

Overview of Human Capital In Turkey In The EU Process In Terms Of Education: An Analysis On The Axis Of Development Plans

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Abstract: In the information age, countries that are considered to be developed owe their technological and economic advancement to their investments on human resources. Positive values that emphasize humane characters such as knowledge, skill, experience and dynamism are seen as human capital. These values, by ensuring more effective use of other factors used in production, increase the rationality in economic activities and enable the national economy to develop faster. Development plans have become much more important and necessary due to the multidimensional and rapid transformation, intensifying competition and increasing uncertainties. Turkey in the EU accession process attaches high importance to the human capital factor in its development plans due to the high density of young population it has. The aim of this study is to evaluate the human capital element in the framework of development plans which have been prepared by Turkey, a candidate of EU membership, from past to present. In this study, human capital element has been evaluated on the basis of the “education sector” that is considerably important due to its positive impacts on the development process. As a result of the comparisons between the EU and Turkey, the necessary steps and suggestions to be followed by Turkey as regards to human capital establish the scope of this research.

Introduction

Achievement of a desired growth rate in a country is depended on the efficient use of all economic resources consisting of development and international competitiveness, physical capital and human capital. Countries that can use their human capital effectively and obtain sufficient quality for their human capital are regarded as advantageous countries in the global competition environment. As the physical capital in Turkey is limited, it has always been significant to adapt especially the unlimited source of human capital to the requirements of the economy. Therefore, it is of vital importance to evaluate the human capital aspect which is overemphasized in development plans in Turkey and to compare it with those in the EU.

In this study, at the outset, "development plans" and “human capital” concepts in Turkey are explained theoretically. Thereafter, the place of human capital is evaluated in the framework of all development plans and the human capital in Turkey and in the EU is compared in terms of “education”. Finally, some suggestions are made for Turkey.

Development Plans in Turkey

Turkey passed to planned period after 1960. Until the planned period, it had been aimed to achieve regional development in the leadership of State incentives and private sector via İzmir Economic Congress and Law for the Encouragement of Industry (Ergun, 2004, pp.72-74). However, due to the fact that the private sector could not make leadership because of undercapitalization revealed that this idea could not be realized. In the 1960s, regions were tried to be supported in the framework of the plans by taking into consideration the factors they already had in the beginning (Karluk, 2004, p.47). Nine Development Plans have been put into practice under the planning authority of State Planning Organisation. The most prominent characteristic of planning approach in Turkey is that it is mandatory for the public sector and instructive for the private sector. Development plans have objectives, such as ensuring capital accumulation, reaching a stable and high growth rate, mitigating the regional differences and integration with the world and improving human resources.

The first plan of industrial policy is the First Five Year Development Plan (1963-1967) which is considered as the beginning of implementation of Etatism. It was expected to maintain an increase in consumption products and the signals of import substitution were given with this Plan. It was considered that the

import substitution would have to be carried out systematically by the State. In the First Five Year Development Plan, it was emphasized that the allocations of public investments had to be organised according to the regions in order to achieve equal opportunities and inter – regional balance in the country (I.BYKP, 1963, pp.57-58). Priority was attached to the national plan and the heavy industry in the Second Five Year Development Plan (1968-1972). The importance of using regional planning as an efficient instrument was highlighted (Dinler, 2001, p.194). Unlike the first two plans, the Third Five Year Development Plan (1973-1977) gave place to the development of priority regions for development instead of regional planning (Mengi and Algan, 2003, p.261). The long – term targets of this plan were improving the standards of living, industrialisation, decreasing the dependence on foreign resources, solving unemployment problem, and improving income distribution. The Fourth Five Year Development Plan (1979-1983) coincided with the foreign expansion period. It was decided that the rapid industrialisation would continue. It was aimed to increase exports in this plan which was in the transition period (IV.BYKP, 1979, pp.656-671 & Ekzen, 2009, p.48). It was determined to establish Organized Industrial Zones in the Fifth Five Year Development Plan (1985-1989). 16 regional development centres were designated. During this planning period, the strategy based on outward – oriented exportation manifested itself further (Özaslan and Akpınar, 2005, p.237). The Sixth Five Year Development Plan (1990-1994) and the plans in the aftermath period have been prepared under the influence of the EU as a result of the relations with the Union. The expression of regional planning gave its place to regional development in the Sixth Five Year Development Plan. The 16 regions in the Fifth Five Year Development Plan were left aside and regional planning was shifted to the priority regions for development. The main target of the plan was to increase welfare level in an independent and secure environment in line with the principles and fundamentals of open society and competitive economy (VI. BYKP, DPT, 1989, pp.318-358). The Seventh Five Year Development Plan (1996-2000) gave an extensive place to the adjustments concerning regional development, provincial planning and metropolitans under the title of achieving regional balances (VII. BYKP, 1995, pp. 170-184). This plan is the first plan prepared after joining the Customs Union. The Eighth Five Year Development Plan (2001-2005) envisaged a balance between development policies and regional development policies. The Plan was based on the principles of sustainability, inter – regional integration, achievement of social and economic balances, improvement of standards of living, equal opportunities, cultural development, and participation in the implementation of regional policies. Furthermore, the studies for the Provincial Development Plans, which are in harmony with the regional plans, were initiated on the basis of the provinces (VIII. BYKP, 2000, pp.63-87). The Ninth Five Year Development Plan (2007-2013) coincided with a period during which multi - dimensional and rapid changes were experienced. The Plan has been prepared during the EU adaptation process as the main strategy document which will contribute to the membership process taking into account the characteristics of the transition period (IX. BYKP, 2008, p.16).

