

The Queuing's Determining Factors on University Graduates: SFAX Region as a Case Study

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ABSTRACT

Unemployment is the most serious problem which affects Tunisia and a big number of the developing countries. The young graduates' unemployment rate approximates 30% in Tunisia. Finding no job is against the expectations of those young graduates. Most often these young graduates live with their parents under the same roof, although they get trained according to required specifications. Indeed, a discrepancy between their formation and the market needs impairs their hopes for getting jobs easily. The point of departure of this study is an examination of a detailed micro-data analysis over the diplomas of the young graduates from higher educational institutes being enrolled in the Employment Office of the District of the North of Sfax with benefits from the Professional Integrative Training Contract. The queuing of these young graduates is illuminated insofar as they have not been ultimately integrated into permanent works. The objectives behind this study are to determine the factors accentuating either a lengthening or shortening of the young graduates' job queuing.

Keywords: Economic conditions – diploma – field - queue.

INTRODUCTION

Unemployment's consequential effects are felt heavily on the individuals, let alone on the society and its economy. Unemployment is multi-causal. It leaves distantiation, disqualification and a loss of self-esteem. It is also daunting on the short and the long runs. Seeing with a diluted eye, the unemployed withdraws from his social network and feels confined in his self. The prominent outcomes of such a situation at the economic level signify an expulsion of a significant segment of the entire population. These outcomes are felt by the ostensibly negative growth rate as well as the public finance. In this respect, the 2013 Tunisian Constitution stipulates that the Tunisian citizens have the right to work. Conversely, the unemployment rate increases steadily. The unemployment prominence particularly for the young graduates seems one of the remarkable evolutions at the Tunisian market oriented job throughout the latest years. Although the unemployment rate decreases from 18.3 % in 2011 to 16.7 % in 2012, the situation remains worrying. The labor market still suffers from several structural and functional constraints worsened by the social and the political events held since the 14th of January 2011 revolution. The revolution has some repercussions on the graduates in particular. In 2012, the number of the unemployed graduates reaches its highest (174900). It represents a rate of 33.2% compared to 23.3 in 2010 and 18.7 in 2007.

These rates reveal that the Tunisian graduates are more affected by unemployment than the non-graduates counterparts. Nevertheless, Maalej (2013), Vultur (2010), Nauze-Fichet and Tomasini (2002), diplomas are not so efficient tools for eradicating unemployment. Salais (1980) assimilates the fact that unemployment is a phenomenon of queuing. He thinks that the unemployment temporal extension results in a widening gap between offer and demand as well as in employment affecting transformations. In this case, hypothesizing that the unemployment period is subjective to the concerned individuals is thoroughly beguiling. Cazes and Scarpetta (1995) believe that the analysis of those of the ins and outs streaming as well as the unemployment duration is suggestive. It indicates that certain categories are much more vulnerable to the labor market situation than others. The risks of finding oneself unemployed and later out of unemployment are seemingly variable with regard to certain number of characteristics. The amounted variables are gender, age, the educational level, the unemployment time-span and lastly the regional circumstances. Accordingly, in 2012, the Tunisian women's unemployment rate reaches 25.6% compared to that of men's (14.6 %). The graduated women from higher education are clearly more affected by unemployment than men. In fact, their unemployment's rates are respectively 43.5% and 20.9% during one year. As far as this study is concerned, an analysis of a queuing periodical sample of the higher education graduates who are enrolled in the Sfax-North Employment Office is

conducted. The subjects of the study enjoy the Professional Integrative Training Contract and are definitely integrated into the labor market.

LITERATURE REVIEW

With regard to the human capital theory, training is conducive to stimulate the individual productive capacities. As a general rule, these types of capacities specify the individual job qualifications as well as his remuneration. The educational level is a mere human capital constituent among others notably experience and expertise (Mincer, 1974). In an efficient labor market, the business undertakers seek for the employees with high competencies in order to make as much profits as they can. Hence, they hire experienced employees which may make job categorical shifting almost impossible. The human capital theory evokes a periodical existence where the company may get graduates as manpower beyond its requirements. The company's manpower overabundance is considered a periodical imbalance (Freeman, 1976). This imbalance is reduced naturally through the set of reactions between the individuals and the business undertaking. It is this imbalance that contributes to the queue set-up. The queue is composed of a well-organized group of individuals waiting for their employments' turns. Salais (1980) conceptualizes that being unemployed is birth in itself whereas getting a job signifies death. According to Salas-Velasco (2007) the queue is lengthened providing that the unemployment rate goes up. What is essential for the individual is that he can ameliorate his position within the period of queuing. Nauze-Fichet and Tomasini (2002) affirm that diplomas are of two fold. Firstly, they lessen the unemployment's risks. Secondly, they open up the access to get the most qualified and well-paid jobs. Hence, it is noticed that students pursuing their studies can get diplomas which allow them to take up the highest positions in the period of queuing.

