EXECUTIVE SUMMARY

Turkey Higher Education Policy Studies
INTRODUCTION: EXPECTATIONS FROM HIGHER EDUCATION SYSTEMS: NEW TRENDS IN THE WORLD AND IN TURKEY

The study is composed of three main headings. The first two of them examine new trends and expectations in higher education systems in the world as well as European Higher Education Area and Bologna Process in order to position the strategy in a global and national context and the third heading discusses development of expectations related to Turkish higher education system.

These trends and processes as well as their possible results are discussed by analysing them from a critical point of view and strategies that can extend beyond these trends are suggested instead of copying one of these trends. Global economic structure that depends on today’s knowledge economy has diversified and increased the expectations from universities, which are responsible at the first degree for producing and sharing knowledge. Main expectations are:

- **“To provide more education to a wider age group**
- **To contribute further to regional and national development by establishing stronger bridges with the society**
- **To increase employability of graduates and target practice in addition to produce knowledge in research**
- **To develop open and transparent governance models that can be held accountable by the stakeholders**
- **To achieve all of these with gradually decreasing public resources”**

Universities, which are faced with decreasing public resources and increasing expectations, try to obtain more autonomy in order to increase and diversify their income resources and develop more productive management models. An impact of globalisation on higher education is to increase student mobility and to open the higher education systems especially in developed countries to this mobility. The most important example of this is the European Higher Education Area formed by European Countries and Bologna Process that steers this area. Currently 45 countries are members to the Bologna Process. Turkey participated in this process in 2001. The basic purpose of the European Higher Education Area is to “make Europe the most competitive and dynamic knowledge-based economy in the world”. This section includes regulations realized in our higher education system regarding Bologna action lines.

Other sub-headings discussed in these two sections of the introduction are financing, private higher education institutions, autonomy of universities, accountability and governance. Different models are presented regarding these issues.

In order to analyse how the expectations from Turkish higher education system is developing, first changes in distribution of age groups in the population in Turkey, which is in a demographical transition process, are considered in the third part of the introduction section. Demographical studies suggest that the number of young people at university entrance age (19 years of age after increasing secondary education to 4 years) was 1,358,000 in 2005 whereas this number will decrease to 1,258,000 in 2025, that is, the population in higher education age group will decrease about 10%. It can be said that the demand for higher education will decrease due to mainly economic reasons rather than demographic reasons. The second expectation from higher education is related to decreasing development gap. In order to take advantage of its place in demographic transformation process, our country, which has the
highest fifteenth population in the world, should increase participation of population in workforce and their education level as well as provide opportunities to working individuals in order to enable them to realize their capacities related to accessing knowledge, analysing knowledge, renew themselves in a continuous manner compatible with their jobs. This requires restructuring of education system in general and higher education system in particular in a flexible, open and powerful manner.

The demand for higher education may be related to achieving an enriched cultural background and thus achieving a more reputable position in the society. This is a demand related to realization of life project of an individual and the only objection to this may be the question of whether this demand will be supplied free of charge.

CHAPTER I: CURRENT STRUCTURE AND PERFORMANCE OF THE HIGHER EDUCATION SYSTEM IN TURKEY

In the first section current structure and performance of our higher education system are considered and the current situation is determined. The first section is composed of four sub-sections. In sub-section one the structure of institutions is presented in the context of their structural diversifications and geographical distributions, developments in recent history, introduction of current structure and problems encountered while operating the existing structure.

When the current complicated structure reached by Turkish higher education is evaluated in general, it can be said that the system displays a significant adaptation capacity in spite of all limitations and fait accompli it encounters and maintains its existence even though it is faced with many problems. However, it cannot be said that this progress is a regular and planned progress. Many problems arise while operating the structure that is a result of such a progress. It is difficult to say that the structure is root of all problems. A significant portion of the problems has existed for a long time. For this reason, it more correct to say that these problems are caused by connection of existing management culture and current structure.

Sub-section two discusses financing of higher education. In accordance with article 130 of the Constitution, higher education at each level has the nature of being a public service. Current system is public financing in state universities and private financing in private universities. Public financing manner of state universities is financing via budget. The budget system applied for universities was changed three times in the last 35 years and universities have complained excess centralized bureaucratic tendencies in all of these systems. In line with the advances in the world regarding quality management and performance management, Public Accounting Law No. 1050 was replaced with the Law on Public Financial Management and Control No. 5018 enacted in December 10, 2003. Provisions of the law have been applied for universities since budget of the year 2006. In order to obtain a clear opinion regarding the system brought by this law, first we should see practice, wait for the system to be completely understood and settled, determine whether interventions of central administration (like the Prime Ministry and the Ministry of Finance) ended or intervening tradition attempts to reproduce itself.

According to the data for the year 2005, budget has highest share in income resources of state universities with 57%. It is followed by revolving fund with 38%, tuition fees with 4% and other incomes with 2%. In accordance with the Law No. 5018, revolving fund enterprises will be terminated on December 31, 2007. Now, it is not possible to apply tuition fees and especially tuition fees of students in second education in pool budget. Also, treasury
contribution provided to universities in scope of general budget was decreased in an amount equal to total income by transforming produced special income item into actual income.

As of 2005, share of higher education budget in total budget is 3.4% and its share in Gross Domestic Product is 1.1%. When all students are considered, current expenditure becomes USD 1,197 per student and when only formal education students are considered it raises to USD 1,938. This figure corresponds to one forth of OECD average (in these calculations value loss of Turkish Lira against USD in the last month was not considered). Even though education allocations have increased in the last years, every year Turkey takes last place among OECD countries with respect to share of education in Gross Domestic Product. A general evaluation of financing of higher education indicates that Turkey does not allocate sufficient amount of funds for higher education. However, demographical transformation process has created an opportunity for Turkey. If a contemporary assertion is aimed by increasing supply and raising quality, it will be necessary to change financing model significantly. Naturally, only increasing resources will not be sufficient and new approaches will be needed for efficient use of these resources.

In sub-section three supply in secondary education system and student selection and placement examinations are analysed. According to the evaluation made by considering quality and quantity, the determinations in the report may be summarized as follows:

- Determinations made with respect to various criteria have indicated that secondary education system at both general high schools and vocational high schools levels does not provide sufficient background for higher education.

- In the university entrance examination applied today, students are placed in higher education institutions according to only their ranks without considering their basic qualifications. Lack of qualifications of the students who pass the election examination are significantly disregarded. As a result of this higher education is faced with coping with lack of qualifications created by secondary education.