The Concept of Human Capital

Human capital is defined as the total of values such as experience, work experience, knowledge and skills of the individual participating in the production, in other words of the labour force.

In the studies of Mincer, Becker, Nelson and Phelps (1996) and many other scholars, it is explained that human capital has an essential role for the economic development. This fundamental role has been more clearly explained in the researches carried out since 1980s and Lucas (1998) concluded that there is a positive relation between the long – term development and human capital. According to the model developed by Mankiw, Romer and Weil (1992), it is indicated that human capital is a much more important production factor than the physical capital and labour elements in the framework of the neoclassical thinking (Boughanmi, 2009, p.252). Theory of human capital focuses on the education concept basically and declares that education influences the experience, beliefs, perceptions and motivations of the human (Merwe, 2010, p.108).

According to the development theory, human capital forms the fundamental element of development. The investments to be made in education, health and nutrition for developing the human capital affect the productivity at micro and macro levels and the earnings. Investments made into education at the state, firm and individual levels in line with the returns of education investments, which are more measurable than the other human capital investments and accepted as considerably significant due to their positive impacts on socio - economic development process, is of vital importance (Tunç, 1998, p.83).

The Place of Human Capital in Development Plans

First Five Year Development Plan: The Plan accepted human capital as man power and attached the maintenance of growth rate to the qualified man power. It was specified that training qualified people could be enabled by giving priority to education and training. In this direction, the issues of human capital, employment and education were dealt with interdependently and concomitantly. Using human capital in the most productive manner possible was identified as the most important target by highlighting the fact that individuals should

benefit from possibilities of education according to their capabilities. Long - term projects were developed to achieve this target (I.BYKP, 1963).

Second Five Year Development Plan: "Human" factor appeared in the Plan as a significant element for economic development. As in the first plan, the Second Plan also dealt with human capital as a source of power and the issues of human capital, employment, education, science and research were discussed interdependently and concomitantly. The aim was to put forward the best and most productive ways of using human capital resource to achieve economic and social targets and eliminate human capital bottleneck in the long – term. In this planning period, it was further emphasized that "human" is a quantitatively limited resource. Therefore, a working policy was determined in order to use this limited qualified human capital in a productive manner. In this Plan, programmes were prepared in order to solve the problems of unequal inter – sectoral distribution of human capital and incapacity of using human capital aptly as well as the problems concerning lack of qualified and quantified human capital in the medium and long – term. In these programmes, instruments such as the job evaluation technique, transfers, retraining, assignments, in-service training, incentive possibilities, opportunities, organisation and method units were used. Moreover, an extensive education policy was developed in order to generalize training with the aim of improving the quality of human capital. In this policy, several programmes were put into practice such as training the personnel having higher education diploma abroad and increasing the literacy rate in order to train qualified labour force (II.BYKP, 1968).

Third Five Year Development Plan: During this planning period, even though the human capital reached the desired level in terms of quantity, it was not at the desired level in terms of quality and the proper usage. In the Plan, many targets like education, health, industrialisation targets were based on the human capital requirements. It was tried to provide consistency between fundamental policies such as employment, wages policy, research environment and working conditions in order to find solutions to the problem of qualified labour force migration. All the problems in the first two plans, except for the quantitative increase of "human capital" problem, continued. In this Plan, it was stated that it was necessary to train individuals sufficiently qualified to implement the technology transferred into the country. Besides, the main reasons of the problems appeared in the field of "human capital" were put forth and studies to eliminate these problems through some instruments like wages and employment policy, and new programmes were carried out (III.BYKP, 1972).

