

Analysis of Supply Side Factors Influencing Employability of Fresh Higher Learning Graduates in Tanzania

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Abstract

This study analysed the supply side factors influencing employability of fresh higher learning graduates in Tanzania taking Arusha city as a case study. The snowballing procedure was used to obtain 80 respondents who were used for analysis. Primary and secondary data was collected using structured interview, observation and documentary review. In particular, the study used logistic regression analysis to model the relationship between independent variables and the dependent variable. Employability in the study area depends on curricula factors and demographic characteristics of fresh graduates in Tanzania. The results shows that, only two variables used in assessing employability were significant at ($P < 0.05$). Among those only one demographic characteristics which was sex of graduates and one curricula factor which was knowledge of practical experience obtained through field practical/ placement, study tours and campus experts visits showing to have higher chances of employment as higher learning graduates need to have application of such knowledge while other factors was insignificant at $P = 0.05$ ($P > 0.05$). The measures to be taken to address employability of fresh higher learning graduates in the study area are promoting internships, placements and work based learning followed by involving employers in committees and policy on employability and lastly conducting employability awards and programmes.

Index terms— supply side factors, employability, graduates, higher learning institutions.

1 Analysis of Supply Side Factors Influencing

Employability of Fresh Higher Learning Graduates in Tanzania Nicholaus E. Nikusekela ? & Eliafura M. Pallangyo ?

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The measures to be taken to address employability of fresh higher learning graduates in the study area are promoting internships, placements and work based learning followed by involving employers in committees and policy on employability and lastly conducting employability awards and programmes.

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I.

3 Background Information a) Overview

In most African countries, including Tanzania, unemployment, under-employment and poverty levels have continued to increase and have remained extremely high levels despite considerable efforts to promote sustainable development by national governments and international development agencies (ECA, 2002). Although youth unemployment seen as a universal problem, it is much obvious and "a ticking time bomb" in the developing countries.

In the developing countries, the problem of youth unemployment draws attention due to several reasons. Foremost, the youth constitute a significant proportion of the population as suggested by Christiana and Okojie (2003), in Tanzania 68 per cent of the population is made up of young people aged between 15 to 35 years (NBS, 2012). Second, youth agenda has been used in political campaigns as it is the case in Tanzania's ruling party "Chama Cha Mapinduzi, CCM" manifesto during campaigns youth were promised to get employment, as the ruling party promised to create "one million employment within first five years (2005) (2006) (2007) (2008) (2009) (2010)", wrapped up by its campaigns slogan christened "Ari Mpya, Kasi Mpya na Nguvu Mpya" literary translating into "New zeal, Speed and Vigour" (Shaidi, 2006). Further, Kabul et al. (2009) argued that ruling party presidential candidate described as "youth candidate" and his campaign went hand in hand with excessive use of media and over ambitious promises especially to youths (TEMCO, 2011), hence the coming of "youth presidential candidate" assures more votes from youth group.

Most of the higher learning fresh graduates have been struggling to secure the jobs by either employing themselves or get a chance in public or private institutions. Unemployment of fresh higher learning graduates has been increasing across the African continent and other countries in the world (Symington, 2012). Unemployment challenge is seen to affect both the developed countries and developing countries, for example, as of 2015 Tanzania is having an unemployment rate of 11.7%, Rwanda 3.4%, Uganda 4.2% Botswana 20%, South Africa, 25.2%, India 9%, Hungary 10.2%, France 10.4% and Australia 5.7%. This implies that unemployment is a challenge in most of the countries (World Bank, 2014). According to Levine (2013), the unemployment rate is considered to be a lagging indicator, meaning that its ups and downs happen sometime after the ups and downs of other broad indicators of economic activity, such as decline in production.

Junakar (2011) explains that, the economic crisis, which happened between 2007 and 2008 which threatened and collapsed some large financial institutions, declined the stock markets in the world which impacted the economies of different states. As a result, different sectors like production, exportation and importation were disturbed and they had an unbalanced and excessively long-term effect on young people who are mostly fresh graduates who were looking forward to get chances to be employed after finishing their studies.

The

4 b) Problem statement and justification

The prevalence of unemployment in Tanzania is regarded as a major national developmental challenge, both economically and socially. Most of the fresh higher learning graduates are left hanging before they secure jobs. The unemployment rate in Tanzania started to increase in 1970s, when the country experienced an economic crisis reflected by the fall in annual Growth Domestic Product (GDP) growth rate from 5% to an average of 2.6% in early 1980s, and about 1% in the beginning of 1990s (Tanzania Employment Survey, 2008).