- Since the number of students who take this examination is very high, using multiple-choice questions becomes a necessity and this makes measuring analysis, synthesis and evaluation abilities of students very difficult. Also, ability of the students related to expressing themselves in oral or written manner in their native language cannot be measured.

- Central examination, which only places about 20% of nearly two million candidates, has made examination a purpose and training a tool in secondary education because of the competition it creates among students. Reading out of curriculum, social and other activities, participation in different activities and projects are considered as loss of time with regard to university entrance examination. For this reason, the system causes a high school profile that has difficulty in expressing himself, that could not develop his problem solving ability sufficiently, lacks social activity experience, insulated from the society and that could not gain basic objectives of secondary education.

- Another reflection of the education process followed while passing from secondary education to higher education and focused on examination is related to its negative effect on psychological health of students. Concerns of candidates on not being placed any higher education institution or being placed in a higher education field they do not want causes them to be pessimistic for the future, significant problems arise and these problems may negatively affect not only them but also their families. This examination affects not only lives of the students, who pass it, but also lives of the students, who cannot pass it, and causes significant stresses in families.
In sub-section four the performance of higher education system structural characteristics of which has been examined is evaluated in a multi-dimensional manner. Performance of a higher education system requires being evaluated separately in terms of three basic functions (education, research and public service) it should realize. This is an external evaluation of higher education system in terms of its functions. It is not sufficient by itself and it should be complemented with internal evaluations. Success in producing academic staff, management and life quality it provides to university population, its reliability in the society and its sensitivity for achieving opportunity equity are complementary criteria that should be definitely considered. The following determinations are made with respect to these multi-dimensional performance criteria.

- **The evaluation in education field may be started with regard to existent capacities and their usage.** About 16% of the students placed by Student Selection and Placement Centre do not enrol to the higher education institutions. It is observed that the rate of not enrolling is especially high at associate degree programs of open education and formal education. On the other hand, the percentage of the students, who were placed and continue to their programs for a certain period of time but enter the examination and are replaced, is 13%. It is clear that the system works with a rather high capacity loss.

- The share of vocational schools of higher education in formal education is about 30%. In our country it is thought that this percentage is very low. However, statistics show that this rate is 23% in Finland, 31% in Greece, 5.4% in Italy, 27% in Korea, 33% in Great Britain, 34% in Japan and 45% in the USA.

- The number of students in formal education has increased as follows in the last 12 years; 3.8 times in associate degree level, 1.7 times in bachelor’s degree level, 2.6 times in master’s degree level, 1.8 times in specialization in medicine and doctorate decree level. The total number of students has increased 2.1 times. However, the increase in doctoral level has remained low compared to the need.

- The share of open education in our higher education system is high. This share is below 10% in developed countries whereas it is above 30% in developing countries like Turkey. It can be said that our open education system has also a role in achieving lifelong learning functions.

- Schooling rates in higher education in Turkey in 2005 are 25% in formal education and 39% together with open education. Even though, Turkey ranks last among OECD countries according to these rates, it should not be forgotten that this rate was about 6% in 1981. In the analysis made in terms of efficiency, “number of students per year” obtained by dividing total number of students in each type by normal education period was compared with the number of graduates. In accordance with rough efficiency criteria, efficiency rates are found as 0.28 in associate degree level, 0.75 in bachelor’s degree level, 0.48 in master’s degree level and 0.43 in doctorate degree level in formal education. These rates are 0.29 in associate degree level and 0.39 in bachelor degree level in open education. Low efficiency except bachelor degree programs in formal education indicates that the increase in schooling rates does not reflect on the increase in trained workforce at expected level.

- In associate’s degree programs average number of students per academic staff (professor, lecturer and instructor) is 59 and this rate is very high. Average number of students per academic staff is 29 in bachelor’s degree and this rate is highly above the rates in the Western countries (15 in Norway, USD and Finland, below 10 in Belgium and Netherlands and below 20 in other European countries). Lecture load of 73% of
academic staff is excess. This excess lecture load not only decreases education quality but also prevents self-development of individuals and thus it increases the focus on education function more than the other two functions.

- The surveys indicate that about 60% of academic staff have foreign language problem and about 42% of them have never visited abroad. 38.3% of 82,096 academic staff is female and 61.7% of them are male and this distribution is more balanced compared to some other countries. However, this balanced distribution cannot be seen in the number of female managers in academic life. 42% of academic staff and 39% of undergraduate and graduate students are in three big cities and this distribution is not highly problematic. However, the percentage of professors in three big cities reaches about 60% and this can be considered as a significant problem. This significant problem can be explained in terms of both the attractiveness of the three big cities and the fact that the majority of the universities out of these cities are new. Likewise, 72% of assistant professors work in universities in the cities other than these three cities. Furthermore, 61.8% of research assistants work in universities in the cities other than these three cities.

- Since quality assurance in universities has gained importance both at international level in general and in frame of Bologna Process for the last ten years, the attention of our universities to quality assurance has significantly increased. Since the first years of 1990s, engineering programs of long-established universities have passed ABET (Accreditation Board for Engineering and Technology, USA) evaluation process and received equivalency accreditation issued by ABET for countries other than the USA and obtained a quality assurance that is internationally valid. Based upon this experience, Engineering Accreditation Board was established in scope of Engineering Deans’ Council in 2002. This unit has been evaluating engineering programs even though it does not have a legal entity status yet. In 1997, the Council of Higher Education and British Council started the “Project on Determining the Quality of Turkish Universities”, completed its pilot studies and prepared a report on the process but could not implement the project. Starting from 1998-99 academic year, accreditation was envisaged for the academic staff in faculties of education, which were restructured and in this context regulations have been realized in order to increase quality.

- In the last years, our 7 universities passed institutional evaluation process of the European Universities Association (EUA). They participated in quality culture project of EUA since 2002. This project targets to develop and share quality culture among Bologna countries.

- In accordance with the “Regulations on Academic Assessment and Quality Improvement at Higher Education Institutions” that was prepared by the Council of Higher Education and took force on September 20, 2005, the Commission on Academic Assessment and Quality Improvement in Higher Education (YÖDEK) composed of 9 members selected by Interuniversity Board started its works. “Guide on Academic Assessment and Quality Improvement at Higher Education Institutions” completed by this Commission in May 2006, was prepared by considering the developments in the world and Europe dimension, especially in Bologna Process and in this context it determines duties and responsibilities of the upper bodies of higher education and higher education institutions, internal and external assessment principles and criteria as well as details regarding the process.

