"Unemployment in Africa: how appropriate is the current definition for policy purposes"

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Abstract

The paper seeks to establish that the concept of unemployment defined by the ILO appears to be too narrow within the context of many developing countries including Ghana. This phenomenon tends to put many jobless adults into the discouraged worker category thereby giving a misleading picture about the unemployment situation in these countries. In addition, the structure of the labour market in many African countries is such that informality takes the face of unemployment. The paper seeks to provide evidence to show a trade-off between informality or vulnerability of employment and unemployment rates based on a scatter plot and a simple correlation analysis. The paper also adopts descriptive approach based on simple diagrams to show the extent of discouraged worker effect on the phenomenon of unemployment. Based on these observations, the paper recommends the adoption of a broader definition of unemployment within the Ghanaian context to show the true picture of the phenomenon to inform policy formulation. Additionally, labour market challenge need not be restricted to the phenomenon of unemployment but rather extend to cover the poor quality of employment associated with informality.

Introduction

The design and implementation of efficient national policies for employment generation and poverty reduction requires a deep understanding of the structure of the labour market. Quite often, policy makers and analysts are quick to single out unemployment as a major labour market challenge while other important elements such as poor quality of employment are overlooked. Unemployment is related directly to joblessness though the two are conceptually different. It is identified as a major economic, political and social problem in many countries. Social vices such as prostitution, robbery, CIBER crime and teenage pregnancies are sometimes blamed on unemployment. High insecurity in SSA & the recent upheaval in North Africa have been linked to the phenomenon of unemployment. Unemployment poses economic cost in the form of

revenue and output losses. It also implies a waste of human resources and can cause extreme personal hardship for the unemployed including psychological costs. Governments all over the world often vow to uproot the phenomenon but find it a tough nut to crack. They often blame their predecessors for doing little to reduce the rate of unemployment but end up accused of the same offence during the subsequent round of election. Despite the fact that the issue has been a "hot" one globally, statistical evidence does not seem to show that it is a big problem in many African countries. Indeed, while countries such as Lesotho, South Africa, Botswana, Namibia, Zambia, Sudan, Tunisia and Algeria have unemployment rate ranging from 10.0% to 25.3% countries like Benin and Madagascar have unemployment rate of less than 3%. The question that remains unanswered are (i) that is it a statistical issue? (ii) that it has something to do with the applicability of the definition? (iii) unemployment is not an issue to worry about in Africa.

The paper seeks to establish that the definition of unemployment as put forward by the ILO is too narrow thereby putting many jobless adults into discouraged worker category and thus give a "misleading" picture about the true situation of unemployment. The paper also makes effort to establish the significance of discourage worker effect and ascertain the correlation between informality and unemployment.

Structure of the Labour Market

Figure 1 presents the structure of the Ghanaian labour market, using data from the 2010 Population and Housing Census. A cursory examination of Figure 1 shows that about 71.5 percent of the working age population of 15.2 million in 2010 were in the labour force, and only 5.8 percent of the labour force (or 4.2 percent of the working age population) was unemployed. Besides job-seeking, inactivity outside the school system also constitutes a major challenge in the labour market. This comprises people who are jobless outside the school system who may be available for work but fail to seek work for various reasons (discouraged workers) and those who are jobless but not available for work. The discouraged workers constitute what may be referred to as hidden unemployment and combining this with job seekers yields "broad" unemployment. The sum of the broad unemployed and jobless people who are not in school and not available for work yields what is referred to as Joblessness outside School System (JOSS), which accounts for 18.1 percent of the working age population.

Beside the problem of the incidence of joblessness, there is also the issue of the quality of employment. Employment in Ghana is generally dominated by low-quality jobs in terms of skill levels and regularity of earnings, such that 7 out of every 10 workers were engaged in vulnerable employment in 2010, with only 23.1 percent of a total employed

population of 10.2 million being productive employment. Vulnerable employment is a measure of persons who are employed in relatively precarious circumstances such as own-account work and contributing family work. They are less likely to have formal work arrangements, access to benefits or social protection programmes and are more "at risk" during adverse economic circumstances (ILO, 2009). In terms of institutional classification, almost 9 out of every 10 jobs are organised on an informal basis, with only 13 percent of people in employment engaged in formal sector employment. Related to vulnerable employment is the working poverty rate[1]. Estimates from the Fifth Round of the Ghana Living Standards Survey (GLSS 5) indicate a working poverty rate of 25.6 percent compared with 8.7 percent and 31.8 percent for those in productive[2] and vulnerable[3] employment respectively.

