

# Identifying the Economic Factors Affecting the Social Demand for Higher Education of Postgraduate Students of Ferdowsi University of Mashhad (Case Study: Ferdowsi University of Mashhad)

Mostafa Soroush<sup>1</sup> and Mahboubeh Arefi<sup>2</sup> and Mohammad Yamani<sup>3</sup>

<sup>1</sup>Master of Management and Planning of Higher Education, Shahid Beheshti University

<sup>2</sup>Associate Professor. In Planning curriculum, Shahid Beheshti University.

<sup>2</sup> Professor. In Planning curriculum, Shahid Beheshti University.

Received: April 20, 2015

Accepted: June 15, 2015

## ABSTRACT

The decision to go or not to go to university is a crucial decision in the life of young people because it affects all aspects of their life and future including: occupation, income, social relations and even mate choice. Thus, the identification of factors affecting the social demand for higher education can be effective in preparation for appropriate programs and reducing the problems in this field. Factors affecting the demand for higher education can be summarized in four categories: 1) individual factors and household characteristics 2) educational factors and facilities 3) economic factors 4) social, cultural and environmental factors. In the present study, we deal with identifying the economic factors affecting the social demand for higher education of M.A. and PH.D students of Ferdowsi University. The conclusion indicates that the factors such as getting a better job and economic laws and regulation in society affect entering university for higher education.

**KEYWORDS:** social demand for higher education, economic factors, occupation, students.

## 1. INTRODUCTION

Social demand for higher education in the form of individuals' demand for receiving higher education has considerably increased in the second half of the twentieth century (Menon, 1998). Within 27 years (1970-1997) student population of the world has increased from 28.08 million to 88.16 million people (i.e. more than threefold). In this regard, the number of students in developing countries has been different. During this period, the number of students has increased more than sevenfold, while the number of students in developed countries at the same time has been two-fold. Thus, the developing countries' share of the total student population of the world has increased from less than 25% to 50% (Akbari, 2001). This is due to the fact that discrimination in the past occurred slightly at first but later it came true. Accordingly, the issue of discrimination in the access to higher education was introduced (Jiao, Wan, 2009). Also, the number of students who chose another country for higher education has increased from 2.1 million in 2001 to 3.3 million people in 2009 (OECD).

In directing the social demand, each country's planning system has two major missions. On the one hand, it should predict the changes in the social demand as much as possible, and adapt the supply of educational services with its demand; on the other hand, by making changes in the educational system, the educational planning should direct the social demand in the required directions in order to achieve a comprehensive development (Emad Zadeh, 2001). The increasing wave of social demand for higher education in Iran has challenged the educational system in the past two decades due to specific changes such as the combined age groups and the proportion of volunteers to the corresponding age groups. These challenges illustrate the importance of proper planning (Gharoun, 2003). Revision of educational policies, the necessity of developing and improving higher education courses, financing bottlenecks, immigration of elites, graduates' unemployment and educational decline are among the tensions that have occurred in many countries in response to this public need (Rouzbehani and Taremi, 2005). It is necessary that the social demand for higher education be in accordance with the country's development program and that the needs of different sectors of economy for specialized human resources be directed and coordinated. One of the ways of directing this demand is to determine the volunteers' motivations and individual needs and also to determine their orientation towards higher education and the factors affecting this orientation (workbook of Haghighi and Akbari, 2004).

The main objectives of the higher education system in each country can be imagined on four bases: 1. helping the realization of social objectives by providing equality of opportunity in higher education, 2- estimating the social demand for higher education proportionate to individuals' characteristics, motivations, expectations and education, developing the potential abilities of citizens and facilitating the continuous learning process (lifetime), 3- developing the required specialized human resources for the country's development and helping to solve the society's problems, 4- advancing the frontiers of knowledge and producing new knowledge (Dehnavi, 2000, quoting Bazargan, 1995). Therefore, due to the importance of the factors affecting the creation of the social demand for higher education, and because the research carried out in the country about the social demand was on fourth year high school students (pre-university), this study, by studying the opinions of students who have experienced studying at a school of higher education, identifies the economic factors affecting individuals' decision-making and answers the question of whether or not students' motivation has changed over time.

## 2. Social demand for higher education

Social demand for higher education is the result of the total individual demands and the total decisions of individuals about the type and duration of study forms the social demand for higher education. Therefore, it could be stated that the social demand for higher education depends on the following two factors: one group consists of the individual factors and another group consists of others' decisions and the general conditions affecting individuals' decisions. (Gharoun, 2004). Also, the social demand can be defined as the tendency of young people to enter university and institutions of higher education. (Arasteh *et. al.* 2010). Identifying and analyzing the factors affecting the social demand reveals important points regarding the process of individuals' decision-making for educational investment. Higher education has also some features of a commodity and has an investable nature. From the consumption's dimension, individual's motivation is in fact benefiting from education for its own sake or the acquisition of knowledge or a utility. Considering budget constraints and his or her income, it is modeled by using the standard neoclassical theory of consumer behavior in which a person demands the goods and services that provide the highest possible utility. In this theory, the demand for higher education depends on the individual's or family's income and the cost of higher education, therefore, the dependence orientation is positive and negative, respectively. And of course the price or cost of benefiting from higher education include a wide range of direct and indirect private costs, etc. Empirical evidence for this type of behavior modeling can be found in the researchers conducted in 1967-78. ) Campbell and Siegel, 1971).

