Main Problems of Higher Education and Quests for Reform in Turkey

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When the higher education policies and practices of various countries in the world are examined, it is seen that higher education systems are open to innovations and improvements in order to meet the changing and developing needs of society. However, the problems experienced by higher education institutions in Turkey significantly limit both the solution of social problems and the provision of social development. From this point of view, this study aims to comprehensively address the existing problems that prevent higher education institutions from reaching the desired level in Turkey. In the current study, the main problematic areas in higher education in Turkey were determined by document analysis technique. In this context, the study deals with the problems of supply, demand, and imbalance in higher education; the problem of faculty members; autonomy and accountability; and internationalization in higher education are discussed. The results of the study show that higher education in Turkey is insufficient in many aspects to deal with the problems experienced. The study draws attention to some points that need to be addressed in the struggle with the problems experienced in higher education and ends with some regulation suggestions.

Keywords: higher education, problems of higher education, reform in higher education

INTRODUCTION

In the beginning, education and the ideals it embodied aimed to raise "good people". Later, the aim was directed towards raising "good citizens". Recently, due to the deep effects of global capitalism, raising "good producer" and "good consumer" has been awakened. Today's ideal is creativity. As a matter of fact, in today's information society, education is called "the ability to be creative in an environment of special uncertainty and to properly manage the cognitive dissonance that is in the origin of our failures to understand reality" (Innerarity, 2010, p. 6). The biggest challenge facing the information society is the generation of collective intelligence. The intelligence of society as a whole is more important than simply having a society of more than one individual intelligence. UNESCO's (2016) inclusion of the fifth dimension "learning to transform oneself and society" to the principles of "learning to know, learning to do, learning to live together and learning to be" (UNESCO, 2014) supports this situation. Therefore, higher education institutions, which are a part of the society they live in, play an important role in both the transfer and production of knowledge.

In the past, higher education institutions have played an important role in providing change and development in society, and today higher education institutions are still considered to be an important agency in building future generations (Arabacı, 2011; EUA, 2011; Johnstone & Marcucci, 2007; Sakınç & Bursalıoğlu, 2012; Taş & Yenilmez, 2008). For this reason, higher education institutions must be the determinants of change and development rather than being exempt from change. When Peter Drucker said in an interview in 1997, "Thirty years from now, the big university campuses will be relics. Universities won't survive. Such totally uncontrollable expenditures, without any visible improvement in either the content or the quality of education, means that the system is rapidly becoming untenable. Higher education is in deep crisis", this was met with surprise by many (Drucker,

1997). Undoubtedly, Drucker's idea has not yet become true, as universities are still around today and continue to grow. However, especially after the covid-19 pandemic (post-covid period), this idea has helped to understand that the strategic management of higher education institutions as a dynamic and global business has become more and more complex. Moreover, it enabled higher education institutions to understand that they have to transform in many aspects, especially in information and technology (Aktan, 2021; Livari et al., 2020; Masry-Herzallah, 2022; Teixeira et al., 2021; Torres & Ortega-Dela Cruz, 2022).

The "Higher Education Law" numbered 2547, published in the Official Gazette of the Republic of Turkey in 1981, restructured the higher education system in Turkey. The most important element of this new system is the establishment of a new institution called the Council of Higher Education (CHE) for the direction and administration of higher education at the national level, and thus it is based on a centralized structure (Küçükcan & Gür, 2009). Although a long period of time has passed since the law and authorities stated that the structure of CHE would change in all Development Plans and almost all Government Programs after 1990, a comprehensive higher education reform that would change the structure of CHE has not been carried out yet (Gür & Çelik, 2011). At this point, there is a deep need for reform that can compete globally and at the same time respond to changing and developing social needs (Boer et al., 2010; Doğan, 2013; Eurydice, 2016; Gür & Çelik, 2011; Marginson & Rhodes, 2002). But as Einstein put it, "no problem can be solved from the same level of consciousness that created it." Therefore, current needs show that education should be approached and addressed from a different angle.