Figure 1: Taxonomy of the Ghanaian Labour Market

<table>
<tr><th>Population</th><th>Economic Status</th><th>Time use</th><th colspan="2">Employment Type</th><th>Quality of Employment</th><th>Labour Market Status</th><th>Institutional Sector</th></tr>
<tr><td rowspan="10">Working-age population

15.208,425</td><td rowspan="7">Labour Force

71.5%</td><td rowspan="7">Full-time Work

67.4%

Part-time work</td><td colspan="2">Wage employment (18.2%)</td><td rowspan="2">Productive employment 23.1%</td><td rowspan="7">Employed

10,243,476</td><td rowspan="7">Formal (13.8%)

Informal (86.2%)</td></tr>
<tr><td colspan="2">Employer (4.9%)</td></tr>
<tr><td colspan="2">Own-account work (59.9%)</td><td rowspan="3">Vulnerable employment 71.5%</td></tr>
<tr><td colspan="2">Contributing family work (11.6%)</td></tr>
<tr><td colspan="2">Domestic work (0.6%)</td></tr>
<tr><td colspan="2">Casual work (2.0%)</td><td rowspan="2">Other 5.5%</td></tr>
<tr><td colspan="2">Other (2.9%)</td></tr>
<tr><td>Job-seekers

4.2%</td><td>"Narrow" unemployed 5.8%
282,786**</td><td rowspan="2">Broad unemployed

636,848 **</td><td colspan="3" rowspan="2">Joblessness outside school system (JOSS)
2,754,845 or 18.1%</td></tr>
<tr><td rowspan="3">Outside the labour force

28.5%</td><td rowspan="2">Inactive outside school system 13.9%</td><td>Discouraged worker 354,062**</td></tr>
<tr><td colspan="2">Inactive outside school system (jobless but not available for work)</td></tr>
<tr><td>In school 14.5%</td><td colspan="5">Students and pupils</td></tr>
</table>

** Figures constructed from 2010 Population and Housing Census

Source: Constructed by the authors using data from the 2010 Population and Housing Census

[1] Working poverty rate measures the proportion of employed people who live in households considered to be poor
[2] Productive employment in this context refers to people in wage employment and self-employment with employees
[3] Vulnerable employment is made up of those in self-employment without employees and contributing family work

Overview of Unemployment in Africa

Data on unemployment is generally obtained from registered sources or through surveys. As a result of the absence of effective & functional employment centres in many countries in Africa, unemployment figures and other labour market indicators are often sourced from household surveys or population census data. Table 1 presents unemployment rates by region and selected African countries. A higher average unemployment rate is reported in North Africa than in Sub-Saharan Africa. The rate is almost twice higher in North Africa than in SSA (Table 1). The rates also vary among countries on the continent from 0.7 percent in Benin in 2002 to 25.3 percent in Lesotho in 2008. Generally, countries in the North and Southern Africa reported higher rates of unemployment compared to West and East African countries. The lower unemployment rates in the West, East Central and some Southern African countries compared to countries in the North explains the lower average unemployment rates in Sub-Saharan Africa than North Africa.

Table 1: Unemployment Rates by Regions and Selected African Countries

Country	Total	Male	Female	Youth	Adult
Lesotho, 2008	25.3	23.0	28.0	34.4	***
South Africa, 2011	24.7	22.3	27.7	49.8	20.3
Botswana, 2006	17.6	15.3	19.9	34.5	13.8
Namibia, 2012	16.7	14.7	8.9	34.3	***
Zambia, 2005	15.9			23.4	***
Sudan, 2008	14.8	12.7	19.3	22.9	***
Tunisia, 2010	13.0			30.7	***
Algeria, 2010	10.0	8.1	19.1	29.5	***
Senegal, 2006	10.0	7.9	13.6	14.8	8.1
Egypt, 2010	9.0	4.9	22.6	24.8	***
Morocco, 2011	8.9	8.4	10.2	17.9	***
Mauritius, 2011	7.9	5.2	12.3	21.7	***
Ghana, 2010	5.8	5.4	6.3	12.9	4.0
Uganda, 2010	4.2	3.1	5.1	5.4	***
Zimbabwe, 2004	4.2	4.2	4.1	7.6	***
Liberia, 2010	3.7	3.4	4.1	5.1	***
Tanzania, 2011	3.5	2.7	4.2	7.1	***
Sierra Leone, 2004	3.4	4.5	2.3	5.2	***
Madagascar, 2005	2.6	1.7	3.5	2.3	***
Benin, 2002	0.7	0.9	0.4	0.8	***
SSA, 2012	7.5	7.1	8.1	11.9	6.0
N. Africa, 2012	10.3	7.9	17.2	23.8	7.1
World, 2012	5.9	5.7	6.2	12.6	4.5