But the economic dimension which is considered as a human capital is based on the assumption that more education makes a person more productive in the future and this means earning capacity during the life of a person. In this theory, higher education and any skills and education create an ability or capacity in a person that can increase his/her future income. Therefore, the costs incurred to acquire the education or skills are, in fact, a kind of investment, and from this perspective, the behavior of the demand for higher education is dependent on the variables affecting the costs and benefits of this investment.

Another theory which explains the behavior of the demand for higher education is a combination of the two neoclassical and human capital theories which assumes that the consumer or demander for higher education makes a decision at two different times to allocate his/her consumption and according to budget and time constraints selects an optimal combination of educational services in the present or future. (Gharoun, 2002).

### 2. Factors affecting the social demand for higher education

Higher education, like any other product or service, has demanders whose behavior of demand is formed based on some patterns. In other words, each person, while influenced by conditions and different variables, decides to benefit from higher education services as a consumer or not. Social demand for higher education is, in fact, the outcome or the result of people's demand for higher education which is formed as a collective behavior and is influenced by various factors.

Previous studies indicate that the expected outcome has the greatest impact on people's decision to enter university, and an increase in direct costs and unemployment rate makes young people abstain from investment in higher education. But at the same time, excessive increase in unemployment rate encourages them to continue their study. Moreover, the influence of family variables lies within the mechanism of expected income and acts thereby. (Jebanly and Monfaredi, 2000).

Each of the social and economic factors has some components that are effective in motivating students to have higher education. Among the economic factors, the most important component namely employment can be noted. When the unemployment rate increases, unemployment is transmitted from high levels of education to lower levels. In these circumstances, even if more income cannot be earned, people simply select higher education to escape the unemployment resulted from lower levels of education. (Gharoun, 2003). To get an appropriate job and earn higher income is the most important motivation for students to enter university. And acquiring knowledge in the area of interest becomes less important (Cooper, 2000). Despite the increasing growth of higher education graduates, the share of the educated human resources in the country's working population is very low, that is to say 10 %. (Tayi, 2003).

## 4. METHODOLOGY

The method used in this study is a causal or causal - comparative method. A causal research is said to be a research in which the researcher studies the probable cause of the dependent variable and since the dependent and independent variables have occurred in the past, this type of non-experimental research is called casual research and quantitative study is done. In this study, data collection is done by using a questionnaire. The related study population consists of graduate students of Ferdowsi University of Mashhad and the 161 subject sample was selected according to a stratified sampling.

Questionnaire was used to process and analyze the obtained data. The SPSS software was also used for the data purification. For data analysis in descriptive statistics, statistical indicators such as frequency, frequency percentage, cumulative percentage were used in the form of the statistical tables.

In the inferential statistics section, research hypothesis test was used twice and in the secondary findings section, independent samples t- tests and ANOVA test were used.

### 4.1. Studying general questions

Studying the general questions in the questionnaire shows that 99 subjects are women and 62 subjects are men. 134 (83.2 %) of the respondents are single and 27 (16.8 %) of them are married. Respondents are divided into two groups based on master's and doctoral degree. 137 subjects (85.1 %) are graduate students and 23 (14.3%) are Ph.D. students. Population statistics for the age groups of 80 subjects

(49.7 percent) is between 23 to 25 years old ,of 42 subjects (26.1 %) between 25 and 27 years old , of 21 subjects (13%) between 27 and 29 years old and of 17 subjects ( 10.6% ) is over 29 years old.

Concerning the distribution of subjects among four income groups it can be said that: 29 subjects (18%) are in the group earning less than 6,000,000 Rial, 41 subjects (25.5%) are in the group earning 6,000,000 to 10 million Rial, 56 subjects (34.8%) are in the group earning 1 million to 25,000,000 Rial, and 29 subjects (18 %) are in the group earning more than 25,000,000 Rial.

Regarding father 's education level it can also be said that the father of 9 subjects ( 5.6% ) are illiterate, the father of 29 subjects ( 18 %) have primary school education, the father of 18 subjects( 11.2 %) guidance school education, the father of 50 subjects ( 31.1 %) diploma education , the father of 6 subjects ( 3.7 %) pre- university education , the father of 9 subjects post-diploma education, the father of 25 subjects undergraduate and the father of 15 subjects graduate and higher education .