Higher education institutions are agencies that have the potential to provide social change and development and move society forward thanks to their structure that both affects and is affected (Arabacı, 2011; Bağcı, 2016; Bowen, 1980; OECD, 2017). Therefore, the success of higher education institutions is very important in terms of social and sustainable development (Akça, 2011; Altbach et al., 2009; CHE, 2019; Kurt & Gümüş, 2015; OECD, 2012; Psacharopoulos, 2009; Psacharopoulos & Patrinos, 2004; Türkmen, 2009). Being able to solve their current problems in higher education in order to catch up with the era is of great importance for developing countries such as Turkey (Tanrıkulu, 2009). At this point, first, determining and analyzing the existing problems well is necessary. Because only by analyzing current problems and their reflections, predictions can be made for the future and a vision can be created. When the literature is examined, it is seen that the problems of higher education in Turkey are the subject of various studies. However, most of these studies focus on selected problems rather than addressing the problems of higher education from a holistic perspective, whereas the problems in higher education are highly interrelated. Therefore, addressing the problems with a holistic perspective may facilitate a better understanding of the cause of the problems and the production of policies for these problems. This study is important in terms of determining the problematic areas in higher education in Turkey, as well as showing the results of the policies implemented over the years for the problems in higher education and higher education in Turkey. From this point of view, the study aims to offer possible solutions by focusing on the main problems of higher education in Turkey.

METHOD

In this study, document analysis technique was used. Document review is the examination and evaluation of printed and electronic resources containing information about the research subject in accordance with the purpose of the research (Bowen, 2009). Document review also allows for a comprehensive analysis of resources produced over a wide period of time (Yıldırım & Şimşek, 2021). In this study, document analysis technique was preferred in order to determine the problematic areas in higher education in Turkey, based on the relevant literature. Within the scope of the research, studies (various public data, reports, articles, and dissertations/theses) containing the keywords "higher

education", "problems of higher education", "challenges of higher education", "development of higher education", "higher education reform", and "recommendations for higher education", and "suggestions for higher education" were included in the scope of the review without a year limit. The reason why the year limit is not used here is to prevent possible problematic areas from being overlooked in higher education in Turkey and to examine the continuity of existing problems. Examined studies were analyzed manually in Microsoft Office Excel program with content analysis method and main problem areas in higher education in Turkey were determined. Then, based on the data obtained, the analysis unit was defined, and categories and themes were determined. Finally, the problems identified in Turkey are presented comparatively with data supported by national (TÜİK, ÖSYM) and international data sources (UNESCO, Eurostat, WoS) as of 2021.

FINDINGS

In this review study, the results obtained through a content analysis were discussed under separate headings under themes and categories. In this context, the themes of the study were determined as; the problems of supply, demand, and imbalance in higher education, the problem of faculty members, autonomy and accountability, and internationalization in higher education. These themes are dealt with in the order in the following titles.

The problem of supply, demand, and imbalance in higher education

In the era we live in, the ability of countries, societies, and companies to compete with each other depends on their qualified workforce. This qualified workforce provides development at a point as well as competition (Aktan, 2007; Bağcı, 2016; Gür et al., 2017; Marginson & Rhodes, 2002; Ortaş, 2004). Therefore, education, especially higher education, has become more important over time as the best way to gain knowledge and skills (Doğan, 2013; Helms, 2008). Demand for higher education has increased rapidly because it provides welfare to the individual as well as the contributions it provides to the countries. However, the inability of the states to respond adequately to this demand has revealed the problem of access to higher education (Leveille, 2006). In Turkey, access to higher education has been an important problem since the first years of the Republic (CHE, 2007; CHE, 2019; Doğramacı, 2007; Kavak, 2011). In order to fully comprehend the situation, the participation rates of the population at the age of 30-34 in higher education between 2006-2020 in EU countries and Turkey are presented in Figure 1. In the following Figure 2, the rates of access to higher education in Turkey between 1980 and 2020 are given.
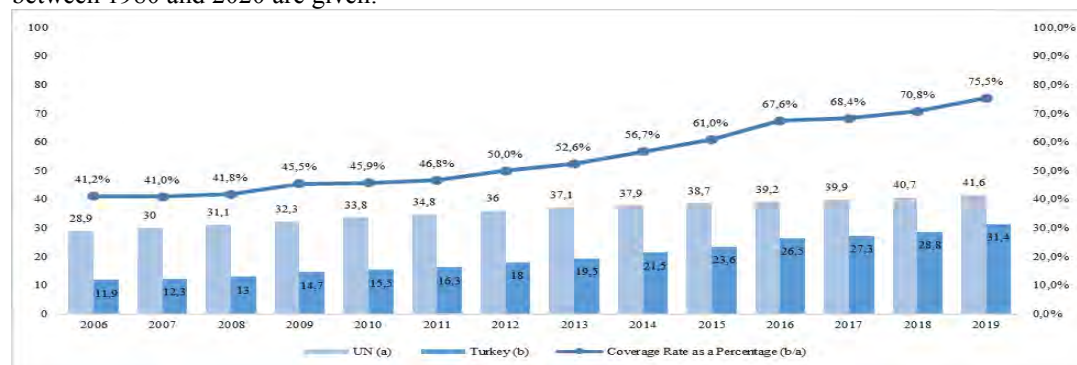