This economic crisis was also reflected in the decline of industrial capacity utilization and a decline in agricultural output, which had an adverse effect on the balance of payment. The ability of the economy to create employment opportunities was therefore, severely undermined ever since. According to World Bank statistics, the unemployment rates have been increasing from 2.5% in 2009 to 3.5% in 2012. This increase reflects the increase of dependants which affects the economy of the individual families and the state. Such a trend can also cause social costs like the unemployed labor force to engage themselves in illegal activities for the aim of generating incomes, loss of personal income causing the declining of the standard of living, the fiscal cost like loss of tax revenues, and negative multiplier effect in the provision of goods and services.

Stakeholders in educational provision generally see education as an investment. In addition, it is believed that the higher one climbs the education ladder, the easier it is to secure an attractive job. Nyirenda (2012) points out that, total number of fresh higher learning graduates who each year enters into the labor market are over 700,000 and the market can only absorb up to 200,000 people leaving thousands of young higher learning graduates roaming in the streets and various offices in the urban centers in search of seemingly unavailable jobs. It is this sense the researcher therefore examined the influence of supply side factors, specifically the curricula and demographic factors on employability of fresh higher learning graduates in Tanzania taking Arusha city as a case study.

5 II.

6 Methods and Procedures a) Description of study area

Arusha region is located in the north-eastern corner of Tanzania. It lies below the equator between latitudes 2° 0' and 6° 0' longitudinally, the region is situated between 35° 0' and 38° 0' East of Greenwich. The region has a common border with Kenya in the North, to the East it borders with Kilimanjaro and Tanga regions. To the South it shares a border with Dodoma region and to the West with Singida, Shinyanga and Mara regions. The main ethnic groups are Iraq, Arusha, Maasai, Meru and Barbaig. Others in small numbers are Sonjo, Gorowa, Rangi, Chagga, Pare and Nguu.

The study was conducted in the area because of the availability universities and the large number of graduates who are produced from different universities in the country and the municipal has a very competitive labor market hence this research aims at evaluating the ability of labor market to accommodate graduates who enters in the market every year.

7 b) Research design

This research is non experimental design using a descriptive cross-sectional research design. This design was selected because it enables the researcher to compare many different variables at the same time, for example age, gender, marital status, income levels and education level (Casley and Kumar, 1988). The study involves the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with the research purpose.

8 c) Sample and sampling procedures

- i. Sample size Snowballing sampling was used to obtain 80 respondents which were used for analysis.
- ii. Sampling procedure The study used non-probability sampling procedure known as snowballing sampling. It was used in selecting key informants who were the employers and the potential employees in the process of acquiring data.
- iii

9 . Sampling technique

The technique used for sampling was snowballing, which works like a chain of referral. Few employees were identified and nominated with the same trait. This was conducted until the sufficient number of respondents was obtained. Primary and secondary data were collected using various methods including interview, observation and documentary review. Kothari (2004) and Paul (2014) mentioned that the use of different methods enabled triangulation of different data collected to ensure accuracy and better quality.

i. Interview structured questionnaire

The major sources of primary data for the research were obtained through interview. This method enabled a researcher to get more direct information on the matter under study and it shortened the time that would have been spent in waiting for the questionnaires. The interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses from higher learning graduates and employers (Kothari, 2004).

ii. Documentary review Secondary data were collected from various reports including development and non development reports from higher learning institutions and other private and government organizations i.e. local, regional and ministry level. But also different findings from different scholars were used to justify the results and findings.

10 e) Econometric model

The logistic regression model is represented as follows: $Y =$ the probability, which measures the total contribution of the independent variables in the model and is dependent variable (employability). $\beta_0 =$ constant, $\beta_1, \beta_2, \dots, \beta_n =$ parameters to be estimated, and $X_1, X_2, \dots, X_n =$ independent variables.

Whether the higher learning institutions graduates meets the demand of the labor market (employability) and the influence of demographic factors were estimated as follows: $\text{Pr}(\text{EMPLOYABILITY} > 0) = \beta_0 + \beta_1 (\text{SEX}) + \beta_2 (\text{EDU}) + \beta_3 (\text{AGE}) + \beta_4 (\text{MARITA}) + \beta_5 (\text{ENTREPRENUR}) + \beta_6 (\text{ICTSKILLS}) + \beta_7 (\text{LANGUAGE}) + \beta_8 (\text{TECHSKILLS}) + \beta_9 (\text{PRACTEXP}) + \beta_{10} (\text{CLASSDEG}) + \epsilon$ (2)

In equation (2) Analysis of Supply Side Factors Influencing Employability of Fresh Higher Learning Graduates in Tanzania III. β_0 is a constant, $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7,$

11 Results and Discussion

12 a) Demographic characteristics

This section presents and discusses analysis of socio-economic characteristics of respondents. The demographic characteristics of the respondents examined in this study includes; sex age, marital status and level of education

because those characteristics have a direct relationship with supply factor influencing employability of fresh graduates in the study area. It is evidenced from chi-square that the distribution of respondents does not vary among age groups and sex and between wards where the participants are residing because chi-square values are insignificant at confidence interval of 95%. The values obtained are above the critical value ($P > 0.05$).

