Demographic Dynamics and Graduate Employability, Wanna Leka, Addis Ababa University, Ethiopia

Abstract

The 2016/17 data from the Ministry of Education shows that there were 788,033 students enrolled in all programs both in government and non-government higher education institutions. In the same academic year, a total of 141,700 students graduated from government and non-government higher education institutions. One of the main purpose of higher education institutions is to produce competent graduates who have appropriate knowledge, skills and attitudes in diverse fields of study. Thus, the employability of these graduates in the labour market has been the interest of many stakeholders. Employability is a multi-dimensional concept. Some authors suggest that we must distinguish between factors relevant to obtaining a job and factors relevant to the preparation for work. In view of this, a preliminary study was carried out to see the employment/unemployment status of graduates from five selected public higher education institutions of Ethiopia. The objectives of the study were: (a) to investigate the factors that the graduates consider as important in enhancing employment in the labor market; and (b) to explore the relevance of students' areas of specialty and the labor market demand. In order to address the objectives of the study, the following research questions were raised: (a) What was the reported employment/unemployment status of graduates from selected public HEIs? (b) What factors were considered as important in enhancing employment in the labor market? and (c) How relevant are HEIs programs in relation to labor market demands? In order to answer these basic questions, both qualitative and quantitative methods were employed in conducting the study. Primary and secondary sources were used to collect data. The primary sources included graduates, instructors, and policy makers from the Ministry of Education. The secondary sources were documents from the sample HEIs, CSA, and other relevant publications. Both questionnaires and interview protocols were used to collect data. The results indicated that a number of graduates were employed in public and private institutions, few of the graduates were self-employed and a small number of graduates were looking for jobs that they were interested in. The majority of the respondents indicated that their pre-employment training was fairly relevant. Despite the positive responses given by respondents, higher education institutions need to work in close collaboration with the employers to make the programs more relevant.

Keywords: graduate employability, higher education institutions, Ethiopia

Introduction

Ethiopia is a country having a population of hundred million. It is reported that about 55% of the population is below the age of thirty. Like other developing countries, Ethiopia aspires to join the club of middle-income countries by the year 2025. In order to achieve this goal, its economy has to grow faster every year. Maitra (2007) stated that higher education is very important to national economies, both as a significant industry in its own right, and as a source of trained and educated personnel for the rest of the economy (p.1). Higher education/tertiary education includes undergraduate and postgraduate education, as well as technical and vocational education and training (TVET). The significance role of higher education in

enhancing the development of a given society has become quite clear in the current knowledge-based society. There is a worldwide consensus that land and natural resources have become less important; on the other hand, human resources are crucial and strategic for the future of each country, thus making the investment in education and research the most fruitful (Maitra, 2007, p.7). The council of higher education (South Africa, 2001) indicated that our world is becoming a knowledge-based society and the role of education, especially at higher level, is the center this phenomenon. Given the critical role of universities in socio-economic development, no country can afford not to support at least some higher education institutions of high quality.

In view of this fact, Ethiopia promulgated the Education and Training Policy in 1994. After the introduction of the policy, the elitist educational system of this country shifted to mass base education. Accordingly, massive expansion took place at primary, secondary, technical and vocational education training as well as in tertiary level education. In 2016/17, the enrollment rate of students at primary level (1-8) was 20.8 million, at secondary level (9-12), it was 8.5 million, at TVET it was 302, 083 and at tertiary level it was 679, 299 (govt.), enrollment at private higher institutions was 108,734.

The Education and Training Policy of 1994 stated that higher education at diploma, first degree and graduate levels, will be research oriented, enabling students become problem-solving professional leaders in their fields of study and in overall societal needs. Furthermore, the Education Sector Development Program (ESDP IV, 2010/11-2014/15) suggested the need for improving the quality and the employability of university graduates. The expansion of higher education institutions (government and non-government) gave thousands of young people the opportunity to pursue tertiary level education and graduate as professionals with a hope of getting employment in the labor market.