- The Council of Higher Education started works on national qualifications framework for higher education in the scope of Bologna Process and Lisbon strategy. In this context,
studies regarding the descriptors of sectoral qualifications on programme basis, and as well as the level descriptors of the qualifications and ensuring quality assurance of learning outcomes will be realized in stages until the end of 2007.

- Investment in human capital is very important for success of higher education system. One of the approaches for training academic staff is to send the doctoral level students to abroad with state scholarships. The statistics show that the program carried on by the Council of Higher Education is more successful compared to the program carried on by the Ministry of National Education with regard to state scholarships for the PhD studies abroad. In spite of this fact, no academic staff allocation was provided to the Council of Higher Education in 2004 and 2006 for this purpose.

- Via its “Integrated Doctorate Program” the Turkish Academy of Sciences (TUBA) has provided support to the students enrolled in doctorate programs in our country by enabling them to continue one year of their programs in a foreign university. Efficiency of this program reached a high level like 87.5%.

- Another approach applied for training academic staff is to send research assistants of developing universities to the developed universities for their doctorate study. In this scope, currently 3,340 research assistants are continuing their study. Excluding research assistants allocated for specialization in medicine, total number of research assistants in state universities was 20,650 at the end of 2002 whereas it became 20,736 at the end of 2005. Even though the number of students increased 22% in the same period the increase in the number of research assistants was only 0.4%.

- The second function of universities is research. In accordance with OECD criteria, the number of full-time equivalent research and development staff in Turkey in 2002 was 28,964 and the number of research and development staff per thousand working population was 1.4. These figures are many times lower than the figures in EU member countries and EU candidate countries.

- Turkish origin articles published in journals recognized by international reference indexes (SCI, SSCI and A&HCI) increased 30 times in the last 20 years and Turkey succeed in reaching from 43rd rank to 20th rank in 2004. According to May 2006 data it will reach to 19th rank in 2005. Paying great attention to this indicator in Turkey, depending appointments and promotions of academic staff in universities to their performance in this field and awarding such publications had a great role in this progress. However, when the low number of references made to Turkish origin articles is considered, it is seen that quality should be emphasized more than quantity in publication encouragement policy. However, this significant success does not include the function of contributing to national innovation processed and development of local knowledge.

- Another negative aspect is not observing any increase in the number of people who are awarded doctorate degrees. Reaching 150,000 academic staff in 2023 as determined by National Science and Technology Document is not an objective that can be realized by graduating 2-3 thousand doctorate level students per year. The same document targets 6 researchers per thousand working people for 2013 (currently 1.1) and this is also an objective that cannot be achieved if measures sufficient for a significant jump are not taken.

- Public service, which is the third basic function of universities, is a function on which information cannot be collected in systematic way both in our country and in the world. The main reason of this is the fact that the other two functions (education and research)
are more emphasized in performance assessments. However, higher education institutions produce public service in many fields. The rationale under extending universities across the country is the expectations related to the contributions these institutions will make to local development via their local effects and public services they provide. Realizing such functions mainly depends on the reliance of the society to universities. In the two researches conducted in 2001 and 2004, universities ranked at top level among the institutions on which the society relies. This determination is significant since it indicates that universities have a potential for leading the society.

- Another criterion that should be considered related to performance of a university is the governance and life quality that a university provides to its academic staff and students. Researches suggest that academic staff significantly feels effects of insufficient income, they highly alienate and have important concerns. In spite of this they have a certain degree of satisfaction with being academic staff in university when compared to other alternatives. They do not interpret their environment as completely negative. 
  This result should be considered as an opportunity that should be utilized. A similar situation is also valid for students. In situations that are objectively negative, students psychologically adapt themselves to the situation and reach rather high satisfaction levels.

- Income share that can be allocated for education by low-income groups is lower than their share in the national income. In Turkey, the mechanisms related to equal opportunity works only after the student becomes successful in Student Selection Examination. However, almost nothing is done about unequal opportunity related to success in Student Selection Examination. In this situation, concerns on unequal opportunity should be directed to unequal opportunity in secondary education and Student Selection Examination.

INTRODUCTION TO STRATEGY

After expectations are determined and existent situation is discussed, a preparation is made at the introduction to strategy section before suggesting a strategy. In this context, first, main problem areas that will be targeted by the strategy by depending on analyses, then, opportunities of four different logics on which a university design can be based are displayed and finally means that can be utilized in designing a strategy are considered.

11 strategic problem fields solution of which will be handled by higher education strategy are as follows:

1. Being able to increase supply capacity at strategic objectives level,
2. Increasing education quality and developing a quality assurance system that is internationally valid,
3. Establishing mechanisms that will enable excellence centres that can be at front line in the competition for science and technology develop themselves in scope of higher education and providing the flexibility needed for this,
4. Increasing total amount of resources allocated for higher education, diversifying them and using them more efficiently, realizing opportunity equity in the society,
5. Educating workforce at doctorate degree level in quantity and quality sufficient for closing academic staff deficiency and providing necessary number of researches for taking an effective part in Europe research area,
6. Developing management cultures that can eliminate alienation in higher education system,
7. Eliminating loyalty based assessment in forming and promoting academic staff in universities and applying competence based assessment criteria; preventing deformation of ethical standards on the relations of universities with the society by market values,
8. Designing university entrance system in a way that will minimize stress and side effects of it on students,
9. Ensuring that higher education graduates know at least one foreign language,
10. Specially emphasizing the problems related to vocational schools of higher education,
11. Eliminating unequal opportunity in higher education mainly caused by secondary education system.

An instrumental logic that targets realising a single purpose cannot be sufficient for regulation of a complicated institutional structure that has a central importance in influencing the future of a country like higher education. There is need for a more complicated consideration. For this reason, the problem of regulating the institutional structure should be handled within the framework of using different logics. This can be realized by emphasizing four different regulation logics.

They can be expressed as approaching higher education with,

- A logic of offering public service,
- A developer and investor logic,
- A logic that aims to improve citizenship concept and ensure social solidarity,
- A logic that aims to protect and maintain the special culture that has roots in history of university.

Each of these logics will affect the design of a higher education system from different angles. In fact there is a certain division of tasks among these four logics and they can be used to complement and limit each other.

Here, it is necessary to shortly comment on the fourth logic. University is an institution that has a 900 years long history. This institution is one of the cultural heritages of human that should be protected. All through their long history, universities have always been a special micro-cosmos. This is a live environment where rationalism, transparency, elegance, generosity, tolerance prevails and critical thinking capacity is not prevented. Targeting production and development of a special culture that has universal assertions within the framework of new scientific concepts and new economic relations context by knowing that if universities lack their nature of being a different place and melt within the society this will be a loss for the society, forms a logic that cannot be covered by other logics while reorganizing universities.

