AN ANALYSIS OF THE IMPACT OF POLITICIZATION OF EDUCATION IN TURKEY ON THE RELATIONSHIP WITH EU: CAN THE HUMAN CAPITAL BE THE CONFIDENTIAL CRITERION OF EU?*

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Abstract: This study intends to analyse the relationship and the future of the European Union (EU) and Turkey and seeks to answer this question; Is Turkey that is demanding to become a member of the EU and identifying it as a state policy, really ready for the membership of the Union? In other words, if we take an argument concerning the relationship between European Union and Turkey and the future of this relationship with reference to the Union member states' political / economic / cultural envisagement about Turkey from a critical viewpoint highlighting interior factors rather than exterior factors, then, what could be the reason why Turkey fails the membership or the primary reason retarding the membership? In this study, it is considered that the answer is hidden in Turkey's human capital asset and lack of effectiveness. Although important educational and training projects were implemented to develop qualified work force in the last three centuries from Ottoman times to Republican period, it can be concluded that all these efforts were not enough to catch the expected level. A human capital index is developed for this study in order to compare European countries and Turkey and other indexes were also used. Results showed Turkey's current position with respect to EU and inspire serious policy changes to develop human capital.

Keywords: Turkey, European Union, Politicization of Education, Human Capital.

TÜRKİYE'DE EĞİTİMİN SİYASALLAŞMASI SORUNUNUN AVRUPA BİRLİĞİ İLE İLİŞKİLERİNE OLAN ETKİSİNE DAİR BİR İNCELEME: BEŞERİ SERMAYE AVRUPA BİRLİĞİ'NİN GİZLİ KRİTERİ OLABİLİR Mİ?

Öz: Bu çalışma Türkiye'nin Avrupa Birliği ile ilişkilerini ve geleceğini analiz etmeye çalışmakta ve şu sorunun cevabını aramaktadır: Avrupa Birliği'ne üye olmayı bir devlet politikası haline getiren Türkiye, buna gerçekten hazır mıdır? Diğer deyişle, üyeliği geciktiren sebepler arasında çokça zikredilen dış unsurları bir an için unutulur, bunun yerine içe dönük eleştirel bir araştırma sürdürmeye çalışılırsa, bu gecikmenin gerçek sebepleri konusunda neler söylenebilir? Bu çalışma, bu problematiği, sorunun politik-kültürel boyutunu

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vurgulayarak ele almayı denemektedir. Osmanlı-Cumhuriyet tarihine bakıldığında, eğitim alanında önemli projelerin hayata geçirildiği görülmektedir ve denilebilir ki eğitime son üç yüzyıldır yatırım yapılmaktadır. Fakat bütün bu gayretler umulan beşeri sermayeyi oluşturmaya ve gelişmişlik düzeyini yakalamaya yetmemiştir. Bu çalışmaya göre, bunun en önemli sebebi Türkiye'de eğitim daima politik bir meselenin konusu edilmesidir. Bu varsayım, çalışma kapsamında geliştirilen beşeri sermaye indeksi ve diğer indekslere göre yapılan karşılaştırmada mukayeseli olarak ispatlanmaya çalışılmıştır. Beşeri Sermaye seviyesi bakımından Türkiye'nin hâlihazırdaki durumu hayli dikkat çekici sonuçlar ortaya koymaktadır ve önemli politika değişikliklerinin işaretini vermektedir. Sonuç olarak, denilebilir ki, Türkiye Avrupa Birliği'ne girmeye hazır değildir.

Anahtar Kelimeler: Türkiye, Avrupa Birliği, Eğitimin Politikleşmesi, Beşeri Sermaye.

