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Factors Affecting Overeducation in Urban and Rural Areas of Iran

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A B S T R A C T

With the extensive development of higher education in Iran, the phenomenon of overeducation or job-education mismatch has emerged in the Iranian labor market, which has caused negative consequences, including the increase in unemployment. Therefore, it is necessary to identify the factors affecting overeducation in order to adopt a suitable policy to reduce it. Therefore, the purpose of this research is to identify the factors affecting the overeducation of the workforce in urban and rural areas of the country. For this purpose, the household cost-income data of 2020 and the logit model are used. The results of the research show that the variables of years of education, experience, part-time job, sex, unemployment rate, relative supply of graduates, relative demand of graduates, and employment in the private sector are factors affecting overeducation in Irananian labor market. At the end of the study, the suggestions have been made to reduce the overeducation. The general suggestion of the research is that, first, student training in universities should be done based on the needs of the labor market; Secondly, by making different economic sectors knowledge-based, the recruitment of educated workforce should increase according to the level of education.

Keywords: *Higher Education, Job-Education Mismatch, Labor Market, Overeducation, Unemployment.*

Introduction

There is a phenomenon in the labor market that is referred to as education-job mismatch or education. Inconsistency in job education can appear in both vertical and horizontal ways. The meaning of vertical mismatch is that the level of education or skill of graduates is more or less than the needs of the society; For example, the society needs a workforce with a bachelor's degree, but the society's workforce has a higher or lower education. The meaning of horizontal mismatch is that the type of education or skills of human resources are not in accordance with the needs of the society. For example, the country needs agricultural graduates; While the job applicants have studied in other fields. (Dartomi et al., 2016). Among the two types of education-job mismatch mentioned, this research has put the vertical education-job between education and job in its agenda.

Overeducation has adverse results and is potentially a costly phenomenon; For example, at the individual level, the overeducation may cause a decrease in income as well as a decrease in productivity and job satisfaction of people. At the social level, it can also cause inefficiency, hidden unemployment and waste of educational expenses (Tisong and Levin, 1985). Also, at the macro level, national welfare is at a lower level compared to the state in which people's abilities are fully used. In addition, tax revenues may be wasted on educating people with unproductive education (McGuinness, 2007). Therefore, there is a need to identify the factors affecting overeducation at the country level and make appropriate policies to correct the current situation, improve the status of graduates, and consequently develop employment and economic growth. Therefore, the main goal of this study is to investigate the factors affecting the education of the labor force separately in urban and rural areas of Iran.

Methodology

In this study, in order to estimate the model and determine the nature and severity of the effect of various factors on the overeducation in Iran based on the studies of Charalambido & McIntosh (2020), Kosel et al. (2016), Kopets (2015) and Dartomi et al. (2017). The following model is used.

$$OV_{ij} = \alpha_0 + Exp_i + \alpha_3 Marr_i + \alpha_4 Gender_i + \alpha_5 Ptimei_i + \alpha_6 Sr_i + \alpha_7 Unemp_i + \alpha_8 Rel\,s_i + \alpha_9 Rel\,d_i + e_i \quad (1)$$

In this model, i refers to the working person. The variable OV represents the overeducation index, which takes the number one if the person has an excess of education, and zero otherwise. Therefore, according to the nature of the dependent variable in this study, the logit method is used to estimate the relationship (1). The symbols Exp, Marr, Gender, Ptime, Sr, Unemp, Rels, Reld, and e are respectively experience, marital status, Gender, part-time job, number of years of education, unemployment rate in the individual's age and gender group, relative supply of university workforce in the province of residence (ratio of workforce with university education to Labor force without university education), the relative demand of university labor force in the province of residence (ratio of the working population with university education to the working population without university education, and error term. It should be noted that the data of the Statistics Center is used for the unemployment rate variable.

The method of calculating education index: There are three general methods for calculating education: job assessment (JA), workers' self-declaration (WA) and realized matching (RM). In the third method, which is also used in this study, the required education in each job is obtained from one standard deviation towards the average education obtained by workers in each job (Verdugo and Verdugo, 1989). According to the International Classification of Occupations (ISCO), occupations are classified and within each of these occupational groups, the average and standard deviation of the years of education obtained by the workers in that group are determined. In the next step, using this average and standard deviation, we determine the person with more and less education

within each of the groups. More than one standard deviation from the average means over-education and less than one standard deviation from the average means under-education, and one standard deviation from the average on either side will be considered adequate education (Ebrahimi et al., 2015).

Data: The statistical population of the research includes working literate people aged 10 years and above living in urban and rural areas of 31 provinces of Iran. The data is collected based on the statistics center's sampling of household income and expenses in 2019.

Logit model: Logit method is used to estimate the model.

