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A THEORETICAL EXAMINATION OF FINANCIAL MODELS OF HIGHER EDUCATION AND PROPOSAL FOR HIGHER EDUCATION IN TÜRKİYE

Research article

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A THEORETICAL EXAMINATION OF FINANCIAL MODELS OF HIGHER EDUCATION AND PROPOSAL FOR HIGHER EDUCATION IN TÜRKİYE

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Abstract

Higher education plays a significant role in the development and growth of a country. It improves the economy of the country and human capital. Higher education is one of the main stages of the educational career of an individual. Every country pays great emphasis on higher education and makes policies to improve the quality and facilities of higher education. The main aim of this paper is to propose a novel and optimal finance model for higher education in Türkiye. We analyze the key features and issues of various financing models of higher education used by different countries in the world. We also evaluate different aspects of financing mechanisms used in different states and the ways through which Türkiye can get an advantage from the experience of other countries. Our proposed financial model aims to assist in improving the quality of research and education in Türkiye as well as reduce the gap between the universities and industry.

Keywords: higher education, financial models, higher education in Türkiye, financial model proposal

1. Introduction

Governments all around the world pay more emphasis to the higher education system as it has a huge contribution to the economy and socio-cultural structure of the country. It also enhances the value of facilities and conveniences that the government provides to its inhabitants. The growth and development of a nation highly are dependent on the quality and competence of the educational facilities available in the country. Therefore, higher education is a very crucial and significant educational stage (Sijgers, Hammer, Ter Horst, Nieuwenhuis, & Van Der Sijde, 2005). The new generation development is exceedingly dependent on higher education. It has an enormous contribution to improving the human resources of the country and escalates the prosperity of the nation.

One of the main problems and concerns regarding higher education is its financing that change with time. The whole system of higher education is extremely reliant on financing. The requirement of higher education has been increased all around the globe in the last few years. However, the majority of the governments do not have the capability and facility to support and finance these increased demands of higher education (Salmi & Hauptman, 2006). All



around the world, the public and private sectors finance the higher education system. The public sector usually dominates over the private sector in financing higher education. On the other

hand, in the last few years, the financing from the public sector has been reduced exponentially in countries where government rules and strategies are prevailed by liberalization (Soares, Steele, & Wayt, 2016). As a result of this, the privatization of the higher education system has increased in such countries. Still, the public sector is considered as the most effective and operational in the majority of the states.

2. Method

In this study, the features and benefits of higher education is evaluated. Along with that, literature and other studies that are conducted on the financial methods of the higher education institutes in the world is examined.

In this research, we analyze the financing and other related factors of the higher education system all around the globe. In addition to that, we will compare the financing models implemented in different countries with the currently used financing model of higher education in Türkiye. We will highlight the issues and problems of the financing model of the Turkish higher education system and provide a novel model to overcome these issues.

3. Findings

3.1. Features Of Higher Education

According to Güngör Göksu (2014), “education is a type of public service which educates the scientific thinking power and professional quality of human resources in line with their individual interests and abilities, and also makes important contributions to the development of qualified labor force and its quantity needed by society” (Göksu, 2014). In particular, the higher education level has a direct impact on the level of countries development. Higher education, which enables young people to improve themselves and gain a place in society, is an important stage of education and this makes the issue inevitable that necessary attention should be given to its funding.

The operational environment of the higher educational institutions all over the globe is changing dramatically and this trend of change will be seen in the future as well. Various changes and modifications such as their size, structure, objective etc. are seen in higher education due to changes in trends in human demography, technology, funding provision modification, and globalization. In the majority of the countries all around the world, the higher education system comprises community colleges, state colleges and universities (Andrews, Aungles, Baker, & Sarris, 1998). These institutes are providing higher education to the students by getting funds from the public and private sectors. The higher educational institutes provide personalized education to the individuals and assist them throughout their academic life. They also provide a guideline for the students to accomplish their goals and become successful in their professional life (Xu, 2009). The institute provides the facility to the students to polish their skills and expertise. The higher educational institutes are considered as a source of innovation, invention, and entrepreneurship. That is why the innovative and creative companies always keep an eye on the higher educational institutes.

