in Benin.

Figure 1.3 Share of Youth (15-29) neither in employment nor in education or training (NEET), 2012



Source: Elaboration on ILO's School to Work Transition Survey data (2012)

iv. Underemployment

The youth unemployment and inactivity presented earlier alone do not explain the problem that young people face in the African labor market today. Even the so-called 'employed' youth are under an abject working poverty that hinders them from achieving their full economic potential. This is because most of the new entrants to the labor market, especially those with low skill levels, are not left with any alternative but to attach themselves with the informal economy. Data taken from 8th edition of *ILO's KILM* indicate that Sub-Saharan Africa with less than US$1.25 per person per day experiences the highest regional working poverty rate in the world in 2012. In absolute terms, as indicated in Table 1.3, of 383.83 million workers who live under US$1.25 a day level in the world, about 128.44 million of them are from Sub-Saharan Africa. If the income bracket is relaxed to US$ 2 per day, we find that about 64% workers of Sub-Saharan Africa are under working poverty, while the world average share on this regard is 27.3%. This massive working poverty of Sub-Saharan African countries makes productive employment for new entrants more challenging than in any other region of the world. Only South Asia has the second highest working poverty, with 24.1% of its working population under US$1.25 a day.

Table 1.3 working poverty (ILO estimates), 2012

	Number of working poor at the US$1.25 a day level ('000)	Number of working poor at the US$2 a day level ('000)	Share of working poor at US$1.25 a day in total employment (%)	Share of working poor at US$2 a day in total employment (%)
World	**383833**	**853688**	**12.3**	**27.3**
East Asia	46296	113220	5.6	13.6
South-East Asia &	35424	98346	11.7	32.5
South Asia	155935	391169	24.4	61.3
Latin America & the Caribbean	9562	20115	3.5	7.4
Middle East	1129	5151	1.8	8.1
North Africa	4180	12945	6.4	19.7
Sub-Saharan Africa	**128442**	**204902**	**40.1**	**64**

Source: Elaboration on ILO's KILM data

To have a look at some specific countries, Table 1.4 presents working poverty and vulnerable employment rates for some selected African countries. The results indicate that 62.1% of men and 60.5% of women in Niger earn US$ 1, 25 per day, while 79.9% of men and 84.0% of women work in a condition of vulnerable employment. The situation is even

worse in case of Mozambique, where 70.8% of men and 75.9% of women earn under US$1.25 per day, and 96.0% of women live with vulnerable jobs.

Table 1.4 Working poverty and vulnerability in selected African countries

	Working poverty rate (US$ 1.25)		Vulnerable employment rate		Women's share of employment	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Congo	48.9	55.9	60.6	89.6	51.3	56.9
Sierra Leon	50.7	57.1	-	-	53.7	56.1
Mozambique	70.8	75.9	79.2	96.0	53.9	59.9
Cameroon	28.1	33.8	74.5	79.6	51.8	53.7
Nigeria	59.8	56.2	-	-	44.0	38.7
Niger	62.1	60.5	79.9	84.0	29.2	20.5

Source: National household income and expenditure surveys (HIES), Reported by ILO, April 2012

Another survey related to abject working poverty by ILO (2012) on 15 Sub-Saharan African countries indicates that Democratic Republic of Congo has the highest estimated working poverty rate among the sampled countries, with approximately 93% of its workforce living with their families on less than US$1.25 per day, while Burundi with 85% has the second highest rate. Of the surveyed 15 countries by the ILO (2012) eight of them have working poverty rates above 50 per cent. The survey further pointed out that the relatively low youth unemployment rate in some Sub-Saharan African countries is linked to the high levels of working poverty. As the result of poverty wage, underemployment seems as equal stressful as unemployment, where the ILO (2014) states that a stable and well-paid job is often an impossible dream, even for the educated young people, in several African Countries.

3. What makes the transition to first-time employment more difficult for the African Youth?

The stylized facts of the African youth labour market discussed earlier show that Africa has faced with high and protracted youth unemployment, where a number of new labour market entrants are trapped on the transition to their first-time employment. Underemployments and massive working poverty are also seen in all the countries with data available, until a point where 'underemployment' becomes equally as painful as unemployment. This points out that youth unemployment in Africa prevails in various forms with no a single factor that fully explains it. Nonetheless, in order to clearly comprehend the challenges that the new labour market entrants face during their transition periods, it is worthwhile to category the major

employment barriers based an assessment of data of various resources and in-depth review of the research literature. In this way, the most important challenges that make the transition to first-time employment more difficult are found to be lack of aggregate labour demand that falls short of meeting the rapidly growing youthful population; skill mismatches & deficits, labour market information shortage, low labour productivity & naive expectation of the youth to government jobs; rigid labour market regulations & institutional setbacks; and ineffectiveness of youth employment innervations & nonexistence of youth policies.

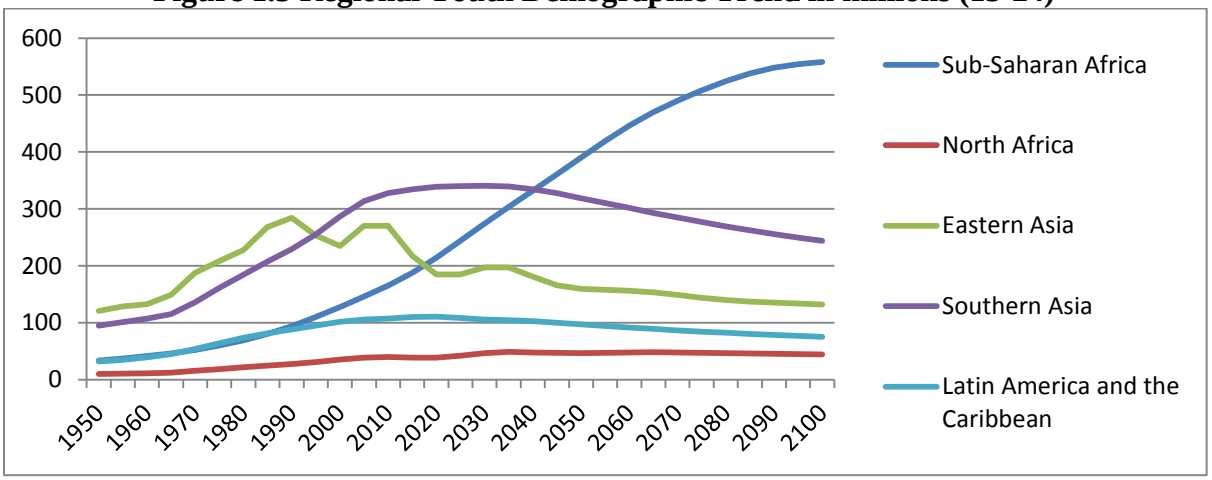
To better understand and have clear overview of those employment challenges of new labour market entrants, a brief discussion is provided for each of them as follows:

3.1. Demographic Explosion and Lack of Aggregate Demand

3.1.1. Youth Bulge and Rapidly Growing Workforce

Africa has recently experienced a rapid demographic growth, especially in the Sub-Saharan region. Figure 1.5 exhibits regional youth demographic trend over time. According to the data, there are about 200 million young people aged between 15 and 24 in Sub-Sahara Africa today, representing more than 35% of the workforce of the region. This absolute number is also expected to rise continuously to 400 million by 2045, which will make the region the home of the mostly youthful population in the world—by exceeding the number of young people projected to exist in East Asia and South Asia. Such trend of demographic waves also brings than one million new lanour market entrants each month into the Sub-Saharan African labour market, where as a result the number of unemployed youth is estimated to escalate by 28% in the coming 15 years, corresponding to about 30 million youth (World Bank, 2012).

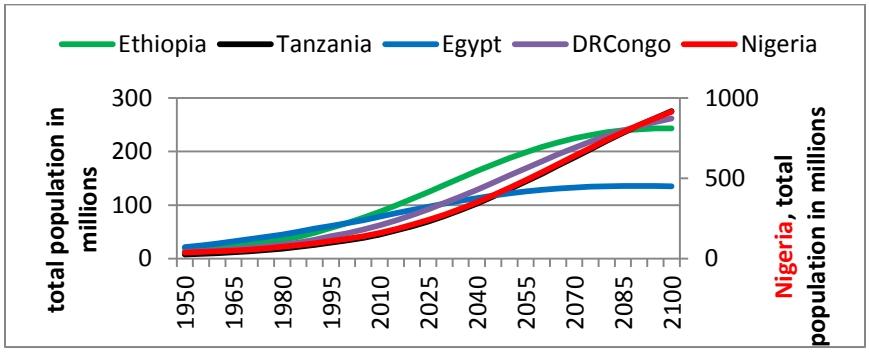
Figure 1.5 Regional Youth Demographic Trend in millions (15-24)



Source: Elaboration on UN population Data

More specifically, youth pollution pressure will be especially very high in countries like Nigeria, Ethiopia, Egypt, Democratic Republic of Congo and Tanzania (see Figure 1.6). Country wise, projections form the data indicate that the current 173 million Nigeria's population is expected to double in the next 25 years, while that of Ethiopia's population is estimated to rise from 94 million in 2013 to 200 million by 2050.

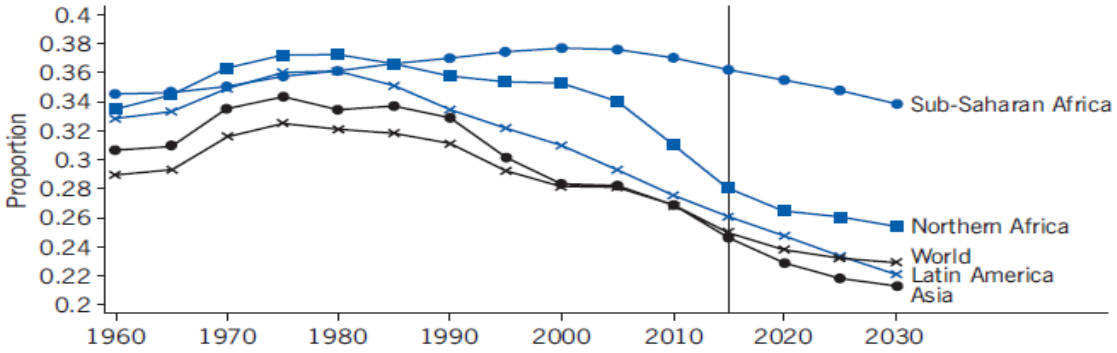
Figure 1.6 Predicted populations by selected countries, in Millions



Source: Elaboration on UN population Data

Indeed, the population pressure is more or less to be felt in most African countries that cumulatively contribute to a high youth bulge, as expressed by ratio of the population aged 15–24 to 15–64. According to Figure 1.7, except Sub-Saharan Africa, all the regions had already experienced their youth bulge peak of more than 34% between 1975 and 1980. Currently, Sub-Sahara Africa is the only region at its peak period with youth bulge of more than 35%, which will have a significant implication for the African labour market in general and the school-to-work transition of young people in particular.

Figure 1.7 Youth ages 15–24 as a share of the population ages 15–64 is the highest for sub-Saharan Africa



Source: Taken from Lam (2014)

It is however less clear whether youth bulge actually is accompanied by high unemployment, especially in Africa where empirical studies on this area are scant. In connection to this, Lam (2014) states that while it may seem obvious to assume that a higher proportion of young people in the working-age population would lead to higher youth unemployment, the evidence of such relationship is limited. Many of the existing researches claim that massive youth unemployment being experienced in many parts of the world are rather linked to macroeconomic fluctuations and inadequacy of local institutions (O'Higgins; 2003; Korenman and Neumark; 1997; Lam, 2014). There are even few studies that ascertain that high share of youth in the population in the developed world downsize the unemployment level of both young and adult workers, mainly by raising the workforce participation rates. By way of example, Shimmer (1999) estimates that one percent increase in the US youth population is associated with one percent youth unemployment decline, and with more than 2 percent drop of adult unemployment. The possible reason for this drop of unemployment is that the increase in the number of young workers raises the demand for housing, which in turn increases labor demand in the job market.

Whereas on the other side, there are few studies that claim that a high share of youth is connected with a high unemployment in the developing world. One such study comes from Behrman and Birdsall (1988), which shows that being in a large cohort of youth had negative effects on the Brazilian labor market for unskilled workers. O'Higgins (2003) also finds out that a high share of young individuals in the working-age population is associated with higher rates of unemployment among youth, although not as strongly as macroeconomic disturbance. A recent study from Lam (2014) also estimates that the elasticity of youth unemployment to the youth ratio is 0.7, meaning that a 10% increase in the youth ratio leads to a 7% increase in youth unemployment. However, he argues that despite such link between youth bulge and unemployment, it is still hard to conclude that youth bulge is a leading cause of the high youth unemployment. The reality seems to be rather that it is the macroeconomic and other local institutions such as education and labour market institutions that appear to affect youth unemployment much more than demography wave does, showing that the problem with the deteriorated African labour market might have a lot to do with the narrow industrial base, unfavorable macroeconomic policies, internal displacement such as

urbanization, unskillful growing of youth, and underdevelopment of labour market institutions than the youth bulge per se.

3.1.2. Sluggish Aggregate Demand

Africa has experienced continuous macroeconomic ups and downs over the last-half century. To stabilize such macroeconomic fluctuations many of the African countries have been introducing a number of economic and social policies. Developed and advocated by Western donors, the 1980s Structural Adjustment Programmes (SAPs), which was intended to promote macroeconomic stabilization, privatization and free market development, was one of those reforms. However, the overall impact of this neoliberal reform policy was not found as expected, especially in achieving policy goals like employment, poverty reduction and economic prosperity. Less attention given to the local institutional landscape of the African countries has frequently been cited as the main reason for its failure. Consequently, the 1980s was a 'lost decade' for Africans, where Africa was named as a 'Hopeless Continent' by *The Economist*. However, such failure forced the African governments and foreign aid donors to turn their faces to human-centered development approach, with much emphasis on the local institutions that promote health, education and other basic social services at the grass roots level. Following such paradigm shift by the end of 1990s, Africa came to register a considerable economic growth in the mid of 2000s. As shown in Figure 1.8, in 2007 African economies aggregately registered a growth rate of 6%, one of the highest rates recorded during any year over the last quarter of the century (AOE, 2012). The growth rate is still projected to continue in some years to come, where '*Africa on Rise'* has recently become a news feed in the international media (the Economist, 2013)

Figure 1.8 Trend of African Economic Growth

Source: African Economic Outlook 2014

Nevertheless, although Africa has been enjoying such economic growth over the last decade, the growth achieved has not been able to create jobs to accommodate the rising number of

young people. The economic growth seen in many of the African economies rather seems to be a jobless growth, where the benefits obtained from such growth have little contribution to job-creation. One reason for this is that because many of the growths seen in Africa are originated from natural resource sectors (such as oil and mineral mining sectors) that have naturally limited trickled-down effects to lower classes of the African society such as the youth. In other way of saying, Africa has a narrow industrial base, where production process is very fragmented with little value-added and job generation. In relation to this, data obtained from AOE (2014) show that Africa's trade volume in the world trading market is very small, with only 3.5% of the world's merchandize exports. The data furthermore indicate that 50% of Africa's export get their extra value-added elsewhere, implying that exacerbated by the sluggish aggregate demand and pervasive informality, Africa's commodity-driven export models create very limited formal employment for the youth at home. To ascertain this, Table 1.5 presents regional share of employment by sector. According to the data, the industrial base of the African economies is so much narrower and employment is highly dominated by the informal agricultural sector. As of 2012, 62% of employments in Sub-Saharan Africa were dominated by farm-based activities, while the share of employment in the industrial sector was only 8.7%, with very small change over the last 20 years (8.3% in 1992). This implies that although African youth have faced specific entry barriers, the biggest obstacle is insufficient demand for the growing youth workforce as the result of stagnant industrial sector for decades. This is unlike to the East Asia, South-East Asia & the Pacific and South Asia, where the contribution of industrial sectors to employment have shown more than 5.5 percentage point increase over the last 20 years, from 23.1% to 29.2% for East Asia and from 13.5% to 19% for South-East Asia & the Pacific.

Table 1.5 Regional share of employment by sector

	Agriculture (%)		**Industry (%)**		**Services (%)**	
	1992	**2012**	**1992**	**2012**	**1992**	**2012**
World	44.3	33.	21.4	22.5	34.3	44
East Asia	55.8	33.	23.1	29.2	21.1	37.1
South-East Asia & the	58.8	41.	13.5	19	27.7	39.6
South Asia	61.7	50.	15.8	21	22.5	28.1
Latin America & the	24.6	15.	22.4	21.7	53	62.6
Middle East	23	16.	24	26.4	53	57.2
North Africa	36.3	29.	19.5	22.4	44.2	47.8
Sub-Saharan Africa	67.6	62	8.3	8.7	24.1	29.3

Source: Elaboration on ILO's KILM data

As the result of such little industrialization over the last two decades, a significant number of young people are being forced to find themselves in a pervasive informal employment. Table 1.6 reports the regional employment status form around the world. It appears that formal employment status measured by proportion of wage and salaried workers is the lowest for the Sub-Saharan region. While the world average of formal employment relation is about 48.4%, the share for the Sub-Saharan Africa region is 21.4%, implying that nearly 8 in 10 workers are governed by informal employment relations characterized by lower wages, little training, insecure jobs, larger turnover and poor working condition, not to mention the widespread unpaid family works. Such huge share of informal labour relations makes African labour market so fragile and challenging for new labour market entrants.

Table 1.6 Status in Employment (ILO estimates (%); by region)

	Wage & salaried workers (employees)	Employers	Own-account workers	Contributing family workers	Share of vulnerable employment in total Employment
World	48.4	2.4	34.8	14.4	49.2
Developed Economies & European Union	86.3	3.6	8.9	1.2	10.1
Central & South-Eastern Europe	49.3	1.8	31.1	17.8	48.9
South-East Asia & the Pacific	36.6	2.3	39.5	21.6	61.1
South Asia	22.0	1.2	59.2	17.7	76.9
Latin America & the Caribbean	63.8	4.7	26.1	5.4	31.5
Middle East	68.3	4.7	21.3	5.7	27.0
North Africa	49.1	9.5	26.1	15.4	41.4
Sub Saharan Africa	**21.4**	**1.4**	**50.7**	**26.5**	**77.2**

Source: Elaboration on ILO's KILM data

It is hard to suggest a possible solution for such narrow industrial base given the multi-dimensional nature of the problem, but whatsoever the case, appropriate investments, including Private and Foreign Direct Investments (FDI) that are geared towards green agricultural development and industrialization may solve the challenge of jobseekers, at least in the long-run. This suggestion is based on previous assessment from a consulting firm-called McKinsey (2014) that estimates that Africa can generate 6 million additional jobs by 2020 from the agriculture sector by bringing unproductive land into use to meet the job demands of the growing youthful population.

3.2. Education and skills Mismatches

Africa has not recently experienced just a youth bulge, but also a significant stock of the youth has gotten the opportunity to education (albeit quality is still debatable). As the result of national and international efforts to meet targets such as the MDGs, the education stride is also expected to boom more and more in the years to come. Table 1.7 presents the educational attainment of young Africans aged 20-24 over a range of years. Primary education coverage has increased over the last 15 years, up from 44% in 2000 to 53% in 2010, and further is expected to rise to 57% by 2025. The same is true with secondary education, where the enrollment rate jumps from 47% in 2000 to 69% in 2010, while it is still projected to raise to 137% by 2030. Moreover, although from a lower base, the enrollment in tertiary education is also at an increasing rate from 4% in 2000 to 7% in 2015, and by 2030 it is expected to be 12%. Ratio of young people aged 20-24 with no education is also expected to plummet from 45% in 2010 to 28% in 2030.

Table 1.7 Youth education growth in Africa (2000-2030)

	2000	2005	2010	2015	2020	2025	2030
No education	34	35	35	34	32	30	28
Primary education only	44	49	53	55	57	57	54
Secondary education	47	58	69	82	99	117	137
Tertiary education	4	5	6	7	8	10	12

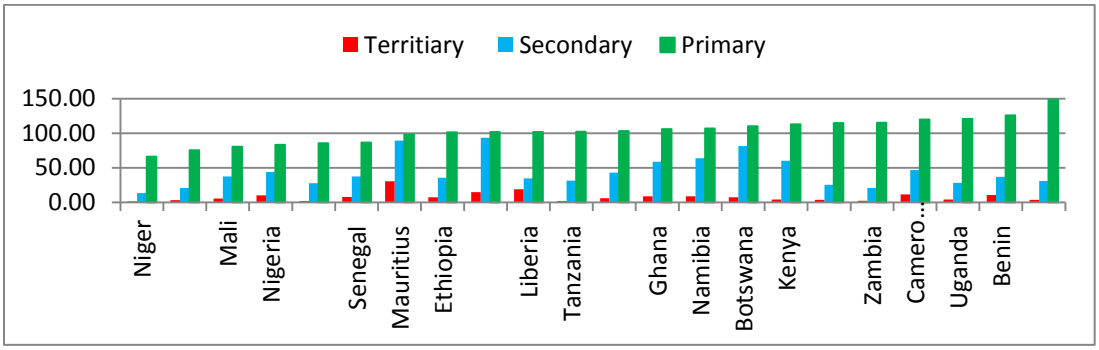
Source: Elaboration on AEO data, 2012

By country comparison, access to education, measured by gross enrollment rate, is also very high in many of the Africa counties. Free Education adopted by UNESCO in May 1961 at the Addis Ababa Conference and later backed by launching the Million Development Goals, where one of the goals is to achieve Universal Primary Education by 2015, has created a grass-roots access for millions of African children to have education opportunity at ease and walking distance. Figure 1.9 shows that gross enrollment rate in primary education is ranging from 66.30% in Niger to 148.55% in Madagascar as of 2012. And 17 of the 21 countries with data available have experienced primary gross enrollment of above 85%. This indicates that although the quality is one issue that seeks a special attention, the current young generation has got an enormous access to education which their parent's generation lacked.

Enrollments in secondary and tertiary level are also getting momentum, albeit with heterogeneity among countries. For instance, secondary school enrollment varies from 13.52% in Niger to 89.37% in Mauritius and 93.37% in South Africa, while countries like

Kenya, Botswana, Namibia, and Ghana have a secondary enrollment rate of greater than 50%. Higher education also varies from 1.5% in Niger to 30.58% in Mauritius; while the gross enrollment of higher education in 6 of the sample countries is greater than 10%.

Figure 1.9 School Gross Enrollment Rates in Selected African Countries



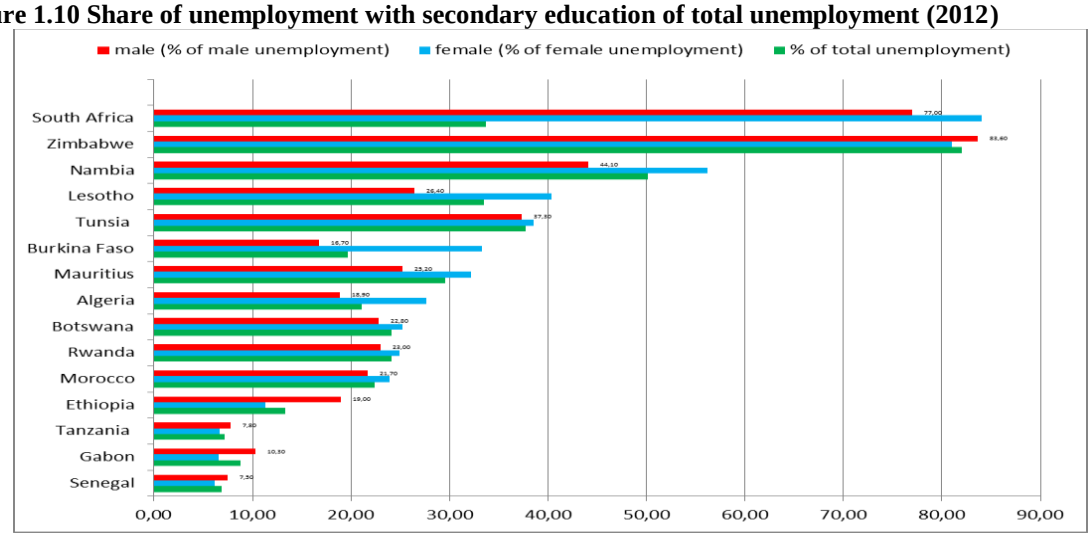
Source: Elaboration on UNESCO Data

Nevertheless, despite such educational stride, the employability of the educated youth, mainly, those high school leavers and university graduates have encountered a number of barriers and obstacles in their ways from the education sector to their first time employment. To understand this reality, it is quite important to have a closer look at the unemployment level of young people with respect to education and skill level.

i. Educational attainment and unemployment

In spite of the fact that today's young cohorts are better educated than their older counterparts, unemployment of educated youth remains a serious problem in many of the African countries. Taking data form the ILO's KILM 8th edition, the share of unemployment of young people with secondary and tertiary education in the total unemployment is presented in Figure 1.9. Young people with secondary education take the largest share in the total unemployment in most of the countries with available data. This is especially the highest in South Africa, Zimbabwe, Namibia and Tunisia. Particularly, for Zimbabwe and South Africa the shares of those with secondary education of total unemployment are above 80% for both young men and women. In Namibia as well, female workers are disadvantageous, where their share is about 56.2% in the total unemployment, comparing to 44.1% for male workers. The share of unemployment of secondary education completed workers is also greater than 20% in countries like Lesotho, Mauritius, Botswana, Rwanda, Morocco, Algeria, and Burkina Faso. Only countries like Senegal, Tanzania, and Gabon are with less than 10%.