I. Introduction and the Problem

This study intends to analyse the relationship and the future of the European Union (EU) and Turkey. To ask in a different way: Is Turkey that is demanding to become a member of the European Union, and identifying it as a state policy, further inarguably idealizing the membership of European Union, really ready for the membership of the Union? When paid attention, the way the question is asked is quite different. In the majority of academic studies, reports by strategy institutions or interpretations pertaining to the relations and the future of European Union – Turkey, the logic how the question is asked is a little bit of difference: What could be the reason why European Union rejects Turkey's membership? Answer to the question is mostly identical: Among the chief arguments are economic backwardness, political instability, cultural differences, etc.

If we take an argument concerning the relationship between European Union and Turkey and the future of this relationship with reference to the Union member states' political / economic / cultural envisagement about Turkey from a critical viewpoint highlighting interior factors rather than exterior factors, then, what could be the reason why Turkey fails the membership or the primary reason retarding the membership? We consider the answer is hidden in Turkey's human capital asset and lack of effectiveness.

In fact, our recent history - the history of modernization for the last three centuries – is full of a good many of successful, brilliant and progressive developments in the field of "education", the source of the existence of human capital (Zürcher, 2004; Shaw, 1994; Shaw and Shaw, 1983; Tekeli, 1983, Lewis, 1968; Ahmad, 1995). In 1773, for instance, initiatives starting with Mühendishane-i Bahr-i Hümayun (Naval Academy) to establish a college continued with Mekteb-i Harbiye (Military Academy) and Mekteb-i Tıbbiye (Faculty of Medicine). Darülfünun-u Şahane (College) was inaugurated in Istanbul in 1900. Upon legislation in 1876, primary school education became mandatory. As from 1869, 'Sıbyan Mektebi' (Primary School) in villages and

districts, 'Rüşdiye' (Ottoman Junior High School) in towns with five hundred houses, İdadiye (High School) in towns with one thousand houses, 'Sultaniye' in province centres were started to ensure primary, secondary and high school educations. However, the cost of primary school was covered by foundations, donations and contributions by students. Developments in education in the Cumhuriyet (Republican) period are remarkable as well. There happened drastic increase in the number of students attending primary, secondary, high school, technical and art schools, especially in the early republican period. For instance, the number of secondary school and high school students exceeded 400%. Teacher training colleges and universities began to show up in higher education. Further, among other notable improvements in education are Village Institutes and People's Houses.

Table 1. Student increase rate by schools in the early of Republican period (1000 people)

	Primary School	**Secondary School**	**High School**	**Vocational School**
1923-1924	**342**	**5,9**	**1,2**	**6,5**
1927-1928	**462**	**19,9**	**3,8**	**7,3**
1931-1932	**524**	**30,3**	**6,8**	**9,5**
1924-1932 Rate of increase	**53%**	**414%**	**467%**	**68%**

Source: (Yenal, 2001: 69)

However, ongoing initiatives concerning education since the period of Selim III, for about three hundred years, have not been satisfactory. The most important reason is that the education has been "politically" handled and it had always been a matter of political debate. In other words, education has not been handled as supposed to be, yet as "a politically significant issue." In this regard, the main role attributed to education is the training of staff envisioned in the minds of reformers, which is suitable for the establishment of the future society.

In this context, we think that such a critical inward outlook we try to emphasize above would give an idea about the past, today and future of our relations with the European Union. In our opinion, although Turkey has accomplished significant and extended progresses in education, they are not sufficient for membership in the European Union. Compared to newly joined EU Countries in the years of 2000's, it can be seen that Turkey has dropped behind them with regard to expenditures of education, science and technology. For example, GDP rates of education expenditure of newly joined EU Countries are almost two times more that Turkey. When it is compared the mean years of schooling, average of Turkey is not more than 7.4 years. In terms of research and development expenditure, it is possible to see a similar picture (Table 2). Yet as to be shown below, education and human capital which is the outcomes

of education is surely significant in terms of development/growth and modernization. On the other hand, such a view we sought to detail and demonstrate below is critical as well as it suggests crucial solutions. This subject can be entitled as follows.