The results of the study about the educational level of respondents' mother show that, the mother of 16 subjects( 9.9% ) are illiterate , the mother of 48 subjects ( 39.8 %) have primary school education , the mother of 20 subjects ( 12.4 %)guidance school education , the mother of 44 subjects (27.3 percent) diploma education , the mother of 8 subjects ( 5% ) pre-university education, the mother of 7 subjects (4.3%) post diploma education , the mother of 17 subjects undergraduate, and 1 graduate and higher.

#### 4.2. Studying technical questions

The results of data analysis are shown in the following sections. In this section, for each of the support question, the factors were studied separately in terms of frequency, mean and standard deviation. To determine the effectiveness of factors, one-sample t test was used. The assumed mean for formulating the hypotheses was considered 5.2. The results of data analysis, based on the defined tests, by separating questions and their hypotheses, are described below.

Question: do economic factors affect the social demand for higher education?

A: Undergraduate social demand:

**Table 1:** Frequency, mean and variance of the questions

	questions	Descriptive Statistics	Completely insignificant					Completely significant	
			1	2	3	4	5	mean	Standard deviation
1	Getting a suitable job	frequency	6	10	17	62	66	4.0683	1.4955
		percentage	3.7	6.2	10.6	38.5	41		
2	The nature of invisibility education	frequency	16	19	39	51	36	3.4472	1.23946
		percentage	9.9	11.8	24.2	31.7	22.4		
3	Entering the labour market in the field of interest	frequency	12	13	24	47	65	3.8696	1.24062
		percentage	7.5	8.1	14.9	29.2	40.4		
4	Employment regulations	frequency	21	35	44	40	21	3.0311	1.23198
		percentage	13	21.7	27.3	24.8	13		
5	Higher income with higher education	frequency	4	12	34	53	58	3.9255	1.04614
		percentage	2.5	7.5	21.1	32.9	36		
6	Receiving suitable licenses for economic activities	frequency	13	24	43	48	33	3.3975	1.20041
		percentage	8.1	14.9	26.7	29.8	20.5		
7	Using Government support schemes such as: Farabi Foundation and National Foundation of the Elite	frequency	55	46	41	10	9	2.2050	1.14629
		percentage	34.2	28.6	25.5	6.2	5.6		
8	Free opportunities for continuing education	frequency	26	33	49	29	24	2.9503	1.27868
		percentage	16.1	20.5	30.4	18	14.9		
9	Moral and material support from the government for the country's need for me specialized force	frequency	43	37	45	27	9	2.5155	1.20988
		percentage	26.7	23	28	16.8	5.6		

**Table 2:** Mean and t value of economic factors undergraduate education

Economic factors	mean	t	Degree of freedom	P
gaining a better position	3.7940	16.896	160	0.000
Economic laws and regulations	3.4534	12.602	160	0.000
Government support policies	2.5538	0.704	160	0.482

The figures in the above table show that the effect of the factor of getting a better job and also the effect of economic laws has been significant in graduate social demand .However, considering  $P=0.482>0.05$  , it could be stated that the effect of government support policy has not been significant.

B: Social demand for postgraduate education:

**Table 3:** Frequency, mean and variance of the questions

	questions	Descriptive Statistics	Completely insignificant					Completely significant	
			1	2	3	4	5	mean	Standard deviation
1	Getting a suitable job	frequency	10	6	28	53	64	3.9627	1.13406
		percentage	6.2	3.7	17.4	32.9	39.8		
2	The nature of invisibility education	frequency	14	17	40	52	38	3.5155	1.20988
		percentage	8.7	10.6	24.8	32.3	23.6		
3	Entering the labour market in the field of interest	frequency	14	17	40	52	38	3.8696	1.24623
		percentage	8.7	10.6	24.8	32.3	23.6		
4	Employment regulations	frequency	7	16	27	52	59	3.0311	1.39384
		percentage	4.3	9.9	16.8	32.3	36.6		
5	Higher income with higher education	frequency	31	30	33	37	30	3.7826	1.23842
		percentage	19.3	18.6	20.5	23	18.6		
6	Receiving suitable licenses for economic activities	frequency	12	13	33	43	60	3.1242	1.32137
		percentage	7.5	8.1	20.5	26.7	37.3		
7	Using Government support schemes such as: Farabi Foundation and National Foundation of the Elite	frequency	22	34	38	36	31	2.3333	1.30562
		percentage	13.7	21.1	23.6	22.4	19.3		
8	Free opportunities for continuing education	frequency	55	44	26	20	14	2.9188	1.47077
		percentage	34.2	27.3	16.1	12.4	8.7		
9	Moral and material support from the government for the country's need for me specialized force	frequency	41	25	31	32	31	2.5419	1.39684
		percentage	25.5	15.5	19.3	19.9	19.3		

**Table 4:** Mean and t value of economic factors of postgraduate education

Economic factors	mean	t	Degree of freedom	P
gaining a better position	3.7940	16.896	160	0.000
Economic laws and regulations	3.4534	12.602	160	0.000
Government support policies	2.5538	0.704	160	0.482

The results of the table suggest that for higher education admission, the effect of factors of getting a better job and also the effect of economic laws has also been significant. But the effectiveness of the government support policy cannot be verified.