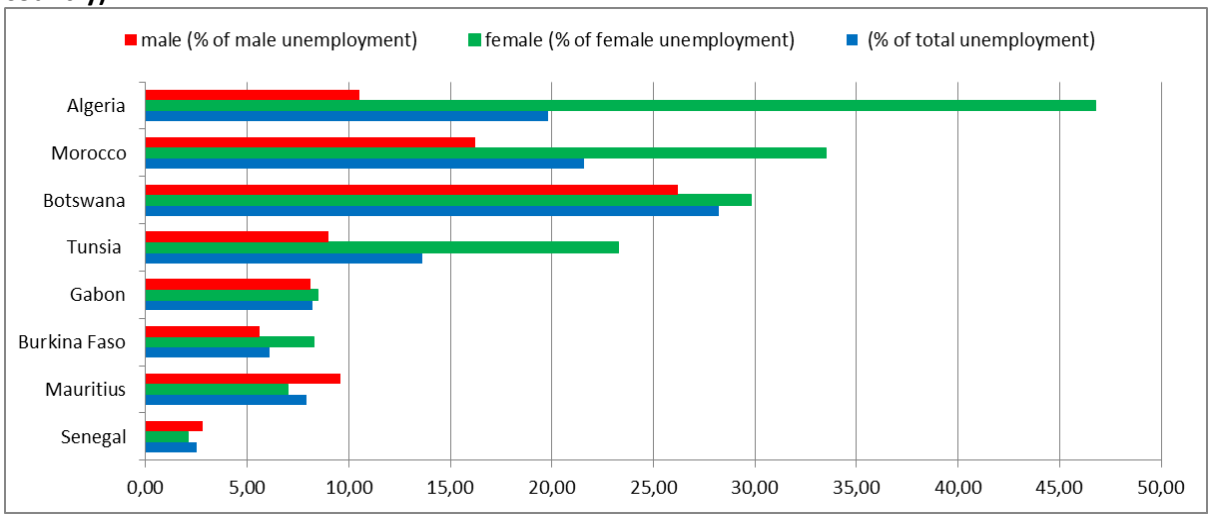
Figure 1.10 Share of unemployment with secondary education of total unemployment (2012)



Source: Elaboration on ILO, KILM Data

The share of unemployment in total unemployment for workers with tertiary education is also very high in countries with data available (see Figure 1.11). Especially in Algeria, Morocco, Botswana and Tunisia, tertiary female graduates take large share of the total unemployment in each country, to the extent of 46.8%, 33.50%, 29.8% and 23.30%, respectively. Only Mauritius, Burkina Faso, Gabon and Senegal show a share of unemployment for people with tertiary education lower than 10%.

Figure 1.11 Share of unemployment with tertiary education of total unemployment (by sex and country)

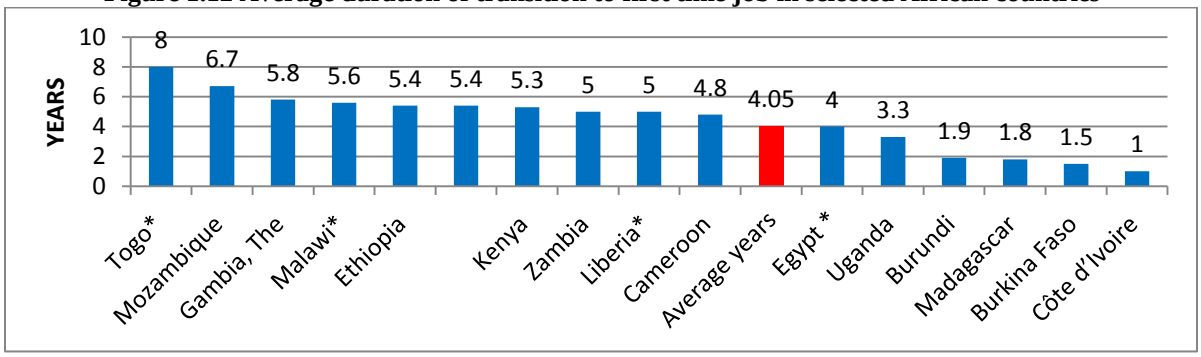


Source: Elaboration on ILO, KILM Data

ii. Transition period to first time employment

The high proportion of young people with secondary and higher education in total unemployment discussed earlier may have an implication as to how the journey to first-time employment is very difficult for many of the school leavers. To examine this, Figure 1.12 presents the duration of transition for young school leavers to first-time employment in 16 African countries. According to the data, the average duration to first-time employment after finishing secondary school is found to be 4.05 years, ranging from 1 year in Côte d'Ivoire to 8 years in Togo. In fact, if a median year is used in place of the mean value, the transition period increases by one year, implying that the transition path is more challenging in many of the African countries. Especially in countries like The Gambia, Kenya, Malawi, Liberia, São Tomé and Principe, Zambia and Ethiopia, young people face more than 4 years of unemployment before finding a first-time employment, which can be categorized as unsuccessful transition. Only in countries like Burundi, Madagascar, Burkina Faso, Coete d'Ivoire are young people experiencing comparatively shorter transition duration, less than 2 years.

Figure 1.12 Average duration of transition to first time job in selected African countries



Source: Elaboration on ILO' and World Bank Data

The data from Figure 1.12 implies that the unemployment incidence alone do not capture the full picture of problems faced by young school leavers, but the duration of unemployment also has a lot to do with the issue of transitions, if not more. This is because a prolonged share of unemployment causes skills and employability loss, which in turn results in structural labour market problems that has further detrimental effects on the skills and future job opportunities of the young school leavers.

iii. Skill deficits and mismatches

Skills mismatches are very common in today's labour market and may exist in different forms. One sort of those skills mismatches is a skill gap that resulted from the overall mismatch between the supply and demand for skills in the labour market. This type of skill mismatch is basically measured by comparing the educational attainment of the unemployed youth with that of employed ones, where higher percentage value stands for higher the level of skill mismatch in the labour market.

Taking this into account, Table 1.8 presents the overall skill mismatches for African countries with data available from the 2012 ILO's School-to-Work Transition Survey (SWTS). The mismatch between the supply and demand for skills varies from 5.8% for Malawi to 40.5% for Benin. It is also as high as 27% for young Egyptians, making it the second worst affected by skill mismatch among the countries with data available. Five of the sample countries have also experienced skill mismatches of above 10%, indicating that young people coming out of high school and colleges are with huge skill deficit that hamper their employability in the labour market. In term of gender, young women workers in Benin and Zambia are more affected by skill mismatches than their young men counterparts (40.8% virus 36% in Benin; 14.8% virus 13.6% in Zambia). But in the remaining three countries young men are more victims of skill mismatches. The possible reason why young males are more hampered by skills mismatches could be because the proportion of school enrollment for males is relatively higher than those of females' enrollments. All in all, the implication of such skill mismatch is that Africa lacks an integrated labour market, where investments on education have small effect on the employment prospect of young school leavers.

Table 1.8 Skill mismatch of labour supply and demand by educational attainment (by sex), 2012

	Male	Female	Total
Benin	36.0	40.8	40.5
Egypt	41.3	24.7	27.8
Liberia	20.7	26.7	20.9
Malawi	10.4	5.2	5.8
Togo	21.3	21.2	22.0
Zambia	13.6	14.8	13.4

Source: Elaboration on ILO's School to Work Transition Survey data (2012)

In addition to the overall skill gaps, there are also specific skills mismatches that come to appear in today's labour market, which are specifically known as vertical and horizontal skill mismatches. While vertical skill mismatches is related to overqualification or underqualification for a specific job in the job market, horizontal skill mismatch is related to perusing education that does not match with the demand of the current job market.

Table 1.9 shows vertical skill mismatches being experienced in Six African countries. On average, nearly one-halve (48.85%) of the young people aged 15-29 in the sample countries are found to be underqualified, ranging from 18.7 in Zambia to 81.8% in Malawi. Such huge skill mismatches being experienced is a clear manifestation of the fact that how the young people are unprepared to the workplace in a manner that the African labour markets demands. With only 18.7%, Zambia is the only country with a relative lower percentage of underqulaification among the countries with data available. In terms of gender as well, young female are more underqualified to the job they were working or seeking during the survey time, where the rate ranges from 63.2% in Benin to 84.2% in Malawi, suggesting that underqualification is more likely to be an important labour market barrier in Africa for both young men and women.

Table 1.9 Vertical skill mismatch for young workers aged 15-29 years, 2012

	Incidence of over qualification			Incidence of under qualification		
County	Male	Female	Total	male	female	Total
Benin	2.5	6.6	4.5	56.9	63.2	59.9
Egypt	9.8	7.8	9.4	31.3	36.4	32.3
Liberia	9.9	8.6	9.3	41	51.1	45.7
Malawi	1.7	1.7	1.7	79.3	84.2	81.8
Togo	4.4	3.1	3.6	49	59.1	54.7
Zambia	24.2	27.7	25.8	18.9	18.4	18.7

Source: ILO's School to Work Transition Survey (2012)

On the flip side, despite the widespread of undequlaifaction, overqualifaction also seems to be an emerging concern among university graduate youth. In fact, overeducation may be part of the natural process of transition from education to first-time employment, but given the level of overqualification in the sample countries such as in Zambia, where more than a fourth (25.8%) of young workers is found to be overqualified, addressing the issue of overqualification is an important factor in avoiding labour productivity losses.

Another type of skill mismatches, which stems from inappropriate educational curriculum, is a horizontal skill mismatches. Resulted from biased educational faculties towards Social

Science and Humanities, instead of technical fields such as Engineering and Information Technology, horizontal skill mismatches has recently resulted in structural youth unemployment in the African youth labour market. Table 1.10 presents data on regional university graduation rates over 2008-2010. And it appears that comparing to other regions of the world, Africa' graduates, both in Sub-Saharan and North Africa, are highly dominated by Faculties of Social Science and Humanities, but with very small proportion in Technology, Engineering and Agriculture. Specifically, over the considered period, 44% of university graduates in Sub-Saharan and 51% in North Africa were from Social Sciences, Business and Law, but only 4% & 10% in Engineering, Manufacturing and Construction in each region, respectively. However, for the other regions this was not the case. For instance, for OCED the rate of university graduate in Engineering Manufacturing and health were 11% and 11% respectively. This in a nutshell shows that Africa does not merely face vertical skill mismatches in the education sector, but also outdated and unfit education curriculum which results in structural youth unemployment due to horizontal skill mismatches.

Table 1.10 University graduation rates in Africa and the world (2008-2010)

	Education, Humanities and arts	**Social sciences, business & law**	**Science**	**Engineering, Manufacturing and construction**	**Agri-culture**	**Health and welfare**	**Services**	**Other**
Sub-Saharan Africa	**26%**	**44%**	**12%** (3% (ICT)	**4%**	**2%**	**5%**	**0%**	**7%**
North Africa	22%	51%	8% (1% ICT)	10%	1%	6%	1%	1%
Asia	23%	30%	6%	20%	4%	9%	4%	4%
Latin America	23%	38%	7%	9%	2%	13%	3%	5%
OECD	25%	37%	10%(3% ICT)	11%	2%	11%	4%	1%

Source: Elaboration on AEO Data

3.3. Labor Market Information Shortage

Labour market information in Africa is sparse and sporadic (Elder and Konok, 2014), which is believed to be another impediment for young jobseekers, particularly for those with disadvantaged backgrounds. This is because majority of the young jobseekers follow traditional way of job-searching–typically through family and friends, which is very ineffective for majority of them to access available job, as connection hardly works for all for, various reasons. It is generally believed that there is no well-coordinated labour market information system that able to significantly guide the employment prospects of young

jobseekers. If there are interventions from governments and private agencies at all, they are ineffective in most case.

Table 1.11 shows data of a recent job information system in 34 African countries. As per the data, only 3 of the 34 countries offer public employment registrations with unemployment benefits, but still only two of them cover more than 50% of young job seekers. In fact, the coverage is a bit wider when it comes to public registration without unemployment benefits as 23 countries are found offering this service, but even on this regard only seven of them assist for more than 50% of young jobseekers. This indicates that public employment information services, with or without benefit, seem to be ineffective in creating well-informed labour market in Africa.

Similar to the public employment services, there are private employment agencies getting involved in assisting young jobseekers, but their actual impact on the employment of the young people is still very little. For example, in 22 of the countries private employment agencies get involved in providing job search assistance, but only one of them is able to provide employment service to more than 50% of young jobseekers, while the rest 21 countries cover only less than 25% of young jobseekers. Likewise, private schemes specifically aiming to assist colleges and universities graduates in their transitions from school to work are introduced in 25 African countries, but in reality only one of them has assisted to more than 50% of the young graduates to enter the labour market, whereas majority of the countries (23) help for less than 25% of the graduate jobseekers, suggesting that the effectiveness of the launched programmes in providing the necessary labour market information is very low and ineffective in many of the African countries.

Table 1.11 Job information systems in African countries

% of youth job seekers	Register at a public employment service and receive unemployment benefits	Register at a public employment service (no benefits)	Get job search assistance from private employment agencies	Get school-to-work assistance from colleges and universities through programmes with the private sector
This service does not exist	31	10	12	9
Less than 25%	1	11	21	23
Between 25% and 50%	0	5	2	1
More than 50%	2	7	1	1

Source: African Economic Outlook (2012)

It is not only information related to job search that is scant in Africa, but there is also little information on the international Key Indicators of Labour Market (*KILM*) that are supposed to be very useful for labour market policy formulation. According to the ILO (2011), lack of KILM is considered as one of the reasons why many of the African countries fail to formulate proactive employment and labour policies.

3.4. Low labour productivity and unrealistic expectation of the youth

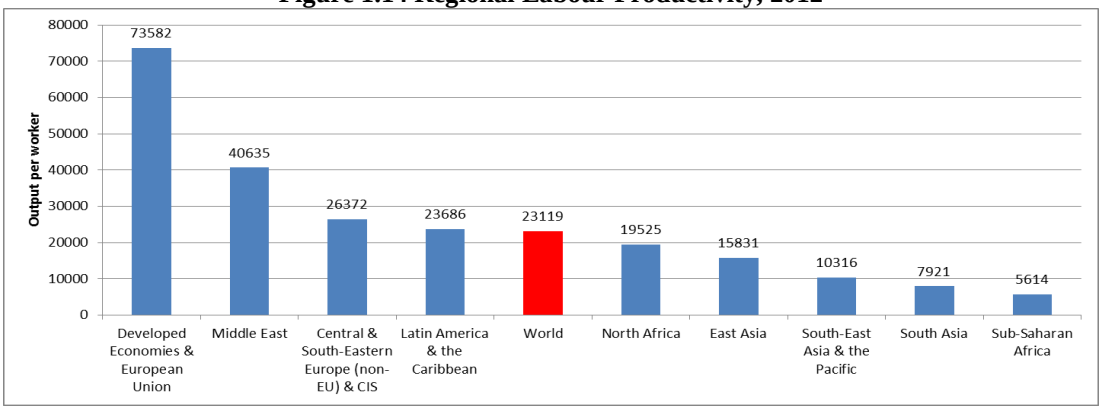
From the perspective of employers, low labour productivity of the youth is also another culpable factor for the high youth unemployment in many of the African countries. This is because young jobseekers with no or very little previous work experiences are very costly for employers as they are required to provide further training and skill upgrading to make them productive in their first-time jobs. Such pheromone then makes employers hesitant to hire first-time jobseekers and forces them to look for job-applicants with previous work experiences that are able to work without little additional training and guidance in the workplace. Because of the high unit-cost embodied with the young jobseekers, even in time of robust economic growth, employers in Africa are reluctant to offer jobs for new labour market entrants (AOE, 2012). In connection to this, data taken from the Center for Global Development (2013) also shows a typical Sub-Saharan African firm has 24% fewer registered employees than similar firms located in other part of the globe. Of course, African firms generally tend to be younger than elsewhere that might make them create only few jobs, but such situation is not only shown by younger firms but bigger firms as well. The fact is that though Africa has abundance labour supply, unit labour cost is not as it is supposed to be as the result of low labour productivity until a point of hindering further investment. On this regard, The Economists in one of its 2014 edition reports:

> *"Employing people in Africa should be cheap, given that many of its countries have rock-bottom income levels. Yet in half of African countries labour costs are higher than in China because workers are less productive. They are nearly 80% higher in Africa than those in other countries at similar levels of income. That lowers competitiveness and makes hiring less likely"*

Figure 1.14 also shows the same story, where the labour productivity for Sub-Saharan economies is the lowest comparing to other similar regions in particular and the world average productivity in general. Statistically, labour productivity in Sub-Saharan Africa is 4.5

times lower than the world average as of 2012. Sub-Saharan African countries also have much lower labour productivity than other developing regions like South-East, East-Asia and the pacific, North Africa and the Latin America &Caribbean, implying that African firms are less good at creating jobs than elsewhere in the world.

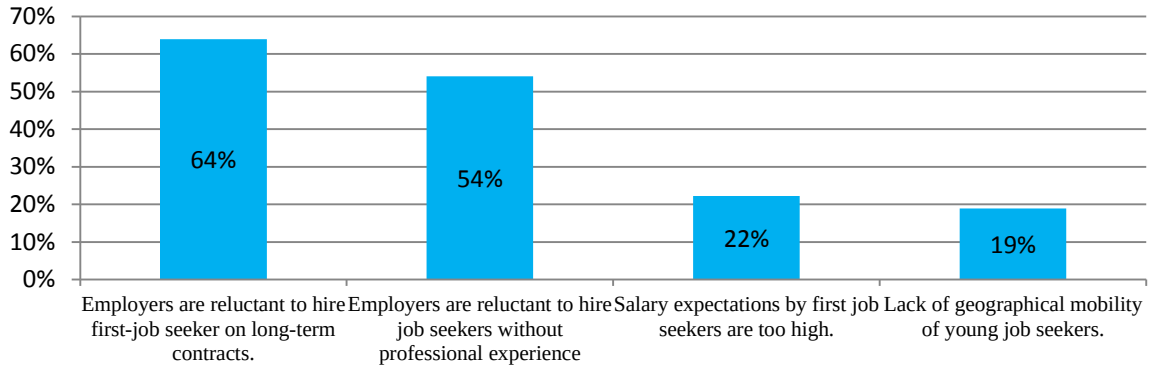
Figure 1.14 Regional Labour Productivity, 2012



Source: Elaboration on ILO Data

As the result of such low labour productivities, many of the employers feel that young jobseekers coming into the labour market are not qualified for the available wage jobs. As part of the 2012 School-to-work Transition Survey in Africa, the ILO distributed questionnaires for employers to estimate the demand for young labour and youth employability in Eight African countries. A significant number of employers believe that lack of skills relevant and low productivity of newly hired workers are major problems for their production process. For instance, 21.3% of the 459 employers in Liberia responded that they could not hire young graduates because they believe that those young graduates don't have the required skills for employment. The same is also true that about 7% of the 832 Malawian employers have the attitude that lack of skills cause significant problems in hiring young workers in the Malawian labour market. More broadly, Figure 1.15 deals with the attitude of employers in the African labour market, where nearly 65% of the interviewed employers are reluctant to hire first time job-seekers on long-term contracts, while more than 50% of them are still hesitant to offer employment for young job seekers without previous work experiences.

Figure 1.15 Employers' expectations are a challenge for young people entering the job market

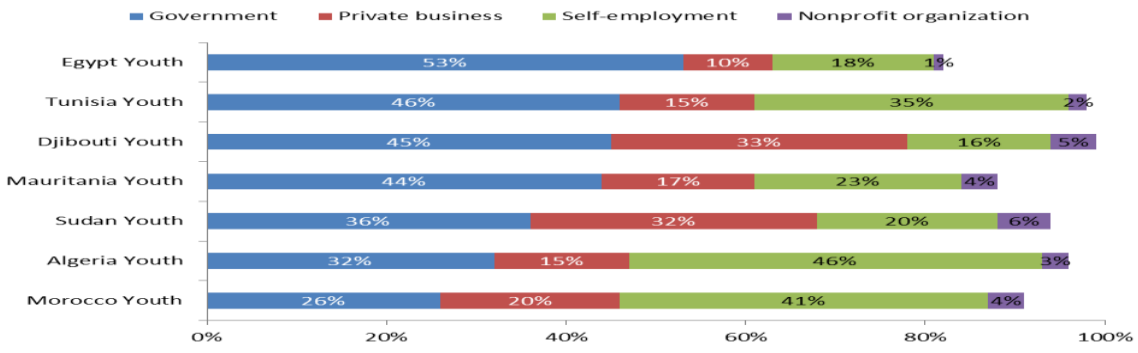


Source: African Economic Outlook, 2012

The same survey indicates that more than 20% of the employers also claim that salary expectations by first jobseekers are by far above expectation to be offered. This indicates that the employment challenges of the newly job-seekers do not come from the labour market demand side only, but from the supply side of the labour market as well. Traditionally, a number of unemployed youth in Africa show expectation that do not go well with African's business environment. This is especially true among youth with tertiary education as they are motivated to hold jobs only related to the government sector. The need to be employed in the public sector by first time job-seekers is especially very high in North African countries. Young people from this region are said to be with high ambitions for government job, but finally left behind with discouragement.

In relation to this, Figure 1.17 reports a survey result as to where young workers would prefer to work, supposing same pay and benefits. High proportions of youth prefer to have public sector jobs over private sector or self-employment in all the seven North African countries. These proportions are especially very high in countries like Egypt (53%), Tunisia (46%), Djibouti (45%), and Mauritania (44%).

Figure 1.17 where do you want to work, assuming equal pay and benefits?



Source: African Economic Outlook, 2012

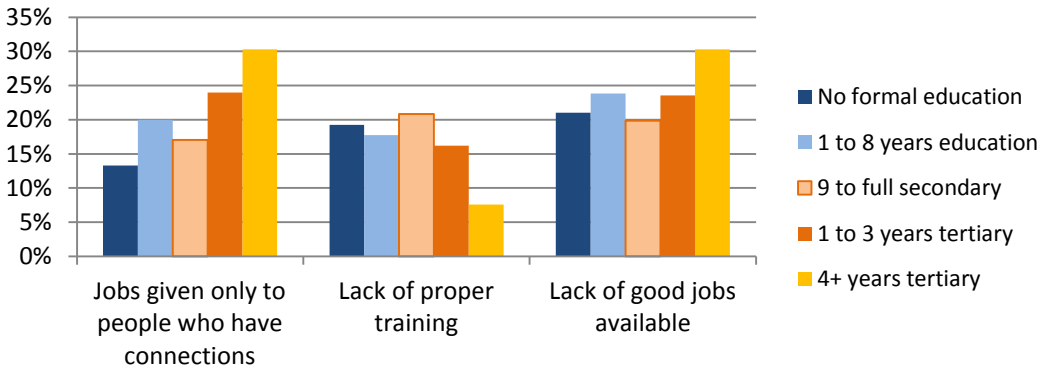
As the result of the high demand of the youth for government jobs, an enormous disillusion is growing among young jobseekers with higher education in North Africa, and indeed, in other part of the continent too, assuming personal backgrounds matters a lot in getting employed.