Getting employed in the labor market is quite a challenge for many young people. As the number of graduates increase every year, the chances of securing employment in ones' area of specialty are becoming problematic. Currently there are over forty-five public universities and a good number of private higher education institutions. Thus, the graduates from public as well as from private higher education institutions equally join the labor market looking for employment. Table 1 below shows the number of graduates who completed their undergraduate studies in public and private higher education institutions and joined the labor market at various times.

Table1. Graduates who Completed Undergraduate Studies in Public and Private Institutions

	Public Higher Education Institutes			% Females	Private Higher Education Institutes			% Females
Year	Male	Female	Total		Male	Female	Total	
2011/12	49902	15337	65239	23.5	8483	4422	12905	34.3
2012/13	49230	16936	66166	25.6	7236	5671	12907	43.9
2013/14	64153	18630	82783	25.6	7960	6238	14198	43.9
2014/15	69648	24608	94256	26.1	7268	6043	13311	45.4
2015/16	77133	36210	113343	32	7640	6292	13932	45.2
2016/17	87442	39882	127324	31.3	7083	7293	14376	50.7

Source: MoE: Education Statistics Annual Abstract. 2011/12 – 2016/17.

Table1 was constructed to show that thousands of young people graduate from public and private higher education institutions every year and join the labor market. However, no well-known national comprehensive study has been undertaken so far concerning the employability of these graduates. In view of this study was conducted that included five public universities.

Statement of the Problem

Higher education in this country served very limited segment of the society. It stayed as an elitist educational institution for many years. Very few young people joined higher institutions and as they graduated, they had no problem of finding employment in the labor market. Since the introduction of the Education and Training Policy, the number of higher institutions increased to a large extent. This expansion opened up opportunities for thousands of young people to join these institutions. As a result, thousands complete their education and join the labor market looking for employment. The demand of the labor market seemed limited and the employability of graduates became a source of concern. Thus, this study targeted how graduates get employment as the competition got stiffer every year in the job market.

Purpose of the Study

The major purpose of this this study was to explore the employability level of students who graduated from five public higher education institutions and joined the labor market.

Objectives of the Study

The objectives of the study were:

- to investigate the employability status of graduates from five public universities;
- to explore the relevance of the skills the graduates acquired during their studies and the jobs they are performing in the labor market;

- to solicit the views of the graduates concerning their training and the reality of the labor market; and
- to make practical recommendations to policy makers based on the findings of this study.

Research Questions

The study attempted to address the following basic research questions:

- What was the reported employability status of graduates from selected public HEIs?
- How relevant was pre-employment education and training of the graduates to the existing demand of the labor market?
- What was the opinion of the graduates concerning the application of what they learned and what they do in the labor market?

Significance of the Study

Even though the study covered only five public universities, the outcome of this study could benefit different groups, namely: Policy makers, higher learning institutions, students, instructors, curriculum developers, researchers, parents, international organizations and other interested stakeholders.

Delimitations

It was reported that there are more than forty-five public universities and a large number of private universities in the country. This study covered only five public universities. Furthermore, the study did not include the views of the employers.

Limitations of the Study

The data was collected from only 151 graduates of these five public universities. Furthermore, the opinions of the employers were not included in this study. Based on these facts, the findings of the study could not be taken as comprehensive. Thus, one must take caveat while reading the findings.

Methodology of the Study

Both qualitative and quantitative methods (mixed methods research) were employed in conducting the study. According to Creswell (2014):

> 'A mixed methods research design is a procedure for collecting, analysing and mixing both quantitative and qualitative methods in a single study or series of studies to understand a research problem. The basic assumption is that the uses of both quantitative and qualitative methods, in combination, provide a better understanding of the research problem and question than either method by itself.' (p.535).