C: Comparison of the effects of economic factors on the demand for graduate and higher education

In this section, the effectiveness of factors affecting graduate and higher education has been tested and the achieved results indicate that there is not a significant difference between the impact of economic factors on the demand for higher education in graduate and postgraduate period.

**Table 4:** Mean and t value of economic factors of postgraduate education

Economic factors	Education period	mean	Standard deviation	dual mean	Dual SD	t	Degree of freedom	P
gaining a better position	graduate	3.7940	0.97174	0.01139	0.93246	0.155	160	0.877
	Post graduate	3.7826	1.02216					
Economic laws and regulations	graduate	3.4534	0.96000	0.14168	0.70525	2.552	160	0.012
	Post graduate	3.3116	1.10324					
Government support policies	graduate	2.5538	0.96908	0.06112-	0.72064	-1.076	160	0.283
	Post graduate	2.6149	1.16236					

#### 4.3. Secondary findings

In the section of the research secondary findings, by using ANOVA analysis, it was revealed there is not a significant difference between students' opinion about the impact of economic factors on the social demand for higher education in terms of educational level, marital status, age and father's education. The comparison of men's and women's views showed that men's and women's different views regarding economic factors affecting the social demand for higher education for graduate and postgraduate university admission is not also significant.

Furthermore, the results suggest that for graduate admission, in the factor of government support policy among different income groups and also in the factor of getting a better job based on mother's education, the difference in viewpoints is significant.

## 5. Conclusion

Formal education, especially higher education system has a significant role and responsibility concerning meeting the needs of society. These responsibilities include economic development, transmission of knowledge, educating human resources for taking different jobs in society, and more importantly, from the economic and human resources planning dimension, applying the educational findings of educated people in working environment and thereby increasing the efficiency and effectiveness. The results of this study indicate that the most important economic factors affecting the demand for postgraduate students include

The factor of gaining a better position in society (to get a suitable job, the investable nature of education , entering the workforce in the field of interest)

The factors of economic laws and regulations (employment laws, increase in income with higher education, achieving suitable licenses for economic activities)

According to the results, the relationship between labor market and education is clearly visible. Therefore, proper planning should take place to coordinate the needs of the labor market and education and to use the knowledge of higher education graduates in various jobs in the society. However, to minimize the loss of human resources in the country, there are three main conditions:

1. Making the best use of the existing potential resources.
2. The availability of job opportunities for people interested in practical participation in economic activities.
3. Creating an environment for competition and innovation, and adaptation of knowledge and skills of human sources with the needs of the country.

The realization of the first two conditions requires the efficient role of government in administration of active policies in labor market, creating the required flexibility in the labor market by adapting the existing laws and regulations and creating variety in all types of contracts and reforming payment system and facilitating displacement of workforce through the formation of a transitional labor market. Regarding the third condition in two major fields, some duties have been defined for government in creating a competitive environment in economic activity, particularly in transferring governmental administrations and strengthening higher education and innovation system.

## REFERENCES

1. Arasteh, H . and M, Behrang. and M, Hassan Abadi. Evaluation of the factors influencing the decision of fourth year high school students to study in the university. Association of Higher Education, 2012. 4 .
2. Akbari Pour, S. The current situation of graduates employment and unemployment Work and Society, 2004. 53 .
3. Gharoun, M. Estimating the social demand for higher education in the period from 1380 to 1388, Research and Planning in Higher Education, 2002. 26(71).
4. Gharooun, M. The challenge of social demand for higher education in Iran ,the Parliament and Strategy, 2003. 41(29).
5. Gharoun, M. The effect of economic status of the household on demand for higher education, Research and Planning in Higher Education, 2003. 30(43).
6. Gharoun, M. The Workbook, H. Akbari, N. (2004 ). The study of convergence of social demand for higher education in Iran ( 1362-1380 ) Iranian Economic Research, Sixth year, 20:115 .
7. Campbell, R. and B, Siegel. Demand for Higher Education in the united States, 1919-1960. Economics Letters, 1967, 57, p. 482-494.
8. Menon, M. E. Factors Influencing Demand For Higher Education, The Case Of Cyprus, Higher Education, 1998, 35, p. 251-266.
9. OECD (2010). Education at a Glance. OECD, Paris.