Figure 3.18 also presents a survey from other 10 African countries that deal with the main obstacles to join the job market for young jobseekers with different educational attainment, where the responses are summarized into three main obstacles: lack of connection, lack of proper training and lack of job at all.

The responses are quite unexpected. While young job-seekers without education blame for lack of proper training as their main obstacle to get a job, young people with higher education consider lack of connection as their main challenge to find a job. Specifically, comparing to 13% of those without education, 30% of young jobseekers with university degree believe that connections are more important to get a job, while the opposite holds with respect to lack of proper training, where about 19% of young jobseekers without education consider lack of proper training as the main obstacle, comparing to 8% of those with university degree. The disillusion then comes here when young jobseekers with university degree claim that connection such as personal backgrounds and access to privileges circles matters to get a job than proper training and skills. Only young jobseekers with secondary education have shown somehow proportional perception in the two obstacles: connection (18%) and lack of proper training (21%).

In sum, given the limited job availability and the enormous interest shown by young jobseekers in government jobs, it is inevitable to see such disappointments and frustrations among the young jobseekers. This is especially true in Africa, where the public employment proportions are already saturated and left with little space for new labour market entrants. Hence, making efforts to help young jobseekers develop realistic expectations and to create a strong private sector that able to offer attractive alternative jobs can be a good means to reverse the growing frustrations and disillusions among the new labour market entrants.

Figure 1.18 Disillusion about a fair job market increases with education



Source: African Economic Outlook, 2012

3.5. Rigid employment regulations and Institutional setbacks

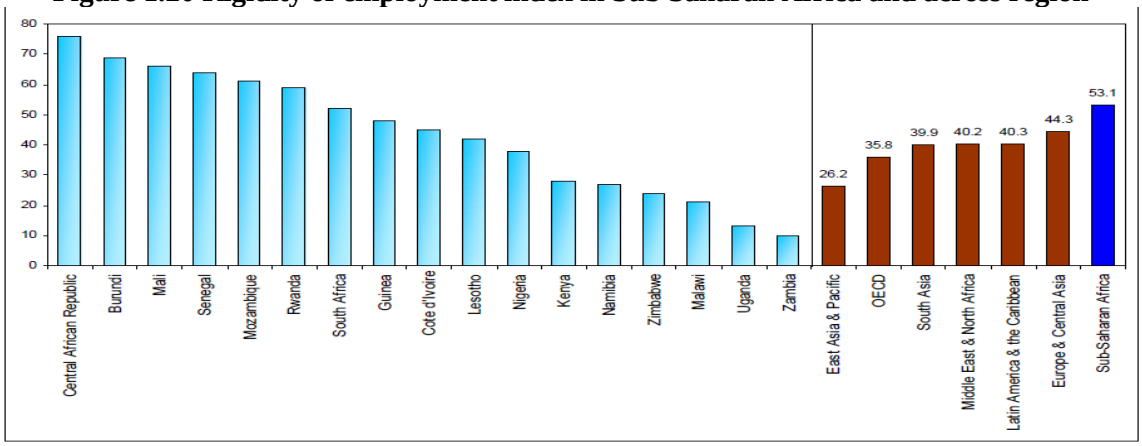
i. Regulations and labour market inefficiency

Exacerbated by poor labor market governance, the existing labour market regulations are also other factors that may explain the high youth unemployment in Africa. This is because African labour market regulations are said to be very rigid and static to absorb new labour market entrants. As shown in Figure 1.20, scoring an average employment rigidity of 53.1%, Sub-Sahara Africa is characterized through the most rigid labor markets in the world, while the two lowest scores are seen in OECD (35.5%) and East Asia and Pacific (26.2%). There is however a significant cross-country difference within the Sub-Saharan region. With an employment rigidity of 76%, Central African Republic is found to be with the most rigid labour market, followed by Burundi (68%), Mali (66%), Senegal (64%) and Mozambique (61%). Zambia and Uganda are the two countries with the lowest employment rigidities, (10%) and (14%), respectively.

The idea is that in a risky business environment, where it is not easy for employers to predict the human resources they need, high hiring and firing costs resulted from rigid labour law may increase firms' hesitancy to hire new workers. Needless to say, in almost all the African countries there are no unemployment benefits to compensate for dismissed workers. The only benefit provided for fired workers is a severance pay based on national labour regulation, but the existing regulations are very generous that may discourage employers to offer jobs for new labour market entrants whose employability and adaptability are not well tested before (AOE, 2012). In fact, the overall African labour market governance is not also well-

organized in such a way that the new labour market entrants could be entertained with their early job careers. In connection to this, in his research on collective bargaining and employment relations in Kenya, Fashoyin (2010) states that the legal frameworks that tripartism of governments, employers and labour do not seem suitable for flourishing industrial harmony and peaceful relations for national development.

Figure 1.20 Rigidity of employment index in Sub Saharan Africa and across region

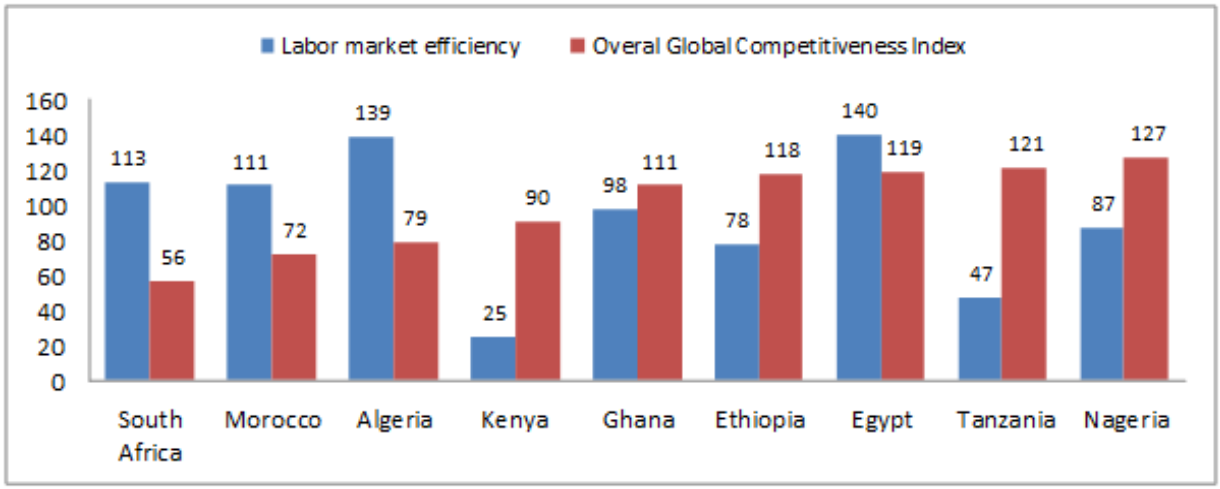


Source: World Bank (2010)

Indeed, beyond the employment rigidity, it is also insightful to examine the African labour market efficiency from 2013 World Economic Forum's Global Competitiveness Index (GCI) data for other selected African countries in comparison to 144 countries. Figure 1.21 presents the overall global competitiveness index and labour market efficiency of 9 African countries. Regarding to overall competitiveness, with a rank of 56 out of 144 countries, South Africa appears to be the most competitive nation among the African countries, followed by Morocco (72nd), Algeria (79th) and Kenya (90th), while countries like Nigeria (127th), Tanzania (121st), Ethiopia (118th) and Ghana (111th) are some of the African countries that poorly performed in the global competitiveness in 2014. However, coming to the labour market efficiency pillars the story is quite different; countries with better overall global competitiveness have fared poorly with labour market efficiency. This is especially true for South Africa, Algeria and Morocco, where they show relatively strong competitiveness, but very inefficient labour market at global level with a rank of 113th, 111th and 139th out of 144 countries, respectively. Quite unexpectedly, East African countries have shown better labour market efficiency in 2014. With a rank of 25th in the labour market efficiency, Kenya is found to be with the most efficient labour market among the African countries, followed by Tanzania (47$^{th)}$ out of 144 countries). On the opposite side, North African countries do experience the most inefficient

labour market, where countries like Egypt (140th) and Algeria (139th) are only 4 and 5 steps better than Venezuela (144th)—the country with the most inefficient labour market in the world (note: Sweden and Singapore are the first and second nations with efficient labour market at global level as of 2014).

Figure 1.21 Overall global competitiveness and labour market efficiency (rank out of 144 countries), 2013



Source: Compiled from the Global Competitiveness Index report (GCI), 2013

It is also worth investigating the labour market efficiency in terms of pillars from the perspective of cooperation in labour-employer relations, flexibility of wage determination and hiring and firing practices. To do so, Table 1.12 presents the rank of pillars for labor market efficiency for the 9 African countries. The first pillar to consider is the Cooperation in labour–employer relations. According to the Global Competitiveness (2013) data, one of the most important indicators for the labour market efficiency is the relation between workers and employers. This indicator was developed by asking a standard question for representative sample of people in each of the selected countries. The standard question in this case is: "How would you characterize labour-employer relations in your country?" Answers range from 1 to 7 scales. While 1 implies a generally *confrontational* labour-employer relation, a value of 7 indicates a generally *cooperative*. Based on those values of perception of citizens, rank order is given out of the 144 countries. Of those 144 countries covered by the Global Competitiveness survey, South African ranks the last and faces the worst cooperation in labour–employer relations at global level in 2014. On this regard, only Nigeria (61st place in the world) and Kenya (70th place in the world) relatively show smooth labour–employer relations from the African perspective. Although it is not such an easy task to reason out what accounts for the low perception of labour-employer relation in South Africa's labour

market, there are some clues that such poor cooperation might stem from the fact that the South African labour amrket is characterized by extremely high unemployment and joblessness of young people and above all by a significant tension between employees and employers in the mining sector of the country. Tanzania (117th) and Algeria (130th) are also other countries with very poor workers-employers relations in 2014.

Table 1.12 Labor market efficiency (7th pillar), Rank (out of 144th), for 9 African countries

	South Africa	Morocco	Algeria	Kenya	Ghana	Ethiopia	Egypt	Tanzania	Nageria
Cooperation in labour-employer relations	144	**83**	130	70	85	97	95	117	61
Flexibility of wage determination	139	**37**	104	69	137	74	67	105	*35*
Hiring and firing practices	143	**86**	122	17	72	78	69	73	7
Redundancy costs, weeks of	33	**97**	83	17	137	91	134	33	79
Pay and productivity	15	**65**	123	56	63	99	131	122	51
Reliance on professional management	36	64	141	34	58	124	134	106	52
Brain drain	21	45	133	47	57	88	110	98	92
Women in labour force, ratio to men	84	137	144	48	10	33	139	6	85

Source: Elaboration on Global Competitiveness (GCI) Data, 2014

The second pillar important to consider while analyzing labor market efficiency is the flexibility of wage determination. This is because wage flexibility and the way how it is determined is also one of the most important factors that may affect the employability of the new labour market entrants. Taking this point into account, the Global competitiveness survey of 2014 has gathered peoples' perception as to what extent of a given economy's wage rate is flexible enough and the factors influencing its level. The question with respect to this issue is: "How wages are generally set in your country?" This issue basically seeks to identify whether wage rate is determined at company level—which is technically in a decentralized decision—or in a centralized manner, which in turn refers to a decision of wage rate at industry level or state level. Similar to the Cooperation in labour–employer relations, the responses of this question also vary from 1 to 7 scales. A value of 1 stands for the state of affairs in which wage rate is highly influenced by a centralized bargaining process, whereas a score of 7 implies that wage rate determination is left up to the individual company level. Based on the obtained values, ranks are given out of 144 countries (see Table 1.12). Among the sample African countries, wage rate determination is highly decentralized in Morocco (37th) and Nigeria (35th), while it is very centralized in countries like South Africa (137th), Ghana (135th) and Tanzania (105th). A centralized wage setting mechanisms has been singled

out as one of the causes of youth unemployment persistence, in particular when insiders have higher power than outsiders in wage bargaining (Blanchard and Summers, 1987).

Thirdly, the ability of employers to flexibly deal with their workforce and quickly hire and fire employees is also considered as an important factor for labour market efficiency, with important implications for the youth employment. The central question for this indicator is: "How would you characterize the hiring and firing of workers in your country?", where average weighted responses range from 1 to 7, [1 = impeded by regulations; 7= flexibly determined by employers]. This implies that the results are somehow related to the rank order to that of flexibility of wage determination, where a rank of 1 means the most flexible labour market, while a rank of 144 stands for the most rigid labour market in the world. From the given data, with a rank of 7th place in the world, Nigeria does have the lowest hiring and firing cost of workers, it seems up to the employer decision to hire and fire workers. Placed at the 17th, Kenya has also a lower cost of hiring and firing comparing to other African countries such as Tanzania (73rd), Egypt (69th), Ethiopia (78th) and Ghana (72nd). In countries like Algeria (122nd) and South Africa (143rd), hiring and firing practices are more impeded by regulations. In general, labour market efficiency has become to be seen as an important factor to tackle youth unemployment, improve productivity and competitiveness. The consequence of rigid labour market was dramatically highlighted by the events in Arab countries in 2011, where rigidities were an important contributor to high youth unemployment in the region (WEF, 2013).

ii. Doing business Regulations

Although the development of private sector is considered to be as an engine of economic growth and employment by adding new jobs, doing business for private company in Africa does not seem that much easy and conducive environment. Particularly, the pervasive informal sector and unsupportive business environment have been impeding the development of private sector for years mainly by discouraging firm creation and entrepreneurship.

Table 1.13 presents regional business environment indicators from the perspective of labour market procedures. It appears that the requirement cost for setting up new businesses in Sub-Saharan region is 8 times higher than in OECD countries and 4.5 times higher than in Europe

and Central Asia. Not only that, but firms in Sub-Saharan region must also deposit, on average, 129.8 percent of per capita GNI in a bank in order to obtain a business registration number. This is the highest globally— about 30.1 times higher than in Latin American and the Caribbean; 19.2 times higher than OCED member countries and 6.8 times to that of South Asia East Asia & Pacific and. In terms of days, it also takes, on average, 37 days to start a business in the Sub Saharan region, comparing to only 12 days in OCED member countries. Plus, Sub-Saharan Africa appears to be particularly vulnerable in the area of enforcing contracts. With average investor protection indexes of 4.5 out of 7, Sub-Saharan Africa is the only region in the world with the least legal protection for business investors.

In a nutshell, in terms of many of the business environment indicators, Sub-Saharan region and North Africa along with the Middle East are with the worst situation, implying that firm creations are very low in those regions comparing to the other regions of the world, which might be one of the factors for the few job opportunities for the young people.

Table 1.13 Regional doing business indicators, labour law regulations

	Sub-Saharan Africa	Latin America & Caribbean	Middle East & North Africa	South Asia	East Asia & Pacific	Eastern Europe & Central Asia	OECD
Starting a Business							
Number of Procedures	8	9	8	7	7	6	5
Duration (days)	37	54	20	23	37	16	12
Cost (% GNI per capita)	37.3	81.2	35.0	21.6	22.7	8.3	4.7
Min. Capital (% GNI per	129.8	4.3	86.7	20.1	19.1	10.0	14.1
Getting credit							
Average strength of legal rights index (0–10)	5.8	5.6	3.2	5.6	6.5	6.6	7.2
Average depth of credit information index (0–6)	2.4	5.4	3.8	3.7	4.2	4.9	4.9
Registering Property							
Number of Procedures	7	7	6	6	6	5	5
Time (days)	65	66	104	34	33	81	31
Cost (% property per capita)	9.4	5.9	5.8	7.3	2.8	4.1	4.4
Protecting Investors Disclosure Index	4.5	5.1	4.9	5.1	5.4	5.7	6.0
Enforcing Contracts							
Number of Procedures	39	40	44	43	36	36	32
Time (days)	641	717	665	1,075	518	389	525
Cost (% of debt)	50.3	31.3	24.3	27.2	48.3	26.3	20.0
Closing a Business							
Time (years)	3.4	3.2	3.4	3.4	2.9	2.7	1.7
Cost (% of estate)	23	16	9	14	23	13	9
Recovery Rate (cents / dollar)	22.5	32.7	33.4	33.1	33.7	35.8	68.2

Source: World Bank Doing Business Database (2012)

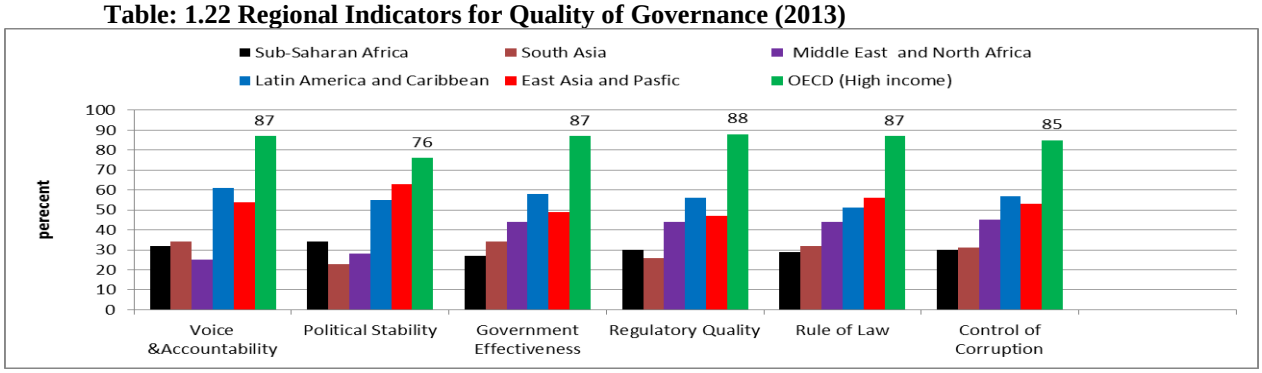
The private sector is also believed to be as inaccessible sector for young female, often contributing to high unemployment and widening gender disparities in wage employment in the region (World Bank, 2012). It is however worth noting that in spite of the poor business indicators, the overall atmosphere of business environment has been said to be changing in the last few years, with the rhythm of "Africa on rise", where many world leading companies are heading towards Africa to investing in several economic sectors, which may make young Africans live in hope.

iii. Institutional setbacks

No matter how much it is obvious that quality of local institutions plays a vital role in promoting economic growth, employment and productivity, this is not the case that has happened in Africa for years. In fact, it is very difficult to measure the quality of local institutions and their related impact on youth unemployment. But, to make things simple in relation to this, it can be examined in terms of quality of governance, which can be approximated by Six composite indicators taken from the World Bank Governance Research Indicators, namely: voice and accountability, government effectiveness, rule of law, control of corruption, political stability, and regulatory quality.

Figure 1.22 presents regional values of quality of governance given out of 100 for those six indicators. In most of those indictors, Sub-Saharan region and Middle East & North Africa are the two regions of the world with lowest records, especially in government effectiveness, implying that absence of good governances in the form of corruption and misuse of natural resources are important contributors to youth unemployment and underemployment in the region.

Table: 1.22 Regional Indicators for Quality of Governance (2013)



Source: Elaboration on World Bank Governance Research Indicators (GRIS) data, 2013

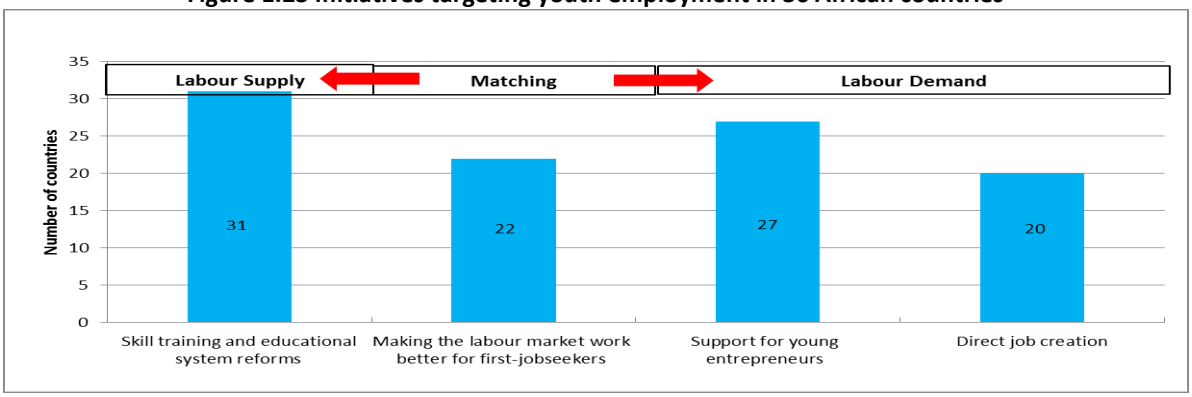
There are some cases that are worth mentioning in relation to this issue. A study from CGD (2014) reveals there are a number of public authorities in search of taxes and bribes that tend to chase large firms and hinder potential job creations. Specific cases are mentioned from Nigeria and Liberia in that firms with more than 100 employees spend 14% longer dealing with government officials than smaller counterparts to settle out disputes. Another case is from South Africa where employers are desperate to divert the attentions of public authorities by not offering new job opportunities so that they will not face higher tax and other economic explanations. Plus, 40% of firms in Sub-Sahara also reported having to pay bribes to get things done, where this proportion exceeds 60% in Kenya.

3.6. Ineffectiveness of youth employment programmes and absence of youth policies

To support young jobseekers in their way to first-time employment, African governments have been promoting employment interventions that range from labour demand schemes to labour supply initiatives. Unfortunately, however, most of the employment interventions are said to be failed programmes with very little help for the young jobseekers.

Taken from the African Economic Outlook (2012), Figure 1.23 demonstrates the kind of employment interventions undertaken in 36 African countries. Of the surveyed 36 African countries, 31 of them carried out skill training and educational reforms, whereas 20 countries were engaged with direct job creation aiming to absorb new labour market entrants. In the middle, 22 countries take action to match the labour market and make it work better for first-jobseekers. It also appears that 27 countries have implemented initiatives to support young entrepreneurs. However, in spite of those youth employment initiatives, many of the young jobseekers don't practically benefit from their outcomes as many of them are ineffective, where even some are dysfunctional.

Figure 1.23 Initiatives targeting youth employment in 36 African countries



Source: African Economic Outlook, 2012

Some of the reasons for such failure are basically connected to lack of clarity with the responsibility of implementing the initiatives as they are split between too many government actors with insufficient co-ordination among them(AOE, 2012).

In addition to the ineffectiveness of the youth employment programmes, most of the African countries are still said to be with no national youth policies to guide young people not only in their ways to employment, but also in their overall socio-economic aspirations.

Table 1.14 presents data on the existence of national youth policies in Africa and the world. At global level, of 198 countries, 122 countries (62%) have a national youth policy in 2014, up from 99 (50%) in 2013. Across all regions, 37 states (19%) were either developing a new or revising their current youth policy in 2014.

However, when it comes to Africa the proportion of national youth policy is very low. Only 23 out of 54 countries (43%) have a national policy in 2014, while other 17 African countries reported themselves that they had not national policies at all. The implication of the National Youth policy is that despite the good beginning to bring the issue of youth into the center of economic and political circles, there is still a long way to go in creating an inclusive labour market and in having a productive employment for the African youth.

Table 1.14 the existence of national youth policies in Africa and the world, 2014

	A National Youth Policy…				A National Youth Policy…		
	Total n° of Countries N	Exists in full or as a draft 01.2013 N and %	Exists in full or as a draft 04.2014 N and %	Change in 15 months 2013-2014 N	Is revised or developed 01.2013 N and %	Is revised or developed 04.2014 N and %	Change in 15 months 2013-2014
Africa	54	21 39 %	23 43 %	+ 2	16 30 %	14 26 %	– 2
World	198	99 50 %	122 62 %	+ 22	56 28 %	37 19 %	– 19

Source: Elaboration on Youth Policy organization data, August 2014

4. What policy options for an inclusive labour market?

The result of this comparative study has a lot to imply for policy formulation in order to help new labour market entrants in Africa. Needless to say, the issue of youth employment is an issue of development: be it in the form of fighting poverty, meeting the sustainable development goals, promoting inclusive growth or creating inclusive society. That said, there is no one-size-fits all approach to tackling the youth employment crisis. However, there are some key policy areas that need to be considered in relation to national and local circumstances. Accordingly, the following policies are forwarded to address the challenges of youth unemployment in Africa.