Data Sources and Data Collection Instruments

Primary and secondary sources were used to collect data for this study. The primary sources were graduates who joined the labor market. Secondary data was collected from CSA, and

other relevant publications/books and journals. As regards to the data collection instruments, questionnaires were used for graduates.

Sampling techniques and sample size

Here are five universities for the study: Addis Ababa, Arba Minch, Haromaya, Hawassa, and Jimma Universities were included on the basis of purposive sampling technique. Tracing former graduates was a very challenging exercise. Hence, an attempt was made to get the actual number of graduates from the registrar office of each sample university. Then snowball sampling was employed to track down those who graduated from undergraduate regular programs of the sample universities. A total of 151 graduates were included in the study.

Methods of Data Analysis

The data obtained through the questionnaires were coded and entered into a computer using SPSS. During the analysis percentages and cross-tabulation were used in dealing with the data.

Data Presentation and Analysis

In this study five public purposely selected universities were included as shown in Table 2, of which 46.4% of the participants were from Addis Ababa University, close to 20% were from Arbaminch University. Again, close to 15% and 13% participants were from Hawassa and Haromaya Universities respectively. Only 6.6% were from Jimma University. A total of 151 graduates participated in this study.

Table 2. Graduate Students

Names of the Institutions	**No of graduate participants**	**Percent**
Hawassa University	22	14.6
Addis Ababa University	70	46.4
Arbaminch University	30	19.9
Haromaya University	19	12.6
Jimma University	10	6.6
Total	**151**	**100.0**

In Table 3 we can see that 90.7% of the participants were male students and only 7.9% of the participants were female graduates. In the public higher learning institutions, girls' participation is still less than male students.

Table 3: Participants' Gender

Gender	No of the participants	Percent
Male	137	90.7
Female	12	7.9
Total	149	98.7
Missing	2	1.3
Total	**151**	**100.0**

For many years, it was a known fact that institutions of higher learning served more students coming from urban areas. As we can see in Table 4, a large majority 82.1 % indicated that they attended urban high schools. Only 17.2% indicated that they came from high schools located in rural areas.

Table 4: Location of high schools that the graduates completed

Location of High Schools	No of Respondents	Percent
Urban schools	124	82.1
Rural schools	26	17.2
Total	150	99.3
Missing	1	.7
Total	**151**	**100.0**

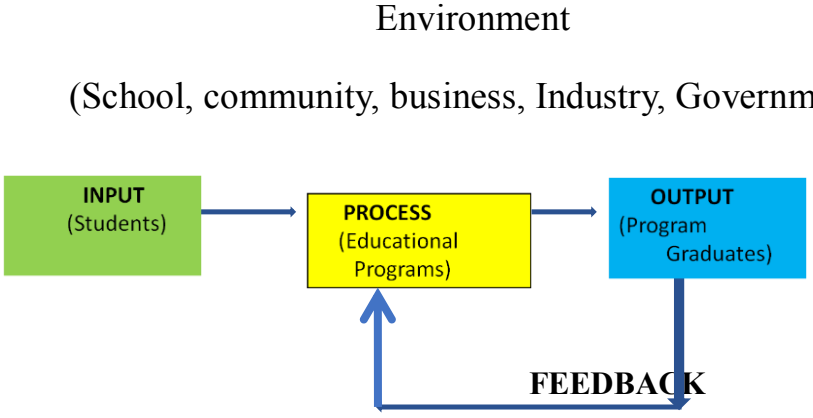
The graduates who participated in the study were asked if they studied the subjects of their choices. Table 5 showed a large majority 77.5% of them indicated that they did so. This fact is quite important to maintain the interest of the students.

Table 5: Did you study the subjects you liked most while attending university education?