Fourth Five Year Development Plan: During this planning period, the amount of human capital increase quantitatively. Yet, this increase did not create a balanced development between the levels. In this plan, priority was given to the training of qualified human capital needed for the use of technical assistance capacities. As long as the qualified human capital requirement needed by the economic and social development was fulfilled, technical assistance was transferred to the projects that would positively influence the social and economic development. In the Plan, appropriate and productive use of human capital in the employment and wages policies, and elimination of inter – sectoral and inter – regional disparities of human capital distribution were especially taken into account. Legal adjustments, especially for the compulsory working procedures of higher education graduates, were made in order to decrease inter – regional labour force disparities in the regions where qualified labour force was required. In the scope of the plan, taking care of the human health is at the forefront in order to assess the human capital in the most productive way possible (IV.BYKP, 1979).

Fifth Five Year Development Plan: Projects to increase the employment rate of young human capital were prepared in the Plan. Human capital planning consistent with the macro - model and the employment distribution were prepared. In this planning period, the quantity of highly educated human capital increased to the desired level. It was given priority to the training of intermediate level technical human capital. The employment of qualified and experienced human capital in the sectors and the regions was enabled via the improvements in the wages policy and the working conditions. (V.BYKP, 1984).

Sixth Five Year Development Plan: This Plan focused on the training of specialised labour force required in the field of information technology and it was decided to make a human capital planning which responded the qualified labour force need of the economy for the continuity of the growth. The requirement for taking necessary measures as the insufficiencies continued in the rational use of human capital resources was emphasized as well as the issues of making necessary adjustments to improve the cooperation between the universities, industrial vocational high schools and the industry so as to meet the qualified human capital requirements. It was mentioned that economic and social development could be ensured merely through well trained and educated human capital (VI.BYKP, 1989).

Seventh Five Year Development Plan: The Plan covered the issues of improving the qualities of labour force according to the demand and making a coherent labour force market organisation in the policies related to employment and human resources, training of human capital that could internalize the national values, open to universal values, contribute to the information generation and use the information creatively since the well trained young population would be the greatest advantage for Turkey in the 2000s. It was mentioned in the plan that development of human resources was of vital importance for the institutional arrangements that could solve social problems, it was aimed to develop human resources through Structural Transformation Projects that would be realized in the plan at first, the economic and social development should be maintained, the social and

individual welfare level should be increased, and the natural and human resources should be used efficiently. In this framework, it was declared that well trained human resource increased the competitiveness of Turkey which was increasingly opening up to the world on the one hand, and on the other hand, it influenced the fact that Turkey could get a larger share from the added value created by the EU. According to the Plan, it was considered that investing in the human was the most productive way of investment and had a significant contribution for the rapid and sustainable economic growth and social development in Turkey having a young and dynamic population structure. Therefore, it was aimed at mobilizing all the possibilities that could be used in order to develop human resources in every period beginning from the pre - school period up to the post - retirement period as well as to develop and generalize the training of human capital in all age groups. It was overemphasized in this planning period that the most important sector was the education sector and it was also mentioned that well trained young population would be the most important advantage for increasing the competitiveness of Turkey and for her integration to the EU. The characteristics of well trained human capital were identified as having developed skills of thinking, perception, and problem solving; being open to the outside world, universal values and new ideas; having a developed personal responsibility feeling and developed social sensitivity; being prone to science and technology production; and having a high level of skills. In the Plan, it was referred that human capital was the most important resource of Turkey and therefore, the primary source of all kinds of breakthroughs was the human capital. The key role was given to human capital especially to increase the science and technology skills. In this respect, human capital was evaluated as an important strategic resource (VII.BYKP, 1995).