The higher education institutes also provide the opportunity to youth or students to get an understanding of the professional field and provide them the knowledge about their field by integrating the curriculum with the market skill depend. The higher education institutes conduct

examinations and assessments to investigate the understanding of the individual about the key concepts and theories of the courses related to their field. In addition to that, semester projects

are assigned to each individual so that he gets to know how to implement the concepts and theories he learned in the course and learn the ways to work within a team and individually (Johnstone, 2016). However, the teachers play an important role in guiding and motivating the students in their semester and graduation project that helps them in their professional field.

According to statistics, the United States of America has one of the best higher education systems all around the globe. In 2017, the total number of higher education institutes in the United States of America was 4,298 (Statista, 2020). Out of 4,298 universities, 1626 and 1687 are public universities and private non-profit institutes respective (Statista, 2020), where the rest of them are private profit institutes. The higher education system of the USA comprises community colleges, state colleges, vocational colleges, and universities. The majority of the world's famous universities are located in various states of America. Denmark stood at the third number in the best higher education system. In Denmark, the number of higher educational institutes is approximately 110 (Jongbloed, 2009). The higher education system of Denmark consists of four different institutes that are "Professional academies", "University Colleges", "Universities" and "Institute of Arts". However, the time duration of the bachelor's degree is 3 years, whereas in the USA, UK, Australia, New Zealand, Türkiye and various other countries it is for 4 years (Jongbloed, 2009). *There are a total of 208 universities in Türkiye. 129 of them are State (11 Technical, 2 Fine Arts, 1 High Technology Institute, Gendarmerie and Coast Guard Academy, Police Academy and National Defense University), 75 are Foundation Universities and 4 are Foundation Vocational High Schools (YÖK, 2023).*

3.2. Benefits Of Higher Education

Education is generally treated as public property. However, considering its benefits, 'higher education may not be considered as "mere public goods" that all members of society benefit equally, such as national defense, environmental cleanliness, homeland security and the judiciary, nor as a "purely personal property" for who consume alone like food, clothing and housing.' (Kurul Tural, 2002).

It is obvious that higher education has both personal and social benefits. These benefits can be both monetary and non-monetary. Classifying these benefits as personal and social benefits will shed light on our understanding of higher education benefits.

3.2.1. Personal Benefits Of Higher Education

Higher education is very crucial not only for the individual but also for society, especially in the 21st century. It provides various different benefits to each individual such as successful and affluent professional career, financial stability, etc (UoPeople, 2020). Higher education gives awareness to teenagers about their careers and assists them in choosing the right profession. It also provides the facilities to learn new skills, knowledge and to be trained. In addition, it provides them more opportunities as compared to secondary education students. Gölpek (2012) summarizes the high education benefits that can be accepted as private returns, it this way: it emerges as increase at individual's future employment possibility, productivity and earning capacity with more revenue thus benefit from more goods and services (Gölpek, 2012). The employment rate of higher education students is 72.6% in Canada while the employment rate of other students is 61.4% in 2010 (Xu, 2009). In addition to that, 88% of the individuals, having higher education, have permanent jobs in various well-reputed organizations (LaTour, 2014). Educated individuals are evaluated as qualified workforce. As a

result, it is possible for educated individuals to earn higher wages than uneducated individuals, and with education, the standard and quality of living of individuals can be increased (Doç & Akça, 2012). There is always a positive relationship between training and the gained revenue.

This is valid regardless of development status of countries and in countries where there is few educated work force, high education graduates are always very likely to find work. In Canada, the average salary of the individuals having a university degree was nearly \$56,000 in 2008 that is 60% more than the individual without having any higher education (LaTour, 2014).

The unemployment rate among university and college graduates is 3 times less as school graduates in 2009 (UoPeople, 2020). It indicates that higher education ensures the financial stability and successful career of individuals. That is why university students after graduation remain happier and relaxed as compared to the students having less education. Higher education also assists in the personality development of individuals (Baum & Payea, 2005). It improves the verbal and non-verbal communication, critical thinking, discipline, time and resource management, and passion realization skills of the individuals that not only help them in their professional life but also in personal life.

3.2.2. Social Benefits Of Higher Education

Social benefit is the benefit reflected in other members of society rather than the benefits provided individually. According to Golpek (2012), these benefits are reflected in the way that they contribute to national income through increasing tax revenues and productivity of educated individuals in society (Gölpek, 2012). The social benefit (social return) of education is measured by the rate of social return and is recognized as a benchmark for society's decisions on resource distribution. Accordingly, the Social rate of return measures the relationship between the social costs of education, which must be compensated by society as a whole, and the expected benefits will provide to society (Gölpek, 2012).