Source: *Constructed from Key Indicators of the Labour Market (ILO, 2011)*

Youth unemployment rates are generally higher among the youth than adults. As noted by Baah-Boateng and Turkson (2005), unemployment is more of a youth than adult phenomenon and declines with age. Figures in Table 1 show average youth unemployment rate of 12.6 percent as against 4.5 percent for adults. Similarly, youth unemployment rate in North Africa is three times higher than the rate for adults while the rate for the youth in SSA is almost twice higher than that of adults (Table 1). Similar pattern is found in South Africa, Botswana and Ghana.

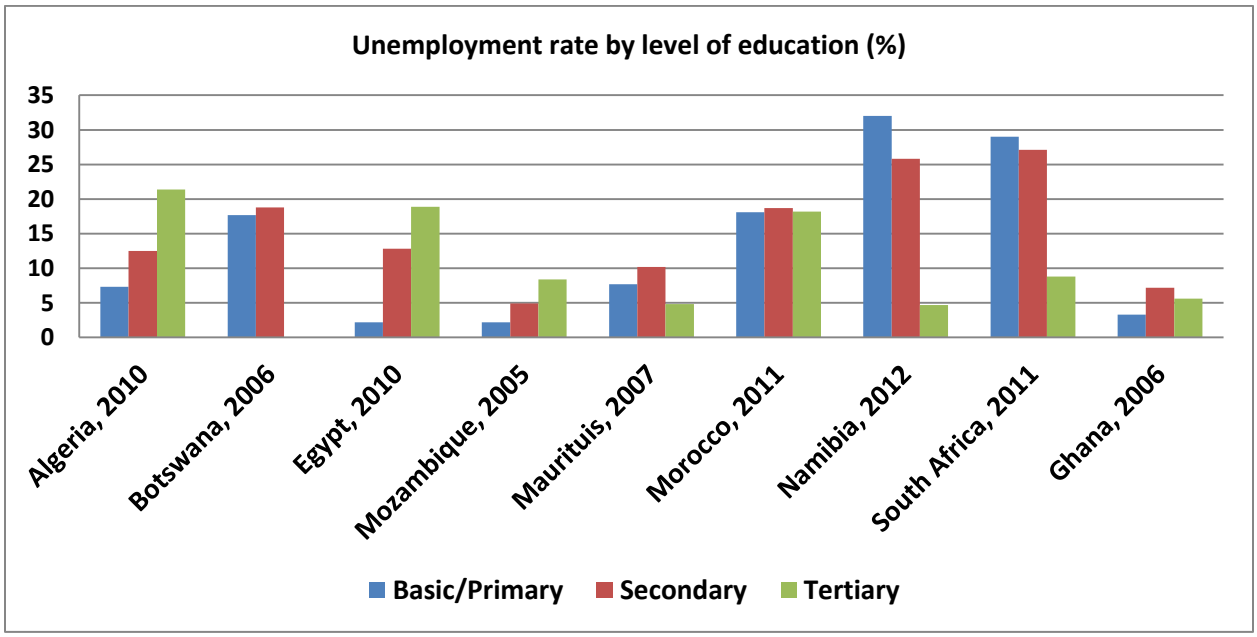
Higher youth unemployment rate than adults' rate is accounted for by a number of factors. First, the youth are more vulnerable in times of economic challenges than their older counterparts considering their limited labour market experience. In addition, they also lack job search experience and labour market information to facilitate their job acquisition. Even in an economic upturn, lack of work experience combined with lack of social capital puts the youth at a disadvantage for new job opportunities. In economic downturns the last-in, first-out of hiring and firing disproportionately affects young people (UNECA, 2005). The situation becomes worse in Africa where many countries do not have proper functioning employment and placement centres making the youth resort to job search through friends and family members since they often lack previous employment contacts and networking.