Table 2a. Comparison of Turkey with newly joined EU Countries

Government expenditure on education, total (% of GDP)				
	2000	**2005**	**2010**	**2011**
Bulgaria		**4,24**	**4,09**	**3,82**
Cyprus	**5,34**	**6,92**	**7,27**	**7,24**
Estonia	**5,34**	**4,87**	**5,65**	**5,15**
Greece	**3,37**	**4,09**		
Croatia			**4,30**	**4,20**
Hungary	**4,95**	**5,45**	**4,89**	**4,71**
Lithuania		**4,88**	**5,35**	**5,17**
Latvia	**5,35**		**5,02**	**4,93**
Romania	**2,86**	**3,47**	**3,52**	**3,07**
Slovak Republic	**3,92**	**3,84**	**4,23**	**4,05**
Slovenia		**5,68**	**5,68**	**5,68**
Turkey	**2,58**	**2,90**	**2,90**	

Source: (http://data.worldbank.org/topic/education)

Table 2b. Comparison of Turkey with newly joined EU Countries

Mean years of schooling (of adults) (years)				
	2000	**2005**	**2010**	**2011**
Bulgaria	**9,5**	**10**	**10,6**	**10,6**
Cyprus	**10,0**	**10,7**	**11,3**	**11,5**
Estonia	**11,7**	**11,9**	**12**	**12**
Greece	**8,9**	**9,8**	**10,1**	**10,2**
Croatia	**6,0**	**9,4**	**10,8**	**11,0**
Hungary	**10,7**	**11,1**	**11,3**	**11,3**
Lithuania	**10,9**	**11,8**	**12,4**	**12,4**
Latvia	**9,4**	**10,4**	**11,5**	**11,5**
Romania	**9,9**	**10,1**	**10,5**	**10,6**
Slovak Republic	**11,2**	**11,6**	**11,6**	**11,6**
Slovenia	**11,6**	**11,4**	**11,8**	**11,9**
Turkey	**5,5**	**6**	**7,2**	**7,4**

Source: (http://data.worldbank.org/topic/education)

Table 2c. Comparison of Turkey with newly joined EU Countries

Research and development expenditure (% of GDP)				
	2000	2005	2010	2011
Bulgaria	0,50	0,45	0,59	0,57
Cyprus	0,60	0,93	1,61	2,37
Estonia		0,59		0,66
Greece	1,05	0,86	0,75	0,75
Croatia	0,80	0,94	1,17	1,21
Hungary	0,59	0,75	0,80	0,91
Lithuania	0,44	0,55	0,60	0,69
Latvia	0,36	0,40	0,46	0,50
Romania	0,64	0,50	0,63	0,67
Slovak Republic	1,38	1,43	2,10	2,47
Slovenia	0,47	0,59	0,84	0,85
Turkey	0,50	0,45	0,59	0,57

Source: (http://data.worldbank.org/topic/education)

II. Human Capital and its Significance for Development

Besides the establishment of an orderly political infrastructure for the development of countries, juristically guarantee of rights of ownership and equity, and physical infrastructure preparation such as communication and financial sectors, it is an important condition that individuals have the basic and vocational education to the extend they have adequate human capital (Yenal, 1999: 46).

Qualified human resources and scientific research and development activities, which can be considered as the prominent riches of a developed state, are the result of prolonged investments made for human being and scientific infrastructure, rather than inherited from the past. (Porter, 2011: 218). Human resource development programs are important for the increase in human capital for economic development in national plans. Education is one of the most important factors to enable nations a competitive advantage in long term. Education applies to not only mandatory primary and secondary education as in many countries, but also higher education, vocational education, job shadowing, technical training and other life-long learning activities (Porter, 1990: 628). The chief reason for the rapid development of such countries as Japan, South Korea and Taiwan deprived of the production means like soil, raw material and capital after the second half of 20th century can be said to be the investment in education, and human capital increase after the development strategies of human resources from primary school to vocational and technical education.