Responses	No of Participants	Percent
Yes	117	77.5
No	29	19.2
Total	146	96.7
Missing	5	3.3
Total	**151**	**100.0**

The students studied at the university level were expected to prepare themselves for employment or self-employment in the labor market. Students coming to the institutions of higher learning need to have a reasonable high school academic preparation to pursue their education at higher level. Students' pre-employment education and training as well as their completion at the institutions of higher learning could be conceptualized as shown in figure 1. The input part included all material and human resources including students and teachers. The process part included the curriculum, education and training, the teaching/learning activities including all other skill developing activities. All activities that take place within the university compound were considered as pre-employment training. According to Finch and Crunkilton (1989), assessment of program graduates (i.e., contribution to society, job satisfaction, competence attained) serves as feedback for system adjustment. The environment within which an educational system operates must be taken into account. The environment (school, community, business, industry, government) can influence input, system operation, and output (p.26-27).

Those who completed the pre-employment training were graduates who joined the labor market having mastered employability skills. In view of this, the graduates were asked how effective their pre-employment training was (Table 6).



Adopted from - Finch & Crunkilton (1989)

In Table 6, we can see that almost 40% of the respondents said the program was moderately (average) effective. Other respondents (34.4%) considered the program was effective. Only 8.6% of the graduates said the program was highly effective. Contrary to the positive responses indicated above, a total 14.6% of the graduates thought that the program was ineffective though they were the minority.

Table 6: The effectiveness of the subjects the graduates studied in developing skills needed in the labor market.

Responses	No of Respondents	Percent
Highly ineffective	5	3.3
Ineffective	17	11.3
Average	60	39.7
Effective	52	34.4
Highly effective	13	8.6
Total	147	97.4
Missing	4	2.6
Total	**151**	**100.0**

After graduation, the students joined the labor market looking for employment (Table 7). A total of 151 graduates were traced and located through snowball sampling/chain sampling method. Out of these graduates, 53% of them got their first job within six months after graduation. Those who said it took them from 6-12 months accounted for 6%. Only 3.3% of them said that it took them more than a year to find the first job.

Table 7: Time it took graduates to get their first job

Responses	No. of Respondents	Percent
Within six months after graduation	80	53.0
From 6-12 months	9	6.0
More than a year	5	3.3
Any other	48	31.8
Total	142	94.0
Missing	9	6.0
Total	**151**	**100.0**

Those who got employed were asked the type of organization they joined. From Table 8, we can see that 90.7% of the graduates joined government organizations. Very few joined private sectors as well as NGOs. Thus, the government is the big employer in this case.

Table 8: Type of organizations graduates got employment

Response Items	No. of Respondents	Percent
Public sector (government organization)	137	90.7
Private sector	1	.7
Non-Governmental Organization (NGO)	5	3.3
Total	143	94.7
Missing	8	5.3
Total	**151**	**100.0**

The graduates who got employment were asked if they applied in their workplace whatever skills they learned in their respective institutions. We can see from Table 9 below that close to 50% said that they applied very much what they learned in their institutions. Close to 28% indicated that they apply a little of what they learned. Only 2% of the respondents pointed out they do not apply at all what they learned.

Table 9: Applying what was learned in work places

Response Items	No. Respondents	Percent
Not at all	3	2.0
Yes, a little bit	42	27.8
Yes, very much	75	49.7
Total	120	79.5
Missing	31	20.5
Total	**151**	**100.0**

The graduates were asked to indicate how useful the programs they pursued in their universities to the current jobs. We can see from Table 10 that close to 54% said the programs they pursued were very much useful. 41% percent said that the programs they went through were somewhat useful. Only 3.3% of the respondents pointed out their university programs were not useful at all. In table 10, graduates expressed the usefulness of the level of the program in a positive way.