Figure 1
Participation in higher education in EU countries and Turkey

Source: Prepared by the researcher using the 2020 data of the "Statistical Office of the European Union (Eurostat) (https://ec.europa.eu/eurostat)."

When Figure 1 is examined, it is noteworthy that there has been a regular increase in participation in higher education in Turkey every year since 2006. In addition, when the ratio (b/a) between participation in higher education in EU member countries and Turkey is taken into account, the increase in access to higher education in Turkey is higher than the average increase in access to higher education in EU member countries. Despite this, the gap between average access to higher education in Turkey and EU countries is still high.

Figure 2 shows the number of candidates applying to higher education and the number of candidates placed in higher education in Turkey. Accordingly, a supply cannot be created above the increase in the demand for higher education in Turkey. There has been a significant increase in the number of candidates applying for university entrance over the years. For example, while the number of candidates applying for the university entrance exam was 1,678,326 in 2006, this number reached 2,086,115 in 2014 and 2,436,958 in 2020. On the other hand, the number of candidates placed in the university in 2020 was only 921,886. In addition, the increasing supply rate for higher education in Turkey since the 2000s can meet 40% of the demand on average. In particular, the situation where the supply meets the demand tends to decrease both numerically and proportionally since 2016.

According to the results of the Student Selection and Placement Center (ÖSYM), while the number of vacant places (public and foundation universities) was 214.383 in 2017, it became 128.508 in 2018, and this number decreased further and became 71,233 in 2019. As a result of the planning made in the program quotas, the occupancy rate, which was 76.45 percent in 2017, increased to 84.69 percent in 2018, and the occupancy rate increased further and became 91.36 percent in 2019. Although the occupancy rates in the programs seem to have increased in recent years, the main reason for this is the capacity reduction of CHE. For example, while 983,090 candidates settled in the university in 2015, this number increased to 825,397 in 2017 and 921,886 in 2020. Therefore, this formula provides a temporary solution to the imbalance problem in higher education. However, this solution limits access to higher education.
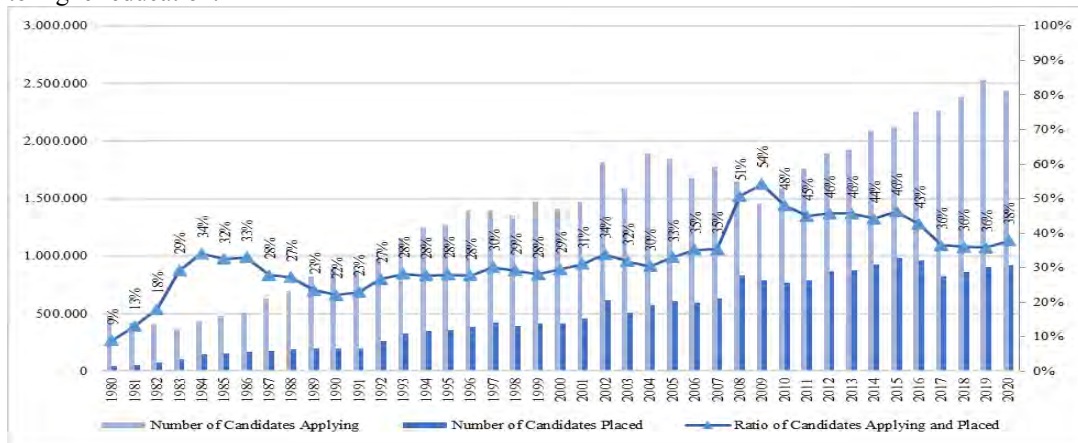

Figure 2

Number of access to higher education

Source: Prepared by the researcher using the data of "ÖSYM (https://istatistik.yok.gov.tr/) and "Higher Education Information Management System (https://istatistik.yok.gov.tr/)."