Changing economic and social conditions has raised the importance of knowledge and human capital. The roles the information technologies undertake to change traditional manufacturing processes, and the worldwide economic

market in which information quickly flows and modifies constantly necessitated reconsideration of the importance of the classic means of production (OECD, 2001: 16).

In addition to what traditional development economists put as the most important means of production such as soil, labour, capital, and the other tangible resources, the evaluation criteria related to labour began to diverge after the 1960s. Tangible viewpoint which defines labour in terms of quantity and is based on physical strength has shifted to an abstract base in which the workman is mentally evaluated and acted in regard to his knowledge and skills (OECD, 2001: 17). A labour force which requires analytical ability and is complex and able to manage dynamic production processes being constantly renewed, rather than in simple and repetitive production process emerging as a general characteristic of manufacturing industry since the first half of 20th century, has become popular. Dynamism of rapidly changing technology and market demand dynamism has continuously made possible the renewal of skills and acquisition of new information. Employees, who are able to develop new services in accordance with the changing customer demands, and offer special services to customers by taking initiatives not only in manufacturing sector but also in service sector, have become more competent. The idea of increasing in the quality of labour and employees trainings which could ensure to follow technological and sectoral developments have increased the importance of the formal, informal, organizational and national education. Besides the timeliness, quality and the use the knowledge in production obtained during learning process from birth to death, it is also important how long the knowledge will contribute.

The intellectual capital of nations is the sum of internalized knowledge and experience to have been accumulated, and to be used to increase the current or potentially future social welfare, and to achieve national objectives in individuals, organizations, institutions and all social layers as a whole (Bontis, 2004: 14-15). Human capital, which is a dimension of intellectual capital, is the sum of knowledge and skills that individuals possess to the extent they could fulfil the national objectives and tasks. The way to acquire the knowledge is possible through formal education in early life, and then through participation in the organizational or lifelong trainings. Together with structure of the national education system, it is also important that the individuals have qualifications both in quality and quantity (Bontis, 2004: 20). Factors such as the average rate of college graduates in society, the quality of education, the average duration of education, those who work in production and are majored in their fields can be useful to understand the general characteristic.

The abundance of human capital is a sophisticated concept which is not only unlimited to the knowledge and capabilities used in the production process but also includes general facts, information about laws and business procedures, teamwork skills, communication skills, a culture facilitating

interaction and teamwork, and information networks to be converted into service or production (OECD, 2001: 19).

Human capital also refers to the utility of the sum of the knowledge, experience, expertise and intuition acquired by the people of a nation when performing the national targets. Human capital comprises both the learning of scientific information acquired through education and values arising from national cultures and beliefs. Furthermore, human capital, together with abstract values such as health, motivation, intuition, entrepreneurship and expertise, can be assessed with tangible data such as labour force with high quality skills, population ratio of doctors, engineers and scientists, female labour force rate and the life expectancy (Lin and Edvinsson, 2011: 4).

Human capital is a term which is difficult to be replicated, requires many years of acquisition, and plays the most important role in the development of countries on the condition that it is supported efficiently. Human capital is the sum of knowledge, experience and skills which individuals gained as a result of formal or informal education and which they use throughout their lives in the production of products and services for the benefit of individuals, organizations and communities (Ardichvili, Zavyalova and Minina, 2012: 213-214). While the primary education and schooling rates are accepted as an important criterion in enhancing human capital in the beginning, when such countries as, in particular the members of European Union and those having Far East economies achieving a certain development level are considered for good and all, it can be put that the technical training and lifelong education should come into prominence, regarding that the education is now mandatory and widespread.

Even though new university graduates are acquiescently accepted to their first job in the light of their trainings and knowledge, the importance of their organizational or non-organizational, formal, informal and vocational trainings to be obtained in the way they would be skilled at in the area in which the business specializes is undeniable. As an example, it can be put that even the assembly industry and service sector jobs requiring the most basic abilities are possible through vocational training (Becker, 1993: 20).