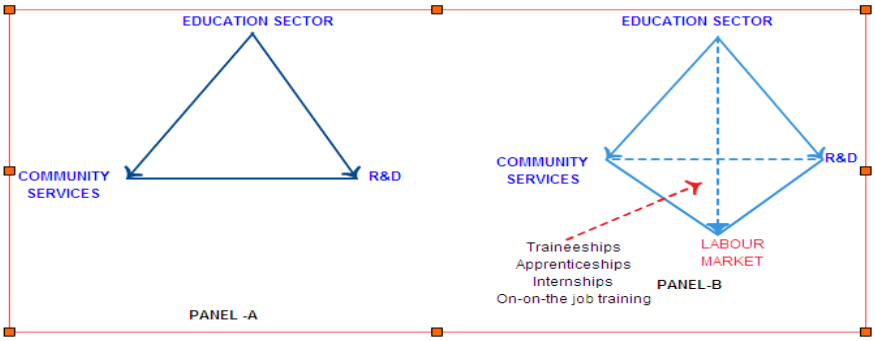
i. Aram young Africans with skills that the 21st century demands

The high unemployment of young people in Africa is a wakeup call for governments and policy-makers alike to address the problem of transition of young people to first-time employment. It is important to underline that Africa's competitiveness depends on how its youth are becoming employable and adaptable in the labour market. Hence, there is a need make sure that the growing youthful population is academically rigorous and economically relevant to the 21st labour market demand (high-tech economy).

The question is however how to do it. Conventionally, the duties of the education sector are limited to teaching students in class, conducting researches; and delivering community services (Panel A below). However, in an effort to equip young people with the right skills, there is a need for employers and/or industries to be involved directly in the education sector so that students will learn how to do a job, beyond reading and writing skills, from the scratch. The fact is that it is very common to see today that a significant number of school leavers and college graduates are seen like 'forged products' of the education sector and simply rejected from the labour market—just similar to what 'most of us' do commonly for low quality cloths in a boutique. The basic reason for this is due to the skill inadequacy and mismatches they face as many of the new jobseekers are equipped with limited specialized skills derived from sophisticated trainings such as vocational and apprenticeship programs. Hence, to avoid such skill mismatches and improve their employability and adaptability, young students need to learn their education with employers, not only with teachers. Direct involvement of industries and companies can be mainly in the form of—if

not limited—internships, apprenticeships and on–the–job–training (see Panel B). If practiced legitimately, this approach can be a viable medium–long term solution for the youth job crisis experienced in many parts of Africa.

Fig.1. Linking education sector to the Labor Market outcomes



Source: Author

ii. Tune higher education as an engine for innovation

Anecdotal evidence shows that when Nigeria's Dangote Group announced for 100 truck driver jobs in 2012, it was unexpected to see that 6 PhDs, 704 masters and more than 8,460 bachelor degree holders were among the 13,000 applicants. This leads to one big question: why were the applicants not employed in careers they trained for? The answer is not that much easy but one thing of certainty is that Nigerian universities are not imparting the knowledge and skills required in the labour market. Another story from South Africa also indicates that despite the prevalence of 600,000 unemployed university graduates in 2012, there were more than 800,000 vacant places that require some level of skills in the country.

What can be derived from such data is that African universities are not producing young graduates demanded by the existing labour market. That is, although employers in the labor market are nowadays demanding strong thinking, communication, and entrepreneurial skills, it seems the case that such kind of demand is largely unmet by the African higher educational systems. Therefore, it is a high time for African higher institutions to shift their ways of delivering education in such a way they are able to impart the knowledge and skills demanded in the current dynamic labour market. It is only with a world class education and research excellences that African can create better jobs and downsize the magnitude of youth unemployment. Hence, turning African higher education into an engine for innovation

requires actions to increase institutional diversification, strengthen science and technology research and development capacity, and improve the quality and relevance of tertiary education (Araya and Legas, 2014).

iii. Industrialize the African economy

Pervasive informality and lack of aggregate demand of the African economies are other major obstacles of the youth employment challenges. It is found that 8 in 10 workers are informal workers in the African job market, implying that wage employment sector is too small to absorb the rapidly growing youthful population and offer a living wage. Overall industrialization has also a very narrow base and contributes to only 8.7% wage employment. As the result of this narrow industrial base, African modern production process creates very limited productive jobs. For instance, only 3.5% of the world's merchandize exports are from Africa, and more than 50% of Africa's exports get their extra value-added outside Africa. To improve such limited industrial base and create jobs for the growing population, Africa needs to industrialize both its agricultural and manufacturing sectors by creating conducive business and macroeconomic environment in such a way that they are able to attract investment from both domestic and foreign countries. With sound macroeconomic policies it is possible to attract foreign investors that can invest in many of the modern manufacturing and agricultural sectors and generate millions of jobs. Also, the skill that young employees acquire from working with foreign employers will be a big plus for their competiveness in this globalization era.

iv. Develop Labour market information system

Today, unlike the education sector that remained static for long, the labour market is very dynamic and changes very rapidly. In spite of this, majority of the African youth search jobs through connections and personal backgrounds, where young people with disadvantaged backgrounds left much behind. Hence, it would be really quite vital if the African countries could establish centers that could help first time jobs seekers with career information, counseling and guidance. Such information centers are expected to help young people find employment when new job opportunities open up and smooth up the transition into the labor market. It is not only the job search method that is dread of information, but also the state of Key Labour market indicators (KILM) are also meager, which is one of the main hurdles for

formulating proactive employment and labour policies in the continent. Hence, strengthening labour market information system and improving the availability of labour market indicators is essential to ensure better labour market outcomes, particularly towards the achievement of full and productive employment of the youth.

v. Provide support to Small and Medium Scale Enterprises (SMSE)

Given the facts that the share of informal sector is more than 80% in the African economies, targeting small and medium scale enterprises may help generate jobs for the growing youth. Particularly, as people with a primary education or less are disproportionately concentrated in the informal sector, increasing the skills in small firms through trainings can increase the productivity of the informal sector. This kind of investment especially helps the young workers when they move out of the informal sector into formal sector for "they can take their human capital with them". In short, helping Small and Medium Scale Enterprises with issues related to finance, training and red taps could be one of the ways to create jobs to millions of African youth.

vi. **Reform Labour market regulations where necessary**

According to the 2014 World Economic Forum's Global Competitiveness data, many of the African countries appear to experience with lower labour market efficiency, comparing to 144 worldwide countries. For instance, South Africa scores the least rank in cooperation workers-employee relations, just 144th out of 144 countries in the world. The implication is that weak and inefficient labour market institutions and/ regulations are other major obstacles for the employment of new labour market entrants. For instance, the hiring of young workers is being hampered by certain institutional settings that favor insiders. Hence, there is a need to introduce a kind of incentive by law for employers who hire new labour market entrants by giving some training to make them adaptable to the labour market.

vii. Enhance the effectiveness of youth employment initiatives

It is found that although African governments have been launching a number of youth employment schemes, many of those programmes are said to be ineffective in helping the

young jobseekers. Even in some countries, a significant number of employment programmes are reported to be dysfunctional, with no National Youth Policies at all. Such failure of employment initiatives is a wake-up call for governments. That is, when employment initiative is envisaged, it should be designed with labour market requirements in mind so that its implementation will be realized. This can just be done by proper follow up, evaluation and monitoring system.

viii. **Improve overall human capital of the African people**

Needless to say, human capital is the key to higher productivity and growth for any economy. And it is believed that it is the low human capital stock that really explains all the messes that Africa sees in this 21st century, where youth unemployment is one of them. Therefore, improving the human capital of the African youth could be a silver-bullet for its overall development challenges. In this way, African governments and policy-makers alike need to search new ways through which the human capital of the continent can be improved. Without adequate human capital stock, it is hard to go a long way either in promoting youth employment in particular or in sustaining human development in general.

5. Concluding Remarks

Although Africa's current young cohorts get better access to education opportunities than their parents' generation, the labour market is not welcoming them as it is supposed to be. Rather it is very common to observe that youth unemployment has become a challenging issue throughout the continent in both economic and social terms, where the share of youth among the unemployed population is over 60 percent in that young workers are hit the hardest; especially it is three times higher than adult unemployment in countries like Mauritius, Algeria, Tunisia, Gabon and Cape Verde. More particularly, official youth unemployment rate is above 40% in countries like South Africa, Nigeria, Reunion and Tunisia as of 2012. It also is above 20% in Ethiopia, Zambia, Mauritius, Egypt, Algeria and Morocco. Gender differences are also very noticeable in many of the labour market indicators, where unemployment rates for young women are as high as 56.9% in South Africa, 54% in Egypt and 38.2% in Algeria in 2012.

In addition to the widespread of unemployment incidence, long-term unemployment is felt by majority of unemployed youth, with far reaching consequences on their human and social capitals. For instance, share of unemployed greater than 12 months account for 59.5% in Botswana, 61.7% in Lesotho, 64.8 % in Morocco, 78.3 % in Mozambique and 82.2 % in Namibia. As the result of this long-term of unemployment, many young Africans are going out of the labour market, where nearly one-third (29%) young people have become neither in employment nor education, or training (NEET) in both Egypt and Liberia as of 2012.

The employment condition of those who got job is also another story, millions of new labour market entrants are trapped in temporary and precarious jobs that fall short of legal protection and future opportunities. This makes Sub-Saharan Africa the only region with the highest working poverty in the world, where 64% workers receiving less than US$ 2 per day.

The employment status of the African youth does not also improve much with education. In South Africa and Zimbabwe, say for example, the share of unemployment people with secondary education to total unemployment is above 80% for both young men and women. The share of unemployment in total unemployment for workers with territory education, particularly among young women, is also very high in countries like Algeria (46.8%), Morocco (33.50%), Botswana (29.8%) and Tunisia (23.30%), implying that the transition from education to first time productive employment is very long for young people with

higher level of education. In relation to this, a study from the African Economic Outlook (2012) conducted in 17 African countries indicate that the average duration to complete the school to work transition pathway is found to be 4 years, ranging from 1 year in Côte d'Ivoire to 8 years of lag in Togo.

Although causality is not tested empirically in this chapter, a situational analysis and data obtained from various international organizations such as the *ILO's KILM database 8th edition*, *African Economic Outlook*, and *the World Bank database*, reveals that the most important factors contributing to massive high youth unemployment, by blocking new labour market entrants, are lack of aggregate labour demand to meet the rapidly growing youthful population; skill deficits and mismatches; labour market information shortage; low productivity, attitude of employer and perception of the youth, labour market regulations and overall poor governance.

The fact of the matter is that there are nearly 1 million new lanour market entrants each month in the African labour market, which keeps the youth bulge too high (more than 35% youth to population ratio). Given the pervasive informality and narrow industrialization base of the African economies, this high bulge is expected to cause a persistent youth unemployment that might not improve in sight. It also appears that even education does not seem to help for majority of the young people. This is because the supply of qualified youth exceeds the capacity of the modern economy to produce white-collar jobs they youth have been dreaming for years. The chance for employment especially is exacerbated by skills mismatches, where imbalance between the supply of and demand for skills among young people aged 15-29, for example, reached as high as 40.5% in Benin and 27% in Egypt in 2012.

Absence of relevant labour market information and ineffective public information services are also other factors that explain the problems of first-time jobseekers. Labour market information is unorganized and many of the job information systems designed are ineffective in getting the first-time jobseekers connected to the job market. For instance, public information services implemented in 21 African countries are reported to be able to serve just for less than 25% of young job seekers in each country. In place, majority of the African youth choose to use traditional ways of finding jobs, such as family, friends, and social networks, which are very costly for low-income young workers as they are more vulnerable

due to limited guidance from family members. In fact, it is not only the job searching method that matters, but also international Key Indicators of Labour Market (KILM) that are believed to be very useful for labour market policy formulation are very fragile, with little improvement over the last two decades, even comparing to other similar regions such as East Asia and the Pacific or Latin America and the Caribbean.

Very low labour productivity and attitude of employers towards first-time jobseekers; and young people's ambition to governments' jobs are other major obstacles too. The low productivity embodied within the young people, as new comers to the working life, results a high unit-labour cost for African firms than in any other region of the world. For instance, labour productivity in Sub-Saharan Africa is 4.5 times lower than the world average. This makes hiring young labour more difficult for many the African firms. And, as firm don't need to invest in additional workable and adaptable skills, the attitude of employers to new labour markets entrants is almost negligible. In connection to this, a study in 19 African countries indicate that nearly 65% employers are reluctant to hire first time job-seekers on long-term contracts, while more than 50% of them are also hesitant to offer employment for young job seekers without previous work experiences.

However, on the flip side, those young people with higher level of education are not much interested in the informal job market, but prefer to wait a long queue for governments' jobs. This situation is especially very common in the North African countries, where high proportions of youth prefer to have government jobs over private sector or self-employment. This is as high as 53% in Egypt, 46% in Tunisia, 45% in Djibouti and 44% in Mauritania. Stemmed from this wrong-headed ambition, a significant number of educated youth have started to develop a disillusion as to how to get job and started complaining that connections and relatives matter, than skills and abilities, to get government employment in Africa. Many of them are frustrated and devoid of hope, and being forced to exit from the workforc on a continuous basis. As of 2012, about 22 million out of 40 million African young jobseekers have become inactive and fearful of their future opportunities.

Data obtained from the 2013 World Economic Forum's Global Competitiveness index also show that Africa has the lowest labour market efficiency measured by cooperation in labour-employer relations; flexibility of wage determination; hiring and firing practices; redundancy costs; pay and productivity etc. To examine this labour market efficiency, countries like

South Africa, Nigeria, Ghana, Kenya, Tanzania, Ethiopia, Morocco, Algeria and Egypt were thoroughly analyzed as examples and ranked among the lowest countries in the world.

Moreover, the African business environment is not conducive for private sector to attract potential domestic and foreign direct investors. According to the *2013 World Bank's Doing Business* report, African private sector suffer from several constraints that discourage entrepreneurship and firm creation, including barriers to entry, high transaction costs, and difficulties in securing finance for start-ups. For example, the requirement cost for setting up new businesses in Sub-Saharan region is 8 times higher than in OECD countries and 4.5 times higher than in Europe and Central Asia. It also takes, on average, 37 days to start a business in the Sub Saharan Africa comparing to just 12 days on OCED member countries. Also, Sub-Saharan Africa is the only region in the world with the least legal protection for business investors, where investor protection indexes average is 4.5 out of 7.0 in 2013.

Lack of good governance is also another cause for the persistent youth unemployment and massive working poverty. Data derived from the World Bank (2014) indicates that Sub-Saharan Africa has lowest scores with four of the six measures of quality of governance: voice and accountability, government effectiveness, rule of law, control of corruption, political stability, and regulatory quality.

Of course, a few countries have been launching a considerable number of youth employment initiatives that are supposed to help young jobseekers, but practically most of the initiatives are reported to be ineffective and even sometimes dysfunctional at all. A survey in 19 African countries indicates that 69% of interviewed young people believe that their government handles job creation badly, while only 27% find that their government is dealing well with job creations. Regretfully, there are a number of African countries that don't have developed National Youth Policy at all. As of 2014, only 23 out of 54 countries (43%) have a National Youth Policy. This points out that in many of the African states youth employment in particular and youth development in general have not receiving enough consideration for years, which might be one of the factors that are accountable for the widespread open youth unemployment and pervasive informal labour relations in the continent.

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LITERATURE REVIEW

CHAPTER I
THE SCHOOL-TO-WORK TRANSITION GAPS IN ETHIOPIA: A CRITICAL ANALYSIS OF SURVEY DATA

OUTLINES: 1.*Introduction—2.Background of Country study—3.Education and labour market—3.1.Education—3.2.Labour market—4.Analyzing the gap between the education and labour market—4.1.Explaining the transition gap—4.1.1.Education Attainment of the youth—4.1.2.Current activities of youth—4.2.Measuring the transition gaps—4.2.1.Neither in Employment, Education and Training (NEET)—4.2.2.Combining work and education—4.2.3.Unrealistic-expectation and unemployment—4.2.4.Skills Mismatches—5.The pathway to productive employment*

1. Introduction

This part of the literature review summaries the existing research works. It starts with the socioeconomic climate of the country study (Ethiopia), and then makes a very brief review on the position of youth in the labour market from an international and comparative perspective. Reviewing the labour market status of various countries, it proceeds to present a critical review on the gaps that exist in the school to work transitions of young people form the context of the developing countries. In connection to this, possible measures as to how to quantify the transition gaps between schooling and working life are thoroughly reviewed.

2. Background of Country study-Ethiopia

Ethiopia is a low income country, where more than 80 percent of its population makes a living through agriculture. Followed by the Service Sector, Agriculture contributes for nearly half of the Gross Domestic Product (GDP), while the industrial sector contributes no more than 10 percent of the total GDP (MoFED. 2010. *Growth and Transformation Plan (2010/11-2014/15). Volume i: Main text Ministry of Finance and Economic Development, Addis Ababa, Ethiopia*). This indicates that like many developing countries, subsistence agricultural is the main employment contributor for majority of the population and the role of industry sector in this regard is somewhat negligible, albeit a recent sign of improvement due to attraction of Foreign Direct Investment (*World Bank. 2012.World Development Indicators).*

In terms of growth trend, with a model of 'developmental state', which is characterized by huge public investment in a range of social infrastructures such as road, dams and light train

lines constructions, Ethiopia has recently made substantive economic progress, even at times recording a double-digit growth (MoFED. 2014. *Annual Report of Economic Performance*, the Ministry *of Finance and Economic Development (MoFED, Addis Ababa, Ethiopia)*. Such growth is also clearly seen in Table 1.1a, where many of the indicated macroeconomic variables have gone through a noticeable change over 2010-2015. For example, real GDP Growth was as high as 11.4% in 2010, and this was higher in the subsequent years, albeit revised downwards in following years (10.7% in 2011 and 7.6% in 2013)

Table 1.1a: Macroeconomic Indicators

	2010	2011	2012	2013
Real GDP growth	11.4	10.7	7	7.6
Real GDP per capita growth	9.3	8.5	4.8	5.6
CPI inflation	17.5	26.7	29.3	14.5
Budget balance % GDP	-1.7	-1.6	-2.2	-1.9
Current account % GDP	-4.9	-6.3	-8.6	-8.4

Source: African Economic Outlook, 2012

Ethiopia has also experienced population dynamics over recent years. Its population is predominantly characterized by youth explosion with a significant influx to urban areas. Various publications demonstrate this: MOLSA. 2009. *National Employment Policy and Strategy of Ethiopia.* Policy report Ministry of Labour and Social Affairs, Addis Ababa, Ethiopia, states that Ethiopia's population is young and rapidly growing with a high trend of rural-urban migration; CSA. *2012. Key Findings on the 2011 Urban Employment Unemployment Survey,* Central Statistical Agency of Ethiopia, Addis Ababa, Ethiopia, also makes a predication that the current growing youthful population in Ethiopia along with a low productivity of the agriculture and a narrow base of modern industrial sector is expected to create a weighty pressure on the labour market that may end with a widespread open unemployment. Much in the same way, DE GOBBI, M. 2006. *Labour market flexibility and employment and income security in Ethiopia: Alternative considerations, Employment Policy Unit, Employment Strategy Department, International Labour Office, Geneva*, also finds out that the proportion of the urban population has been growing in recent years due to migration from rural areas. The author specifically mentioned that migrants were about 44.6% of the urban population as of 1994, most of whom had migrated to look for a job.

3. Education and Labour market

3.1.Education

Ethiopia has made major strides in having access to basic education over the last two decades. A number of previous research works have ascertained this outcome. WORLD BANK .2008. *Achieving service delivery through decentralization in Ethiopia*, Africa Region Human Development Department, The World Bank, Washington, D.C, remarks that Ethiopia has recorded a significant access to basic education in its remote areas through a massive decentralization fiscal resources to local communities. The study further points out that decentralization has created favourable environment at grassroots level with a number of primary and secondary school being constructed in many parts of the country. This is also ascertained by the FDRE. 2012. *Ministry of Education: Education Statistics Annual Abstract*, Addis Ababa, which reports that primary schools have shown an increase of more than double in recent years, form 10 thousands in 1995 to 24 thousands in 2012. The rise in the number of primary and secondary schools gave a significant opportunity for children and young people to be enrolled, even in remote parts of the country (WORLD BANK. 2008. *Achieving service delivery through decentralization in Ethiopia,* Africa Region Human Development Department, The World Bank, Washington, D.C).

3.2. Labour Market

The literature on the position of youth in the Ethiopian labour market is relatively narrow, especially from the school to work transition perspective. But, to better understand the nature of youth labour market, it is imperative to review the outcomes and policy implications of most important previous research works. See among others, KIBRU, MARTHA. 2012. *Employment Challenges in Ethiopia*, Addis Ababa University; and GUARCELLO, L and ROSATI, F. 2007. *Child Labor and Youth Employment in Africa: Country Study Ethiopia*, SP discussion paper, No. 0704, who find out that Ethiopia has one of the highest urban unemployment rates worldwide, at about 50% of the youth workforce. Such scenario is also demonstrated by DENU, B. TEKESTE, A. AND DEIJL, H. 2007.*Characteristics and Determinants of Youth Unemployment, Underemployment and Inadequate Employment in Ethiopia*. *Employment* Strategy Papers, Employment Policies Unit, ILO. Those three research works have one point in common, in that youth labour market crisis is a pressing issue and

considered as one of the core economic and social challenges that Ethiopia has faced today. Additionally, the characteristics and trends of the Ethiopian youth labour market over 1997 and 2013 is comprehensively described by BROUSSARD, NZINGA and TEKLESELASSIE, TSEGAY.2012. *Youth Unemployment: Ethiopia Country Study*, Working Paper 12/0592 August 2012, *International Growth Centre, London School of Economics and Political Science.* Those authors have concluded that despite the improvement seen in Ethiopia's economic growth; youth unemployment particularly in urban areas remain widespread and persistent. They have again shown that gender gap in the Ethiopian labour market is very large, where women have experienced much higher unemployment rates throughout the study period (1997-2012), signifying that young women have not benefited as equal as men from the recent economic records.

A few of other Authors have also pointed out some of the main causes for such youth labour market failure in the country. See among others KRISHNAN, PRAMILA,TESFAYE GEBRE SELASSIE AND STEFAN DERCON. 1998. *The urban labour market during structural adjustment: Ethiopia 1990-1997*. CSAE Working Paper Series 1998-09 Centre for the Study of African Economies, University of Oxford), who have stated that although Ethiopia has shown some improvements on its GDP growth and educational expansion over recent years, its labour market has remained remarkably unresponsive to the pressures of economic reforms; and KIBRU, MARTHA. 2012. *Employment Challenges in Ethiopia*. Addis Ababa University, Ethiopia, argues that although the Government of Ethiopia has been introducing and implementing different labour market policies and strategies, the potential of these interventions to have meaningful impact on youth employment has been hindered by the informal nature of economy, the low demand for labor and lack of government budget. The implication on this regard is crystal clear, in that the Labor market institutions that govern employment relations in Ethiopia are generally weak and ineffective (see among others, WUBIE, HIRUY. 2013. *The Settlement of Individual and Collective Labour Disputes under Ethiopian Labour Law. E-Journal of International and Comparative ADAPT LABOUR STUDIES UNIVERSITY PRESS, Volume 2, No. 1, January 2013; and THE WORLD BANK. 2007. Urban Labor Markets in Ethiopia: Challenges and Prospects. Volume I: Synthesis report 38665: Poverty Reduction and Economic Management Unit Africa Region, The World Bank).*

The literature that deals with the link of education and employment is somehow vast and many of those research works usually used to conclude that there exists a positive relationship between education and employment, where diploma had been serving as a passport for employment and higher wages (see among others, RYAN, PAUL. 2001. *The School-to-Work Transition: A Cross-National Perspective*, King's College University of Cambridge; CASTEL, VINCENT. PHIRI, MARTHA. STAMPINI, MARCO. 2010. *Education and Employment in Malawi*. WPS no.110, June 2010, African development Bank; QUINTINI, G; MARTIN, J AND MARTIN, S, 2007. *The Changing Nature of the School-to-Work Transition Process in OECD Countries*. Discussion Paper No. 2582, January 2007; and OECD. 1998c. Thematic Review of the Transition from Initial Education to Working Life: Interim Comparative Report." Document DEELSA/ED (98)11. Paris: OECD. FREEMAN, RICHARD B. and WISE, DAVID A.1982. *The Youth Labor Market Problem: Its Nature, Causes, and Consequences*, University of Chicago Press.