The question of how to organize internal and external relations of universities will be guide by this logic rather than other logics. It should not be forgotten that “Cultural Qualifications of Universities” are one of the cultural heritages of human being that should be protected.
Likewise, the European Council also accepted this quality of university even though it was accepted rather late.¹

The first level of higher education is university and its second level is the Council of Higher Education. In the strategy tried to be developed, it is envisaged to assign directing and steering functions to the Council of Higher Education rather than decision making functions and to increase the autonomy of universities. The tools and devices that can be used for steering a higher education system that is more decentralized compared to the past can be summarized under a few headings.

The first type is “institutional reorganizations”. Institutional reorganizations may left such a wide discretion area to actors in a decentralized system that performance of the system may not develop in desired direction. Certain special institutional reorganizations may be needed in order to complete this deficiency. The most important of them is financial incentives that depend on performance criteria. Existence of such a competitive environment will increase performance of the system. In order to prevent corruption and realize competition with equitable conditions in a decentralized system composed of units that have high autonomy requires transparency and accountability. An accountability system should be established by considering the following three headings:

- Accountability in using pubic funds,
- Assessment according to teaching and research performance,
- Assessment according to university’s management and life culture.

In each three dimension, criteria and institutional mechanisms to be used for accountability and assessment should be determined as well as positive and negative sanctions regarding these issues should be defined.

CHAPTER II: HIGHER EDUCATION STRATEGY FOR TURKEY

The second section of the report is on higher education strategy. Development the strategy starts with determining the visions related to education, knowledge production, research and public service production functions of higher education institutions.

A suggestion for a vision related to education function of higher education cannot be separated from general education vision. In an era when the world globalizes while it transits to knowledge society, Turkey should establish its education vision in a manner that will enable children and young people in the country to be successful in conditions of the new era. This vision can be summarized as follows.

Education; will be provided to ensure that individuals are equipped with potentials that will enrich realization of their life projects, orient them to being active citizens, who do not avoid taking initiative and responsibility and have critical thinking ability, make them sensitive to human rights, democracy as well as environmental, cultural and aesthetical values in a manner that enables everyone to access education completely and with opportunity equity.

In this context education vision of higher education is defined as; “Higher education should achieve the nature of being a mass education means and within general education vision first it should follow flexible and open programs that can adapt to the changing conditions in the world and in later stages it should target advanced specialization and be transformed into a

¹ This was decided in 905th meeting of the Committee of Ministers of the European Council on December 7, 2005.
structure that is open to lifelong learning and compatible with world standards in terms of quality.”

Regarding the vision on knowledge production and research function “In Turkey, scientific researches in higher education system should be oriented to production of scientific knowledge that has history in and out of the country and that has international reputability.”

This short premise emphasizes developments in three separate fields. On of them is related to external history. If scientists in a country select their research fields by being effected by dynamics and problems of the society they live, sociology of that country has an external history. If external history of science in a country can be written, these activities are not alienated to the society, they are integrated into the society and they are meaningful for the society. In other words, the activities in science field are embedded in the society.

The second emphasis is on existence of internal history. If scientists in a country can produce science by being effected by others researches, this means that scientific activities in that country have an internal history. If an internal history of science in a particular country can be written it can be said that scientists in that country forms an epistemological community. In order to talk on scientific performance of a country, the people who realize these activities should form a scientific community rather than living within borders of that country.

The third emphasis of the vision is on scientific competency level and international reputation of science field. It is expected that different scientific disciplines that have internal history, form an epistemological community will reach a capacity sufficient for establishing a school and take a reputable place in the world in terms of international publications and references.

In this study, a more flexible framework that can be developed is given as public service production vision. Within this framework, it is defined as; “Higher education institutions should produce public service in different necessary field in order to both fulfil their education and research functions and provide benefit to their societies by preserving their meanings. The services that will be produced by these institution and the relations such institutions will establish with the society and market while producing such services will be determined by the ethos, which define the border between these institutions and the society. In order to prevent these public services from being a source of incompatibility in the system, knowledge on how to divide and use the income obtained from these services should be transparent both in and out of the institution, there should be internal audit for quality of produced services and performance of academic staff in production of these services should be clearly related to their academic careers.”

The second step in developing higher education strategy is to make some determinations on dimensions of strategic objectives. Strategic objectives suggested for Turkey are given as three diagrams. While developing these diagrams, predictions on basic variables that determine higher education system were utilized and options on how the system changes parameters were selected. Suggested strategic objectives do not target only one year and predictions for the years 2005, 2010, 2015, 2020 and 2025 were made on performance and parameters of the system. It can be said that these strategic objectives have both a mission and a realizable nature.

First of all, predictions are made for the number of students in higher education. It is targeted to increase the number of associate degree and bachelor’s degree students to 65% of higher education age group in 2025. That means the number students in this category, which is about 2 million today will reach to 3,380,000. Also, it is targeted to decrease the share of open education in total higher education from 35% to 11% in twenty years. It is projected that the
share of foundation universities will increase from 7% to 16%. Accordingly, the state should create capacity for 160, 270, 310 and 340 thousand new students in four consecutive five years periods. A more rapid increase is envisaged for master’s degree education. It is demanded to increase the number of students in this category, which is 140,000 in 2005 to 630,000 in 2025. It is expected that state universities will have 52, 95, 120 and 120 thousand shares in this increase in four consecutive five years periods.

The critical parameter that establishes the connection between the number of students and the number of academic staff and lecturers is the number of students per academic staff. On the other hand, one of the prerequisite for improving the quality of education in Turkey is to decrease the number of students per academic staff. Assumptions regarding the improvements in these parameters and necessary increases in academic staff are given in diagram 2. According to these assumptions the number of academic staff in universities should be increased from 32,000 to 160,000. It is predicted that the number of academic staff in vocational schools of higher education will reach from 6,000 to 39,000 in 20 years.

In the last section of diagram 2, the number of people with doctorate degree necessary to meet the need in Turkey for workforce with doctorate degree is calculated. As can be clearly seen in the diagram, this demand comes from two different sources. One of them is the doctorate degrees needed in order to increase the number of academic staff in universities. The second one is the number of researches with doctorate degree needed in order to include Turkey in the European Research Area and increase its R&D expenditure up to 2.5% of GDP in line with the EU suggestions.

In order to meet both demand, Turkey should produce 3,500 doctorate degrees per year in the first 5 years period, 7,400 per year in the second 5 years period, 11,500 per year in the third 5 years period, 17,000 per year in the forth 5 years period.