In this regard, Çetin (2005), in his analysis using human development index conducted by United Nations development program to evaluate Turkey's human development performance and compare it with EU countries, indicates Turkey’s weak condition against European Community. Likewise, in their study in which they compared Turkey and EU in terms of health, education and labour market-related indicators being the components of human capital, Öz, Taban and Kar (2009), using Cluster Analysis method, have put forth that Turkey has no similarity with the old and new members with regards to education, health and labour, and suggested the necessity of radical reforms for improvements.

III. European Union and Turkey's Efforts to Increase Human Capital

Together with the adoption of the Lisbon Strategy Document in 2000, the European Union declared their target of being "the most dynamic and competitive knowledge-based economy in the world". The union with this paper has aimed at making Europe an attractive place to work and invest, and focusing on knowledge and innovation for economic growth as the main strategy. Another considerable feature of the Lisbon strategy is the policy recommendations shedding light on employment, Research and Development (R&D) and economic growth. A key requirement for economic growth, they put, is to follow innovation-oriented policies, and a learning economy will gain continuity. Further, the document includes recommendations about the quality and improvement of human resources, one of the most important requirements of human capital. It was emphasized that activities such as vocational and technical education, and innovative studies cooperating the establishment of European higher education area, universities, industry associations and "Research and Development Centers" should be increased by establishing a continental information network for increasing human capital and intellectual capital (EU, 2000).

In the summit held in Brussels, 2006, the Lisbon strategy was revised and emphasized that education, above all, should be handled as a fundamental element and the areas with most investment conversion and with high added value should be provided fund (EU, 2006).

In 2010 the European Union published "Europe 2020a Strategy for Smart, Sustainable and Inclusive Growth". One of the most conspicuous points in the strategy is the importance given to human capital. 3 out of 5 main objectives for the Union are directly related to investments for increasing human capital both in quality and quantity. Objectives are as follows: (EU, 2010)

- Upgrading the employment rate of the population aged 20-64 to the level of 75%,
- Achieving the target of GNP's 3% allocation to R&D; taking necessary incentive measures in order that private sectors invest in the R&D
- Decreasing the proportion of early school leavers to 10% and upgrading higher education graduates at the age-range 30-34 to at least the level of 40 %

To achieve these objectives, three main areas are of importance: They are movement plans aiming smart, sustainable and inclusive growth. Especially those of smart growth and inclusive growth include movement plans to increase human capital. In smart growth targets, knowledge and innovation are considered as a necessity for economic stability and growth, and such targets as the improving education quality in community so as to increase innovation in

the community; strengthening ties among universities, business and research centers; the young people taking their place in business world through training as apprenticeship and work experience; creating an information network by extending high speed in the community are expected. As for with inclusive growth, employment of high levels, investment policies to improve abilities and the modernization of vocational training are advised to increase employment.

Turkey's vision declared in the strategy paper for the terms 2011-2014 sets forth "being the production base of Eurasia in high and medium technological products". In accordance with the vision, the determined general objectives are "increasing the competitiveness and efficiency of Turkish Industry and expediting the transformation to an industry structure which has more share in world exports, where mainly high-tech products with added value are produced, which has qualified labour and which at the same time is sensitive to the environment and the society." (Sanayi ve Ticaret Bakanlığı, 2010: 13).

Three main strategic objectives have been set in accordance with the vision and objectives namely increasing the weight of mid-tech and high-tech sectors in production and exports, transition to high added value products in low-tech sectors, and increasing the weight of companies that can continuously improve their skills (Sanayi ve Ticaret Bakanlığı, 2010: 15).

Countries, particularly China and India, having a large labour potential, following their global market entry, have become attractive investment areas for a number of international companies. That they have cheap labour and are integrated a rapidly growing technology has urged Turkey to achieve the competitiveness by implementing knowledge-based strategies.