Eighth Five Year Development Plan: The element of information society was particularly focused in the Plan and it was emphasized that the quality of the labour force was needed to be improved as the information was the most important production factor in the process of information society formation. Hence, it was indicated that the greatest contribution for the development of developing countries in the 21st century would be investing in the human resources and improving the infrastructure. It was stated that the countries which could adapt to the rapid changes in the world, equip people with the qualities required by this new environment, access and produce information, and use this information would be effective and successful. Besides, the fundamental principle in the Plan was to improve human capital qualitatively, increase the living standards, and eliminate the disparities in these fields between the regions and the settlements. As mentioned in the previous Plan, rapid development of the qualities of human capital which is one of the main elements of international competitiveness and particularly the improvement of cultural features maintained its importance in this Plan. Moreover, the Plan aimed the evaluation of human capital as a strategic resource and adjustment of human capital so that it would have problem solving and creative features (VIII.BYKP, 2000).

Ninth Five Year Development Plan: When the fundamental principles of the Plan are regarded, it is observed that a human focused development and management conception forms the basis of the Plan. Hence, in order to train qualified human capital which is the most significant issue, it was stated in the Plan that educational possibilities should be extended, effective measures should be taken for training the human resources required by new tasks and responsibilities, in this scope the number of especially qualified personnel should be increased in the public sector, and necessary measures should be taken for the continuous training of the existing personnel. During the planning period, it was decided to establish excellence centers at several universities in many strategical fields. Besides, the projects focused on training scientists and multi-partnered and interdisciplinary projects have been commenced to be supported respectively since 2002 and 2004. In 2005, "Scientist Training and Development Programme" was initiated in the scope of "Turkey Research Field Programme" implemented by TÜBİTAK (The Scientific and Technological Research Council of Turkey). It was also mentioned in the Plan that there was a need for dealing with development agencies as an integrated regional development programme triggering local initiatives by benefiting from the common cooperation platform. In this scope, development of new policies to improve human resources was also drawn attention. It was also highlighted in the Plan that it was necessary to make an efficient human resources planning in the public institutions and authorities to achieve a competent level for the public staff, give sufficient in - service training to the public staff and achieve a desired level for the public staff in terms of knowledge and skills that would enable them to carry out their tasks productively. It was emphasized that the fact that the promotion issue of public employees had not been clearly and sufficiently defined in the legislation, there was not an effective awarding system in the public sector, and there was inequalities in the wages influenced the self - improvement of public employees negatively. "Investigator human capital" concept was touched upon in the Plan and referred that it was required to develop investigator human capital qualitatively and quantitatively and encourage investigator employment in the private sector. In this context, via the training programmes, it was aimed at training labour force that is prone to technology production and Research & Development. The other elements expressed about the human resources are as follows: in order to achieve social development; developing information systems about the labour force market, achieving a more flexible structure in the education and labour force market, training human capital demanded by the economy taking into consideration the life long training strategy in order to increase the employment level and the productivity of the labour force, training high - skilled,

productive and creative information age people having developed conception, perception and problem solving skills, open to new ideas, having personal responsibility feeling, contributing to the contemporary civilisation, prone to the use of science and technology and production, and appreciating art (IX.BYKP, 2006).

Comparative Analysis of Human Capital in the EU and Turkey in terms of Education

Human capital defines in the EU as the abilities, knowledge and skills embodied in people and acquired through education, training and experience. The European Council of Lisbon, by setting for the EU the overall goal to become the most competitive and dynamic knowledge based economy in the world, has set human capital at the heart of its development strategy (<http://ec.europa.eu/>).

EU attaches great importance to “education” so as to increase the human capital qualitatively. The cooperation in the field of education between the EU and Member States came to agenda with Lisbon Strategy in 2000. Although there is not one single educational policy in the EU, there exists an exchange of opinions and implementations in this field between the member states. The opportunities offered by EU education programmes cover the introduction and implementation of new technologies in the education sector, exchange programmes, education opportunities abroad, and mutual recognition of diplomas. The education policy also covers the cadres of teachers, students, administrators in the education sector, academicians, and specialists.

Thanks to her young population, Turkey will be a source for some part of the human capital needed by the EU. This can be achieved by developing human capital not only quantitatively but also qualitatively. Developing human capital qualitatively is possible through "education". The first introductory screening meeting of the Membership Negotiations, started in 2005 between Turkey and the EU, was realized under the Education and Culture Chapter. Furthermore, Turkey has signed "Culture 2000" programme of the EU in order to support the projects to be carried out in the field of education and culture. The EU negotiation process puts forward the human capital issue and offers opportunities for human capital development. It is indicated in the last development plans that the issues concerning the EU should be concentrated on especially in the higher education programmes in order to provide in – service training for the public staff and train the qualified human capital to be needed by Turkey during the EU integration process. Within the context of Bologna Process, significant works, particularly in the field of exchange of students and academic members, European Credit Transfer System and diploma supplement, have been carried out in the field of higher education.