Table 10: Usefulness of the programs pursued to their current jobs

Response Items	Frequency	Percent
Not useful at all	5	3.3
Somewhat useful	62	41.1
Very much useful	81	53.6
Total	148	98.0
Missing	3	2.0
Total	**151**	**100.0**

The next question posed for the graduates was the level of their satisfaction in the jobs they were doing (Table 11). Those who said highly satisfied accounted for 15.2% and those who said just satisfied accounted for 36.4%. When the two groups combined, the total sum amounts 51.6% and this is the majority. There were other respondents who said they were neither satisfied nor dissatisfied and they accounted for 16.6%. A total of 24.5% of the graduates pointed out that they were highly dissatisfied or simply dissatisfied (Table 11).

Table 11: The level of satisfaction in the current Jobs

Response Items	No. of Respondents	Percent
Highly dissatisfied	19	12.6
Dissatisfied	18	11.9
Neither satisfied nor dissatisfied	25	16.6
Satisfied	55	36.4
Highly satisfied	23	15.2
Total	140	92.7
Missing	11	7.3
Total	**151**	**100.0**

It is known fact that labor markets are dynamic due to technological impact. Graduates need to be flexible to adapt to the changing situations. Current literature and experience show graduates need to have both core and soft skills. The core competences are skills necessary to live in a complex, very interacting, and continuously changing society (Maitra, 2007). Core skills are skills that make an individual effective at work and they are sometimes called transferable skills. Graduates can develop through time and these skills become part of the individual. On the other hand, soft skills such as team-working, leadership, project management, etc. can be learned from different experiences (Martin, 2007). Maitra (2007) suggested that education must not remain a theoretical learning but the transfer of knowledge must be integrated with practical experience.

In view of this, graduates were asked what kind of knowledge and skills were needed to be effective in labor market. The responses were given in Table 12 with a ranking order.

Table 12: Rank order of knowledge and skills graduates needed to perform effectively in the labor market

No	Response Items	% Respondents
1	Theoretical & practical	60.0
2	Communication skills	43.0
3	Practical & experienced based	40.4
4	Theoretical & experience	34.0
5	Social skills	28.5
6	Theoretical	18.5
7	Practical	18.0

One of the research questions that were posed to the graduates was concerning their overall rating of the effectiveness of the universities in producing capable graduates. From Table 13 we can see that about 9% of the respondents said the program was highly effective. Those who simply said effective accounted for 34.4%. About 40% of them said that the program's effectiveness was an average (not very high or low).

Table 13: Overall rating of the university's effectiveness in producing capable/ competent graduates in the labor market

Responses	No of Respondents	Percent
Highly ineffective	5	3.3
Ineffective	17	11.3
Average	60	39.7
Effective	52	34.4
Highly effective	13	8.6
Total	147	97.4
Missing	4	2.6
Total	**151**	**100.0**

Conclusion

The Ethiopian higher education system has expanded to a large extent since the introduction of the Education and Training Policy in 1994. This expansion has opened up opportunities for thousands of young people. It is reported that there are over forty-five universities in the country. Furthermore, private institutions of higher learning are also flourished after the introduction of the education policy. At the end of every academic year, thousands of young

people graduate from these higher institutions of learning and join the labor market seeking employment in public or private enterprises. Employability of graduates is a result of a complex set of interrelated factors comprising economic and professional contexts (Stiwne and Alves, 2010).

In this study, 151 graduates from five public universities took part. Almost 91% of these were employed in public organizations. Thus, the government was the main employer. The graduates were asked a number of pertinent questions that included the usefulness of the programs they completed, job satisfaction in their place of work, relevance of their pre-employment training, etc. The responses obtained were mainly on the positive side. However, a good percentage of the graduates also indicated that their pre-employment training was not that much of high quality.

Recommendations

Based on the results of the study, the following recommendations are forwarded.

- Serious attention should be given to design university education and training on market demand.
- Universities should carry out tracer studies periodically to see the relevance of their pre-employment education and training to the labor market.
- In addition to core skills, relevant soft skills must also be emphasized.
- Universities should have labor market information system.
- Girls are still under represented at the institutions of higher learning and this situation has to change.
- More effort must be made by all stakeholders to make the universities center of excellence.

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