It is an important agenda topic of Turkey to overcome problems caused by high unemployment rates and global competition despite rapid economic development after 2001 economic crisis, and make strides so as to train quality labour in accordance with the demand of the market.

A major obstacle in the development of the private sector and in increasing the competitiveness on global scale is the competencies and skill levels of labour. Lack of skill level is largely due to lack of education. Evaluated in terms of its competence, Turkish labour lags behind developed countries. Compared by level of education, 26,6% of those who work in European countries, aged 15-64, are graduates while for Turkey it is 13,3 %. The fact that school enrolment in Turkey is relatively weak compared to developed countries is a significant factor reducing Turkey's competitiveness (Sanayi ve Ticaret Bakanlığı, 2010: 80).

As well as the quality of education acquired from formal or informal channels contributing a great deal to human capital, the time duration is also an important factor. Conceptual skills, knowledge and experience the employees gained as a result of trainings applied to them at sufficient amount of time will positively affect productivity in their working lives.

IV. Research Methodology

We have aimed to develop Human Capital Index to measure Turkey's situation across the European Union countries. To do this, the data base of World Bank was used (http://data.worldbank.org/topic). By examining the data on human capital index previously created in the literature and also taking the factors offered by the database into consideration, 7 factors were determined, which were more current and believed to have high measurement power (Table 3). For example, the literacy rate used by Bontis (2004) to measure the human capital of the Middle East countries, the percentage of primary school teachers, the data such as the proportion of male and female students in elementary school were not thought to be distinguishing factors for European Union countries and Turkey where the primary and secondary education are mandatory. Today, since internet is being used for entertainment, game and messaging for communication, rather than creating an information society and educational purposes, the data used by Lin and Edvinsson (2011) and Weziak (2007) was thought to be insufficient to measure the human capital regarding the internet usage.

In order to relatively calculate 7 sub-factors to form the human capital index for each country, the country with the highest value was determined for each sub-factor. All other countries' data were divided into the data of the country with the highest value and multiplied by 10. For instance, in order to determine Turkey's relative scores of math and science education in terms of quality, compared to other countries, the value of Belgium (6.2), the highest value in this factor was used as the base. Turkey's science and mathematics education points were calculated as: (3, 4/6, 2) * 10 = 5, 5. After these calculations had been made for each of sub-factor and all countries, to determine the percentage impacts of sub-factors on general index, the factor weights were determined by receiving the opinions of academics studying in social sciences. Like each compound index, the sub-factors that constitute the index and their impacts on the total weight are debatable. However, previous investigators (Bontis, 2004; Lin and Edvinsson, 2011) have used similar methods to determine the weight factors. Human capital score for each country and acquired relative factor score (I) were obtained by the determined weights multiplication and the sum of 7 factors (Table 4).

HCI= 0,15* (BS1) + 0,15* (BS2) + 0,15* (BS3) + 0,15* (BS4) + 0,10* (BS5) + 0,10* (BS6) + 0,20(BS7)

Besides the developed Human Capital Index (HCI), "Human Development Index (HDI)" developed by United Nations Development Programme and "knowledge economy index" and "education index" by the World Bank were also used in this study so as to provide comparison. Using economic stability and three sub-factors on training, health index developed by the United Nations Development Program measures the development level of

the countries. General health status is measured by the life expectancy at birth, the average of 25 years old adult students in schoolattendance and expected attendance duration for children taking school (UNDP, 2011). In addition, the knowledge economy index and education index were also used, the index the World Bank prepared so that the countries could see their current situation and determine their national strategies by comparing their situations. Knowledge economy index (KEI) is an composite index measured by 12 different values such as economic and institutional regime index, education index (EDI), the innovation index (KI) and information technology (ICT) index consisting of the total and the number of patents and internet and phone usage rates. EDU index that measures the quality of education and used to create KEI, on the other hand, is measured by the average length of school attendance, enrolment ratio in secondary schools and universities (www.worldbank.org/kam).