At the macro-economic level, job competitiveness implies that the relatively most graduates are found at the highest points of the periodical queuing scale (Thurow, 1975). It remains that the employers do not know the real candidates' productivity while hiring. Hence, according to the reporting models, there is imperfect information about the labor markets' agents. Diplomas are merely an index for helping the employers to identify the graduates with the adequate productive capacities (Spence, 1973). At a shortage employment period, the situational categorical shifting is of help in due course. The individuals concerned may be held to shorten the period of queuing. In addition, they accept employments with less qualification than theirs which give powerful indices of the employers' potentialities. In their analysis of those of the in-streaming, Cazes and Scarpetta (1995) come up with the conclusion that there is a selective operational behavior in terms of termination and hiring. With reference to them, there are certain social categories which are more frequently vulnerable to unemployment than others. Accordingly, it is arguable that the personal characteristics play a role of a paramount importance over the unemployment period.

Two noticeable groups are particularly vulnerable to the risk of a long unemployment period. They are women and the low graduates. Their situation is more aggravated compared to the stagnant labor market. Calmand et al. (2010) corroborate that the diplomas which are obtained from Arts and Human Sciences are oriented towards the public sector and particularly teaching. Those who are employed in the private sector are faced with less favorable opportunities for work. Business organizations are unable to recognize their skills. Conversely, the fields of Legal Rights as well as Economics and Management are conducive to the private sector. In another way, the employment's conditions are still more advantageous for the scientific sciences than for arts and human sciences. Graduates from human sciences and arts are seemingly inclined to the public sector-particularly teaching which constitutes an outlet for roughly half of them. Once they are employed in the private sector, they face less than convenient working conditions. Business organizations are practically unable to identify these employed competencies. Conversely, the fields of Legal Rights and Economics and Management sciences are mostly conducive to the private sector employment. Comparing the private and the public sectors, it occurs that the employment' opportunities are still more advantageous for Accurate Sciences than for Arts and Human Sciences.

The noticeable discrepancy between the two sectors affects the labor market. Walter (2005) substantiates that high schools as well as universities are, equally, at the base of the downgrading of the labor market. They maintain the highest point in the hierarchy of graduation. For instance, the national schools of engineering guarantee better integration into the labor market than the schools of commerce. Fernex and Laurent (2005) who study the students' perceptions in accordance with the labor market and the insertion's possibility notice that an intense disparity among all the examined fields. Indeed, the students of human and social sciences face much more difficulties and worries in terms of their integration as well as the opportunities to get jobs going in line with not only their aspirations but also their school formation. In contrast, the students from the national schools of engineering feel more confidence and less worry. Nevertheless, it remains that going through higher education to get a job is generally the corollary of a professional pre-stage. It is fulfilled through the framework of school training lending itself towards job full integration. The professionalization of schooling at the tertiary level leads to a high degree of employability. It follows both competencies and marketization processing which are persistently influential with a deep marking of the job/educational training relationship (Charles, 2014).

DATA AND METHODOLOGY

The Professional Integrative Training Contract (P.I.T.C.) lasts one year. It may be renewable once. Those who can benefit from it are the newly young graduates coming from university with a job-hunting aim. These graduates have not acquired a professional experience yet. Their experience is limited to a short training study integrated into the university courses. With the P.I.T.C., a governmental grant is guaranteed for the newly working community of the graduated. They enjoy a monthly governmental financing support in addition to social security services. In this respect, this study is conducted by targeting the Tunisian Universities graduates with the P.I.T.C. privileges during the period ranging from 2007 to 2010. In Sfax, there are six employment offices. The number of the graduates concerned is obtained from employment office located in the North of Sfax Region. The selection of the city of Sfax is not done at random. Sfax is well-known for its weighing economic activities in Tunisia with geographical stretching university institutions. It offers substantial hiring potentialities. It is noted that the Sfax University' students' number is 46279 during the 2009/2010 year. The female rate is about 57.62%. It is a percentage which represents 12.94% of the total sum. Those who obtain diplomas in the year of 2010 are roughly 10972. It corresponds to 12.75% of the total number of the Tunisian graduates. 58.68% of the Sfax University graduates are females. In the year of 2010, 4278 of the graduates make a P.I.T.C. contract. It represents 9.45% of the P.I.T.C.'s contractants total number in Tunisia. In Sfax, from 2007 to 2010, the P.I.T.C.'s contractants approximates 16000.