However, over recent years, given the high youth unemployment worldwide, the claim that education is a passport for employment and higher wages seems to fade away. This is commonly evidenced by the literature in many ways, where unemployment rates for educated young people become much higher than those with lower level of education. See among others, KONDYLIS, F AND MANACORDA, 2006. *Youth in the Labor Marketand the Transition from School to Work in Tanzania*, the World Bank, DP no. 0606, who underline that youth unemployment is by no means a unique phenomenon, but the problem is rather being compounded by disappointing education outcomes; GURBUZER, L AND OZELY, M. 2009. *Youth Employment in the Hashemite Kingdom of Jordan: Characteristics and Determinants, International Labour Organization, IPEC/ SIMPOC, who have stated that* a higher level of education does not necessarily protect individuals from unemployment. SERNEELS, PIETER. 2007. *The Nature of Unemployment among Young Men in Urban Ethiopia.* Review of Development Economics, 11(1), 170–186, 2007, also writes that job guarantees were established for all university graduates in Ethiopia until early 1990s and in this way university education had been serving as a passport to employment in education. But this is no more at play today as it is very common to see growing queues of educated unemployed in the labour market. GUARCELLO. L, LYON. S, and ROSATI. F. 2008. *Child Labor and Youth Employment in Ethiopia*, in "Youth in Africa's Labor Market", The

World Bank, Washington DC, also indicate that unemployment rates are actually highest among those who have completed a secondary education. Similarly, BROUSSARD, NZINGA and TEKLESELASSIE, TSEGAY. 2012. *Youth Unemployment: Ethiopia Country Study*, Working Paper 12/0592 August 2012, International Growth Centre, London School of Economics and Political Science, also add that despite a significant rise in Ethiopia's educational attainment over 1997 -2012; there has not been as much job creation to accommodate the newly educated job seekers and as the result the unemployment incidence for school leavers remain widespread.

4. The gap between education labour market

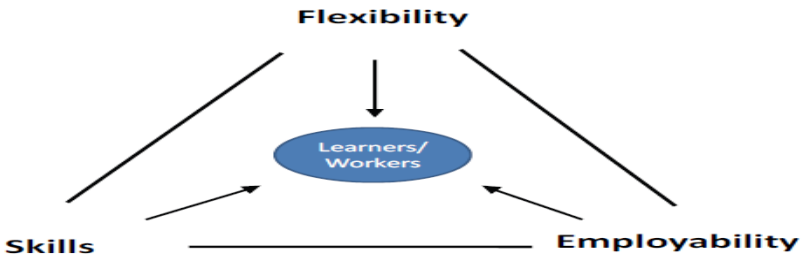
4.1. Explaining the Transition Gaps

Before reviewing the empirical works on the school to work transition gaps, it is imperative to explain what the school to work transition stands for and the theoretical framework underpinned behind it. As cited in EDER, SARA. 2009. *School-to-Work Transition Survey: Methodological guide, Modules*, Youth Employment Programme, International Labour Office, Geneva, 2009, the concept of school-to-work transition was officially envisioned by the ILO in 2003 as part of a Gender Promotion Scheme. As time passed by, it was then expanded to include issues related to youth employment as part of its socially inclusive labour market, basically by quantifying the relative difficulty faced by young people in transiting to a job. In this way, the ILO's SWTs Module standardly defines the school-to-work transition as the passage of a young person aged 15-29 from the end of schooling to the first productive job. Likewise, the WORLD BANK. 2013. *World Development Report: 2013: Jobs*. Washington, DC., defines the school-to-work transition as the critical socio-economic life changing period between approximately 15 to 24 years of age–a period when young individuals are expected to build skills based on their specific education and training that helps them become productive members of the society; and the AFRICAN DEVELOPMENT BANK (AFDB). 2012. *Labour Force Data Analysis: Guidelines with African Specificities*, Tunisia, also defines it as the difference between the estimated age of entry into the workforce and the estimated age of entry into first-time productive employment.

All those definitions signify that the transition from school to work is an important developmental stage in the life of young people (CALEB DICHABE, SELLO. 2006. *Transition of School Leavers into the Labour Market from Ga-Rankuwa High Schools, Tshwane University Of Technology, South Africa).* In other words, the school to work transition of young people is highly influenced by the level of human capital acquired at school or training centers. The issue of school-to-work transition path is conceptualized here from the perspective of Human Capital Theory (BECKER, G. 1994. *Human Capital: A Theoretical and Empirical Analysis With Special Reference to Education*, Chicago: The University of Chicago Press). Human capital formation in this sense is a process that improves an individual's knowledge and skills, and therefore his or her productivity at home, community, or workplace (*WORLD BANK.* 2009. *Youth and employment: the potential, the problem, the promise in Africa, Washington DC.).* GARCIA, MARITO AND FARES, JEAN. 2008. *Youth in Africa's Labor Market*, Direction in Development, Human Development, the World Bank, Washington DC., also ascertain that investments made on people in early time affect their human capital and future employment prospects to a large extent.

Therefore, investigating the school-to-work transition from the perspective of human capital theory is an essential approach that gives insights for plausible policy options in tackling the issue of youth unemployment. WANG, YIDAN. 2012. *Education in a Changing World: Flexibility, Skills, and Employability*. The World Bank, has developed a tripartite learning framework as to how optimal human capital can be formed at the post–basic education level and helps to ease the school to work transition. As shown in Figure 1.1, the learning framework places people's (learners and/or workers') needs at the center. It shows that, to enhance the employability of young people, building a flexible education system, developing and updating needed skills are important steps.

Figure 1.1 Tripartite Learning Frameworks



Source: Yidan Wang (2012)

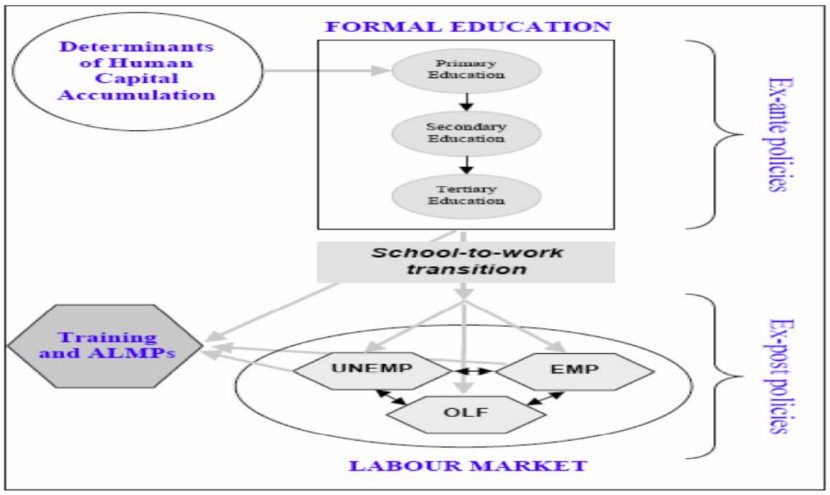
The above tripartite framework demonstrates that education in general and professional training in particular, serve as the social institution for the formation and reproduction of the workforce, ensuring that young people are ready to enter the labour market in accordance with the market requirements (SHULUS, A. and MKRTCHIAN, G. 2003. *Problems of the youth labour market. Sociological research*. Volume 42, no.1, pp.29-42.). This is also discussed by GARCIA, MARITO AND FARES, JEAN. 2008. *Youth in Africa's Labor Market*, Direction in Development, Human Development, the World Bank, Washington, in a way that entering into the labour market without adequate skill is all about becoming more vulnerable to shocks and more likely to get stuck in low-quality jobs. Such learning framework is expected to provide learners with what they need in response to changing circumstances, and imparting knowledge and skills when they need them and delivering learning where it is convenient.

In addition to the tripartite learning framework, the scheme of school-to-work transition has also been diagrammed by various institutions. The school-to-work transition framework developed by the ECONOMIC COMMISSION FOR AFRICA. 2007. *Economic Report on Africa: Meeting the Challenges of Unemployment and Poverty in Africa*. UN Publications, is demonstrated in Figure 2.1. The diagram divides the determinants of human capital accumulation into ex-ante polices and ex-post policies. While the ex-ante policies are related to the factors that influence human capital formation from early childhood to tertiary education level, the ex-post ones focus on policies usually taken in the labor market after the territory education. As shown, the concept of school-to-work transition is indicated in between the tertiary education and labor market, with an implication that students need some training actions upon university graduations.

However, with this type of school to work transition, there is one caveat that seeks attention. As clearly shown, the transition path is confined only to graduates of higher education, whereas it has less familiarity to school leavers or other similar level achievers. This means that the school-to-work need to be conceived from below or at least form the secondary education. Because youth need access to skill development through internships, on-the-job training and apprenticeship schemes, both in the formal and informal economic sectors, and vocational education driven by the needs in the labor market starting from secondary education. In light of this fact, ADAPT has modify the scheme of the school to-work

transition slightly in a way that embrace students who complete the secondary education, but not able to join territory education. The scheme is adapted as illustrated in Figure 1.3.

Figure 1.2 the traditional way of the school to work transition path

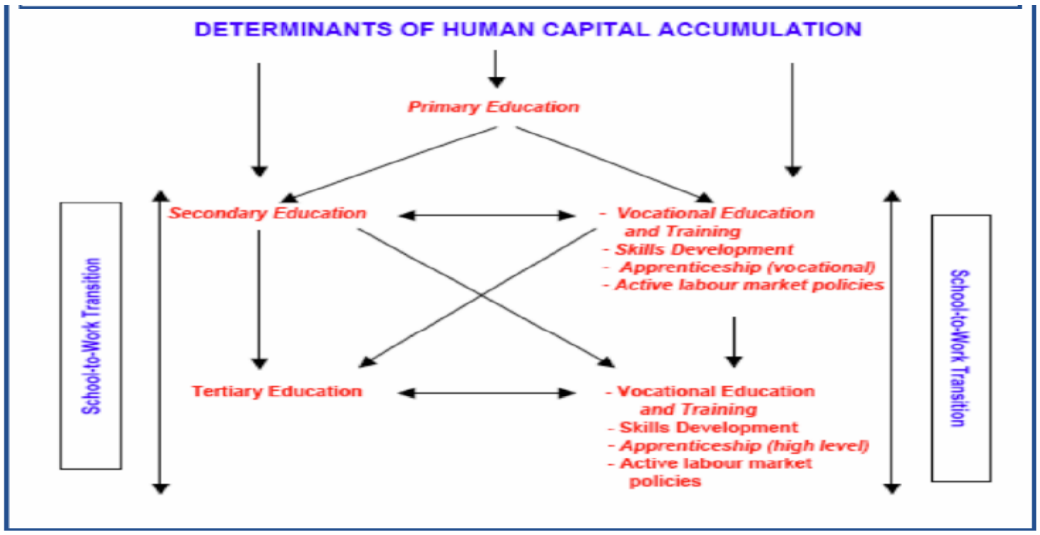


Source: United Nations of the African Economic Commission, Addis Ababa (2007)

This modified scheme points out that the school to work transition needs to be practiced right from high school for those who do not join higher education. Earlier evidence also favors this. See among others RYAN, PAUL. 2001. *The School-to-Work Transition: A Cross-National Perspective,* King's College University of Cambridge; and OECD. 1998c. Thematic Review of the Transition from Initial Education to Working Life: Interim Comparative Report." Document DEELSA/ED No.11. Paris, who basically argue that the school-to-work transition cannot be a single process; it is rather, defined typically as the period between the end of compulsory schooling and the attainment of full-time, stable employment. FASIH, TAZEEN. 2008. The Link Between Education and Employment: the World Bank, also writes the relationship between the education "market" and labor markets is much more complicated, with many players active at various levels, so early investment in cognitive and non-cognitive skills produces a high return and lowers the cost of later educational investment by making learning at later ages more efficient. Additionally, TRIBOSCHI, MICHELE. 2012. *Labor Law and Industrial Relations in Recessionary Times: The Italian Labour Relations in a Global Economy:* also strongly underlines that there is a need to carry out an education and vocational training reform, and to improve the functioning of all those bodies intended to promote the employability of young people by means of networks,

formally or informally, between educational and training bodies, employers' associations, local institutions and trade unions right from lower secondary school.

Figure 1.3 ADAPT's proposal for effective school to work transition path



Source: Tiraboschi (2011)

Indeed, the scheme from ADAPT International is more of similar to that concept of Heckman (Noble prize winner in Economics, 2000) in that human capital formation finds its root in effectual investment of early yearly of age. Early intervention is too much worthy. The cost of failure not to do so is enormous later in the labour market. Having this theoretical concept in mind, the next question is then how to measure empirically the transition gaps that exist between the education sector and labour market.

4.2. **Measuring the transition gaps**

The transition gaps that exist between the education sector and labour market are very complex to measure accurately as the challenges that young people face during the transition period are multidimensional to the extent of very difficult to quantify (QUINTINI, G and MARTIN, S. 2006. Starting Well or Losing their Way? The Position of Youth in the Labour Market in OECD Countries", OECD Social, Employment and Migration Working Papers No 39, OECD Publishing, Paris). In fact, it also varies based on that national social institution that may play a paramount role in smoothing and shortening the transition path. The transition from school to work is by no means a linear well-defined process, with individuals leaving

school once and for all, possibly searching over a certain period of time before landing in their first job (ROSATI, F. 2006. *Transition from education to the labour market in Sub-Saharan Africa: An analysis for 13 countries*, Understanding Children's Work (UCW), the World Bank. The measure of the transition gaps can be measured differently based on local social institutions (RYAN, PAUL. 2001. *The School-to-Work Transition: A Cross-National Perspective, King's College University of Cambridge). Taking seven countries*, RYAN, PAUL.2001. *The school to work transitions* shows that the labour market pathways of young people differ from one to another. While most high school leavers in countries like Germany, the Netherlands and Japan directly transit into regular employment, the pattern of transit of young people in France, Sweden, the United Kingdom and the United States are somehow complicated. His review of alternative labour policies also indicates that the successful transition in Germany and Japan are mainly due to domestically specific institutions such as school-employer recruitment networks in Japan and the dual-apprenticeship system in Germany. He measures the school to work transition by the number of years between the highest age of compulsory full-time education and the age at which the proportion of young people who are employed and not in education. On the basis of this, the transition durations rose substantially from 5.5 to 7.4 years on average during 1990-96 for 15 OECD countries for which data are readily available. QUINTINI, G., J. P. MARTIN AND S. MARTIN, 2007, *The Changing Nature of the School-to-Work Transition Process in OECD Countries*, IZA DP No. 2582, IZA Germany; also examine the pattern of school-to-work transitions in OECD member countries and analyzed the extent to which the situation of youth in the labor market has changed over a decade. They state that though the current young generation enjoys higher education attainment than their parent's generation does, they suffer from higher unemployment rate. They reason out that the skills acquired in initial education by the young people are not always well adapted to the current labour market requirements, as well as general labour market conditions. They find that the average length of the transition to stable employment varies significantly across countries. For instance, in European countries, for young people with upper-secondary qualification it takes two or more years to find a first job. They empirically indicate that the incidence of over-education has increased in 15 out of the 22 OECD countries in 2005 by 1.5 percentage point from1995. They further debate the increased policy concern with weak youth labour market outcomes in

many of those countries and review some of the employment programs undertaken such as the New Deal for Young People in the UK. Having employed optimal matching, a method borrowed from molecular biology; *QUINTINI, G and MARTIN, S. 2006. Starting Well or Losing their Way? The Position of Youth in the Labour Market in OECD Countries", OECD Social, Employment and Migration Working Papers No 39, OECD Publishing, Paris*, analyze the transitions from school to work in Europe and the USA; and they show that school leavers in USA and Europe go separate ways, where the share of youth facing serious difficulties on the labour market is 18 percentage points higher in Europe than the USA. The study also show that 30% of European youth encounter difficulties settling into the labour market, while another 15% are trapped in long-term unemployment. It is also suggestive to look from the OECD.2011. EDUCATIONAL AT A GLANCE ANNUAL REPORT, as to where a 15-year-old is expected to spend on average the next 15 years of his or her life:

"6.9 years in education, 5.8 years in a job, and unemployed for a total of 0.9 year, and out of the labor force entirely (neither in education nor seeking work) for 1.3 years. And taking into consideration at the population of 15-29 year-olds in OECD member countries as a whole, 46.3% are in education, 38.5% hold a job, 6.3% are unemployed, and 8.9% are outside of the workforce."

In one way or another, a close review of the literature reveals that the transition gaps of the school to work can be measured by (1) the number of youth in Neither in Employment, Education nor in Training (NEET) and (2) those young people who combine both education and work (see, among others, EUROFOUND. 2014. *Mapping youth transitions in Europe*, Publications Office of the European Union, Luxembourg; ELDER, SARA AND SIAKAKONÉ, KOKO. 2104. Labour market transitions of young women and men in sub-Saharan Africa, Work4Youth Publication Series No. 9, International Labour Organization, Geneva). RYAN, PAUL. 2001. The School-to-Work Transition: A Cross-National Perspective, King's College, University of Cambridge. QUINTINI, GLENDA. MARTIN, JOHN AND MARTIN, SÉBASTIEN. 2007). The Changing Nature of the School-to-Work Transition Process in OECD Countries, IZA DP No. 2582 ;(3) by the level of unrealistic-expectation of new school leavers and university graduates (see MARTÍN RAMA. 2003. The Sri Lankan Unemployment Problem Revisited. Review of Development Economics, 7(3), 510–525); (4) skill mismatches (see SARA, E and SIAKAKONÉ, KOKO. 2104. *Labour*

market transitions of young women and men in sub-Saharan Africa, Work4Youth Publication Series No. 9, International Labour Organization, Geneva)

4.2.1. Youth neither in Employment, Education nor in Training (NEET)

Youth neither in Employment, Education nor in Training (NEET) has become one of the most important indicators to quantify the school to work transition gap in both developed and developing countries (ELDER, SARA AND SIAKAKONÉ, KOKO. 2104. *Labour market transitions of young women and men in sub-Saharan Africa*, Work4Youth Publication Series No. 9, International Labour Organization). Those authors measured the labour market transition of young people in 8 African countries using the Youth neither in Employment, Education nor in Training (NEET) and found that a significant proportion of young people being trapped in between the education sector and labour market. Also for Tanzania's youth, KONDYLIS, F and MANACORDA, 2006. *Youth in the Labor Market and the Transition from School to Work in Tanzania*, the World Bank, Discussion Paper No. 0606, used this NEET indictor in quantifying the difficulty young people face on their way to world of work. See also KEDIR, ABBI AND HENRY, MICHAEL. 2004. Why do the youth in Jamaica neither study nor work? Evidence from JSLC 2001, University of Leicester, Leicester, UK.

4.2.2. Combining education and work

Combining education and work can also serve as indicator how the transition gap between school and the world of work is close to each other. For young people who combine work and school are expected to have short the transition gap as the experience they get while school can help them find jobs easily in latter times (GUARCELLO, L. MANACORDA, M. ROSATI, F. LYON, S. VALDIVIA, C. 2005. *School to Work Transition in Sub-Saharan Africa: an overview*, Understanding Children's Work (UCW) Project, Working Paper No.43933). Another research from RAGUI ASSAAD, CHRISTINE BINZEL and MAY GADALLAH. 2009. Transitions to Employment and Marriage among Young Men in Egypt, indicates that having access to work in a family enterprise reduces significantly the duration of transition from school to work. Nevertheless, there is one caution that needs to be taken into account while using this indicator as a measure for the school to work transition as such measure may not work for young people in rural areas as working at very early ages may make them end up in low productivity jobs on the household farm (KONDYLIS, F and

MANACORDA, 2006. *Youth in the Labor Market and the Transition from School to Work in Tanzania,* the World Bank, Discussion Paper No. 0606; and BEEGLE, KATHLEEN, RAJEEV DEHEJIA, AND ROBERTA GATTI. 2005. *Child Labor and Agricultural Shocks*, Journal of Development Economics.

The school to work to transition gap in Ethiopia is a less researched topic. As far as is known, no systematic or empirical study was previously conducted on this regard. Previous studies have tried only to explain qualitatively. See among others WUBIE, HIRUY. 2013. *Youth Unemployment and School-to-Work Transition in Africa: The Ethiopian Perspective*, a Chapter in ADAPT LABOR STUDIES BOOK SERIES, Cambridge Scholars Publishing, who pointed out that there is a huge skills deficit of the educational curricula in Ethiopia and the fact that the school-to-work transition is not taken as a priority within the Educational Sector Development Program (ESDP). And more, GUARCELLO, L AND ROSATI, F. 2007.*Child Labor and Youth Employment: Ethiopia Country Study, Understanding children's world*, THE WORLD BANK, Special Protection Project, wrote that there is limited empirical basis for formulating policies for youth employment and analyzing the school to work transitions in Ethiopia.

4.2.3. Unrealistic-expectation and joblessness

In recent years, educated young people are said to be too much aspired to find white-collar job in the public sector, which is one of the factors to prolong their entry into the labour market and results inactivity (see among others, ELDER, SARA AND SIAKAKONÉ, KOKO. 2104. *Labour Market Transitions of Young Women and Men in Sub-Saharan Africa,* Work4Youth Publication Series No. 9, International Labour Organization). This is also explained by MARTÍN, RAMA. 2003. The Sri Lankan Unemployment Problem Revisited. Review of Development Economics, 7(3), 510–525, stating that in many developing countries high unemployment of educated young people is attributed to unrealistic expectations, to queuing for public sector jobs with stringent job security regulations. The authors specifically presents that high unemployment in Sri Lanka has been connected to unlikely higher wage expectation and a long queue to enter to the public sector, who is one of the reason for the protracted school to work transition of young school leavers. Additionally, DICKENS, W AND LANG, K 1991. *An analysis of the nature of unemployment in Sri*

Lanka, NBER Working Paper Series no 377, argue that unemployment is best explained as queue unemployment.

4.2.4. Skill mismatches

The concept of skill mismatch also has become a persistent and growing problem in the youth labor markets (ILO. 2013b. *Global Employment Trends for Youth 2013: A generation at risk*/International Labour Office – Geneva). Because, in this knowledge based global economy, mismatches between employers' needs and the skills of recent graduates can affect the employment prospects of the inexperienced but relatively well-educated young people ELDER, SARA AND SIAKAKONÉ, KOKO. 2104. Labour market transitions of young women and men in sub-Saharan Africa, Work4Youth Publication Series No. 9, International Labour Organization). There is no a very specific definition of skill mismatch as it encompasses terms related to various types of imbalances between skills offered and skills needed in the workplace (ILO.2014. *Key Indicators of Labour Marke (KILM 15). Skills mismatch*, 8th edition, Generva). Some of forms of skill mismatches that may have worsened young people's employability are summarized in Table 2.1.

Table 2.1 Forms of skill matches

Types of skill mismatches	Explanation
• Vertical mismatch	The level of education or qualification is less or more than required
• Horizontal mismatch	The type/field of education or skills is inappropriate for the job
• Over education (under education)	Workers have more (less) years of education than the job requires
• Over qualification (under qualification)	Workers hold a higher (lower) qualification than the job requires
• Skill shortage (surplus)	Demand (supply) for a particular type of skill exceeds the supply (demand) of people with that skill
• Skill gap	Type or level of skills is different from that required to adequately perform the job

Source: ILO, May 2013

There is some evidence that education systems are failing to equip students with skills that are valued by the knowledge economy. See among others, EGEL, DANIEL AND DJAVADSALEHI-ISFAHANI. 2010. *Youth Transitions to Employment and Marriage in Iran evidence from the School to Work Transition Survey*, Middle East Development Journal, Vol. 2, No. 1 (2010) 89–120; *ELDER, SARA AND SIAKAKONÉ, KOKO.* 2104. *Labour*

market transitions of young women and men in sub-Saharan Africa, Work4Youth Publication Series No. 9, International Labour Organization; and MOURSHED, M; PATEL and SUDER, K. 2014. *Education to Employment: Getting Europe's Youth into Work*, MCKINSEY CENTER FOR GOVERNMENT. All those Authors strongly argue that an overriding cause for young people being held back is a lack of skills relevant to today's work. This is also demonstrated by MARTÍN RAMA. 2003. *The Sri Lankan Unemployment Problem Revisited*. Review of Development Economics, 7(3), 510–525, where today's education is not well geared towards the labour market and this might be resulting in various forms of skill mismatches, which in turn adversely affect the employability of young people. This becomes especially very detrimental situation in time of a global knowledge economy, where jobs are being shifting significantly from unskilled to skilled labor (World Bank, 2011. *Skills, not just diplomas Findings from forthcoming regional report on Eastern Europe and Central Asia* (ECA) and ongoing World Bank work, Washington DC).