Table 3. The comparison of data used for measuring human capital

Nick B., (2004)	Lin, C.Y.Y. and Edvinsson, L. (2008)	Weziak, D. (2007)	The Values Used in This Study
Literacy rate	Labor force skills	S&T sector employee rate	(BS1) Quality of math and science education
Number of higher education institutions	Employee Training degree	IT employee ratio	(BS2) The level of staff training
Rate of primary school teachers having vocational competence	Literacy rate	The number of researchers per 1000 people	(BS3)University graduation rates for population ages 15 and above
University students ratio	University students ratio	Internet access ratio	(BS4)Professional and technical labor ratio
Number of university graduates	Primary school teacher/student ratio	Computer skill degree	(BS5) Life expectancy
Primary school 1st year male student enrollment	Internet users ratio	IT employee ratio	(BS6) Number of Eng. and scientific articles per million
Primary school 1st year female student enrollment	The share of education in government budgets	The ratio of people ages 25-64 attending an training program	(BS7) Public expenditure on education in proportion to GNI
		University graduates aged 20-29 in technical area	

Table 4. Comparative Human Capital Index

	HCI	HDI	EDU	BS1	BS2	BS3	BS4	BS5	BS6	BS7
Germany	11	3	5	5.2	10.9	34.78	80	540	4.57	5.23
Austria	14	9	10	4.9	7.5	29.85	80	582	5.47	6.27
Belgium	4	8	8	4.9	19.3	32.48	81	666	6.44	7.38
Bulgaria	29	28	28	2.8	10	22.02	73	105	4.44	5.08
Czech Republic	19	14	15	4.4	5.2	33.81	77	357	4.52	5.18
Denmark	1	6	3	5.4	12.6	39.19	79	960	8.72	10
Estonia	13	19	11	4.3	15.8	26.69	75	374	5.66	6.49
Finland	5	11	2	5.1	10.5	36.5	80	943	6.81	7.8
France	10	10	14	4.7	9.4	32.6	81	496	5.89	6.75
South Cyprus	7	18	23	4.4	16.7	27.19	80	163	7.94	9.1
Nether-lands	6	1	4	5	13.9	36.7	81	868	5.63	6.81
England	9	16	7	4.7	14.3	27.07	80	773	5.68	6.45
Ireland	8	2	6	4.7	18.5	23.45	80	573	4.98	6.51
Spain	20	12	13	3.7	14.8	24.75	82	468	7.29	5.71
Sweden	2	4	1	5.7	14.1	39.34	81	1084	4.67	8.36
Italy	24	15	18	3.2	6.3	31.47	81	447	7.81	5.56
Iceland	3	5	9	4.7	17.6	36.39	81	745	5.64	8.95
Latvia	18	26	26	3.9	12.6	31.22	73	64.5	5.67	6.46
Lithuania	15	24	20	4.1	15	29.2	73	135	3.15	6.5
Luxem-bourg	21	13	12	5.4	9.2	31.8	80	153	5.12	3.61
Hungary	17	22	16	3.7	13	29.15	74	244	3.5	5.87
Mace-donia	30	30	30	3.3	6.8	18.99	74	28.2	5.77	4.01
Malta	22	21	199	4.3	6.3	28.16	80	55	5.1	6.61
Poland	23	23	25	4.2	9.1	26.51	76	187	5.79	5.84
Portugal	27	25	22	3.9	3.3	18.18	79	323	4.28	6.64
Romania	28	27	27	3.9	7.2	19.32	73	58.1	5.04	4.91
Serbia	26	29	29	3	6.4	23.41	74	143	4.08	5.78
Slovakia	25	20	21	3.9	6.1	29.05	75	180	5.7	4.68
Slovenia	12	7	17	4.1	9	31.41	79	636	3.12	6.54
Turkey	31	31	31	3.7	5.3	13.64	72	118	4.09	3.58
Greece	16	17	24	3.5	22.3	22.98	80	445	4.09	4.69
Index Percentages				15	15	15	15	10	10	20