The third dimension of strategic objectives that should be clarified is financing objectives. In the calculations regarding this issue it was assumed that average annual increase of GDP will be 5% in the next twenty years. It is assumed that in the following years, Turkey will not be contented with quantity concern in its higher education system, be aware that efforts should be made in order to improve quality and the state will increase current YTL 4,095 expenditure per student to YTL 8,200. If these financing objectives are realized, the share of higher education in GDP will increase from 1.082% in 2005 to 1.378% in 2010, 1.596% in 2015, 1.784% in 2020 and 1.935% in 2025. This is an achievable improvement. Existence of demographic opportunity emphasized in the first sections of this study will enable realization of this assumption. Envisaged objectives are objectives that can be realizable and should be realized for Turkey.

The third step in developing the proposed strategy is the suggestions made for the process of transition from secondary education to higher education.

The most important characteristic of the university entrance examination system that has been implemented since 1974 was to realize examination and placement in a centralized system. The system has achieved confidence of the society. Suggested arrangements are beyond changing the examination in a technical manner. For this reason, handling this change in scope of reorganization of secondary education and higher education systems is seen as a more reasonable method. If integrity of the system should be considered while solving transition problem then suggestions should be extended in a manner that will cover whole of the system. The suggestions on this issue are as follows:

- Suggestions on orienting at an early age (when it is considered that the first 2 years of 4 years secondary education curriculum is composed of common curriculum, making
an examination at the end of the 10th grade of secondary education for determination and orientation),

- Suggestions on increasing the number of students to be admitted at higher education institutions (providing some courses in formal education via e-learning depending on quality of the program and characteristics of courses and, if secondary school completion examination is practiced, the students, who pass this examination, may be entitled to directly enrol in open education and some programs in formal education),

- Encouraging vocational education,

- Applying secondary school completion examination,

- Reorganizing selection and placement system of higher education.

The prerequisite of the suggested transition system is “secondary school completion examination” to be applied at the end of secondary education. This system also includes two separate examinations (excluding special talent examination) to be centrally realized and programs for placement in universities are separated into four groups.

Suggested examination:

- **Course Level Selection Examination**: This is an advanced level examination for ranking and will be realized in four stages in consecutive weeks at the second half of June. These stages will be independent of each other and include Mathematics, Social Studies, Science, and Turkish – Foreign Language examinations. For placement in bachelor’s degree programs, grade in the courses to be determined according to characteristics of the relevant program will be used instead of general examination grade or score type grade. In this system, students do not need to take all stages of four-stage examination or all courses in an examination stage.

- **Basic Level Selection Examination**: This examination, which depends on a common curriculum, is similar to Student Selection Examination before 2006.

- **Special Talent Selection Examination**: This is an examination applied by relevant departments of universities as it is used today.

Programs for placement:

- **Programs for placement without examination**: Placement in these programs may be based on secondary education completion examination grades. These programs are open education faculty, some associate degree programs and certain bachelor’s degree programs.

- **Programs for placement with Basic Level Selection Examination**: Placements in these programs will be based on results of Basic Level Selection Examination. Vocational Schools of Higher Education, some bachelor’s degree programs of schools of higher education and faculties may be included in this group.

- **Programs for placement with Course Level Selection Examination**: Placements in these programs will be based on results of Course Level Selection Examination. Bachelor’s degree programs like engineering, medicine, law that require a sound level of basic background are in this group.

- **Programs that require special talent**: Placement in programs that require special talent will be realized with special talent examination grades like it is done today.
Graduates of secondary education schools may directly enter this examination to be realized by relevant departments of universities like it is done today.

The following results will be achieved if new examinations are applied: 1) weight of education in school will increase in secondary education and this will enable to increase quality of secondary education, 2) students, who have the qualifications required by bachelor’s degree (or associate degree) programs will be placed in such programs and this will contribute to increasing quality of education at higher education level.

The fourth step in developing higher education strategy for Turkey includes choices made for structure and manner of management. The bodies that constitute structure of management in higher education system are considered by differentiating them at three levels (upper-university bodies, university level bodies and bodies in faculties and their sub-units) but assuming that each level will act in framework of same basic principles and approaches. Some principles that are important for all levels in today’s higher education institutions may be listed as follows: 1) Academic Originality and Managerial Autonomy, 2) Productivity and Importance Given to Quality, 3) Efficient Resource Use, 4) Financial Autonomy, 5) Transparency, 6) Diversification, 8) Flexibility, 9) Being Open to Participation, 10) Relation with the Society and 11) Importance Given to International Relations. Implementing these principles at each level of higher education requires a significant mentality change. Thus, structures, duties and powers of managerial organs should be reconsidered and reorganized. Such a renovation process does not completely disregard past knowledge, experiences and traditions. For this reason, achieving a correct balance between what should be changed and what should be preserved has importance.

One of the basic preferences suggested for higher education is increasing autonomy of universities and extending their decision fields. There are three limitations and obstacles regarding this issue. The first of them is related to the Constitution and the Higher Education Law No. 2547, the second one is related to budget legislation and the last one is related to the current mentality and habits in academic institutions. Thus, transition from a centralized system to a more participatory system may be gradually realized. Of course, current system is less centralized than the system brought by the Higher Education Law No. 2547 in 1981, however there are still many things that should be done. On the other hand, it is clear that a system in which institutions make all decisions according to their objectives and requirements will not be an ideal solution. In order to operate whole of the system in an efficient and equitable manner, rules and standards of the game should be determined related to many aspects of it. In other words, regulation is needed in certain issues. Bologna Process is an important and effective reference frame in determining rules and standards of the game.

Some steps that may be taken in order to decrease centralization in the current system are indicated in this report. Further steps will be possible by developing quality processes. Integration of quality assurance system with renewed budget legislation and implementation will enable allocation of resources according to performance. And, this will enable a decrease in centralization.

Main approaches related to three governance levels in Turkey may be as follows:

Upper-university level: Planning, coordination, steering, financing and quality assurance may be stated as the main functions at this level. Upper-university level should not intervene daily administration and management. Planning, coordination and steering includes opening new universities, faculties, departments, bachelor’s degree and graduate degree programs, determining quotas, planning academic workforce, allocating staff, sharing resources in financing field as well as developing and implementing internal and external
assessment processes, methods and criteria at both university level and department or program level.

- Maintaining the Council of Higher Education and Interuniversity Board will be proper in order to realize these functions. It is important to ensure that the General Board of the Council of Higher Education includes at least representatives from science and engineering, social sciences and medical sciences among its members, who come via Interuniversity Board and its other members, who come via other two channels, include representatives from the Ministry of National Education, Ministry of Finance and State Planning Organization.