Findings

The most important research findings are as follows:

1- Increasing the number of years of education both in urban areas and in rural areas leads to an increase in education. This result is consistent with the findings of Keshavarz Haddad and Javaheri (2016). This result is as expected because the more education a person has, the more likely he is to have more education than the labor market needs.

2- Increasing the potential experience of the labor force in both urban and rural areas leads to a decrease in education. This result is consistent with the findings of Ebrahimi et al., (2015) and Keshavarz Haddad and Javaheri (2016). This result is as expected because the more experience a person has, the better he can adapt to the needs of the labor market. In fact, the level of education and experience in the labor market as a complement to each other lead to a decrease in education.

3- In both urban and rural areas, education is less in part-time jobs. This result is in line with the findings of Ebrahimi et al. (2013) and Morano (2014). This result may be due to the fact that part-time jobs have more flexibility to match skills with education. In other words, the problem of education is seen more in full-time jobs that play a more important role in income and livelihood. This point reveals the need to pay more attention to the problem of education.

4- In both urban and rural areas, more education is seen among women. This result is in line with the findings of Ebrahimi et al., (2015) and Morano (2014) and in contrast with the findings of Keshavarz Haddad and Javaheri (2016). The reason for this result is perhaps the possibility and ability of women's participation on the one hand and trust in women on the other hand is lower in many jobs.

5- In urban areas, an increase in the unemployment rate causes an increase in education. In other words, the increase in employment in the country's labor market takes place at the cost of more education. This result is in line with the findings of Dartomi et al. (2016), Morano (2014) and Kopets (2015). The reason for this result may be that in high unemployment conditions, people are forced to work in jobs that are not compatible with their education. Therefore, it is suggested to decrease the education of the workforce with policies to reduce the unemployment rate, at the same time as solving the employment problem.

6- In urban areas, the increase in the demand of academic labor leads to a decrease in education. It is necessary to update the labor market in terms of knowledge and technology in order to increase the demand for university graduates. This result is in line with the findings of Dartomi et al. (2016) and Kopets (2015). The reason for this result may be that as the demand for educated labor increases, the labor force has more choice to choose a job according to their education and the level of education decreases.

7- In urban areas, the increase in the supply of university labor leads to an increase in education. . This result is in line with the findings of Dartomi et al. (2016) and Kopets (2015). The reason for this result is that as

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the supply of educated labor increases, as the demand remains constant, the labor force has less choice to choose a job according to their education and education decreases.

Education in the private sector is more than in the public sector. Although this result is in conflict with the findings of Keshavarz Haddad and Javaheri (2016), it seems logical because in recent years, employment and promotion in the public sector are done with stricter criteria and with more consideration of educational qualifications than in the private sector.

Conclusion

According to the research findings, the following suggestions can be made:

1- Due to the positive effect of education level on overeducation, it is suggested that the development of higher education, especially in graduate education levels, should be done according to the needs of the labor market. Educating students with excess education will only increase unemployment, disillusionment of the workforce and decrease the value of courses and universities among the general public. It is better for students to consider the needs of the labor market when making decisions about choosing a field and continuing their studies.

2- Considering the negative impact of experience on overeducation, it is suggested to increase the experience of the labor force, for example, through internships during education and employment in part-time student jobs, before officially entering the labor market. This result also shows that with the increase in the age and experience of the workforce, education decreases. In other words, the labor market is slow in matching education with needs. To solve this problem, it can be effective to develop the skills required by the workforce through a technical and professional organization or the private sector, before entering the labor market officially. At the same time, by reducing the incomplete and asymmetric information in the labor market, it is possible to reduce the cost of job search for the labor force and the cost of hiring the required labor force for the employer, so that the adaptation of education to the needs of the labor market can be done faster.

3- Due to the higher level of overeducation in full-time jobs compared to part-time jobs, it is suggested to focus more on these types of jobs to reduce the level of education.

4- Due to the fact that overeducation is more common among women, it is suggested that women should be given a higher priority than men to solve the problem of education.

5- Due to the positive effect of unemployment rate on overeducation, it is suggested to reduce the education of the labor force with policies to reduce the unemployment rate, at the same time as solving the employment problem.

6- Due to the negative impact of university labor demand on overeducation, it seems that it is necessary to become knowledge-based as much as possible in the industry, agriculture and service sectors. Undoubtedly, the two-way connection between the industry and the university will make the university education more compatible with the needs of the labor market and reduce the lack of education.

7- Considering the positive effect of university labor supply on overeducation, first of all, it is suggested that higher education policies should be made based on the needs of the labor market, both in terms of the types of fields and in terms of educational content. Secondly, conditions should be provided for both the graduates and the employers to attract the labor force along with the matching of job and education. In this regard, employment agencies play an important role.

Due to the higher level of overeducation in the private sector compared to the public sector, it seems that the creation of a strong, dynamic and modern private sector that has the ability to create jobs for university graduates can help reduce the level of education.

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