Increasing the number of graduates for the labour force and eliminating the education needs of children who are in need of special education as soon as possible are among the titles emphasized in the Progress Reports published by the EU for Turkey,

Level of education	Young workers (15-24)	Prime-age (25–54) and older workers (55–64)
Low	3.4	20.8
Medium	5.8	43.8
High	1.2	25.0

Table 1 : Highest education level attained in the EU, 2007 (share in total employment as %)

Resource: Eurostat

Table 1 presents the employment rates in terms of education levels in the EU compared with the total employment rates in the EU. If it is needed to evaluate the situation in Turkey within the same year, 63.2 % of the labour force is composed of the sub – medium level educated people and the illiterates. Moreover, 14.7 % of the labour force in Turkey consists of the college and faculty graduates. Again, in 2007, whereas the percentage of the population aged 25 to 64 having completed at least upper secondary education is 70.8 % in the EU 27, this rate is 25.8 % in Turkey.

	Years	Public Expenditure on Education as % of GDP	Financial aid to Pupils and Students as % of Total Public Expenditure On Education	Ratio of Students to Teachers and Average Class Size
<i>EU 27</i>	2000	4.88	5.2	13,5
	2003	5.14	5.6	13,1
	2006	5.04	6.0	12,7
<i>Turkey</i>	2000	2.59	3.1	25.4
	2003	2.96	4.8	23.7
	2006	2.86	6.9	23.2

Table 2: Comparasion Avarage EU 27 and Turkey
Resource: Eurostat

Table 2 has been prepared to compare the EU and Turkey in terms of important ratios of education. While the public expenditure in Education in % of GDP was 4.88 in the EU in 2000, this rate increased to 5.04 in 2006. On the other hand, this rate was 2.59 in Turkey in 2000 and increased to 2.86 in 2006. While the highest rate among the EU countries belongs to Denmark, the lowest one belongs to Romania. Financial aid to Pupils and Students as % of Total Public Expenditure on Education in Turkey is at the average of the EU. It is seen that the amount of financial aid in Turkey increases by years. Denmark and Norway are the countries having the highest contribution rate whereas Poland and Switzerland have the lowest contribution rate. When the Ratio of Students to Teachers and Average Class Size is examined, it is observed that this rate which is considerably important for the qualified education owing to the lack of trainers in Turkey is over the EU average. The Member States of the EU float at the average of the EU in this ratio.

Conclusions

It has been emphasized in all the development plans in Turkey that human capital is of utmost importance and it is necessary to develop this capital. Thus, the education level of human capital has been improved in every passing planning period. Nevertheless, there are some shortcomings in the implementation; and the investments in the human capital and the budget share allocated to education services in Turkey still continue to be lower than the EU average. This situation creates an important problem in Turkey which requires high quality and high - skilled human capital. The starting of compulsory 8 – year education, the increase in the number of universities have been important steps in Turkey in terms of human capital accumulation and development. Turkey has a young population structure. Putting this young population through a high quality education and training system will not only meet the qualified labour force need of Turkey in the long term but also that of the EU which has a gradually aging population structure. In order to achieve this development, it is essential to ensure that low – income groups benefit from education services more by improving the quality and extensiveness of education services in Turkey. Otherwise, the EU will not regard this young population as a new source of blood for their economies, but as an unqualified unemployed army that will flood in their countries. Additionally, Turkey will not be able to have the capacity to compete in the EU market operating according to the free market conditions in the event of a potential full membership.

The accession process to the EU offers some opportunities to develop the human capital in Turkey. Some of the more visible opportunities are the new financial resources that will be transferred from the EU for education services and the possibility of participating in the international academic exchange programmes. The opportunities, which are less visible but which have great importance for a permanent change, offered by the accession process are composed of the speed gained in the restructuring process of the ongoing education and the possibility of benefiting from the good examples implemented in Europe within this process.

In conclusion, Turkey has not the same development level in terms of human capital compared with the EU countries. Turkey has to put into practice structural measures that will increase the quality of the human capital in order to catch up with the EU level. The investments made into human, especially in the "education", have to be increased and approximated to the level of the EU countries. In Turkey, the priorities in the allocation of resources have to be determined more rationally and more financial resources have to be allocated for education services from the budget.

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