5. Pathway to Productive Employment

A significant proportion of young people in developing countries cannot afford to be unemployed and as the result they are rather forced to get into extreme informal jobs with a poverty wage (ELDER, SARA AND SIAKAKONÉ, KOKO. 2104. *Labour market transitions of young women and men in Sub-Saharan Africa,* Work4Youth Publication Series No. 9, International Labour Organization). A study from DONALD, SPARKS and STEPHEN, BARNETT. 2010. *The Informal Sector in Sub-Saharan Africa: Out of the Shadows to Foster Sustainable Employment and Equity*? International Business and Economics Research Journal –Volume 9, Number 5, critically argue that that employment in the informal sector is no longer a journey, but has become the destination of many young people. In total, about two-thirds of all employees work in the informal sector in Sub-Saharan countries (World Bank .2007. *World Development Report 2007: Development and the Next Generation*. Washington, D.C). In this way, in the way of analysing the school to work transition, it would be suggestive to study the movement from informal to formal job so that we can have a full picture of the labour market dynamism.

CHAPTER II

DETERMINANTS OF UNEMPLOYMENT INCIDENCE, DURATION AND EXIT TO FIRST–TIME EMPLOYMENT IN ETHIOPIA: AN ECONOMETRIC ANALYSIS

OUTLINES: *1. Introduction—2.Analyzing socioeconomic determinants of youth unemployment incidence—2.1.Specification of Logit Model—2.2.Logit Regression results—2.2.1.Effects of Individual Characteristics—2.2.2.Effects of family backgrounds: a proxy for unemployment compensation—2.2.3.Effects of human capital—2.2.4.Effects of Job-Searching Behaviors—2.2.5.Regional effects: a proxy for local labour demand—2.2.6.Educational policy shift and training effects—3.Analyzing the duration and exit rate to first-time employment*

1. Introduction

As pointed out early, the first chapter of the dissertation gives a focus on the intertwining of educational attainment and employment opportunities among young people. Yet, it important to note that employment opportunities of young people are influenced by other several factors other than education attainment per see. In this way, the second chapter of the thesis work tries to capture the most important micro determinants of youth unemployment incidence and its descriptors, and how those variables affect the exit rate from unemployment state to employment state.

2. Analyzing socioeconomic determinants of youth unemployment incidence

Socioeconomic determinants of youth unemployment have been researched across countries. See among others, *KINGDON, GEETA and KNIGHT, JOHN. 2000. The Incidence of Unemployment in South Africa, Centre for the Study of African Economies, University of Oxford,* who employed a logit model and found out that unemployment incidence in South Africa varies importantly by race, gender, age, education, and region. For example, women experience substantially higher unemployment than men. Incidence of unemployment also varies with household income (LEIBBRANDT, M., BHORAT, H. AND WOOLARD, I. 2000. *Understanding Contemporary Household Inequality in South Africa*, Journal of Studies in Economics and Econometrics, November). With a comparative study approach, BETTINA, ISENGARD. 2002. *Youth Unemployment: Individual Risk Factors and Institutional Determinants*: *A Case Study of Germany and the United Kingdom*. German Institute for Economic Research DP No.284, DIW Berlin, also carries out a research as to how individual and institutional factors influence youth employment in Britain and Germany. There is also one recent study on the determinant of labour market outcome in a Latin

American country. This is from DE MELLO, D AND PUENTES, E. 2010. *The determinants of labour force participation and employment in Chile*, Applied Economics, First published on: 21 September. From the perspective of poverty, AKHTAR, SAJJAD SHAHNAZ, LUBNA. 2005. *Understanding the Youth Unemployment Conundrum in Pakistan: Preliminary Empirical Macro-Micro Analysis, Centre for Research on Poverty Reduction and Income Distribution (CRPRID), Discussion Paper Series No. 4, also make an empirical analysis on the key determinant of youth unemployment in Pakistan* using micro-econometric model (Probit model). As of 2012, how institutions and labour market policies have been affecting youth and total unemployment rates in developed countries over three decades is also *studied by* CHOUDHRY, M. MARELLI, E. SIGNORELLI, M. 2012. *Key Determinants of Youth Unemployment in OECD Countries, JEL: J08, J48, J68.* The Authors did this by using fixed effect panel data and reached in a conclusion that the labour market outcomes were getting worse and worse over the last thirty years. For Turkey, *KABAKLARLI1, E. HAZEL, P.BULUŞ. A. 2011. Economic Determinants of Turkish Youth Unemployment Problem*: Co Integration Analysis International Conference on Applied Economics–ICOAE 2011 carried out a study on the economic determinants of youth unemployment. The same is true for Iran, where VALADKHANI, ABBAS. 2003. *The causes of unemployment in Iran: an empirical investigation*, Faculty of Commerce –Papers, http://ro.uow.edu.au/commpapers/390, discusses extensively on the main causes of unemployment from survey data. See also other studies related to this: RAGUI, ASSAAD. FATMA, EL-HAMIDI and AKHTERU,AHMED.2000. The determinants of employment status in Egypt. FCND DISCUSSION PAPER NO. 88; and HAILE, GETINET. 2005. *Determinant of self-employment in urban Ethiopia: A panel data based evidence*, The Policy Studies Institute, 50 Hanson Street, London W1W 6UP. JOEL, HINAUNYE. JOHANNES, ASHIPALA. 2010. *Determinants of Unemployment in Namibia*. International Journal of Business and Management Vol. 5, No. 10; DEMIDOVA O. AND SIGNORELLI M. 2012. Determinants of Youth Unemployment in Russian Regions, Post-Communist Economies, 2.; PERUGINI, C AND SIGNORELLI, M. 2010b. *Youth unemployment in transition countries and regions*. In Economic Growth and Structural Features of Transition. London and New York: Palgrave-Macmillan; and O'HIGGINS, N. 2005. Trends in the youth labour market in developing and transition countries. Labor Demography Working paper No.0507002.

Additionally, KWABENA, KYEI, and KWAME, GYEKYE. 2011. *Determinants of Unemployment in Limpopo Province in South Africa: Exploratory Studies*, Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 2(1):54-61, which indicates that that females, postgraduate studies, middle aged, primary, incomplete secondary schooling and race are predictors of unemployment in Limpopo province of South Africa.

3. Analyzing the duration and exit rate to first-time employment

In addition to the key socioeconomic determinants of youth unemployment, it is also important to review materials related to the duration of youth unemployment. Because studying the duration of unemployment has important implication to identify whether the high youth unemployment being experienced is mainly due to a high rate of entry into unemployment or due to its long duration (KINGDON, GEETA and KNIGHT, JOHN. 2000. *The Incidence of Unemployment in South Africa, Centre for the Study of African Economies, University of Oxford).* NICKELL, STEVE. 1980. *A Picture of Male Unemployment in Britain, Economic Journal, 90(363), p 776- 94, December*, also argues that unemployment should be separated into (1) the chances of entering unemployment and (2) the duration of time for which individuals remain unemployed.

As far as known, there are two researches in Ethiopia investigating the duration of unemployment, namely DENDIR, SEIFE. 2006. *Unemployment Duration in Poor Developing Economies: Evidence from Urban Ethiopia. The Journal of Developing Areas 40(1):181–201* and SERNEELS, PIETER. 2002. *Explaining Non-Negative Duration Dependence among the Unemployed*, CSEA; WPS. 2002-13, but the problem with those authors is that they don't give a complete picture on the transition path of young people to first-time employment. Especially, the work of the latter (SERNEELS, PIETER) focuses only on unemployed man, and does not take into account the unemployment of duration women, which makes a partial analysis by itself. Unlike the limited study from Ethiopia, there a number of researches work on the duration of youth unemployment from other countries. For example, Using detailed retrospective data of the ILO's 2005 School-to-Work Transition Survey (SWTS), EGEL, DANIEL AND DJAVADSALEHI-ISFAHANI. 2010. *Youth transitions to employment and marriage in Iran evidence from the school to work*

transition survey, Middle East Development Journal, Vol. 2, No. 1 (2010) 89–120, investigated the Iranian youth transitions to employment and marriage. In their estimation they employed discrete-time hazard models of women's desire and actual labor force participation and found that the duration of unemployment increases secularly with men's but not women's education. The study further shows that parental background significantly affects the transition of men but not women, whereas workforce participation of a mother is the strongest predictor of a daughter's labor force participation. In analysing the impact of human capital, many of the authors find out that the higher the available human capital, the more quickly will the labour force adapt to the changes that economic reform brings and the duration of the unemployment should be shorter (see among others, KUPETS, O. 2006: Determinants of Unemployment Duration in Ukraine, Journal of Comparative Economics, 34(2): 228-247; and SCIULLI, D and SIGNORELLI, M. 2011.*University-to-Work Transitions: An Empirical Analysis on Perugia Graduates*, European Journal of Higher Education, 1). Using the standard Mixed Proportional Hazard specification BART, COCKX and MURIEL, DEJEMEPPE .2002. *Duration Dependence in the Exit Rate out of Unemployment in Belgium: Is It True or Spurious*? IZA DP No. 632; conducted a detailed analysis on the determinants of unemployment duration for Belgian young men and their result demonstrates an overstatement of the extent of true negative duration dependence and said to be largely spurious. Similar to this, with a framework of inactivity and employment destinations and using a more flexible baseline hazard function, ADDISON, JOHN and PORTUGAL, PEDRO. 2001. *Unemployment Duration: Competing and Defective Risks*, IZA Discussion paper series, No. 350, examines the determinants of unemployment duration. MEYER, BRUCE D. 1990. *Unemployment Insurance and Unemployment Spells*, in: Econometrica, Vol.58, No.4, p.757-782, also examines the effects of unemployment compensation on unemployment durations in twelve U.S. states. His analysis is limited to the transition from unemployment to employment, where unobserved heterogeneity is taken into account by adding a heterogeneity component following a gamma distribution of the survival model. Using Computer and Internet Supplements and taking observable characteristics into account. PETER, KUHN and MIKAL, SKUTERUD. 2004. *Internet Job Search and Unemployment Durations.* THE AMERICAN ECONOMIC REVIEW. VOL. 94 NO. 1, are able to find out that Internet searchers have observed characteristics that are typically associated

with shorter unemployment spells. Much in the same way, CUNNINGHAM, WENDY and SALVAGNO JAVIER BUSTOS. 2011. *Youth Employment Transitions in Latin America*, The World Bank, Policy Research Working Paper, 5521, Washington, DC, also mapped out young people's movements between school and work and between employment sectors for Argentina, Brazil, and Mexico. They made use of a panel data workforce surveys that run from 1980s to the early 2000s in these Latin American countries. By estimating duration matrices and decomposing transition matrices into propensity to move and rate of separation, they found that young people across all three countries follow a similar trend over their life cycle. They leave school to spend a short time in the informal sector, move to a formal position for longer spells, and finally become self-employed.

CHAPTER III

WHAT EXPLAINS THE HIGH YOUTH UNEMPLOYMENT IN AFRICA: A CROSS-COUNTRY ANLYSIS

OUTLINES: *1. Introduction—2.An overview of the African youth Labour market—3.What makes the transition to first-time employment more difficult for the African Youth?—3.1.Demographic explosion and Lack of aggregate demand—3.1.1.Youth Bulge and Growing youthful workforce—3.1.2. Lack of aggregate demand—3.2.Education and skills mismatches—3.3.Labour market information shortage—3.4.Low labour productivity and over expectation of the youth—3.5.Rigid employment regulations and Institutional Setbacks—3.6.Ineffectiveness of Youth Employment Interventions and Absence of Youth Policies—4.What policy options for an inclusive labour market*

1. Introduction

The literature review of this chapter aims to present the stylized facts of the African youth labor market and the challenges on the transition to first-time employment across-many of the African countries. Such brief literature review is expected to serve as spring bond for the analysis of youth employment challenges and consequences that may help governments and labour policy in an effort to bring an inclusive labour market in the continent.

2. An overview of the African Youth Labour Market

Comparing to the rest of the world, the size of literature on the African youth labour market is somehow limited. Many of the existing researches on the position of youth in the labour market rather come from the developed world; mainly form the Organisation for Economic Co-operation and Development (OECD) countries. See among others OECD, 2014. *OECD Employment Outlook 2014,* OECD Publishing, July 2014; BELL, F and BLANCHFLOWER, G. 2010. *Youth Unemployment: Déjà Vu?,* IZA Discussion Paper No. 4705; BELL, F. and BLANCHFLOWER, G. 2011.*Young People and the Great Recession*, IZA Discussion Paper No. 5674. Although not as wide as in the developed world, there is also a growing interest on the labour market situation of the developing world. See among others, O'HIGGINS, NIALL.2003.*Trends in the youth labour market in developing and transition countries,* Social Protection Discussion Papers 27876, The World Bank; LAM, DAVID. 2014. *Youth bulges and Youth Unemployment*. IZA World of Labor; CUNNINGHAM, WENDY. 2009. *Unpacking Youth Unemployment in Latin America*, Policy

Research Working Paper 5022, The World Bank. In a nutshell, what all those research works, be it from both the developed or developing ones, conclude is that youth unemployment has become a severe economic and societal problem over recent years. Such conclusion is also confirmed by the INTERNATIONAL LABOUR ORGANIZATION. 2014a. *Global Employment Trends: Risk of a jobless recovery? ILO,* Geneva, which shows that over 74.5 million young people aged 15-24 were globally looking for jobs as of 2014, but unable to find any relevant vacancies—resulting in that young people are hit by unemployment two to three times higher than their adult counterparts in the global labour market.

Coupled with a dire poverty, the youth employment crisis is particularly more challenging and deep-rooted issue in Africa. The AFRICAN ECONOMIC OUTLOOK. 2012. *Promoting youth employment in Africa*, AEO, Annual report, Tunisia, states that Africa has recently fared poorly in the labour market and youth unemployment has become a challenging issue in both economic and social terms. The challenge of youth employment in Africa is especially large (Guarcello, L and Rosati, F. 2007. Child Labor and Youth Employment in Africa. SP discussion paper, No 0704). In connection to this, TIRABOSCHI, M AND ZIMBA, M. 2010. *Productivity, Investment in Human Capital and the Challenge of Youth Employment in Sub-Saharan Africa*: *Comparative Development and Global Responses in the Perspective of School-to-Work Transition,* also conducted out a comparative research on the school to work transition of sub-Saharan region. Especially, they discussed broadly on the role of labour market information and investment in human capital in improving the productivity and employability of the rapidly growing African youth. As policy recommendation they suggest that revisiting the usage of labour market information systems or labour market observatories at national and local level in light of increasing access to information communication technology across the region should be taken into consideration

From the perspective of labour law and industrial relations, Zimba (2012) also researched the impact of the relationship between enterprise, labour, and the state in youth employment initiatives in the Southern Africa region and how those employment initiatives are important for the school to work transition of young people. As the result of such pervasive unemployment and widespread underemployment among the youth, Africa has the highest incidence of poverty in the world (*UNITED NATIONS ECONOMIC COMMISSION FOR*

AFRICA. 2005. "Youth, Education, Skills and Employment." (December), Available on-line (Accessed on 20June 2014)
http://uneca.org/eca_programmes/policy_analysis/publications/youth_educ_skills_emp.pdf.

3. What makes the transition to first-time employment more difficult in Africa?

3.1. Lack of aggregate demand and youth bulge

THE AFRICAN ECONOMIC OUTLOOK. 2012. *Promoting youth employment in Africa*, states that although Africa's economy has expanded rapidly in recent years, it has not kept pace with the growth of its youth population or their need for jobs, with almost 200 million people between 15 and 24 years old. This stock of youth is set to double by 2045. This especially will be more of a problematic as large segment of the youth gets unprecedented access to education; where every graduate is expected to look for a white-collar job. A recent research demographic effect on youth unemployment by LAM, DAVID. 2014. *Youth bulges and youth unemployment: Youth bulges are not major factor Explaining current levels of youth unemployment*. IZA World of Labor, indicate that youth bulge is connected to the high unemployment being experienced in many of the developing countries

3.2.Education and Skills Mismatches

Over recent years, the transition process from school to the workplace, and how to increase its efficiency, is a puzzle for researchers and policymakers (CUNNINGHAM, W; SALVAGNO, J. 2011. *Youth Employment Transitions in Latin America,* the *World Bank Human Development Network Children and Youth Unit).* QUINTINI, G. AND S. MARTIN. 2006. *Starting Well or Losing their Way? The Position of Youth in the Labour Market in OECD Countries*, OECD Social, Employment and Migration Working Papers No 39, OECD Publishing, Paris, also argue that despite the fact that today's young cohorts are better educated than their older counterparts, high youth unemployment remains a serious problem. This reflects a variety of factors, including the relatively high proportion of young people leaving school without a basic educational qualification, the fact that skills acquired in initial education are not always well adapted to labour market requirements, as well as general

labour market conditions and problems in the functioning of labour markets. Their study highlights the trends in youth labour market performance in selected OECD countries over the past decade using a wide range of indicators related to the length of transitions, working conditions and stability of jobs performed by youth; and the level of "over-education". GUARCELLO, LORENZO, MARCO MANACORDA, FURIOROSATI, JEAN FARES, SCOTT LYON AND CRISTINA VALDIVIA. 2005. *School-to-Work Transitions in Sub-Saharan Africa: An overview*, UCW Working Paper, n.15, November 2005. TIRABOSCHI, M AND ZIMBA, M. 2010. *Productivity, Investment in Human Capital and the Challenge of Youth Employment in Sub-Saharan Africa: Comparative Development and Global Responses in the Perspective of School-to-Work Transition,* Labour Studies e-Book series, ADAPT University Press, Number 3, 2012.

The latest study comes from SARA, E and, KOKO S. 2104. *Labour market transitions of young women and men in sub-Saharan Africa*, Work4Youth Publication Series No. 9, ILO, which deals with the labour market transition of young people in eight Sub-Saharan African countries. The Authors used the ILO's school to work transition surveys and found that unemployment among university graduates is a growing concern as the supply of qualified youth exceeds the capacity of the modern economy to produce the professional jobs they expect. They also state that employers in the sample countries increasingly expect new hires to have high levels of education but at the same time have a tendency to say that recent graduates are not employable due to factors such as the lack of technical expertise. GARCIA and FARES, 2008, *Why Is It Important for Africa to Invest in Its Youth? Chapter I in Youth in the African labour market*, the World Bank, also indicates that despite enormous improvements in education over the past decade, the quality of education remains a major hindrance for Africa's youth as they transition into working life. The Authors further elaborate that unemployment among graduates was the primary evidence of the mismatch between education and the labour market, implying that higher educational attainment has not necessarily led to a decrease in the unemployment rate among the youth. They specifically mentioned that youth with secondary and tertiary education in Burundi, Cameroon, Côte d'Ivoire, Kenya, and Madagascar have higher rates of unemployment than youth with lower educational attainment. This reveals that many young people in Africa are leaving school without the skills they need to thrive in the society and find decent jobs. A

related study from the WORLD BANK. 2012. *Jobs for Shared Prosperity: Time for Action the Middle East and North Africa*, the World Bank, V3 No. 72469, found that nearly 40% of employers in North Africa reported that mismatch of skills are a major constraints to business operation. Specifically, this is very serious in Tunisia, where more than 65% university graduate are underemployed or work in jobs that don't use the skills they acquired in school.

3.3. Labour Market Information Shortage

The nature of labour market information in Africa is so scarce and unequally distributed as the result of the existing unorganized labour markt in the continent (RICHARD K. JOHANSON AND ARVIL V.ADANS, 2004, Skill development in Sub-Saharan Africa: the World Bank). There are a number of emerging policy studies recommended increased attention to the development of information about labor markets through feedback from employers and labor market analysis. (*MARITO, GARCIA AND JEAN, FARES. 2008. Youth in Africa's Labor Market, the World Bank).* Semboja, Haji and Hatibu, Haji. 2007. *The youth Employment in East Africa: An Integrated Labour Market Perspective* argued that young people often lack access to the labour market services and support is needed to help them secure decent and productive work. The researchers from *MFPED.2002. Uganda Poverty Reduction Strategy Paper (PRSP) Progress Report 2002 - Summary of Background to the Budget 2002/03, Kampala,* have tried to identify the maim challenges for the jobseekers .These include preference by employers, for experienced workers; lack of work experience during school years; poor quality in the education; inadequate preparation of the youth in career development and low level of information technology; a stigma on the part of the private sector employers; mismatching between schools and labor market long-term transition from school to the labor market; personal factors such as satisfaction level and family dependence; job seekers looking for prominent and better paid jobs *(MANDA et al 2003, "Globalization and Labour Market in Kenya.", Discussion Paper 6, KIPRA, Nairobi Kenya, and SEMBOJA 2005, A Concept Paper on Promoting Opportunities for Youth Employment in East Africa, Prepared for the ILO regional Office and presented at the EAC Meeting of Labour Commissioners, Nairobi, Kenya, December 2005).*

ODADA, J.E.2008, Overview of Structural Transformation of the Namibian Economy. Paper Presented at the 10th Bank of Namibia Annual Symposium, Windhoek and JOHANNES M. ASHIPALA. 2010,

Determinants of Unemployment in Namibia, United Nations Development Programme (UNDP) Namibia,Windhoek, Namibia, argue that there are limited conventional means of looking for jobs because the majority of Namibians live in the rural areas. Since the majority of the population lives in the rural areas, they have limited access to print and electronic media. The types of jobs that can be done by the majority of people in the rural areas are not advertised in the media. Generally, there is no market place in the rural areas (where majority of the population live) of Namibia where people who are looking for jobs and employers can meet. This resulted in a situation in the rural areas where people who are unemployed and are available to work, but are not actively looking for work because they do not know where to look for work.