The gender dimension of unemployment generally indicates higher rate among females than males. On regional basis, higher unemployment rates are reported in SSA, North Africa and the world in general. The gender dimension however varies from country to country. Four countries, Namibia, Zimbabwe, Sierra Leone and Benin reported higher unemployment rate among males than females with the reverse reported in other 14 countries. This observation may be explained by the difficulties and constraints faced by females in securing a job when they offer themselves. These constraints include lower level of education for females than males and some discriminatory practices of employers which tends undermine the effort of females to obtain jobs in wage and/or formal employment settings and the difficulty in establishing their own enterprises.

Educational dimension of unemployment also show higher unemployment among the educated in some countries. In Algeria, Botswana, Egypt, Mozambique and Ghana, Unemployment rates are observed to be higher among those with secondary education or better than those with basic education raising questions about the relevance of education or the ability of the educated to use the knowledge acquired efficiently in the labour market. In Morocco and Mauritius, unemployment is reported to be highest

among those with secondary education while Namibia and South Africa reported the highest unemployment rate among those with basic education. Indeed, a more formalised labour market in these two countries implies that those with lower education would not have any exit point to escape unemployment as it is in countries with high informality that serves as a refuge point for the less educated.

Figure 2: Unemployment Rates by level of education



Source: *Constructed from Key Indicators of the Labour Market (ILO, 2011)*

Baah-Boateng (2012b) offer explanation to the higher unemployment rate among the educated than the uneducated. He argues that in Ghana, the low unemployment rates among those with no education or basic education emanate from the fact that with little or no employable skills to secure a more formal job gives them no option than to seek refuge in the informal economy rather than remain unemployed. On the other hand, the high unemployment rate among secondary school leavers could be explained by the limited number of vacancies at the tertiary level vis à vis the number of people who come out of secondary schools annually. It is estimated that less than half of secondary school leavers qualify to enter tertiary institutions and out of this number at least 40% fail to secure admission into accredited tertiary institutions. After secondary education, most of these people do not have requisite skills that would effectively make them employable in the formal segment of the labour market but at the same time find the informal sector less attractive destination to earn a livelihood. The proliferation of tertiary institutions pursuing courses (mostly humanities) that are in low demand in the

labour market also explains relatively high graduate unemployment rate at the tertiary level.

Theoretical Explanation of Causes of Unemployment

The phenomenon of unemployment has been explained from different perspectives in the economic literature. Within the neoclassical framework, the labour market is deemed to always clear on the basis of the assumption of flexible wages and perfect information. If this rule is distorted by wage rigidity due to institutional factors (e.g. minimum wage legislation) the labour market may not clear, causing classical involuntary unemployment to occur. Involuntary unemployment is said to exist if individuals cannot obtain work even if they are prepared to accept lower real wages or poorer conditions than similar qualified workers who are currently in employment (Shackleton, 1985). Clearly, holding wages above the market clearing wage in compliance with minimum wage legislation has the effect of creating surplus labour in the market.

Unemployment also arises when firms decide to pay higher wages above the equilibrium wage as incentive to increase efficiency of employees. According to the efficiency wage model, wages are kept higher above the market clearing wage with the view to averting shirking behaviour of employees (see Shapiro and Stiglitz, 1984) or reducing labour turnover (see Salop, 1979 and Stiglitz, 1974). Efficiency wage is also paid by firms to avoid adverse selection of job applicants (see Akerlof, 1970) or as a gift of exchange for high productivity from workers (see Ankerlof, 1982). Within the efficiency wage framework, it becomes difficult for jobseekers to secure employment since the increased wage bills and workers high productivity would not make it appealing for firms to engage more hands and thus creating unemployment..

The insider-outsider model of wage setting behaviour of firms also provides institutional explanation of involuntary unemployment (Lindbbeck and Snower, 1988). The model argues that unemployment arises when wages are determined by taking into account only the interests of those employed (insiders), without regard to the interests of those seeking to be employed referred to as the outsiders (see e.g. Bentolila et al., 2011). The effort of firms to reduce cost of labour turnover which prevents them from hiring outsiders gives some kind of protection to insiders even in the midst of their higher wage demands, creating limited avenues for outsiders to get employed. Besides, insiders may resist competition with outsiders by refusing to cooperate with or by harassing outsiders who try to underbid the wages of incumbent workers to escape unemployment.