13 i. Sex of the respondents

Analysis of the demographic characteristics revealed that 55.0% responses were males while 45.0% were females as shown in Table 1. This indicates that job seeker was dominated by males as compared to females. The results is supported by studies done by Farooq (2011) and Nangale (2012) who concluded that there is still gender inequalities and disparities in employment opportunities. Females have been facing limited participation in the labor market and more job mismatch issues due to socio-cultural constraints and labor market discriminations. Likewise due to their multiple roles as producers, reproducers and providers of family care, women are severely limited in preparing for, and accessing formal employment opportunities and self-employment particularly in the private sector.

14 ii. Distribution of respondents by age

The results in Table 1 shows that 56.2% of respondents were aged between 18-28 years, 20.0% were aged between 29 -39 years and 23.8% of respondents were aged 40 years and above. This shows that majority of participants were fresh graduates accounting to (76.2%) ranging between 18-39 years which could be classified as the active and productive age.

iii. Marital status of respondents The descriptive statistics related to marital status in Table 1 indicates that, unmarried (single) individuals constituted the highest group who are not employed (55.0%) compared to other categories. Only 7.5% of the responses were not leaving with their couples (separated) due to divorcement or temporary misunderstandings and 37.5% of respondents were living with their couples (married).

Overwhelming majority of fresh graduates were not married (single) persons, the plausible explanations could be due to the fact that married persons are highly engaged with a lot of responsibilities that require enough money to curter for many issues. For instance school fees for their children, health services (medication) and food security. Distribution of respondents does not vary among marital status and between wards where the fresh graduates are residing because chi-square values ($\chi^2 = 4.855$) are insignificant at confidence interval of 95%. The values obtained are above the critical value ($P > 0.05$).

15 iv. Distribution by level of education

In this study, supply side factors influencing employability of fresh graduates from high learning institutions in the study area was independent of the education level ($P > 0.05$) which is probably due to the fact that majority of the respondents had similar education background.

Table 1, indicates that majority 68.8% of fresh higher learning graduates had bachelor degree, 22.5% had advanced diplomas and only 8.7% had master degree. This indicates that majority (91.3%) of fresh graduates had first degree education as compared to only 8.7% that had master degrees. It is believed that people with higher education level could make sound decision, efficiency in resources allocation and technological innovation (Odoemenem and Obinne, 2010; Saka et al., 2005). b) The effects of curricula and demographic characteristics on employability Binary logistic analysis was carried to examine the effect of curricula and demographic characteristics on employability of fresh higher learning institutions graduates. A logistic model implies that employability of higher learning graduates (EMPLOYABILITY) is a function of sex, age, marital status, class degree obtained, language used, practical experience, scientific and technical expertise and information, communication and technology. The Nagelkerke correlation coefficient (R^2) value of about 0.334 means that about 33.4 percent of the variation in employability is explained by sex, age, marital status, class degree obtained, entrepreneurship skills, knowledge of information, communication and technology, knowledge of language, scientific and 2 also shows that the chi square of 20.157 was significant at ($P < 0.05$). Further analysis shows that, only two variables used in assessing employability were significant at $P < 0.05$ which was sex of graduates ($P = 0.039$) and knowledge of practical experience obtained through field practical/placement, study tours and campus experts visits ($P = 0.001$) showing that to have higher chances of employment as graduates need to have application of knowledge gained in class as explained by Farooq (2011) and Nangale (2012) while age, marital status, class of degree obtained, language (English) used, scientific and technical expertise and knowledge of information, communication and technology found to have insignificant effect ($P > 0.05$).

Sex factor was significant at $P < 0.05$ but having negative relationship (-1.485) to employability of higher learning institutions graduates. This has created glass walls and glass ceiling barriers, which limits them from being identified in the labor market and hence increasing the rate of unemployment among them as justified by Farooq (2011).

Knowledge of practical experience obtained through field practical/placement, study tours and campus experts visits was significant at $P < 0.05$ and having a positive relationship with employability of higher learning graduates. These requirements pose a challenge for fresh graduates as most of them do not have working experience, and cannot expect to obtain working experience for as long as they have not obtained a job (Nyirenda, 2011).