- *HCI: Human Capital Index created for this study;*
- *HDI: Human Development Index*
- *EDU: Education Index*
- *BS1: Quality of math and science education (rating scale between 1-7), 2010*
- *BS2: The level of staff training (rating scale between 1-7), 2010*

- *BS3: University graduation rates for population ages 15 and above (%), 2010*
- *BS4: The ratio of professional and technical labor force among the employees (%), 2008*
- *BS5: Life expectancy (year), 2008*
- *BS6: The number of engineering and scientific articles per million, 2007*
- *BS7: Public expenditure on education in proportion to Gross National Income, 2010*

V. Comments and Assessment

According to both the data of Human Capital Index for this study and index value previously conducted by the World Bank and UN Development Programme, Turkey ranks the last with regards to all index values when compared with other countries.

It is obvious that education reforms to increase the human capital beginning from Ottoman Empire and developing significantly following the proclamation of the Republic remain incapable. This is because we approach education problem from a political point of view, not an economic and infrastructural one to achieve development. That means: Educational process foreseeing a certain time aims at raising individuals with innovative and critical thinking and self-confident people who always practice it in real life. However, political mind regards modernization as a matter of staff. Therefore, the appraised value for education is just to raise staff appropriate for politics towards a 'Modern Turkey' vision stuck in minds. It is evident from the comparison above that education policies of such a controlled modernization mentality are not able to generate the human capital which will enhance the desired "level of contemporary civilization".

In this regard it can be put that a healthy Turkey- EU relationship is possible when the mentality changes. In other words, from dominant political ideas/movements/attitudes point of view in the field of education, we think that the traditions formed with political interference are not likely to put Turkey into a healthy modernization process and above all not likely to take it a place in EU. Therefore, certain ways that would prevent education policies from political views, and enable medium and long-term human capital potential to be best put into practice are needed. Consequently, we think that such a change, namely a new approach to education is most likely to offer stimulating opportunities in the estimation of human capital potential. Because, as mentioned in the second section, even if the provision of raw materials used in production from equity of that country, having young or high labour force in number are considered to be an advantage in old economies, they remain incapable of outcompeting in

today's information-based developing industry. In this respect, the role of human capital in development and modernization is vital.

In this study, we have examined Turkey-EU relations with regards to human capital-oriented analysis, and it is possible to offer certain suggestions for Turkey's human capital improvement. We think the determinations below are significant for Turkey.

Although having a labour force of secondary or even university graduates is accepted to be essential for competition superiority, it is obvious that, to get ahead in international economics, we need a kind of labour force which is rare, original and specialized according to private sector's needs. The first condition of sustainable competition is to generate a specialized labour force and keep their knowledge up-to-date through trainings (Porter, 2011: 218). Since the skills acquired by compulsory or formal education lose its currency in a certain time period, more dynamic and up-to-date educational strategies should be set. Specialty-oriented vocational education, technical training in universities, proficiency completion education by occupational groups and job shadowing are likely to increase competitiveness.

Improving the quality of primary and secondary education and the working population supported by continuous training are important to increase the national human capital. The success of Far Eastern economies, particularly those of Japan, South Korea and Taiwan comes from the importance given to both primary and secondary education and investment in employees. It is also possible to explain the philosophy underlying in the background of the lifetime employment guaranteed jobs, human resources application unique to Far Eastern societies, by the belief that long-term education investments for employees could gain profound expertise knowledge, rather than by a strong collectivist culture or neo-Confucian understanding.

The co-operation of industrial sectors, universities and research centers not only contribute human capital increase and national innovation, but also provide a didactic aspect because of mutual knowledge update. For this reason, in terms of generating information synergies, mutual project co-operations should be encouraged with different mechanisms in Turkey.

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