- Ensuring participation of female members at a certain ration in the three channels that provide member to the Council of Higher Education is important at the same degree. Also, enabling participation of student representatives in Council of Higher Education General Board meetings in certain issues will be beneficial.

- Some powers of Council of Higher Education should be transferred to Interuniversity Board and some of them should be transferred to universities. For example, practices like informing salary of foreign academic staff to the Council of Higher Education for approval or applying to the Council of Higher Education to obtain permission for visits of university presidents to abroad should be terminated. Naturally, regulation of powers requires reviewing and renewing current regulations. Normally, auditing function should be among powers of the Council of Higher Education.

- General Board of the Council of Higher Education may be composed of 21 members as it is today, but 11 members may be appointed by Interuniversity Board, 5 members by the Cabinet and 5 members by the President.

- Separating Student Selection and Placement Centre from the Council of Higher Education has drawbacks in terms of integrity of the system and it will be better to include this Centre in scope of the Council of Higher Education.

- Objective criteria should be developed and a transparent approach should be applied for using the powers left to the Council of Higher Education. For example, developing a set of criteria for opening university, faculty and department and announcing these criteria will not only prevent unnecessary applications and expectations but it will also steer preparatory works.

- In the future period, it may be necessary to charge the Council of Higher Education with some new functions in scope of the process of harmonization with the European Union. In the new system to be formed with higher education reform, the Council of Higher Education should adopt a function that enhance vision, encourage innovations and initiatives and effectively support strengthening institutions.

- Interuniversity Board may be transformed into University Rectors Conference and may be composed of only university presidents like the practice in many countries. It will be beneficial to strengthen the Interuniversity Board according to the practice in the last 25 years and to establish a full-time executive board. In such a board, at least natural sciences, engineering sciences, social sciences, medical sciences and fine arts should be represented.

- Determining minimum conditions for academic promotions and appointments should be duty of the Interuniversity Board. Duties of the Interuniversity Board should also include developing academic criteria that will guide to decisions of the Council of Higher Education on opening university, faculty and department. It is clear that
sufficient staff and budget should be provided to the Interuniversity Board in order to realize these functions.

- **Higher Education Supervisory Board** should continue to its duty in the Council of Higher Education and emphasize strengthening quality assurance system in higher education. The *Commission of Academic Assessment and Quality Improvement in Higher Education* should be equipped with necessary staff and financial resources and it should have a permanent organizational structure and this organization should be an institution that assess other institutions that will perform assessment in certain fields (like engineering, medicine, etc.) and also determine the principles, methods and criteria related to these fields.

- Establishment of networks and continuously functioning secretariats at upper-university level should be encouraged and supported in order to ensure a strong cooperation and harmony among the faculties that are in the same science field and bear the same name.

- Regarding vocational schools of higher education, *offices having full-time and qualified staff* should be established in both the Council of Higher Education and Interuniversity Board, one member from executive board of both the Council of Higher Education and Interuniversity Board should be charged with this issue. Also, a quality measurement system should be established for vocational schools of higher education. In this context, relations of vocational schools of higher education with business world should be strengthened.

**University Level:** Essentially university senate and university executive board should be maintained at this level, however their powers should be strengthened. *University Executive Board should be composed of deans whereas university senate should be composed for representatives elected by faculties.* Powers of University Executive Boards and University Senates should be regulated again.

One of the important decisions at university level is **determination of university president.** Increasing tenure of university rectors to a non-renewable 5 years is considered beneficial. Benefits of single-stage election for determining university rectors are open to discussion. This is natural when it is considered that election is not a purpose by itself but a method of selecting the most suitable university president.

During their tenure of university rectors especially transparency and accountability principles should be emphasized. The institutions should be equipped with necessary managerial system in order to realize this.

- Developing pre-election stage in university rector elections may be beneficial. For example, being candidate for a particular university rector position should not be limited with only academic staff in the same university but open to all academic staff across Turkey and this approach should be encouraged and supported.

- Another important point at university level is related to **university vice-rectors.** Determining the number of university vice-rectors should be left to universities. Also, being an academician may not be prerequisite for university vice-rectors, who will work at certain fields and the decision on this issue may be left to universities.

- Universities should be supported in establishing advisory boards in order to strengthen their relations with the society, economy and local governments and especially with their graduates and also enable receiving support and criticism from external sources.

**Faculty Level:** Faculty is the institution where state of belonging of academic staff is highest and thus enabling an extensive participation in faculty is very important. Excluding
excessively large faculties, it is beneficial if faculty councils include all academic staff. It will be better to develop a model of university senates for the faculties the number of academic staff of which is high.

- Participation of students at a meaningful level is important for both faculty council and faculty executive board.
- Determination of sub-units of faculties may be left to university senates.
- It will be proper to adopt a more participatory method that current application for determination of deans. It will be better if the Council of Higher Education does not have any function in assignment of deans. Tenure of deans may be limited with three year renewable once. Significant benefits will be obtained if deans adhere to transparency and accountability principles like university rectors.
- Limiting the number of vice-deans with law is not considered necessary. This issue may be left to university or faculty organs.
- Another issue that should be taken into consideration in organization at faculty level is the organization of graduate level. It will be beneficial to bring certain flexibilities to current practice. For example, leaving master’s degree and doctorate degree programs that are essentially in scope of a single faculty to same faculties instead of implementing them via institutes may increase efficiency. Another option is to leave the preferences regarding this issue to universities.
- Establishing advisory boards at faculty level in order to strengthen relations with the society, economy, local governments and graduates and ensure a positive interaction should be encouraged.

The fifth subject of the higher education strategy for Turkey is strategic choices related to developing quality of vocational schools of higher education. Efforts related to vocational schools of higher education that have 30% share in our higher education system and expected to have a similar share in the future and that have the function of educating the workforce that has critical importance for functionality and competitiveness of Turkish economy could not lead to an open and assertive policy. For this reason, vocational schools of higher education have been always remained at second rank in our higher education system. A program, which is definitely assertive and can change the current situation in a radial way, should be prepared and implemented in a strict manner.

Strategic options that will be targeted by a program, which will create such radial changes, may be summarized under six main headings:

1. To increase reputability of vocational schools of higher education (VSHE) among society, students and academic staff and make it assertive and in this way to increase motivation of students and academic staff in such institutions,
2. To ensure that VSHEs are embedded into local labour and employment markets,
3. To enable that VSHEs establish a governance system compatible with the assertion that aim,
4. To canalize better educated and motivated students to VSHEs,
5. To establish a new career path in which academic staff of VSHE, who devote themselves to their profession and care about their profession, can feel themselves happy,
6. To increase physical capacities of VSHEs and restructure their sizes and distributions.
Improvement suggestions related to these six sub-headings are discussed in a comprehensive way in the main report.