The study from *ILO 2006:Global Employment Trends for Youth. International Labor Office: Geneva* also emphasizes that Lack of skills such as job search expertise may play a role in high unemployment rates of youth. With regard to job search methods, asking informal networks of relatives and friends about employment possibilities is the most popular choice. Approaching family and friends remains the favoured job-search method by a majority of unemployed youth. Direct enquiry at factories, farms or other workplaces is the second most popular technique. In contrast, formal job seeking channels are used by a minority of unemployed youth. Clearly there is scope to strengthen the capacity of public and private employment services in sub-Saharan Africa as a means to raise their attractiveness as a placement tool for job seeking young men and womens *(SARA ELDER AND KOKO SIAKA KONÉ, 2014. Labour market Transitions of young women and men in sub-Saharan Africa: Work4Youth Publication Series No. 9, ILO, ILO).*

Another factor explaining unemployment is wealth of the family or household. People from poor families have little or no money to actively look for jobs and this causes geographical immobility to areas where jobs are located (BHORAT, H. 2007. *Unemployment in South Africa: Descriptors and Determinants. Paper Presented to the Commission on Growth and Developme*nt, World Bank, Washington DC, and JOHANNES M. ASHIPALA. 2010, *Determinants of Unemployment in Namibia, United Nations Development Programme (UNDP), Windhoek, Namibia).*

Youth and young adults from poor households fare worse in all measures of labor market transitions *(WENDY CUNNINGHAM.2009. Unpacking Youth Unemployment in Latin America, the World Bank).*

3.4. Low labour productivity and unrealistic expectation of the youth

In competitive nations, labor productivity outweighs labor costs. However, it is generally acknowledged that Africa is the least productive region in the world (AFRICAN DEVELOPMENT BANK. 2013. *African Statistical Yearbook,* African Development Bank, Tunisa). Young people are also concentrated in low-skill informal work or in hazardous forms of work that are ill-suited to their age and experience (*LORENZO GUARCELLO, MARCO MANACORDA, FURIO ROSATI,JEAN FARES, SCOTT LYON, AND CRISTINA VALDIVIA. 2008 .School-to-Work Transitions: Regional Overview, Washington DC).* There is also a problem of underemployment, in Namibia, such that people who consider themselves employed have low productivity and it is not easy to distinguish them from those that are unemployed *(JOHANNES M. ASHIPALA. 2010. Determinants of Unemployment in Namibia, United Nations Development Programme (UNDP) Namibia, Windhoek, Namibia). HUSSMANS, R., F. MEHRAN & V. VERMA 1990. Surveys of economically active population, employment, unemployment, and underemployment: An ILO manual on concepts and methods.* International Labour Office,Geneva, distinguish two types of underemployment: visible and invisible. Visible underemployment refers to "insufficiency in the volume of employment" (measured in time units), while characteristics of invisible underemployment are "low income, underutilization of skills and low productivity." They further illustrate that invisible underemployment measures the shortfall in productivity, which can be measured at the worker level: individuals may work at jobs that do not require them to use their skills or human capital, and this also asserted by BECKER. *1975 Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, 2nd ed. Cambridge, MA: National Bureau of Economic Research. JAVIER HERRERA AND SÉBASTIEN MERCERON.2013. Urban labor market in sub-Saharan Africa: African Development forum, and KEES VAN DER GEEST, 2010. Rural Youth Employment in Developing Countries: A Global View, FAO).*

As the productivity issue is a serious one in the labour market. DEON FILMER AND LOUISE FOX, 2014.*Youth Employment in Sub-Saharan Africa:* World Bank, identified that Skills strongly influence where people work and how much they earn. A key problem is that across Africa rapid increases in school participation and educational attainment have come at

the cost of quality, contributing to a serious shortfall in the skills for productive employment. A latest study from GORDON BETCHERMAN. 2013. *Labor Market Institutions: A Review of the Literature* has come to argued that the theoretical expectation about the productivity effects of job security rules is indeterminate. Empirical work, mostly limited to OECD countries, turns out to be somewhat inconclusive as well. Some researchers have identified a positive relationship between the level of employment expectation and productivity. For example, analyzing OECD countries, *BELOT, MICHÈLE, JAN BOONE, AND JAN VAN OURS. 2007. Welfare Improving Employment Protection. Economica. 74: 381-396,* found that expectation increased productivity, but only in environments where workers invested in firm-specific skills. In a subsequent study, BASSANINI, ANDREA and DANIELLE VENN. 2007. Assessing *the Impact of Labour Market Policies on Productivity: A Difference-in-Differences Approach.* OECD Social, Employment, and Migration Working Paper No. 54. Paris, analyzed and drew to conclusion that more protective job security for regular contracts reduced the annual growth rate for labor and multifactor productivity growth in OECD countries by at least 0.02 and 0.04 percentage points, respectively.

3.5.Rigid Employment Regulations and Institutional Setbacks

Even if a huge part of African economies stands beside the legal framework through informality and poor compliance, the regulatory framework of the labor market is surely one of the most rigid throughout the world *(PHILIPPE ALBY, JEAN-PAUL AZAM AND SANDRINE ROSPABÉ. 2005. Labor Institution, Labor-Management Relation, and social dialogue in Africa: World Bank).* It is for this reason that the AFRICAN STATISTICAL YEAR BOOK.20013, reported that labor market reforms to enhance flexibility are regarded as a precondition for economic growth and employment creation. It further recommends that the focus should be on a highly specific set of institutional issues, such as employment protection legislation on hiring and firing modalities; labor unions as a significant source of labor market rigidities; training and unemployment insurance; the regulation of working time and working arrangements; minimum wages; as well as the role of trades unions and collective bargaining. The main legal challenges for excessively high labor costs include overall compensation for workers (wages and benefits, being excessively high); productivity being excessively low; and rigidities in the legal and institutional environment. Likewise, the harmful effect of unions on workers' subsequent employment opportunities has been seen in the discussion paper written by *DAIJI KAWAGUCHI AND TETSUSHI MURAO,* 2014. *Labor*

Market Institutions and Long-Term Effects of Youth Unemployment: IZA Discussion Paper No. 8156. The main ideas of this research is that labor unions tend to advocate protection of employment and higher wages of existing workers at the cost of reducing employment opportunities for potential entrants. When the trade union make an effort to protect insiders' interest at the cost of outsiders' generally reduces the turnover rate and lowers labor-market mobility *(LINDBECK, ASSAR AND DENNIS J. SNOWER. 2001. Insiders versus outsiders. Journal of Economic Perspectives).*

By way of example, in Ethiopia downward rigidity in real wages in the urban sector in times of economic reform has led to high rates of open unemployment, particularly among urban youth (KRISHNAN, PRAMILA, TESFAYE GEBRE SELASSIE, and STEFAN DERCON. 1998. The Urban Labour Market During Structural Adjustment: Ethiopia 1990–1997. CSAE Working Paper WPS/98.9. University of Oxford, Center for the Study of African Economies, U.K.). Another study related to this form *GORDON BETCHERMAN. 2013. Labor Market Institutions: A Review of the Literature: University of Ottawa,* demonstrates that many aspects of employment contracts are regulated through labor laws, which cover the kinds of contracts permitted, the conditions under which workers can be terminated, and the procedures for termination, including severance requirements (OECD. 2004. *Employment Outlook*. Paris: OECD.)

4. What policy Options for an inclusive Labour market

Labour policy makers in Africa are concerned about the difficulties youth face in their transition to work, and they recognize the deleterious consequences of youth unemployment for both youth and the region as a whole (DEON FILMER AND LOUISE FOX. *2014. Youth Employment in Sub-Saharan Africa: World Bank).* Despite this recognition, the response has been fragmented. Most interventions have been small-scale and face severe challenges for sustainability and scalability (MARITO GARCIA AND JEAN FARES. 2008. *Youth in Africa's Labor Market*, World Bank, Washington DC.). Those authors particularly argued that economic growth is a key to broadening employment opportunities for young people. The intention of such claim is that growth increases employment opportunities for everyone

and has a disproportionately large effect on youth. Say for example, *LAM, DAVID. 2006. The Demography of Youth in Developing Countries and Its Economic Implications." Policy Research Working Paper, WPS 4022. World Bank, Washington, DC.),* found out that in Indonesia and Vietnam youth benefited from new employment opportunities in the trade and manufacturing sectors. In a very similar way, *MARITO GARCIA AND JEAN FARES. 2008. Youth in Africa's Labor Market, World Bank, Washington DC,* claimed that large cohorts of young and mobile workers can, in turn, support the expansion of these sectors. They also added that a key part of improving employment opportunities for Africa's youth is to understand and address Africa's overall economic challenges though wide array of industrialization and effective labour policy that take into account the newly coming labour market entrants. The WORLD BANK. 2007. *Youth in the African labour market*, proposes that the challenge of youth employment in africa can basically resolved by broadening opportunities for young people to accumulate and preserve human capital, increasing the capability of youth to take advantage of work opportunities, and providing youth who are not initially equipped to take advantage of opportunities with a second chance.

There is also other study that proposes that in order to facilitate the entry of young people in the labour market, actions that able to improve productivity and raise earnings across the range of employment in agriculture, household enterprises, and the modern wage sector are very important. However, the most pressing priority is to increase the quality of schooling and ensure that it delivers actual learning and skills *(*DEON FILMER AND LOUISE FOX. 2014*.Youth Employment in Sub-Saharan Africa: World Bank). This was also supported by BERNA KAHRAMAN. 2011 Youth Employment and Unemployment in Developing Countries: Macro Challenges with Micro Perspectives University of Massachusetts Boston, by identifying three kinds of programs which include programs that try to ease the transition from school-to-work before any problems arise; address specific needs of youth who are facing difficulties in the labor market; and some arrangements on demand side programs such as minimum wage programs.* In general, the existing literature basically gives emphasis for the fact that to fight unemployment it is important to consider initiatives aimed at improving labour supply (employability) and labour demand (job creation). Employability in this regard implies to a combination of skills, knowledge and attitudes that enhance young

people’s ability to secure and retain a job, progress at work and cope with change; and secure alternative employment if something happens with current job for some reasons.

Appendixes:

CHAPTER I

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APPENDICES

List of Acronyms

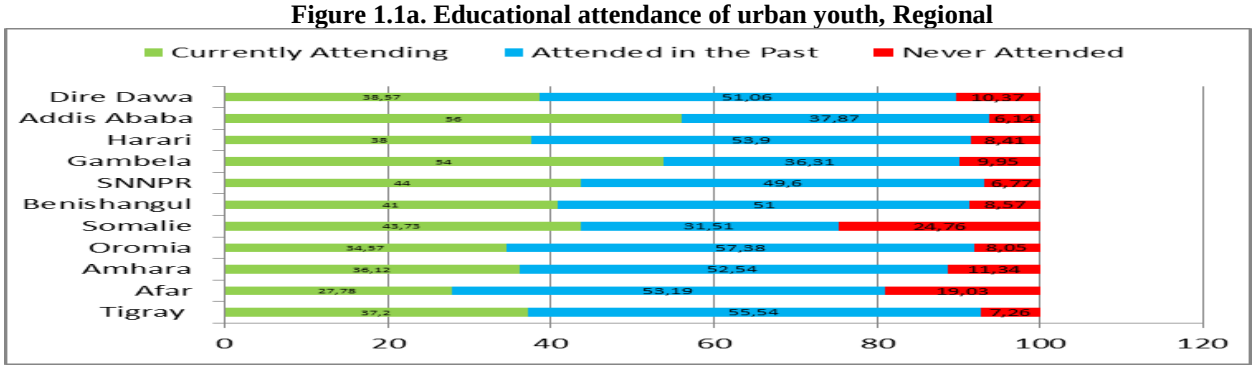
- ADAPT–Association for International and Comparative Studies in the field of Labour Law and Industrial Relations is a non- profit organization set up by Marco Biagi in 2000 with the aim of promoting research in the field of Industrial and Labour Relations from a comparative and an international perspective.
- AfDB = African Development Bank
- AEO =African Economic Outlook
- IMF= International Monetary Fund
- KILM = Key Indicators of Labour Market
- ILO =International Labour Organization
- MoFED= Ministry of Finance and economic development
- NEET =Neither in Employment nor in Education or Trainings
- OECD =Organization Economic Co-operation for Development
- GERD=Grand Ethiopian Renaissance Dam
- SWTS =School to-Work Transition Survey
- GTP= Growth and Transformation Plan
- UNESCO =The United Nations Educational, Scientific and Cultural Organization
- UN =United Nations
- WB =World Bank

Table 1.1a. Regional distribution

Region Freq.	Percent	
Tigray	1,941	7.49
Afar	972	3.75
Amhara	4,745	18.32
Oromia	6,827	26.36
Somalie	1,228	4.74
Benishangul-Gumuz	1,073	4.14
SNNPR	3,131	12.09
Gambela	884	3.41
Harari	666	2.57
Addis Ababa	3,438	13.28
Dire Dawa	993	3.83
Total	25,898	100

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Figure 1.1a. Educational attendance of urban youth, Regional



Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.2a. Current labour market and educational status of youth (%), by region

	Working students	Working non students	Unemployed students	Unemployed non students	Inactive students	Inactive non students
Tigray	9.22	36.39	2.56	15.78	28.33	7.72
Afar	8.41	49.44	1.25	7.78	24.22	8.91
Amhara	10.27	39.08	2.42	14.50	28.05	5.68
Oromia	8.59	40.47	2.25	15.18	26.76	6.75
Somalie	11.26	27.71	2.71	6.71	44.16	7.47
Benishangul	14.48	44.44	1.94	6.42	28.24	4.49
SNNPR	11.75	39.98	2.02	8.50	33.03	4.73
Gambela	27.75	26.24	1.84	3.46	35.75	4.97
Addis Ababa	9.10	28.81	9.28	10.32	36.21	6.28
Dire Dawa	3.41	38.05	3.41	15.85	31.34	7.93

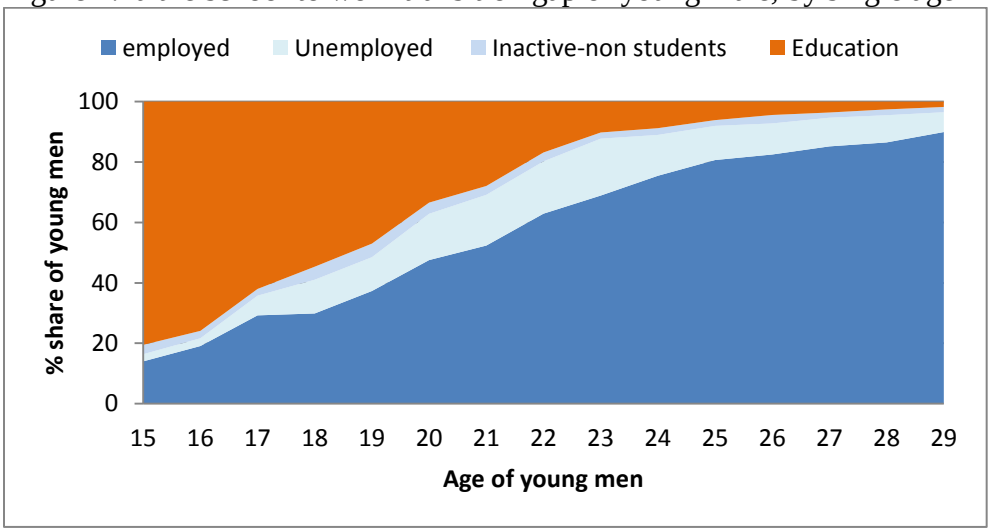
Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.3a. Detail of education or training types

Education or training types	Specific subjects
Education, Humanities and arts	Language and Literature, educational pedagogy, Teaching curriculum, Geography History, Political science, Sociology and Anthropology, Psychology
Social science, Business and law	Business and law: Personal business management, Economics, Book Keeping/Accounting, Secretarial Science, Banking and Finance, Law, Purchasing supply
Science, mathematics & computing	Natural sciences:, Communication, Power, Energy and others like Instrum Biology Chemistry, Geology, Physics, Mathematics, Statistics, Computer Science/Information Science, Health and Physical education, Meteorological Science
Engineering, Manufacturing and construction	Engineering, Manufacturing and construction: Civil Engineering/Building, Mechanical Engineering, Electrical Engineering, Industrial Engineering , Municipality Engineering/Architecture , Other types of Engineering, Dry Land, Automotive technology, Construction technology, Drafting technology, Manufacturing technology, Metal technology, teorological Science, Chemical Engineering, Textile Engineering, Software Engineering
Agriculture and & veterinarian sciences	Agriculture consists of Agriculture, Water and Soil Conservation, forestry Science, Veterinary Science, Animal husbandry
Health and welfare	General medicine, Ophthalmology Pat, Medical Laboratory/Radiology, Pharmacy/Pharmacy Technician, Sanitary Science, Clinical Science/Nursing, Public health Nurse, Health officer,
Senior and Junior Professions, Middle level skilled and Technicians	Professions Home economics, Leather handicraft technology, Decorative work training, Video photographic training, Pottery, Weavery, Wood work/carpentry, Electrical work, Metal welding and binding, Auto Mechanics including motorcycle, Mason, Typing, Tailoring, Driver, Development Agent, Traditional Birth Attendant, Computer Applications and Usage, Lower Scale training of Agriculture, Hotels and Tourism, Police, Military, Cobblestone, Embroidery, Plumbery

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Figure 1.2a the school to work transition gap of young male, by single age



Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.4b. Description of main variables (Young school leavers)

Variable	Obs	Mean	Std. Dev.	Min	Max
unemployment	11431	.2429359	.4288754	0	1
female	11431	.4947074	.4999939	0	1
age1519	11431	.1454816	.3526011	0	1
age2024	11431	.3961158	.4891104	0	1
age2529	11431	.4584026	.4982884	0	1
merried	11431	.3988277	.4896786	0	1
head	11431	.3603359	.4801189	0	1
spouse	11431	.1726008	.3779183	0	1
sondaughter	11431	.2907882	.4541459	0	1
brothersid~r	11431	.176275	.3810707	0	1
primary	11431	.4176363	.4931911	0	1
lowersecon~y	11431	.2584201	.4377852	0	1
uppersecon~y	11431	.0554632	.2288922	0	1
postsecond~y	11431	.1938588	.3953369	0	1
university~s	11431	.0746216	.2627914	0	1
boardpost	11431	.2716298	.4448195	0	1
modernjobs~g	11431	.1206369	.325719	0	1
unempyemen~d	11431	.0095355	.0971873	0	1
relativ~1234	11431	.5213892	.4995641	0	1
Tigray	936	.3034188	.4599803	0	1
Afar	439	.1343964	.3414668	0	1
Amhara	2231	.2725235	.4453576	0	1
Oromia	3470	.273487	.4458129	0	1
Somalia	310	.1967742	.398203	0	1
Benishangul	495	.1252525	.3313399	0	1
SNNPR	1410	.1751773	.3802536	0	1
Gambela	274	.1167883	.3217556	0	1
Harar	327	.1651376	.3718738	0	1
Addisababa	1103	.2647325	.4413908	0	1
Dirdawa	436	.2958716	.4569579	0	1

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.5a. Total estimation of from sample, using weight

Survey: Total estimation

Number of strata = 30 Number of obs = 11431
Number of PSUs = 330 Population size = 2154005
Design df = 300

	Total	Linearized Std. Err.	[95% Conf.	Interval]
unemployment	528299.3	37818.67	453875.8	602722.7
female	1044675	67440.06	911959.3	1177390
age1519	317432	24099.89	270005.7	364858.2
age2024	851461.6	60133.06	733125.6	969797.6
age2529	985111.1	63701.28	859753.2	1110469
merried	861031.4	58799.79	745319.2	976743.7
head	775160.6	53227.48	670414.1	879907.1
spouse	382252.8	28281.63	326597.3	437908.3
sondaughter	629090	43915.55	542668.4	715511.5
brothersidter	367501.3	26478.02	315395.1	419607.5
primary	876545.4	60157.58	758161.1	994929.7
lowersecondary	566843.7	38788.43	490511.9	643175.6
uppersecondary	133844.9	13672.48	106938.8	160751
postsecondary	418349.4	31029.77	357285.8	479413
universitygraduates	158421.2	12090.58	134628.1	182214.3
boardpost	575067	39559.81	497217.2	652916.9
modernjobsesearching	267468.4	21015.49	226112	308824.9
unempyementdcard	21613.18	3153.397	15407.6	27818.76
relatives1234	1117699	74072.96	971930.5	1263467
Tigray	56200.14	10862.29	34824.21	77576.07
Afar	3741.26	881.1926	2007.158	5475.362
Amhara	113842.7	21587.94	71359.75	156325.7
Oromia	171381.1	32437.05	107548.1	235214.1
Somalia	6777.97	1651.149	3528.668	10027.27
Benishangul	2697.72	639.2158	1439.805	3955.635
SNNPR	57935.25	11341.72	35615.84	80254.66
Gambela	1199.38	341.7015	526.9446	1871.815
Harar	2626.39	570.9485	1502.819	3749.961
Addisababa	100179.1	19701.69	61408.12	138950.1
Dirdawa	11718.19	2308.923	7174.453	16261.93

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.6a. Survey logistic regression

Survey: Logistic regression

Number of strata	= 30	Number of obs	= 11431
Number of PSUs	= 330	Population size	= 2154004.7
		Design df	= 300
		F(24, 277)	= 45.47
		Prob > F	= 0.0000

unemployment	Coef.	Linearized Std. Err.	t	P>|t|	[95% Conf.	Interval]
female	.6664117	.0695213	9.59	0.000	.5296005	.8032229
age2024	.1114527	.0988864	1.13	0.261	-.0831461	.3060515
age2529	-.2726062	.1018868	-2.68	0.008	-.4731095	-.0721029
merried	.3230355	.0969179	3.33	0.001	.1323104	.5137605
spouse	1.936905	.1207591	16.04	0.000	1.699262	2.174547
sondaughter	2.005845	.1138943	17.61	0.000	1.781712	2.229978
brothersidter	1.389434	.1206589	11.52	0.000	1.151989	1.626879
lowersecondary	.4158763	.0755139	5.51	0.000	.2672723	.5644803
uppersecondary	.2478384	.1433372	1.73	0.085	-.0342353	.5299121
postsecondary	.198868	.0915053	2.17	0.031	.0187945	.3789416
universitygraduates	-.3356184	.161332	-2.08	0.038	-.6531041	-.0181327
boardpost	-1.07499	.0934313	-11.51	0.000	-1.258854	-.8911262
modernjobsesearching	-.5072583	.1118518	-4.54	0.000	-.7273718	-.2871447
unempyementdcard	-.3265971	.2681456	-1.22	0.224	-.8542815	.2010874
Tigray	.2420545	.1205516	2.01	0.046	.0048207	.4792884
Afar	-.4503076	.2255076	-2.00	0.047	-.8940848	-.0065305
Amhara	.1276716	.1172615	1.09	0.277	-.1030877	.3584308
Oromia	.0528343	.108646	0.49	0.627	-.1609704	.266639
Somalie	-.2677247	.2216685	-1.21	0.228	-.7039468	.1684973
Benishangul	-.8317541	.1880908	-4.42	0.000	-1.201899	-.4616097
SNNPR	-.2964107	.1140768	-2.60	0.010	-.5209028	-.0719186
Gambela	-.809098	.2434302	-3.32	0.001	-1.288145	-.330051
Harar	-.5222936	.1785255	-2.93	0.004	-.8736146	-.1709727
Dirdawa	.2118191	.1408804	1.50	0.134	-.0654199	.489058
_cons	-2.680492	.1487579	-18.02	0.000	-2.973233	-2.38775

. estat gof

Logistic model for unemployment, goodness-of-fit test

F(9,292) = 11.95
Prob > F = 0.0000

. mfx

Marginal effects after svy:logit
y = Pr(unemployment) (predict)
= .20425322

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
female*	.108986	.01143	9.53	0.000	.086579	.131393	.484992
age2024*	.0182401	.01632	1.12	0.264	-.01374	.05022	.395292
age2529*	-.0440072	.01629	-2.70	0.007	-.075931	-.012083	.457339
merried*	.0535118	.01636	3.27	0.001	.021448	.085576	.399735
spouse*	.404062	.02624	15.40	0.000	.352624	.4555	.177461
sondau~r*	.3900031	.02336	16.70	0.000	.344218	.435788	.292056
brothe~r*	.2798952	.02731	10.25	0.000	.226367	.333424	.170613
lowers~y*	.0715167	.01381	5.18	0.000	.044443	.09859	.263158
uppers~y*	.0428645	.0263	1.63	0.103	-.008685	.094414	.062138
postse~y*	.0334856	.01599	2.09	0.036	.00215	.064822	.194219
univer~s*	-.0499843	.02204	-2.27	0.023	-.093176	-.006792	.073547
boardp~t*	-.1503211	.01044	-14.39	0.000	-.170789	-.129853	.266976
modern~g*	-.07334	.01403	-5.23	0.000	-.100836	-.045844	.124173
unempy~d*	-.0481195	.03542	-1.36	0.174	-.117538	.021299	.010034
Tigray*	.0416733	.02179	1.91	0.056	-.001038	.084384	.085713
Afar*	-.0638356	.02762	-2.31	0.021	-.117978	-.009693	.010272
Amhara*	.0212257	.01991	1.07	0.286	-.017799	.060251	.197204
Oromia*	.0086351	.01786	0.48	0.629	-.026363	.043633	.32221
Somalie*	-.0402231	.03067	-1.31	0.190	-.100332	.019886	.018143
Benish~l*	-.10441	.01784	-5.85	0.000	-.139367	-.069453	.010941
SNNPR*	-.0452273	.01642	-2.75	0.006	-.077416	-.013039	.147809
Gambela*	-.1019626	.02289	-4.45	0.000	-.146834	-.057091	.004849
Harar*	-.0723038	.02094	-3.45	0.001	-.113338	-.031269	.007411
Dirdawa*	.0365021	.02548	1.43	0.152	-.013434	.086438	.01877

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.7a.Logit model of sub sample estimation for female