In the North Sfax Employment Office, 1840 graduates are recorded. Only 810 of the whole cases who complete their training period are concerned. The study is done by 563 graduates who are definitely integrated after the P.I.T.C. The approach is pursued through highlighting the queue of the definitely integrated trainees and spotting the factors of its lengthening or its shortening. The ordinary least square method is used to conduct the study.

➤ Variables

- The endogenous variable “y” represents the queue between the act of obtaining diplomas and the definite integrative process of the subjects into the labor market.
- The exogenous variables “x” are as follows:
 - Period: this parameter associates four variables including the implemented training periods. The periods concerned correspond respectively to the years 2007; 2008, 2009 and 2010. The variables are binary in the sense that number 1 refers to the uniquely concerned period otherwise 0 is attributed.
 - Gender: it is the parameter which detects any difference, if it exists, between male and female trainees. It is a binary variable. Number 1 is attributed to the males or else 0 is counted thereof.
 - Age: it is a parameter which indicates that the graduates' age as well as his P.I.T.C.'s contract's signature.
 - Diploma: this parameter depicts the number of the required years to get a post-graduate diploma.
 - Field : as a parameter, it associates the seventh variables related to the graduates from “Arts, Tourism, Sports, Media and Cultural Studies”, “Legal Rights Sciences”, “Arts and Human Sciences”, “Economics and Management Sciences”, “Accurate and Technological Sciences”, “Medicine and Paramedical Sciences” and ultimately, “Agriculture, Biology and Environmental Sciences”. The seventh variables are binary with 1 refers to the specific field otherwise 0 is considered.

RESULTS

A correlation of -0.606 is first noticed between the variable of the “Economics and Management Sciences” and the other of ‘Accurate and Technological Sciences’. Placing the correlated variables in the same equation is avoided. Hence, two equations are obtained as follows;

Explicative variables		Dependent Variable: The queue	
		Equation 1	Equation 2
Period	Period 2007 (172 graduates)	-7.605*	-7.185*
	Period 2008 (177 graduates)	-7.699*	-7.279*
	Period 2009 (85 graduates)	-7.138*	-6.719*
	Period 2010 (129 graduates)	-7.031*	-6.612*
Gender	Male (316 graduates)	-0.354*	-0.354*
Age		0.391*	0.392*
Diploma		-0.302*	-0.302*
Field	Arts, Tourism, Sports, Media and Cultural Studies (30 graduates)	-0.085	-0.505**
	Legal Rights Sciences (17 graduates)	0.422	0.003

	Arts and Human Sciences (22 graduates)		
	Economics and Management Sciences (189 graduates)	-0.015	-0.435
	Accurate and Technological Sciences (237 graduates)	0.419*	
	Medicine and Paramedical Sciences (55 graduates)		-0.419*
	Agriculture, Biology and Environmental Sciences (13 graduates)	0.038	-0.381**
		0.199	-0.220
Number		563	563
R-squared		0.782	0782

* (p < 0.01) and ** (p < 0.05) as a signifier roof

With respect to the revealed estimations of the two equations, the four variables during the interval of 2007 to 2010 have a positive and significant impact on the queue. The graduate within each field inevitably undergoes an unemployment period. The latter is strongly accentuated in the fourth period. It accounts for the unemployment's structural defect that Tunisia suffers from. The low recorded economic growth cannot integrate the unemployed and notably the new graduates into the labor market. This more and more accentuated unemployment situation is the main cause behind of the outburst of the protest movements by the end of 2010 (ONEQ, 2013).