The sixth subject of the suggested strategy is composed of basic options on ethical values in university. Reputability of each institution in the society depends on existence of clearly defined ethical standards and realizing its activities in compatibility with these ethical standards. Increase in sensitivity for ethical standards and start of discussions regarding this issue in Turkish university history occurred after 1980s and discussions were mainly limited with publication ethics. This study, which suggests a development strategy for universities, considers defining clear ethical standards for all function fields of today’s universities as a strategically important problem.

University should crystallize its ethical standards in four different fields. They are listed as;

1. Ethical standards related to relations between university and the society or preserving limitations of this relation,
2. Ethical standards related to education function of higher education,
3. Ethical standards related to scientific research and publication,
4. Ethical standards related to public service production function of university.

And, in the main report institutional and individual behaviours, which are expected to achieve and comply with, are defined separately for each heading.

**Strategic options related to life and management culture in universities** are considered as seventh subject of the strategy. One of the basic purposes of universities is to educate students. One side of this education function is to equip student with knowledge and skills and the encourage him to research whereas its other side is to enable development of citizenship and life culture explained in the third ratio related to university. The first part of this education function will be realized in an education process in lecture rooms, laboratories, libraries of universities under guidance of academic staff whereas its second part will be realized in interaction of students in scope of their life experiences in the environment provided by the university. Micro-cosmos nature of university becomes important in this context.

Strategic options that should be realized by the university in order to be such an environment for its students can be listed as;

1. To develop a governance culture that tries to ensure communicative reasonability in horizontal relations instead of realize management in a rigid hierarchical relations,
2. To make reasonable efforts in order to keep life quality in university at a high level,
3. To establish academic staff student relation on a mutual like and respect basis,
4. To ensure that students can develop a free and self-respecting life experience in relation between equals with their free will while they are continuing their education,
5. To ensure that students can independently organize many activities in intellect, art, sport and various hobby fields that give meaning to life of students in a manner in which students do not lose their leadership functions,
6. To increase awareness of students on their social responsibilities and to enable them to start carrying out this responsibility with non-governmental organizations or with non-governmental organization logic.

**Strategic Options related to Quality Assurance in Higher Education** is considered as the eight subject of the suggested strategy. In the process started with the “Regulation on
significant steps were taken in assessing and developing quality levels of higher education institutions at national level. In this scope, higher education institutions were established an internal quality assessment system with the “Academic Assessment and Quality Improvement Reports” they will prepare every year as a result of assessing their own institutions in scope of the processes to be determined by Commission of Academic Assessment and Quality Improvement in Higher Education (YODEK). However, even though the regulation includes the issues regarding external assessment processes that are one of the most important elements of quality assurance in higher education, independent bodies or agencies capable of conducting external quality assessment could not be founded yet. In scope of the new regulations, the suggestions summarized below are considered important with regard to the activities that aim to increase quality level of higher education institutions and guarantee their services.

- **Budget and staff of the Commission of Academic Assessment and Quality Improvement in Higher Education should be supported and a legal entity status responsible for the regulations in this field should be provided to it.**

- In scope of the relevant regulation as well as the principles and standards to be determined by the Commission of Academic Assessment and Quality Improvement in Higher Education, independent bodies/agencies that will realize external quality assessment of higher education institutions on institutional basis should be established in an continuous organizational structure that adopt international standards.

- Establishment of institutions that can perform external quality assessments on unit/sub-unit or program basis (like Engineering Assessment Council) should be encouraged in other science/profession fields and it should be ensured that such institutions/establishments can carry on their activities with a legal entity status.

The ninth subject considered by the strategy is legal regulations related to responsibility, audit and discipline in higher education. In this context, relevant articles of the Constitution and the Higher Education Law No. 2547 are compared, attention is attracted to the limitations and reservations in both the Higher Education Law No. 2547 and relevant regulations, which exceeds the limitations and reservations in the Constitution, and changes are suggested in line with these.

**Regarding student and employment record amnesty**, it is stated that since higher education institutions are institutions that lead the society in many different dimensions, amnesty in these institutions will remove dissuasiveness of penalty and similarly frequently applied student amnesties are unacceptable political intervention to academic life and they should be completely eliminated.

The **tenth** subject of the strategy is to **equip higher education students with at least one foreign language**. In general, university students in Turkey, which wants to increase its competitiveness in a globalizing world and take place in the EU, should graduate from the university by knowing at least one foreign language. This is a minimum condition. Knowing at least two foreign languages is expected from the students in the EU countries.

This problem is in agenda of Turkey for a long time. It cannot be said that the regulations realized by Turkey at higher education level in order to solve this problem until now is sufficiently successful. The education system in Turkey should have a strong assertion regarding this issue. Assertive strategic options regarding this issue can be listed as follows:

1. **In the long term students coming from secondary education should solve foreign language problem before then start higher education.**
2. In the short term higher education institutions should make insistent efforts to close foreign language gap of students with various means.

3. Supply of language lecturers in higher education should be accelerated rapidly in the following years in order to realize both the first and the second objectives.

4. In the medium term, obtaining certain grades in language level determination examinations validity of which are accepted may be asked from the students to graduate from university. Imposing this condition for the student who will continue to master’s degree education may be started earlier.

5. Providing only one foreign language (English) to university students is also insufficient. Teaching more than one language should be encouraged. Organizations should be realized in order to teach languages of the EU countries, languages of Balkan, Middle East, Caucasus countries as well as languages of countries that have an important role in world economy and politics like Spanish, Chinese, Russian, Japanese.

It is expected that universities will develop more detailed suggestions on how to implement these strategic preferences in scope of their strategic plans and compatible with their conditions. In this context, improving preparatory classes, giving some courses in Erasmus system in foreign language, etc. may be considered.

The eleventh subject of the strategy considers using new approaches and new technologies in education. It is a fact that new technologies are not sufficiently used in higher education and obsolete teaching method that depends on note taking by students is still widespread. Effective visual learning and thinking skills should be developed by using audiovisual means according to quality and scope of subjects while using new teaching technologies. When importance is given on how to teach in addition to what to teach, considerations will be made on how to use technology in the best possible way for establishing teacher-learner relation. The need to switch from a academic staff centred education to student centred education as stated in education vision section of this study requires establishing a relation between such a vision and education technology.