Age groups of graduate was insignificant at $P=0.05$ ($P>0.05$) but having negative relationship (-0.261) to employability of higher learning institutions graduates. This implies that majority of the respondents were youth.

Marital status of graduates was insignificant at $P=0.05$ ($P>0.05$) but having a positive relationship with employability. This implies that married persons are highly engaged with a lot of responsibilities that require enough money to curter for many issues. For instance school fees for their children, health services (medication) and food security.

Knowledge of English language, class of degree obtained, scientific and technical expertise and knowledge of information, communication and technology found to have insignificant effect ($P>0.05$). This implies that most of higher learning institutions are still emphasizing "too much theory and too little practical training." hence most graduates cannot solve problems or think analytically and are not practically equipped or knowledgeable when faced with job situations which are contrary to education and economic development theory explained by ??ork and Knight (2006).

16 Conclusion and Recommendations a) Conclusion

From the analyses given, a large mismatch appears to exist between higher learning outputs and labor market demands. Without doubt, one main reason for this mismatch is the policy environment, which in this case includes the institutions that structure incentives to reward investment in productive assets. The second reason is the inadequate level and quality of higher learning graduates those employers in the economy employ. One vital input is the skilled human resources, especially the quality of the higher learning graduates -especially the quality of the higher learning graduatestrained portion of the work force. As shown in the results of the findings, many higher learning graduates were not good enough in technical and practical skills, poor in entrepreneurship skills and are deficient in information technology skills.

Although, Tanzania and Arusha city in particular has many problems to contend with, but that of the education sector is a major one. The quest for higher education in Tanzania, even though has increased almost exponentially in the last quarter of the last century, however, this has brought about large scale of graduate unemployment. Because of the obvious structural and dynamic relationship between higher education and a country's level of development, we can safely conclude that a society's system of education has a direct and critical bearing on the types of job that can potentially be available for higher learning graduates employment.

17 b) Recommendations and policy implications

However, the objective realities of the Tanzanian higher learning institutions system do suggest that the country may not be able to provide employment for all her graduates, as the continuous decline in the performance of the universities is quite obvious. It runs through absence of critical teaching/research personnel, lack of facilities, lack of textbook, poorly equipped libraries and laboratories. In this very depressing situation therefore, the process of teaching, research, publication and knowledge development may have no relevance to the challenges of the present global market. Therefore higher learning institutions departments will need to change their curricula every two or three years in order to ensure that the content of their teaching reflects the rapidly advancing frontiers of scientific knowledge and the global market. Furthermore, employers are increasingly demanding new curricula that include skill standards and perhaps even vendor-specific certifications that are not typically included in higher learning institutions curricula. These employers simply do not trust the traditional, faculty developed curriculum will meet their needs especially in the area of information technology as different companies now adopt new vendor products and then search for individuals who have mastered the technology.

Finally, the Tanzania business community and government they are not innovative in creating jobs. Elsewhere in the world, emerging institutional adaptations to the problem of labor market mismatch include the formation of "knowledge coalitions" with other knowledge producing centers in society. Hence, the establishment of more effective labor market information systems and centers that are linked to career counseling in higher learning institutions, and greater private sector involvement in curriculum consultations, faculty attachments, student placements and research funding are very important to reduce the higher learning graduate unemployment rate in Tanzania. ¹

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$$\ln \left(\frac{p^0}{1 - p^0} \right) =: Y =: \alpha + \beta_N X_N + p_N$$

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Figure 3: Table 1 :

2

	B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
Constant	-2.215	1.862	1.415	1	0.234	0.109		
ENTREPRENEUR	0.594	0.716	0.689	1	0.406	0.552	0.136	2.245
ICTSKILLS	0.363	1.220	0.088	1	0.766	1.437	0.131	15.717
ENGLANGUAGE	0.724	1.271	1.840	1	0.175	5.609	0.464	67.779
TECHSKILLS	-0.862	0.677	1.623	1	0.203	0.422	0.112	1.591
CLASSDEGR	-0.398	0.693	0.330	1	0.565	0.672	0.173	2.611
PRACTEXP	2.156	0.675	10.189	1	0.001**	8.633	2.298	32.432
SEX	-1.485	0.721	4.245	1	0.039*	0.227	0.055	0.930
AGELOG	-0.261	0.796	0.108	1	0.743	0.770	0.162	3.663
MARITAL	0.086	0.735	0.014	1	0.907	1.089	0.258	4.598

Figure 4: Table 2 :

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