Survey: Logistic regression

Number of strata	= 30	Number of obs	= 11431
Number of PSUs	= 330	Population size	= 2154004.7
		Subpop. no. of obs	= 5655
		Subpop. size	= 1044674.8
		Design df	= 300
		F(23, 278)	= 17.98
		Prob > F	= 0.0000

unemployment	Coef.	Linearized Std. Err.	t	P>|t|	[95% Conf.	Interval]
age2024	.3183866	.1345887	2.37	0.019	.0535291	.5832441
age2529	-.1345443	.138652	-0.97	0.333	-.407398	.1383094
merried	.6003528	.1296566	4.63	0.000	.3452012	.8555045
spouse	1.97919	.1508422	13.12	0.000	1.682347	2.276033
sondaughter	1.885506	.1488911	12.66	0.000	1.592503	2.17851
brothersidter	1.246179	.1649783	7.55	0.000	.9215178	1.57084
lowersecondary	.4036928	.0983789	4.10	0.000	.2100928	.5972928
uppersecondary	.3682594	.1943639	1.89	0.059	-.0142299	.7507487
postsecondary	.0824696	.1271459	0.65	0.517	-.1677413	.3326804
universitygraduates	-.617605	.2568559	-2.40	0.017	-1.123072	-.1121376
boardpost	-1.942196	.13048	-14.89	0.000	-2.198968	-1.685424
modernjobsesearching	-.8852173	.1391592	-6.36	0.000	-1.159069	-.6113656
unempyementdcard	-.7201494	.353795	-2.04	0.043	-1.416384	-.0239152
Tigray	.1135668	.1303994	0.87	0.384	-.1430466	.3701802
Afar	-.4936433	.2711154	-1.82	0.070	-1.027172	.0398855
Amhara	.0800318	.1332305	0.60	0.548	-.1821529	.3422166
Oromia	-.0012539	.1207779	-0.01	0.992	-.238933	.2364252
Somalie	-.2685329	.2280138	-1.18	0.240	-.7172419	.1801762
Benishangul	-1.130125	.2655632	-4.26	0.000	-1.652728	-.6075228
SNNPR	-.4315469	.1396165	-3.09	0.002	-.7062986	-.1567953
Gambela	-.7414116	.2625844	-2.82	0.005	-1.258152	-.224671
Harar	-.5434612	.2368302	-2.29	0.022	-1.00952	-.0774023
Dirdawa	.1110063	.1661026	0.67	0.504	-.2158674	.43788
_cons	-1.824311	.1760845	-10.36	0.000	-2.170828	-1.477794

. estat gof

Logistic model for unemployment, goodness-of-fit test

F(9,292) = 48.82
Prob > F = 0.0000

. mfx

Marginal effects after svy:logit
y = Pr(unemployment) (predict)
= .26737892

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
age2024*	.0632771	.0272	2.33	0.020	.009971	.116584	.395292
age2529*	-.0262817	.02695	-0.98	0.330	-.079109	.026546	.457339
merried*	.1204763	.02642	4.56	0.000	.068699	.172253	.399735
spouse*	.4458464	.03085	14.45	0.000	.385379	.506314	.177461
sondau~r*	.4071553	.03107	13.10	0.000	.346262	.468049	.292056
brothe~r*	.2785653	.03862	7.21	0.000	.202875	.354256	.170613
lowers~y*	.0823982	.02109	3.91	0.000	.041065	.123732	.263158
uppers~y*	.0772387	.0432	1.79	0.074	-.007431	.161909	.062138
postse~y*	.0163425	.02551	0.64	0.522	-.033649	.066334	.194219
univer~s*	-.1055951	.03737	-2.83	0.005	-.178834	-.032356	.073547
boardp~t*	-.2992332	.0134	-22.33	0.000	-.325494	-.272972	.266976
modern~g*	-.1455519	.01845	-7.89	0.000	-.18172	-.109384	.124173
unempy~d*	-.1170396	.04524	-2.59	0.010	-.205711	-.028368	.010034
Tigray*	.0227263	.02664	0.85	0.394	-.029483	.074936	.085713
Afar*	-.0854304	.04068	-2.10	0.036	-.165153	-.005708	.010272
Amhara*	.0158524	.02674	0.59	0.553	-.036565	.06827	.197204
Oromia*	-.0002456	.02365	-0.01	0.992	-.046604	.046113	.32221
Somalie*	-.0493548	.03905	-1.26	0.206	-.125896	.027187	.018143
Benish~l*	-.1631862	.02621	-6.23	0.000	-.214562	-.111811	.010941
SNNPR*	-.0783608	.02314	-3.39	0.001	-.123705	-.033017	.147809
Gambela*	-.1195033	.03347	-3.57	0.000	-.185094	-.053913	.004849
Harar*	-.0927058	.0345	-2.69	0.007	-.160329	-.025083	.007411
Dirdawa*	.022277	.03408	0.65	0.513	-.044513	.089067	.01877

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Source: Elaboration on 2012 Urban Labor Market Survey data, Ethiopia

Table 1.8a.Logit model of sub sample estimation for male

Survey: Logistic regression

Number of strata	= 30	Number of obs	= 11431
Number of PSUs	= 330	Population size	= 2154004.7
		Subpop. no. of obs	= 5776
		Subpop. size	= 1109329.9
		Design df	= 300
		F(23, 278)	= 13.72
		Prob > F	= 0.0000

unemployment	Coef.	Linearized Std. Err.	t	P>|t|	[95% Conf.	Interval]
age2024	-.1515186	.150715	-1.01	0.316	-.4481112	.1450739
age2529	-.4692858	.1652809	-2.84	0.005	-.7945426	-.1440289
merried	-.1144093	.1610006	-0.71	0.478	-.4312428	.2024241
spouse	1.186029	.3763421	3.15	0.002	.4454247	1.926634
sondaughter	1.820399	.1805376	10.08	0.000	1.465118	2.175679
brothersidter	1.269324	.1951043	6.51	0.000	.885378	1.653271
lowersecondary	.5649557	.1175517	4.81	0.000	.3336255	.796286
uppersecondary	.353275	.2428141	1.45	0.147	-.1245596	.8311096
postsecondary	.5751283	.1406742	4.09	0.000	.2982952	.8519615
universitygraduates	.0829028	.2001065	0.41	0.679	-.3108874	.4766931
boardpost	.2976567	.128313	2.32	0.021	.0451492	.5501642
modernjobsesearching	.1015559	.1713911	0.59	0.554	-.2357252	.4388369
unempyementdcard	.4464267	.4225945	1.06	0.292	-.3851984	1.278052
Tigray	.2846034	.2231163	1.28	0.203	-.1544677	.7236746
Afar	-.5041678	.4734501	-1.06	0.288	-1.435872	.4275361
Amhara	.125111	.1758329	0.71	0.477	-.2209112	.4711332
Oromia	.1555972	.1679853	0.93	0.355	-.1749815	.4861758
Somalie	-.2617062	.4377019	-0.60	0.550	-1.123061	.5996487
Benishangul	-.3434426	.2359108	-1.46	0.146	-.8076921	.1208069
SNNPR	-.09762	.1839435	-0.53	0.596	-.459603	.264363
Gambela	-1.182369	.5765858	-2.05	0.041	-2.317034	-.0477044
Dirdawa	.3675912	.2296255	1.60	0.110	-.0842896	.819472
Harar	-.4467191	.2815567	-1.59	0.114	-1.000795	.1073571
_cons	-2.941864	.258131	-11.40	0.000	-3.44984	-2.433887

```
. estat gof

Logistic model for unemployment, goodness-of-fit test

                    F(9,292) =         37.19
                    Prob > F =          0.0000

. mfx

Marginal effects after svy:logit
      y  = Pr(unemployment) (predict)
         =  .13593218
```

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
age2024*	-.0175967	.01728	-1.02	0.308	-.051456	.016263	.395292
age2529*	-.0544707	.01913	-2.85	0.004	-.091967	-.016974	.457339
merried*	-.0133281	.01853	-0.72	0.472	-.049654	.022998	.399735
spouse*	.1813862	.07498	2.42	0.016	.034426	.328346	.177461
sondau~r*	.2787517	.03425	8.14	0.000	.211618	.345886	.292056
brothe~r*	.1982847	.03785	5.24	0.000	.124097	.272472	.170613
lowers~y*	.0732033	.01691	4.33	0.000	.040058	.106348	.263158
uppers~y*	.0463565	.0351	1.32	0.187	-.022445	.115158	.062138
postse~y*	.0766986	.02111	3.63	0.000	.035324	.118073	.194219
univer~s*	.0099906	.02467	0.40	0.685	-.038359	.05834	.073547
boardp~t*	.0367861	.01654	2.22	0.026	.004373	.069199	.266976
modern~g*	.0122637	.02128	0.58	0.564	-.029453	.05398	.124173
unempy~d*	.0612142	.0667	0.92	0.359	-.069511	.19194	.010034
Tigray*	.0363921	.03071	1.19	0.236	-.023799	.096583	.085713
Afar*	-.0493553	.03816	-1.29	0.196	-.124152	.025442	.010272
Amhara*	.015106	.02165	0.70	0.485	-.027335	.057547	.197204
Oromia*	.0186511	.0204	0.91	0.360	-.021326	.058628	.32221
Somalie*	-.0280197	.04269	-0.66	0.512	-.111699	.05566	.018143
Benish~l*	-.0356478	.02205	-1.62	0.106	-.078863	.007567	.010941
SNNPR*	-.0111823	.02071	-0.54	0.589	-.051772	.029407	.147809
Gambela*	-.0903478	.02666	-3.39	0.001	-.142594	-.038102	.004849
Dirdawa*	.0489775	.03383	1.45	0.148	-.01732	.115275	.01877
Harar*	-.0446091	.02416	-1.85	0.065	-.091963	.002745	.007411

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Table1.9a. Secondary school leavers and above (lower secondary to university graduates): shift in educational policy

Survey: Logistic regression

Number of strata	= 30	Number of obs	= 6657
Number of PSUs	= 329	Population size	= 1277459.2
		Design df	= 299
		F(21, 279)	= 22.04
		Prob > F	= 0.0000

unemployment	Coef.	Linearized Std. Err.	t	P>|t|	[95% Conf.	Interval]
female	.5436784	.0842176	6.46	0.000	.3779441	.7094128
age2024	-.3524046	.1295928	-2.72	0.007	-.6074341	-.0973751
age2529	-.8395063	.1338972	-6.27	0.000	-1.103007	-.576006
merried	.3081327	.1291763	2.39	0.018	.0539228	.5623425
spouse	1.16387	.1904435	6.11	0.000	.7890908	1.53865
sondaughter	1.751158	.1411093	12.41	0.000	1.473465	2.028851
brothersidter	1.411283	.1521737	9.27	0.000	1.111815	1.71075
newpolicy	.0763537	.1048855	0.73	0.467	-.1300537	.282761
boardpost	-.1283514	.1114325	-1.15	0.250	-.3476426	.0909399
modernjobsesearching	-.3161613	.140448	-2.25	0.025	-.592553	-.0397696
unempyementdcard	.4847069	.3853274	1.26	0.209	-.2735902	1.243004
Tigray	.1096749	.1576228	0.70	0.487	-.2005156	.4198654
Afar	-.3790636	.3236127	-1.17	0.242	-1.015911	.2577834
Amhara	.2396201	.1270345	1.89	0.060	-.010375	.4896151
Oromia	.1631912	.1278373	1.28	0.203	-.0883836	.414766
Somalie	-.6725574	.2807066	-2.40	0.017	-1.224968	-.1201466
Benishangul	-.8459278	.2658183	-3.18	0.002	-1.36904	-.322816
SNNPR	-.1475376	.1432293	-1.03	0.304	-.4294028	.1343275
Gambela	-.8009518	.3486979	-2.30	0.022	-1.487165	-.1147389
Harar	-.4005555	.2122957	-1.89	0.060	-.8183386	.0172275
Dirdawa	.1945186	.1939879	1.00	0.317	-.1872358	.5762731
_cons	-2.112954	.2034704	-10.38	0.000	-2.51337	-1.712539

. mfx

Marginal effects after svy:logit
y = Pr(unemployment) (predict)
= .22084652

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
female*	.0945933	.01493	6.33	0.000	.065324	.123862	.461409
age2024*	-.0598576	.02183	-2.74	0.006	-.10264	-.017075	.435032
age2529*	-.1424762	.02271	-6.28	0.000	-.186978	-.097975	.47228
merried*	.054586	.02357	2.32	0.021	.00838	.100792	.326606
spouse*	.2406214	.04346	5.54	0.000	.155439	.325804	.146742
sondau~r*	.3351305	.02735	12.25	0.000	.281521	.38874	.354968
brothe~r*	.2983474	.03489	8.55	0.000	.229969	.366726	.148529
newpol~y*	.0129836	.0176	0.74	0.461	-.021507	.047474	.776173
boardp~t*	-.0217565	.01855	-1.17	0.241	-.05812	.014607	.292231
modern~g*	-.0508149	.02076	-2.45	0.014	-.0915	-.010129	.125975
unempy~d*	.0941506	.08282	1.14	0.256	-.068171	.256472	.008402
Tigray*	.0193427	.02846	0.68	0.497	-.036438	.075124	.09161
Afar*	-.0584625	.04439	-1.32	0.188	-.145459	.028534	.0079
Amhara*	.042868	.02355	1.82	0.069	-.003286	.089022	.201185
Oromia*	.0285858	.02283	1.25	0.211	-.016162	.073334	.301796
Somalie*	-.0950072	.03178	-2.99	0.003	-.157289	-.032726	.013172
Benish~l*	-.1130785	.02661	-4.25	0.000	-.165233	-.060924	.010689
SNNPR*	-.0246322	.02319	-1.06	0.288	-.070079	.020815	.139295
Gambela*	-.1082456	.0354	-3.06	0.002	-.177621	-.03887	.004776
Harar*	-.0613686	.02884	-2.13	0.033	-.117902	-.004835	.007249
Dirdawa*	.0352173	.03671	0.96	0.337	-.03673	.107164	.016288

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Table 1.10a: Secondary school leavers and above (lower secondary to university graduates): Training effect

```
Survey: Logistic regression

Number of strata   =        30                  Number of obs      =      6657
Number of PSUs     =       329                  Population size    = 1277459.2
                                                Design df          =       299
                                                F(  25,    275)    =     18.15
                                                Prob > F           =    0.0000
```

unemployment	Coef.	Linearized Std. Err.	t	P>|t|	[95% Conf.	Interval]
female	.5488957	.0847639	6.48	0.000	.3820864	.7157051
age2024	-.3051021	.1300725	-2.35	0.020	-.5610757	-.0491285
age2529	-.806463	.1322494	-6.10	0.000	-1.066721	-.5462055
merried	.2963987	.1296589	2.29	0.023	.041239	.5515583
spouse	1.142158	.1917518	5.96	0.000	.7648041	1.519512
sondaughter	1.729302	.1402265	12.33	0.000	1.453346	2.005258
brothersidter	1.37764	.1550581	8.88	0.000	1.072496	1.682783
vocational12	-.1902182	.0850491	-2.24	0.026	-.3575889	-.0228476
engineering123	-.6931071	.3846992	-1.80	0.073	-1.450168	.0639539
health	-.7287864	.3542948	-2.06	0.041	-1.426014	-.0315591
agrihusbanday	.023504	.4243446	0.06	0.956	-.8115763	.8585844
naturalscience	-.3621782	.3442977	-1.05	0.294	-1.039732	.3153755
boardpost	-.1057586	.1125744	-0.94	0.348	-.3272971	.1157798
modernjobsesearching	-.2969393	.1409228	-2.11	0.036	-.5742654	-.0196131
unempyementdcard	.52077	.3845966	1.35	0.177	-.2360891	1.277629
Tigray	.1123231	.1583557	0.71	0.479	-.1993097	.4239559
Afar	-.3802773	.3181378	-1.20	0.233	-1.00635	.2457955
Amhara	.2441096	.1272732	1.92	0.056	-.0063551	.4945744
Oromia	.1698054	.1263442	1.34	0.180	-.0788312	.418442
Somalie	-.6407336	.2799157	-2.29	0.023	-1.191588	-.0898791
Benishangul	-.8311366	.2650989	-3.14	0.002	-1.352833	-.3094406
SNNPR	-.1404189	.1436621	-0.98	0.329	-.4231358	.142298
Gambela	-.797013	.3435325	-2.32	0.021	-1.473061	-.1209651
Harar	-.4005592	.2138497	-1.87	0.062	-.8214004	.020282
Dirdawa	.2227085	.1944904	1.15	0.253	-.160035	.605452
_cons	-1.981199	.1905253	-10.40	0.000	-2.356139	-1.606259

```
. mfx

Marginal effects after svy:logit
      y  = Pr(unemployment) (predict)
         =  .21959987
```

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
female*	.0951332	.01501	6.34	0.000	.065722	.124545	.461409
age2024*	-.0517021	.02185	-2.37	0.018	-.094531	-.008873	.435032
age2529*	-.1363991	.02224	-6.13	0.000	-.179981	-.092817	.47228
merried*	.0522458	.02352	2.22	0.026	.00615	.098342	.326606
spouse*	.2349336	.04354	5.40	0.000	.149588	.32028	.146742
sondau~r*	.3297607	.0269	12.26	0.000	.277035	.382486	.354968
brothe~r*	.2897281	.03548	8.17	0.000	.220198	.359259	.148529
vocat~12*	-.0323136	.01439	-2.25	0.025	-.060518	-.004109	.418298
engi~123*	-.0970381	.04194	-2.31	0.021	-.179244	-.014832	.017896
health*	-.100893	.03794	-2.66	0.008	-.175249	-.026537	.017278
agrihu~y*	.0040541	.07367	0.06	0.956	-.140335	.148444	.007911
natura~e*	-.0560932	.04782	-1.17	0.241	-.149822	.037636	.024013
boardp~t*	-.0179009	.01877	-0.95	0.340	-.054687	.018885	.292231
modern~g*	-.0477226	.02091	-2.28	0.022	-.088697	-.006748	.125975
unempy~d*	.1016207	.08352	1.22	0.224	-.062074	.265316	.008402
Tigray*	.0197433	.02851	0.69	0.489	-.036132	.075619	.09161
Afar*	-.0583663	.04341	-1.34	0.179	-.143439	.026707	.0079
Amhara*	.0435334	.02354	1.85	0.064	-.002597	.089664	.201185
Oromia*	.0296475	.0225	1.32	0.188	-.014451	.073746	.301796
Somalie*	-.0909744	.03224	-2.82	0.005	-.15416	-.027788	.013172
Benish~l*	-.1110783	.02669	-4.16	0.000	-.163382	-.058775	.010689
SNNPR*	-.0233803	.02324	-1.01	0.314	-.068936	.022175	.139295
Gambela*	-.107328	.03482	-3.08	0.002	-.175576	-.03908	.004776
Harar*	-.0610936	.02891	-2.11	0.035	-.117751	-.004436	.007249
Dirdawa*	.040454	.03714	1.09	0.276	-.032344	.113252	.016288

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Table 1.11a. Parametric analysis of discrete-time hazard model

Cox regression -- Breslow method for ties

No. of subjects =	2777	Number of obs =	2777
No. of failures =	1177		
Time at risk =	59499		
		LR chi2(15) =	102.95
Log likelihood =	-8445.4023	Prob > chi2 =	0.0000

_t	Haz. Ratio	Std. Err.	z	P>|z|	[95% Conf.	Interval]
female	.8218057	.0591936	-2.72	0.006	.7136056	.9464117
age2024	1.266761	.119918	2.50	0.012	1.052242	1.525014
age2529	1.258263	.1236696	2.34	0.019	1.037792	1.525572
merried	1.168229	.1177176	1.54	0.123	.9588619	1.423312
spouse	.6058551	.0567067	-5.35	0.000	.5043107	.7278458
sondaughter	.6718148	.0687764	-3.89	0.000	.5496784	.8210895
brothersidter	.7847799	.0892428	-2.13	0.033	.6279886	.9807175
lowersecondary	.730137	.053059	-4.33	0.000	.6332098	.8419011
uppersecondary	.7709417	.0990575	-2.02	0.043	.59931	.9917257
postsecondary	.7964838	.0734151	-2.47	0.014	.6648415	.9541912
universitygraduates	.3824281	.0891458	-4.12	0.000	.242173	.6039028
boardpost	1.094401	.0881303	1.12	0.263	.9346109	1.281511
modernjobsesearching	1.394759	.1177244	3.94	0.000	1.182098	1.645677
unempyementdcard	.94218	.2873997	-0.20	0.845	.5161864	1.719096
Addisababa	.9405454	.0915088	-0.63	0.529	.7772551	1.138141

Loglogistic regression -- accelerated failure-time form
Gamma frailty

No. of subjects =	2777	Number of obs =	2777
No. of failures =	1177		
Time at risk =	59499		
		LR chi2(15) =	112.80
Log likelihood =	-3079.6467	Prob > chi2 =	0.0000

_t	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
female	.2337365	.0936542	2.50	0.013	.0501777	.4172954
age2024	-.3005418	.1172212	-2.56	0.010	-.5302911	-.0707925
age2529	-.2552423	.1231766	-2.07	0.038	-.496664	-.0138206
merried	-.2377462	.1314944	-1.81	0.071	-.4954705	.019978
spouse	.8067796	.1351474	5.97	0.000	.5418956	1.071664
sondaughter	.5133935	.1319497	3.89	0.000	.2547769	.7720101
brothersidter	.3030042	.1499696	2.02	0.043	.0090692	.5969391
lowersecondary	.4661397	.0966838	4.82	0.000	.276643	.6556365
uppersecondary	.3725218	.1693525	2.20	0.028	.040597	.7044465
postsecondary	.3307619	.1187882	2.78	0.005	.0979412	.5635825
universitygraduates	1.179927	.2489419	4.74	0.000	.6920103	1.667845
boardpost	.0022378	.1040518	0.02	0.983	-.2017	.2061757
modernjobsesearching	-.3640754	.1146147	-3.18	0.001	-.5887161	-.1394346
unempyementdcard	.2408136	.3878473	0.62	0.535	-.5193532	1.00098
Addisababa	.065225	.1295085	0.50	0.615	-.188607	.3190569
_cons	2.712125	.1846646	14.69	0.000	2.350189	3.074061
/ln_gam	-.1527877	.0437248	-3.49	0.000	-.2384867	-.0670888
/ln_the	-.7963745	.3380065	-2.36	0.018	-1.458855	-.1338938
gamma	.8583119	.0375295			.7878191	.9351122
theta	.450961	.1524278			.2325023	.8746829

Likelihood-ratio test of theta=0: chibar2(01) = 9.95 Prob>=chibar2 = 0.001

Loglogistic regression -- accelerated failure-time form
Inverse-Gaussian frailty

No. of subjects =	2777	Number of obs =	2777
No. of failures =	1177		
Time at risk =	59499		
		LR chi2(15) =	112.86
Log likelihood =	-3075.416	Prob > chi2 =	0.0000

_t	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
female	.2323525	.0930246	2.50	0.012	.0500276	.4146775
age2024	-.3138069	.1158992	-2.71	0.007	-.5409652	-.0866486
age2529	-.2571926	.1220735	-2.11	0.035	-.4964522	-.017933
merried	-.2332783	.1304759	-1.79	0.074	-.4890063	.0224498
spouse	.799284	.1354524	5.90	0.000	.5338022	1.064766
sondaughter	.5027376	.1307609	3.84	0.000	.2464508	.7590243
brothersidter	.2749863	.1495908	1.84	0.066	-.0182063	.5681789
lowersecondary	.4556562	.0967831	4.71	0.000	.2659648	.6453475
uppersecondary	.3812556	.167664	2.27	0.023	.0526402	.709871
postsecondary	.3354212	.1179115	2.84	0.004	.1043189	.5665235
universitygraduates	1.17672	.2416496	4.87	0.000	.703095	1.650344
boardpost	.0369099	.1026505	0.36	0.719	-.1642815	.2381013
modernjobsesearching	-.3276769	.1140072	-2.87	0.004	-.551127	-.1042268
unempyementdcard	.2535217	.3878665	0.65	0.513	-.5066825	1.013726
Addisababa	.0508273	.1290297	0.39	0.694	-.2020662	.3037208
_cons	2.517517	.1918106	13.13	0.000	2.141575	2.893459
/ln_gam	-.2542248	.0560896	-4.53	0.000	-.3641584	-.1442912
/ln_the	.1669334	.3289207	0.51	0.612	-.4777394	.8116062
gamma	.7755175	.0434985			.6947811	.8656357
theta	1.181676	.3886776			.6201838	2.251521

Likelihood-ratio test of theta=0: chibar2(01) = 18.41 Prob>=chibar2 = 0.000