The problem of supply, demand, and imbalance in higher education

This theme is categorized into the problem in the number of faculty members, the problem in producing faculty members, and the problem of academic publication performance. These categories are discussed in the following titles.

The problem in the number of faculty members

One of the most important reasons why the capacity increase at the rate of increase in demand in higher education is not achieved is the difficulty experienced in supplying faculty members (Arslan, 2005; Tanrıkulu, 2009). Especially after the 2000s, higher education institutions, which increased in number, created a need for faculty members, but this gap could not be filled (Arslan, 2005). In order to better analyze the subject, the change in the number of higher education institutions between 1984 and 2020 is shown in Figure 3 below.
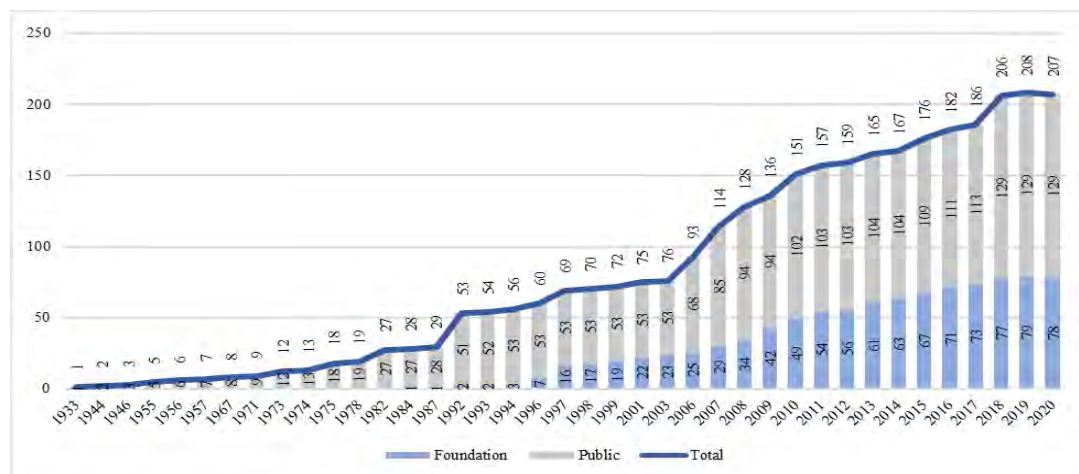

Figure 3
Number of higher education ınstitutions in Turkey by years

Source: Prepared by the researcher using the data of "ÖSYM (https://istatistik.yok.gov.tr/), TÜİK (https://web.tuik.gov.tr/tr/) and Higher Education Information Management System (https://istatistik.yok.gov.tr/)."

When Figure 3 is examined, it is seen that the number of universities in Turkey from 1933 to the 2000s was quite limited. However, there has been a significant increase in the number of both state and foundation universities, especially since 2003 (Kurt & Gümüş, 2015; Özer, 2011). The main reason for this is that higher education supply has been kept low for years. In response to this, Turkey tried to increase the number of universities while increasing the quota of existing universities in order to respond to the increasing demand for higher education. Increasing the number of universities and quotas also created the need for a significant amount of faculty members. In order to see this change, the number of students and faculty members enrolled in higher education between the years 2015-2020 is presented in Figure 4.

When the total number of students in Figure 4 is examined, on one hand, it is seen that there is a regular increase between the years 2015-2020. On the other hand, the increase in the number of students attending formal education is limited compared to the increase in the total number of students (Altınsoy, 2011; Arslan, 2005; Çelik & Gür, 2014). Even after 2018, the number of formal students began to decrease. The main reason for this is that students turn to open and distance education. Two important factors are thought to play a role in this. First, the increasing unemployment rate among university graduates (especially youth unemployment) and employment problems lead to open and distance education, which is less costly and easy to access, instead of formal education that requires a high cost and effort. The second is the increase in the number of universities providing open and