From the Keynesian perspective, unemployment largely arises from deficiencies in aggregate demand over certain periods in the business cycle such that jobs created are not enough for everyone who wants to work (Keynes, 1936). This type of unemployment is cyclical and involuntary because the unemployed is constrained by limited job availability. Related to demand deficient unemployment is seasonal unemployment, created by predictable seasonal variation in demand associated with climatic seasons.

Unemployment could also occur when the labour market clears. This is referred to as voluntary unemployment resulting from the time it takes the individual to find and move into a new job or the time and resources it takes an employer to identify and recruit suitable workers to fill vacancies. This type of unemployment is called frictional search unemployment which is of short duration. Search theory has been used to analyse frictional unemployment resulting from job hunting by workers (see Stigler, 1962; Phelps, 1970). In contrast to neoclassical claim of perfect market information, jobseekers invest in job search due to imperfect information over one's best job opportunity while employers also search for availability of desired skill. Structural unemployment resulting from a mismatch between demand for labour and the skills and location of jobseekers is another type of voluntary unemployment. It is generally related to unemployment created by technological advancement that makes skills of some workers obsolete.

Unemployment has also been explained under the implicit contract framework. The theory argues that a rational worker will choose an unstable job (i.e. a job with a higher probability of layoff), if that job offers higher wages than choose a job which offers stable but lower wages, in a situation where unemployment insurance benefits or other forms of social security exist so as to maximise lifetime earnings. Consequently, unemployment may be created in an unstable labour market if such benefits (social safety nets for the unemployed) are increased (see Azariadis, 1975; and Buddet and Hool, 1983). The underlying cause of unemployment according to the implicit contract theory is the relative risk aversion of employees. Rational jobseekers would prefer present high and certain wages over the short-run to low but stable income spread well into the future.

Inadequacy of Conventional Definition of Unemployment in Africa's Context

The ILO defines the unemployed as persons who are available and looking for paid employment, and have registered at any of the employment centres" (ILO, 1982). The application of this definition to most countries in Africa seems quite problematic considering the peculiar nature of the labour market in these countries. In most countries, this definition tends to produce lower unemployment rate creating doubt

about the indicator. As noted by some research work (Cling *et al*. 2007; Fares *et al*. 2006; World Bank 2006, inter alia), unemployment as defined by ILO is increasingly seen as inadequate to characterize low income countries' labour markets. In effect, unemployment in developing countries is usually described in terms of disguised unemployment or underemployment, while in the developed countries unemployment is explained in terms of labour demand-supply gaps (Boateng, 2000). For example, given two economies with one having a comprehensive social protection scheme and the other little or no social protection scheme, unemployment outcomes from the two countries would obviously be misleading for comparison and policy purpose. That is, individuals in the countries with adequate insurance coverage can afford to remain unemployed while those in the other countries with no or limited unemployment insurance coverage must do something to make a living; no matter how inadequate.

Hidden unemployment or Discouraged worker effect

In many countries in West, East, Central, and Southern Africa, a considerable number of jobless people may be available for work but fail to look for work for various reasons:

1. Employment placement centres in most countries on the continent are under resourced and not functioning properly and coupled with absence of incentives such as unemployment benefit, many of these jobless people fail to make the effort to seek job. In the face of absence of any social benefit for jobseekers, many of them cannot afford to be unemployed thereby seeking refuge in the informal economy particularly if the structure of the labour market provides the environment for informality to flourish.
2. Many jobless people tend to stay out of seeking work based on the perception of no job or in some cases, jobs are mostly seasonal. This tends to increase the discourage worker effect. Indeed, estimates from Ghana Living Standards Survey suggest that at least 45% of jobless and available for work failed to look for work because they claim that there are no jobs or jobs are offseason

In effect, the high discouraged worker effect tends to understate the true unemployment situation in the country. As noted by AfDB et al (2012) the scepticism of youth unemployment rate as the main measure of negative labour market outcomes is that it excludes many young people who are not in employment even though they would be ready to work, but have given up looking for a job. This discouraged young people are often worse off than the unemployed and should be in the forefront of policy makers mind.