Turkey should rapidly increase quality of its human capital in order to increase its competitiveness in the world and take part as an active actor in the European Education and Research fields by fulfilling requirements of knowledge society. In order to achieve this it should increase both quantity and quality of its workforce with doctorate degree. For this reason the twelfth subject considers strategic options for rapidly increasing workforce with doctorate and post-doctorate degree in human capital of Turkey. What should be done in order to reach this target are:

1. To develop the means that will enable to increase the number of workforce with doctorate degree at a sufficient level,

2. To determine the financial means that will enable doctorate students to continue to their education,

3. To make new regulations that will increase quality of doctorate degrees in doctorate programs,

4. To develop the means that will provide post-doctorate opportunities in home and abroad.

Diversification should be ensured in education high number of workforce with doctorate degree as stated in the section in which strategic objectives are determined and means in home and abroad should be utilized effectively.
• The difficulties encountered by doctorate students related to obtaining an income sufficient to maintain their lives should be eliminated by removing the limitations imposed on the number of research assistants and improving their salaries and implementing state doctorate scholarships. A central examination like Specialization in Medicine Examination organized by Student Selection and Placement Centre should be developed in order to bring a uniform system for selecting students according to their qualifications.

• A significant increase as suggested will increase existent concerns on quality more. The intensity of students and academic staff in doctorate programs should be increased simultaneously in order to achieve quality. If sufficient student intensity is achieved many graduate level courses that cannot be opened can be opened and if doctorate supervision is encouraged and sufficient number of academic staff is available, variety of graduate level courses will increase up to a sufficient level. As a solution to achieve this intensity, consortiums may be established between universities for graduate level education and graduate level, especially doctorate courses may be provided in scope of a partnership between these institutions. Commission of Academic Assessment and Quality Improvement in Higher Education should be involved in the issue in order to decrease the concerns on quality and doctorate competency examinations should be realized in a centralized system.

• Providing opportunities for “post-doctorate studies”, which have different subjects and locations than doctorate study and a period between six months and one year of which is spend abroad will be very beneficial.

The thirteenth subject in the strategy is composed of strategic options that may be followed for assignments and promotions as well as self-development of academic staff.

They may be listed as;

1. To increase human capital capable of being academic staff and researcher in Turkey,
2. To ensure that assignments of academic staff depends on qualifications measure of qualified people,
3. To continuously provide channels that enable self-development of academic staff throughout their academic career.

Attention should be paid to more special issues in realization of these strategic options.

• Plans that involve mobility of academic staff should be made for increasing quality of academic staff of a university. This mobility should not be considered and encouraged only in scope of Erasmus program but between the universities across the country. Increasing the number of visiting academic staff up to much higher than current level should be encouraged.

• The tendency to appoint his own student (inbreeding) is very high in academic staff assignments in Turkey. This has negative consequences. Normally, a people who receive doctorate in a university should not be assigned as academic staff in the same university before he works in other universities in home and abroad.

• While encouraging young people, universities should be aware of the fact that today scientific success is more success of an interacted research group rather that individual success and encourage formation of research groups around research programs and in this way they should keep the motivation in groups high and enrich development of academic staff by mutual learning.
In a university, which has opportunities for self-development of academic staff, academic staff should be awarded in order to keep their motivation high and continue their studies with excitement. **It is important to base awarding on a transparent promotion mechanism that works in an equitable way.**

In general, assigning an academic staff who completed his doctorate as assistant professor after he works as lecturer for one year and accepting his application for associate professorship after he works for 4-5 years and has change for new research other than his doctorate study will be necessary for a productive academic life. However, regarding promotions periods different applications may be considered for newly established universities and established ones.

Leaving assignments of professors to universities caused some negative results in addition to its beneficial results. The main negative points are selecting jury members mainly from relevant units and the fact that members selected out of relevant units cannot make an objective assessment. For this reason, assignments for professorship may be made in the current assessment process **after certain conditions determined from centre are fulfilled** or by central professorship juries which are composed of three professors two of who will be determined by drawing lots from jury members list including professors who reached to a successful position in the relevant field.

In the **fourteenth** subject of the strategy, **strategic opinions to be made in order to raise life standards and develop employment rights of academic staff** are considered.

Success of a higher education system mainly depends on its ability to attract strong brains of the society to itself. It is clear that attractiveness of a profession does not only depend on the income it provides but also to its capacity to provide other excitements, satisfactions. However, this determination does not mean that the income provided by a profession is not significant. If income of a profession continually decreases compared to other professions and the income it provides does not allow living a self-respecting life, it is clear that attractiveness of this profession will significantly decrease. The steps that should be taken to increase attractiveness of being academic staff may be listed as follow;

1. Relative position of the academic staff working in higher education institutions (especially the staff under associate professor rank) in the society should be drastically increased,
2. A payment system that can be differentiated according to performance basis should be established,
3. Budget processes should be reorganized accordingly,
4. The right to stay as academic staff should be reorganized (without neglecting ideal staff structure according to title levels of the department and causing academic staff to loose their working instinct),

The **fifteenth** subject of the strategy is on **developing capacities of the staff working in higher education other that academic staff**. Success of a higher education institution in performing its functions in education, research, and public service cannot be realized only with qualified academic staff. **Success of these institutions also depends on existence of a strong and quality support staff.** Strategic options needed in order to make the necessary jump in support services field may be listed as follows;

1. **To assign highly qualified staff in support staff needed for activities of universities,**
2. To develop statuses that will provide fee and other benefits that will enable employment of quality staff in support staff,

3. To realize assignments to these positions according to qualification basis.

In order to be successful in today’s world, it is needed to develop a higher education strategy that includes a financing strategy consistent with general options of the strategy. This higher education strategy developed for Turkey should make open strategic options in five fields related to financing. They are;

1. To provide sufficient resources in order to realize strategic objectives,
2. To adopt budget forms that enable university managements to use resources in an efficient and flexible manner,
3. To establish an effective audit and accountability system related to resource use of university management,
4. Participation manner and amount of beneficiaries of education to financing of education activities,
5. Procedures and methods applied by the Board of Higher Education related to playing an effective role in budget process in order to implement its strategy.

FINAL COMMENTS

This study does not suggest a solution that is a fait accompli for the society and it targets a solution that will be developed in interaction with the society and include a comprehensive consensus. The point on which the parties should focus in order to achieve this objective is strategic options that will improve and accelerate this development perspective. Expectations for such a discussion are reflected on language of the strategy document and using expression that exclude options are avoided.

More definite strategic options will be selected after discussion reach to a certain level.