distance education, that is, the spread of the system; and parallel to this, the increase in the quotas and different alternative programs.
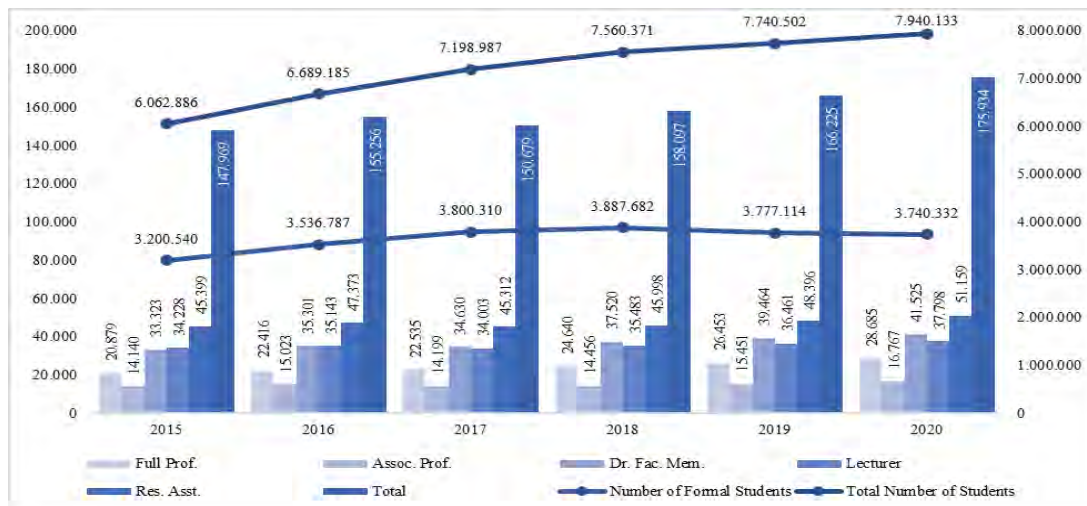

Figure 4
Number of faculty members and students by years

Note. Translator, lecturer, specialist, and education and training planner positions in 2017 and before were added to the lecturer position.

Source: Prepared by the researcher using Higher Education Information Management System data (https://istatistik.yok.gov.tr/).”

According to Figure 4, the number of formal students per faculty member (117.829) in Turkey as of 2019 is 32. However, it is recommended that this number be around 20-25 (Altınsoy, 2011). For example, the number of formal students per faculty member is 15.2 in the USA, 11.0 in Germany, 18.4 in France, 10.9 in England and 7.4 in Japan (Arslan, 2005). As a result, the universities opened have led to the need for a significant amount of faculty members. However, since this situation was not carried out in a planned way, universities in Turkey faced the quantity problem of faculty members. On the other hand, the number of students per faculty member is 22.7. According to UNESCO (2017) data, the number of faculty members per student is 13 in the USA, 8 in Germany, 19 in China, 21 in France, 16 in the UK, and 11 in Russia. As it can be understood from the data, the number of students per faculty members is quite high in Turkey. Another problem at this point is that CHE has not balanced the number of students per faculty member among schools. For example, while the number of students per faculty member is 86 in the school of education, it is only 3.9 in the school of medicine and dentistry (DPT, 2010). In other words, there are serious imbalances between the number of students per faculty member in Turkey. This situation may negatively affect the academic success of students (Babatunde & Olanrewaju, 2014; Nidup, 2022) as well as the performance of faculty members.

The problem in producing faculty members

Eliminating the inadequacy in the number of faculty members and creating the necessary supply is actually related to the number of doctoral graduates because the number of doctoral graduates is extremely important in terms of filling the inadequacy in the faculty staff in the future (Özer, 2011; TÜBA, 2006). From this point of view, the total number of newly registered students and graduate