In the majority of the universities, international students are enrolled, due to which there is usually a multi-cultural environment there. It allows the students to interact with people from different cultures, ethnicities, races, and religions that directly influence society in a positive way (Baum & Payea, 2005). The probability of engagement of university and college graduates in substance abuse, crime and other illegal activities is very low. The percentage of adult smokers having at least a university degree dropped up to 5% from 1998 to 2008 (UoPeople, 2020). Whereas the decline among the other adults is only 2% (UoPeople, 2020). As we know that university graduates have higher earning and are more likely to be financially stable so it is expected that these resources be utilized for the betterment of society. They get involved in society and voluntary work that solves various problems of society. The university graduates are more creative and innovative and provide novel ideas and solutions to resolve the issues of their community. In other words, higher education has a great influence on the future of the society and country.

3.3. Costs Of Higher Education

Higher education costs to individuals and the state, both directly and indirectly. Other levels of education in Türkiye is completely free of tuition and the state assumes close to the full cost. This situation shows some differences in higher education (Kurul Tural, 2002). The cost of the higher education can be classified as personal and social, which will be explained with some examples in the following sections.

3.3.1. Personal Costs Of Higher Education

Higher education is always considered very costly and expensive, as the tuition fee for most courses is very high. There are various reasons for this increase in the personal expenses of the

individuals such as lack of funding by the government, an increase in tuition fee, university's revenue requirement, etc. (Saruparia & Lodha, 2013).

The university expenses in America and European countries have increased exponentially in the past few years due to which most of the students take those student loans. In the USA, almost 45 million university students have taken the student loan and the median student loan is \$29,800 that is double the past few decades (Hoffower, 2019). Along with the tuition fee, there are various other expenses such as dorm rent, textbook purchase, transportation, tools, etc. In addition, the individual must bear the expense of laundry, food, toiletry, clothes, medical treatment etc. According to the estimates, an individual spent at least \$2,000 yearly on personal expenses (Hoffower, 2019). Whereas on apartment rent, textbooks, and transportation a university student spends at least \$12,000, \$1,500 and \$1,000 per year. It is very difficult for the student to manage these expenses and clear the debt (Hoffower, 2019).

3.3.2. Social Costs Of Higher Education

The social cost is also known as public cost and institutional cost. The social cost is actually the expenses endured by government and educational institutes for building and functioning that institute. In other words, the social cost is generally the state funding to the educational institutes that are generated by the means of tax, loans and other civic returns. It also comprises of the direct and indirect cost that is compensated by the state and municipal administrations (Saruparia & Lodha, 2013). However, the personal expenses of an individual are not considered in it. Various variables are used to compute the overall social cost of the higher educational institute such as variable and fixed cost, repetitive and non-repetitive, and current and capital cost. The recurring cost includes the salary of staff, rent, book purchase, journals, maintenance etc. Whereas the non-recurring cost includes furniture, electronic devices, lab material, building, etc. The social cost is increasing rapidly over time. From 1946 to now, the social cost of the higher education system in the USA is continuously increasing (Schwarzenberger, 2008). In 1954, the social cost increased up to 1,119 which is almost twice as the social cost in 1946 that is 619 (Schwarzenberger, 2008).

3.4. Financial Resources Of Higher Education

As high education is not a compulsory education period, it concerns individuals as well as the state in terms of both benefits and costs. Today, student fees of state universities in Türkiye are paid by the state. However, fees are neither the only cost of higher education institutions, nor the only income. Diversification of the sources of income of these institutions provides the opportunity to compensate for financing with another source in the event of any economic contraction or reduction of one of the sources.

Based on this situation, we can say that high education institutions that have diversified their funding sources will not depend solely on the state or will not depend solely on student fees to ensure their continuity. Eicher and Chevaillier (2002), have outlined the benefits of the diversification of resources approach as follows:

Contributing to public universities by paying tuition fees, as well as by businesses and voluntary organizations, makes it possible for appropriate monetary arrangements to be made during periods when the public budget is shrinking; thus, there are no qualitative declines in education. Furthermore, financial dependence on the state negatively affects university autonomy. Diversification of the flow of monetary resources to higher education creates a framework in which autonomy can be sustained more. On the other hand, public assistance to private universities will reduce the amount of tuition fees at private high education institutions, which will lead the private sector to invest in education and will enable public control over private high education institutions. As a result, it is suggested that diversifying the sources of

income of both public and private high education institutions will have desirable consequences (Eicher & Chevaillier, 2002, p.12).