Figures reported in Table 2 below provide evidence to suggest that underestimation of unemployment rates in Africa based on the ILO definition especially in Ghana, Malawi, Rwanda and Congo. In effect, reported unemployment rates in Africa based on the ILO

narrow definition must be complemented by a broader definition that relaxes the criteria of seeking work to take on board the potentially huge discouraged worker effect to avoid the problem of underestimating unemployment rate in Africa.

Table 2: Narrow and Broad Youth Unemployment Rates

Country	ILO Narrow	Broad	Broad-narrow ratio
Botswana	34.5	52.4	1.52
Congo	0.09	7.6	84.56
Ghana	6.6	13.4	2.03
Mali	14.9	38.6	2.58
Malawi	1.9	12.3	6.36
Niger	9.1	12.8	1.44
Nigeria	4.7	9.4	2.02
Rwanda	0.06	5.2	82.33
South Africa	50.7	60.0	1.18
Tanzania	6.1	8.9	1.44
Zambia*	8.8	11.5	1.34

* Unemployment rate for 15+

Source: Authors' Calculation, from Countries Survey Dataset

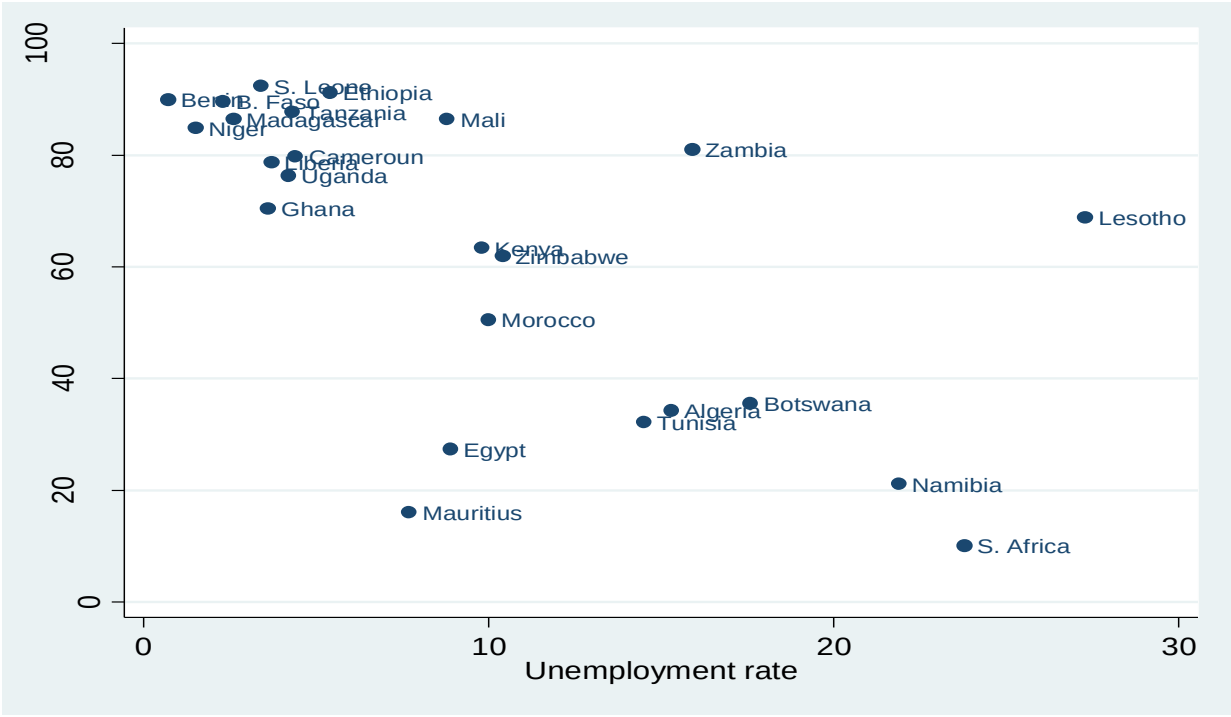
Unemployment-Informality trade-off

A high degree of informality provides a safety net for many jobseekers who are unable to endure the challenges of remaining unemployed for a long time. Indeed, many jobseekers especially those with limited employable skills required in the formal labour market are compelled to seek refuge in the informal economy as a survival strategy. Underemployment, vulnerable employment and working poverty are widespread in many sub-Saharan African countries and therefore focusing on the unemployment rate fails to take into account this reality (AfDB et al, 2012). For example, while unemployment rate in Ghana for adults aged 15+ has remained virtually within the single digit, the informal economy accounts for over 86% of total employment (Baah-Boateng, 2012). This largely explains the low unemployment rate which stands at 5.8% for those aged 15+ in Ghana in 2010 against the backdrop of street hawking and many