The gender variable has a significant and negative impact on queuing. It seems that the male graduates find more opportunities than female to get jobs. Indeed, Walter (2005) considers that the female graduates are exposed to different forms of discrimination related to gender and family. He equally notices that there are difficulties in the access of certain sectors. The female graduates are not regarded in the same way as the male ones. Accordingly, the graduated women are more inclined to ensure better academic scores in order to be well-placed in queuing and accept the employments below their university training (Maalej and Boudabbous, 2011).

The age variable has a significant and negative impact on queuing. The older graduates are expected to stay in queuing longer than their younger counterparts. It is logically explained by the fact that the employers have a tendency for recruiting the younger as well as the new graduates. It is deduced that the new graduates accept less paid jobs merely to leave unemployment and gain much experience. In addition, they believe that being caught by unemployment for one year increases the probability of underpayment (Nauze-Fichet and Tomasini, 2002).

The negative and significant impact of the diploma variable on queuing are felt prominently. Hence, the higher the diplomas are, the shorter period of queuing is. Fernex and Laurent (2005) consider that within an economy-based diploma, the possession of a higher diploma play a major role in distinguishing the candidates. It leads to a kind of 'inflation' particularly when a high university level is required. At the same time a devaluation of the diplomas which necessitate the exigency of high diplomas for the same job.

The field of Economics and Management Sciences has a positive and significant impact on queuing. The students who pursue their proper fields face a long period of queuing. The impacts of the fields of Accurate and Technological sciences as well as Medicine and Paramedical Sciences are negative and significant. The students who opt for them, their period of queuing is shorter.

It remains that the cramming of the high school education into the medical and paramedical fields are less important than the other fields in Tunisia. It refers to the high degree of acceptance by the market labor. Nevertheless, concerning the fields of Accurate and Technological sciences, the number of the graduates is very important, although the period of queuing to get a job is shorter. On the one hand, it indicates how complex the impact of the training, according to the field, is. On the other hand, it essentially depends on the labor market and the economic developmental level of a country.

Given Sfax region, the number of the students who get university diplomas in 2010 is 549 in Medicine and Paramedical Sciences. In the field of Accurate and Technological sciences, it reaches 5045. It is 1375 in Arts and Human Sciences. In Economics and Management Sciences, the number is equivalent to 2503. In Arts, Tourism and Sports, it does not go beyond 648. In Legal Right Sciences, it is 740. Finally, 112 is the number of the graduates in Agriculture, biology and environment.

The need to take an exogenous parameter into account is necessary: particularly that of the worldly economic environment and the social events. These two factors contribute, to a great extent to not only to the deterioration of the economic situation in Tunisia but also to that of employment.

CONCLUSION

The professional integration of the young graduates is a complex ongoing process. Many factors are behind it: namely the formation courses, the professional dynamics, the labor market and even the familial and the social environment (Walter 2005). In the Tunisian context, although the graduates' unemployment rate is conspicuously important than the undergraduates' one, the High Education Institutes are not the only responsible for the failing in their integration. From a macro-economic point of view, the devastating situation of the young graduates from the high education in terms of the labor market is explained by the presence of both a qualitative and quantitative disequilibrium between the offer and the demand of qualifying works (Maalej, 2013). In fact, the Tunisians' race for education has provoked a structural excess of the qualifying work offer. This excess reveals that there is an inversely proportional direction between the educational system and the productive one which undergoes internally full alterations. It is shown by the submergence of the structural unemployment stemmed from a lack of a convenient training in the light of the labor market (Bougroun and Werquin 1995).

In the current approach, an identification of the specific variables which may have an impact on the queue is carried out. The findings that the investigation highlights concern unfavorable economic conditions which have a significant impact on the queue. The male graduates have a noticeably quicker access for getting jobs than the female ones. The older graduates undergo a longer queuing period than the younger ones. High diplomas have a negative impact on queuing. With reference to the findings of the current study, the graduates from Economics and Management Sciences face a much longer queue than those from Accurate and Technological Sciences and Medicine and Paramedical Sciences.

As Walter (2005) proves, it is vital to recall the specialists of the necessity of largely sufficient and pertinent information since the secondary educational courses. Secondary courses pursuit may determine the potential proliferation of the concerned works, competencies; the qualifications' requirements, the works' prospectus and lastly, its estimated availability in the labor market. Such details are necessary for feeding the students' jobs' professional orientations as well as for limiting the risks of the university fields whose future is unknown.

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