Diversifying the funding sources of higher education will benefit in the name of eliminating or reducing limitations on effectiveness and equality, given the benefits it provides and the costs it entails.

3.5. Diversification Of Financing Higher Education

3.5.1. Government Funding

One of the main sources of financing to higher educational institutes is the government, state, and public funding. The majority of universities all around the world are dependent on government funding. The governments usually allocate a specific budget for each sector of education such as teaching, research, development, innovation, experimentation etc. In most countries, the Ministry of Education and related organizations are responsible for allocating the budget and funding to the higher education system. The Danish government has divided the higher education funds into two subcategories that are teaching funds and research funds. 60% of the higher education funding is spent on Bachelor's students (Jongbloed, 2009). Whereas the rest of the funding is allocated for research. The Flemish government has almost the same funding mechanism, teaching and research funding are provided separately along with the investment fund for development inside the campus.

As a result of the increasing demand for higher education in parallel with the current situation of the Turkish higher education system and the secondary school enrollment rates, the understanding of higher education as a public good (public good) has begun to change, and as it is shown, nutrition continues in the form of public health and public nutrition. According to public and private developments, Türkiye's worldwide public weights are observed to be quite high in the sections according to regions.

According to the statistics, only 12% of students are enrolled in private universities in 2023 (YOK, 2023). 52% to 57% revenues of the universities are generated by government subsidies (Caner & Okten, 2013), while the revenues generated by the universities themselves are the subsequent source. However, the contribution of student tuition fees is a minor that is only 5% (Caner & Okten, 2013).

3.5.2. Private Resources

The fact of funding high education through tuition fees is that the number of individuals who benefit from high education, has increased and therefore public resources becomes insufficient. As a result, rather than demanding more resources from the state, the method of receiving more payments from individuals benefiting from high education services is the basis of this model.

In the debate on ensuring fairness in high education, according to some experts, a part of the cost of high education should be covered by fees, since high education is not compulsory education, only a part of society benefits, and those who benefit from the service have the opportunity to earn higher income at the end of the education level.

The private universities are largely dependent on the registration fee, tuition fee of the students, and other related charges. It is the main source of revenue for private organizations. In addition to that, various private organizations and people give funds, subsidies, and donations to the institutes (Schwarzenberger, 2008). In the majority of the countries, the government education department regularizes the pricing policy of the private universities. However, in some countries especially in Africa, there is no rule and regulation to monitor and control the fee structure of the private universities.

Funding of higher education with private resources can be made possible by the promoting private higher education institutions or by the development of private income generation opportunities of public higher education institutions. We can evaluate the foundation (private) universities providing education services Türkiye as a method of financing with private resources. The funding of these institutions is largely based on student contributions and, to a certain extent, on the contribution of the foundation university, on a small amount of government assistance provided by the state under some circumstances (Kurul Tural, 2002). Funding revenues from private sources may include revenues from businesses owned by universities, rental income, and revenues from some additional services provided to students.

3.5.3. The Collaboration Of University And Industry

The collaboration between the university and the industrial sector is very crucial for bringing innovation not only in any specific country but also in all around the world. It is considered as a driving force for the development and progress of the nation. Various countries such as the USA, Canada, and New Zealand etc. across the globe are focusing more on the collaboration of universities with the industries so that they can exchange with each other (Ankrah & Al-Tabbaa, 2015). In addition to that, this collaboration has increased the pressure on both parties such as rapid technological change, new knowledge, etc. These collaborations play an important role in the economic and financial conditions of the country. However, still there is a huge gap between industry and higher educational institutes that needed to be overcome as soon as possible.

Today, many universities in developed countries have become “research institutions” that are integrated with industry and produce information, rather than institutions that carry out classical education and training services are trying to complete this transformation. For example, it has been revealed that government support at US universities is largely related to R & D projects (Ergen, 2006).

One of the most striking examples of university-industry cooperation is the universities established exclusively for industry, especially in the United States. The establishment of training centers called General Motors University and McDonald's Hamburger University, which are owned by General Motors of the United States, are examples of this (Oğuz, 2001, p.139).