Figure 3 presents a scatter chart of unemployment and informality of 31 African countries. Indeed, countries with large informal economy are observed to have low unemployment rate while countries with relatively high rate of unemployment often

have very low informal economic activity. This trade-off between unemployment rates and informality is also established from coefficient of correlation of -0.74 based Spearman's correlation and -0.72 using pairwise correlation coefficient (see Table 3). All the correlation coefficients were statistically significant.

Figure 3: Unemployment-Informality trade-off



Source: *Constructed from Key Indicators of the Labour Market (ILO, 2011)*

Table 3: Results of Estimation of Simple Correlation between Unemployment Rates and Informality

Spearman Correlation	Pairwise Correlation
Unemployment Rate and Informal jobs	Pairwise correlation between informality
Number of Observations = 31	and unemployment rates -0.7206
Spearman's rho = -0.7371	
Test of Null hypothesis: unemployment rates and informality are independent	Prob>|t| 0.0000
Prob>|t|= 0.00000	

Source: *Constructed from Key Indicators of the Labour Market (ILO, 2011)*

Clearly, countries with high rate of unemployment such as South Africa, Namibia, Botswana, Algeria and Tunisia have low rate of informal employment. In countries with well-structured and efficiently regulated labour market with majority of jobs created in the formal sector, unemployment rate tends to be high. This is because the weak or limited informal sector is unable to absorb the surplus labour. The unemployed has nowhere to seek refuge as the case may be in countries where informal economy is vibrant and serves as employer of last resort.

On the other hand, countries with poorly developed labour market where formal jobs are difficult to come by create environment for informality to thrive. These countries are those at the left corner of the figure below including Benin, Madagascar, Mali, Niger, Ethiopia, Tanzania, Cameroun, Uganda, Ghana and Sierra Leone. Consequently, absence of any safety net compels most unemployed to seek refuge in the informal economy as survival strategy. Some of them who are unable to cope with the heat of unemployment are forced out of the labour force as discouraged workers which also tends to create large hidden unemployment. Many people do not desire unemployment and so they engage in any form of economic activity, no matter how insignificant or inadequate and irrespective of the working conditions and income (UNECA, 2011). Increasingly, many of them, especially the educated, are settling for survival jobs in order to sustain themselves. The flow from unemployment to informality produces low unemployment rate but high degree of informality.

Conclusion

Clearly, the conventional ILO definition tends to produce low rates of unemployment which do not present the true labour market challenges in the country. Consequently, the conventional unemployment definition is increasingly seen as inadequate to characterize low income countries' labour markets. As a result, some countries have relaxed this conditional phrase in their measure of unemployment. Hong Kong showed the way by adding the category of "discouraged workers" to the "unemployed".

As long as ILO's conventional definition for unemployment is continuously employed in the developing world, unemployment statistics would persistently be misleading. It is time that a unique and appropriate definition of unemployment is designed for the developing economies, including Ghana. As an alternative to the conventional or traditional definition of unemployment, AfDB et al (2012) suggest NEET rate of youth which counts all youth who are not in employment, education, or training as a proportion of the total youth population. In this study, we use three measures to assess the labour market challenges of the youth: (i) the traditional narrow youth unemployment rate (ii) broad youth unemployment rate; and (iii) youth who are not in

employment, education or training (NEET) as a proportion of youth population suggested by AfDB et al (2012). It is recommended that Africa looks at labour market challenges beyond unemployment to cover the inactive. From Figure 1, policy focus on those who fall under Joblessness Outside the School System (JOSS) in addition to vulnerable employment would yield a greater impact than concentrating on narrow definition of unemployment of the ILO which is more applicable in developed and well-structured and functioning labour market.

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