3.6. The Status Of Higher Education Finance In The World

In European countries, the government gives aid, funds and assists the students in getting a higher education. The governments spend more money on the higher education system. Swedish, Finnish, and Luxembourg government spend 100% of their higher education budget on universities and become the largest spender in Europe (Eurostat, 2019), whereas Portugal spends the least amount of budget that is 69% on higher education. European countries spend annually 60% to 90% of their revenues on higher education. The contribution of private funding in these countries is less than 20% but the UK is the only country where the private sector contributes up to 25% in higher education (Canning, Godfrey, & Holzer-Zelazewska, 2007). In the UK, a special public organization named “Higher Education Funding Council for England” (HEFCE) is responsible for analyzing and managing the financial need in public universities and other higher education institutes (Leshanych, Miahkykh, & Shkoda, 2019). It has divided the institutes into four specialized groups according to their nature of studies that is medical and veterinary, natural sciences, science and engineering, and arts and literature. Similarly, all

German states have their own ministry of education that is responsible for all the educational reforms and management. The national structure is developed to organize and synchronize the curriculum of different courses among the various states (Hryshchenko, 2015).

On the other hand, the USA has the most expensive higher education system as the government does not allocate enough budget for higher education as compared to other developed countries. The American government and private sector give fewer funds to the higher education institutes as compared to the other Organization for Economic Co-operation and Development (OECD) countries (Sijgers et al., 2005), due to which students take loans to complete their education and they are trapped badly in it (Song, 2020). The tuition fee for the Bachelor's degree is approximately 5 to 6 times more than the tuition fee in Japan (Soares et al., 2016), whereas in many European countries like Finland, Germany and Sweden etc. the students do not need to pay any tuition fees. In addition to that, they provide a monthly allowance to their students so they can meet their other personal expenses. That is why the American educational system is not as successful as compared to Europe. The African countries have the worst higher education system, as they are unable to provide public and private financing to the universities and the higher education system. However, both Namibia and Zimbabwe somehow managed to develop effective cost-sharing funding strategies. While South Africa has a similar system like the USA, whereas students must pay tuition fees to study in the universities and higher education institutes. South African National Student Financial Aid Scheme (NSFAS) provides loans to needy students to pay their fees and other expenses (Wilson-Strydom & Fongwa, 2018).

In many European countries such as Finland, Sweden etc., a formula-based funding mechanism is used. It is very effective for European countries as the rate of highly educated people is higher than in America and Canada. However, some European and Asian countries such as Greece, Lithuania, India, and Türkiye etc. implement institutional-based and program-based state funding. Various countries like UK, South Africa, and Netherland etc. are using a grant or block-based funding mechanism. Foreigner students are considered as the revenue generator of any university especially Italy, the UK and Spain (Kikutadze, 2016). The Australian higher education institutes are among the top revenue generators in the economy due to many foreign students. Similarly, Canada is planning to increase the number of foreign students so that they can generate \$16 billion dollars that will indirectly create thousands of jobs (Hryshchenko, 2015).

3.7. The Status Of Higher Education Finance In Türkiye

In Türkiye, it is necessary to examine the funding sources of high education by separating state and foundation universities. All tuition costs are paid by the state, while students enrolled at the foundation universities contribute to the funding of the university by paying tuition.

In the Law No. 2547 on higher education; financing of Higher Education 71, 72 and 73. it is regulated in the article. 71. In this article, the special budget revenue sources of the Higher Education Council of Türkiye and the State Higher Education Institutions are specified as:

- a) Government contribution
- b) Treasury aid
- c) Student contributions and tuition fees
- ç) Sales incomes of printed or visual lecture materials, books and publications
- d) Mobile and immobile properties income
- e) Amounts to be transferred from working capitals

f) Donations, aid and other incomes

The direct form of public financing of state universities is financing with the budget. Direct public resource allocation to higher education institutions in Türkiye is realized through budget appropriations (central budget).

At the same time, another approach used by the public in the transfer of resources towards higher education service is to indirectly finance the said service not through direct allocation of funds, but through some intermediate mechanisms developed. Intermediate mechanisms used in indirect financing of higher education services in Türkiye are scholarships, loans and accommodation services provided to students.

As the public resources began to be insufficient as a result of the rapid expansion and increasing unit costs in the higher education system, it has come to the fore that a part of the cost of higher education service will be covered by non-public resources. In this direction, students and graduates who are the beneficiaries of the services offered by higher education institutions partially or fully undertake the cost of higher education services through fees and donations, and the private sector by establishing new higher education institutions and purchasing research and education services from the university.

Recently, higher education institutions have created new resources by commercializing knowledge through patents and licenses, conducting research on behalf of the private sector and the public, and providing some services such as health and adult education to the society. The incomes obtained by Turkish higher education institutions within the framework of these entrepreneurial activities can be grouped as other operating incomes and revolving fund incomes.

Other operating incomes are the incomes obtained from dormitory, canteen and other social facility activities, publication and sales income, movable and immovable income, as a result of the activities of the revolving fund enterprises established within the scope of the 58th article of the Law No. 2547;

- Medical diagnosis, treatment maintenance and production,
- Production, maintenance and repair of various equipment, installations, tools and vehicles,
- Agricultural production, maintenance, treatment,
- Research activities,
- Production and sale of books, magazines and other printed materials,
- Presentation of projects, expertise, opinions, reports, experiments and similar services from outside the university,
- Technological production,
- It is in the form of activities such as the operation of social facilities.

When we look at the distribution of total university expenditures in 2009 according to the sources of finance, it is seen that 11% of total expenditures were covered by self-income, 86% by Treasury aid and working capital, and 3% by research funds (Demir & Sarıoğlu, 2014) (Kesik, 2003).



3.8. Financial Model Proposal For Higher Education In Türkiye

According to the current financing model in Türkiye, much of high education expenditures are covered by the public. Tuition fees for students studying at public universities are paid by the state and the private income generated by the universities is accepted as the working capital of the universities. While the provision of tuition fees by the state is positive in terms of ensuring equal opportunities in education and increasing the effectiveness of education, the revenues of high education institutions also need to be diversified. Although at first glance it seems that public resources are used only for those who benefit from this education by covering their tuition fees, it is seen that students who are studying at the universities where the revenues have been diversified contribute to these revenues indirectly.

In Türkiye, a country with a large population of young people, the demand for higher education is increasing day by day, putting additional costs on universities. It is seen that the current financing system will only be sufficient to sustain the existing education and training activities and will be insufficient to make new investments. Higher education institutions are required to increase revenues from private revenues and R & D studies and projects, as well as state funding. In addition, university – industry cooperation should be increased, and universities should participate directly in activities to increase production and therefore makes contribution to their own finances and the public budget. In other words, high value-added products and technologies can be developed with university – industry cooperation; thus, the revenues of the country's universities could be increased and make contribution to the country's economy.

Another way to increase the income of Turkish universities is to increase the number of foreign students studying in Türkiye. The revenues that will be generated through tuition fees from these students will provide a certain amount of financial resource to the university and contribute to the diversity of funding. In a way, increasing the number of foreign students in higher education institutions, which can be considered as educational exports, will contribute to the public budget as much as the sum of the tuition fees received from these students. In addition, R & D studies, projects and other studies carried out by these students in universities have an indirect effect on increasing university income.

Such additional revenues make it possible for appropriate monetary arrangements when the public budget and other revenues are reduced, and as a result, the quality of education does not decline. Furthermore, dependence on the state financially negatively affects university autonomy. Diversification of the flow of monetary resources to high education creates a framework in which autonomy can be sustained more. On the other hand, public support to private universities which will reduce the amount of tuition fees at private higher education institutions, will lead the private sector to invest in education more and will enable public control over private higher education institutions. As a result, it is suggested that diversifying the sources of income of both public and private higher education institutions will have desirable consequences (Eicher & Chevaillier, 2002)

4. Results, Discussions And Suggestions

The most basic suggestion of our study is that the insufficiency of real resources allocated to higher education and the inefficiency in resource allocation and use should be addressed in detail, apart from the approaches based on the weight of public funds and increasing private/international resources in the financing of higher education in Türkiye.

Therefore, a more effective administrative allocation based on objective criteria, a more efficient use of resources and a model that increases the use of private resources can be presented as an alternative other than creating private resources and suppressing public weight.

In the financing of private resources, private financing can be summarized within the framework of the themes of participation in the cost of the service received based on equality of opportunity in education and in the context of demand rationalization, the provision of higher education by the private sector within the framework of regulations that will encourage the private sector, and the support of activities aimed at generating private incomes and revolving funds.

The rising demand for universities due to the growing young population in Türkiye is one of the reasons that increases the cost of higher education. This reveals the idea that higher education, which is not compulsory, has mixed property features and students who benefit from these institutions by possessing the potential to gain higher revenues after graduation could partially cover through their tuition fees. However, by diversifying higher education funding through R & D studies, projects and university-industry cooperation, students who benefit from this education contribute indirectly to university income. Therefore, as the university revenues increase, the cost of higher education institutions to the public will decrease, and the state will pay the fees in the financing method already implemented in Türkiye in terms of providing equal opportunities in education will be a positive situation. In this case, any attempt to diversify higher education funding will both relieve public spending and contribute to taxpayers by ensuring higher education services to continue to be offered free of charge.

Increasing demand for universities due to the growing young population in Türkiye is one of the most important factors that increase the cost of Higher Education. This raises the idea that non-mandatory higher education has mixed property characteristics and that students who benefit from these institutions, with the potential to earn higher income after graduation, can partially pay for tuition fees.

Barr, (1993) emphasizes that higher education will increase a person's earnings; thus, the state will take more taxes from that person. As a result, public resources devoted to higher education will be re-obtained by paying more taxes by working more efficiently and productively (Özkan ve Balkar, 2015).

Moreover, R&D studies, projects and revenues obtained through university-industry cooperation in universities diversify higher education funds, allowing students who benefit from this education to indirectly contribute to university income.

In addition, it is desirable that universities have a structure that produces services in competition with each other or even with world universities. It is believed that public resources will create competition between universities in terms of production of services as a result of the creation and distribution of performance-based mechanisms. It is an undisputed fact that applications such as Technopark, Technopolis, technology transfer offices, which have been growing rapidly in universities in Türkiye in recent years, generate income and collaborations with industry are important for both universities and students. These applications cause universities to consider market conditions, produce services for the requested product, and as a result, these studies make significant contributions to the efficiency of universities.

Therefore, as university revenues increase, the public cost of higher education institutions will decrease, and the state will pay fees in the financing method already implemented in Türkiye in order to ensure equal opportunities in education. In this case, any attempt to diversify



higher education funding will both reduce public spending and contribute to taxpayers by ensuring that higher education services continue to be offered free of charge.

A resource allocation mechanism that encourages higher education institutions to compete and rewards performance in terms of access to resources in the relevant section of the recommendations section, which is stated to be caused by public funding mechanisms on the basis of institutional flexibility and financial autonomy, especially due to centralized structuring; replacing predominantly input-based financing measures with both input- and output-based financing measures; Another recommendation is to consider the transfer of authority to the managers of the institutions, since the dominance of central control for the transfer of appropriations allocated from the central government budget between different units/items limits flexibility in the use of appropriations. Heaton et al. (2022) emphasizes that in higher education institutions, especially the senior management should have administrative freedom to distribute internal and external resources effectively and efficiently within the organization. However, if the top management does not have entrepreneurial tendencies, the correct allocation of resources may remain in the background. Elmagrhi and Ntim (2023), suggest in their studies that better managed higher education institutions are more successful in monitoring risk levels and disclosing risks (financial, operational and strategic).

On the basis of the study, as a result of the developments in higher education, the provision of higher education service with predominantly public funding sources brings with it the problem of insufficiency of financial resources, and it is suggested to establish a model for private sector resources to have a larger share, with the mention of the need to diversify and increase alternative income sources in higher education.

In this context, firstly the calculation of real current service costs, then gradually increasing the share of students in current service costs; Pursuant to Article 46 of the Law No. 2547 and Article 7 of the Law No. 3843, the President's Decision on the Determination of the Contribution to the Current Service Costs of the Higher Education Institutions in the Academic Year and the Determination of the Tuition Fees" is attached to the first and second The gradual increase in the share of students in the current service cost in the groups in the A and B categories of the Schedule I, which shows the amount of contributions to be made by the State and the students in open education; It may be possible to gradually increase the contribution and student fee amounts of the students who did not graduate within the period.

Similar to the proposal to gradually increase the share of students in the current service cost in categories A and B of the schedules showing the amount of contribution to be made by the State and students in primary and open education, the amounts to be paid by foreign students are determined by differentiating between categories, the minimum rate in each category is determined. Another suggestion is to increase the tuition fee at a certain rate every year and to remove the provision that the tuition fee cannot exceed 5 times the current service cost.

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