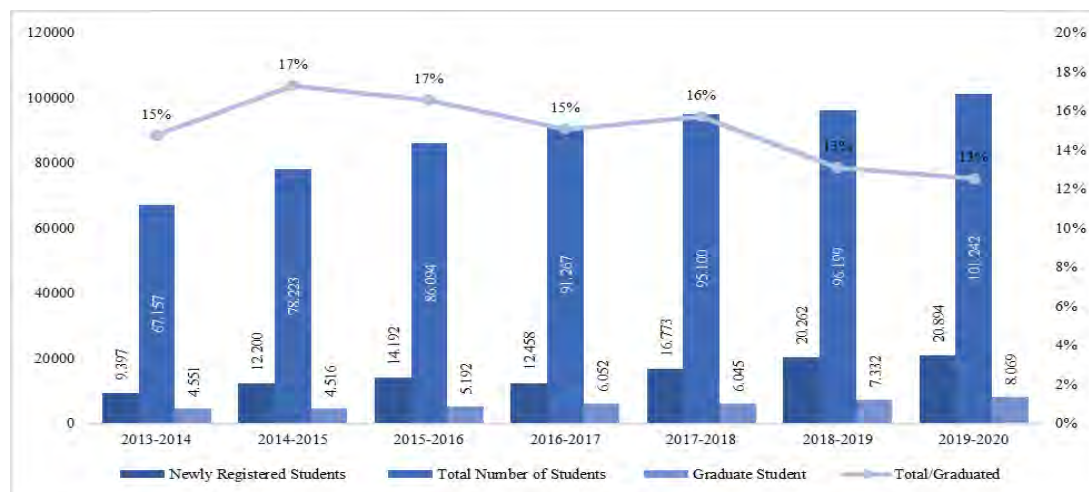students in doctoral programs between 2013-2014 and 2019-2020 academic year are given in Figure 5 below.

Figure 5
Number of students and graduates in doctoral programs

Source: Prepared by the researcher using "Higher Education Information Management System data (https://istatistik.yok.gov.tr/)."

When Figure 5 is examined, it is seen that both the number of doctoral students and the number of graduates have increased numerically over the years. On the other hand, as can be seen from Figure 5, there is a problem with the prolongation of students' graduation times. To give an example in terms of comparison, only 8,069 of the 12,458 students who started their doctorate education in the 2016-2017 academic year were able to graduate in the 2019-2020 academic year. This shows that the duration of graduation in doctoral education, whose normal duration is 4 years, is prolonged. In order to eliminate this problem, CHE has made it compulsory to complete the doctoral education within 12 semesters with the "Graduate Education and Training Regulation" numbered 29690, published in the Official Gazette on 20.04.2016. In this context, students who do not complete their schooling within the specified time will be deregistered as of this date. This decision taken by CHE will both provide quota for students from behind and alleviate the student burden on faculty members.

The problem of academic publication performance

Academic publication performance is one of the most important indicators of the quality of both academic staff and universities (Aydın, 2017; Paudel, 2021). The problem of qualified publication, which is one of the most important indicators in the context of scientific production and contribution to science, is one of the most important problems of Turkish Higher Education from past to present. This was not mentioned much in the periods when Turkish Higher Education was struggling with quantity problems. However, in recent years, the publication quality of academic staff in Turkey has been the subject of various studies (Demir, 2018a; Demir, 2018b; Demir, 2020; Karadağ, 2020). On the other hand, Turkey initiated the TÜBİTAK Turkey-Addressed Incentive Program for International Scientific Publications (UBYT) for the first time in 1993 in order to encourage qualified publications. The UBYT program provides financial support only to researchers who publish in journals indexed in SSCI/SCI/AHCI. However, with the increasing number of universities, academic staff and globalization, the quality of publication of academic staff in Turkey has been brought to the agenda in

recent years once again. In this context, in addition to the (UBYT) Program, a new incentive allowance called "Academic Incentive Arrangement (ATD)" was put into practice in 2015. This program financially supports researchers who publish nationally or internationally, carry out projects, and make presentations at international conferences. Although UBYT is already in force, the main reason for starting ATD is the desire to increase efficiency in areas such as projects or international conferences and projects with international articles. The common point of the two programs is that a researcher who publishes in journals indexed in SSCI/SCI/AHCI receives financial support from both (Demir, 2018b; Tonta, 2017). With the implementation of these incentive programs, the Web of Science (WoS) publication performance of various countries and Turkey between the years 2015-2020 is presented in Figure 6.

When Figure 6 is examined, Turkey lags behind many other countries in terms of WoS publications. Along with this, there is a slight increase in the number of publications in Turkey over the years. However, it does not seem possible to say that this increase is due to the increase in the quality of academic staff. Because, as shown in Figure 3, there is not a regular increase in the number of academic staff except for 2017. A finding that supports this is the decrease in WoS publications in 2017. Therefore, it is possible to state that the quantitative increase of academic staff leads to an increase in publications. As Kurt (2018) states, it is not the right approach to expect to increase the quality of the publications of researchers, who are not competent in language and research methods, only by financial incentives.
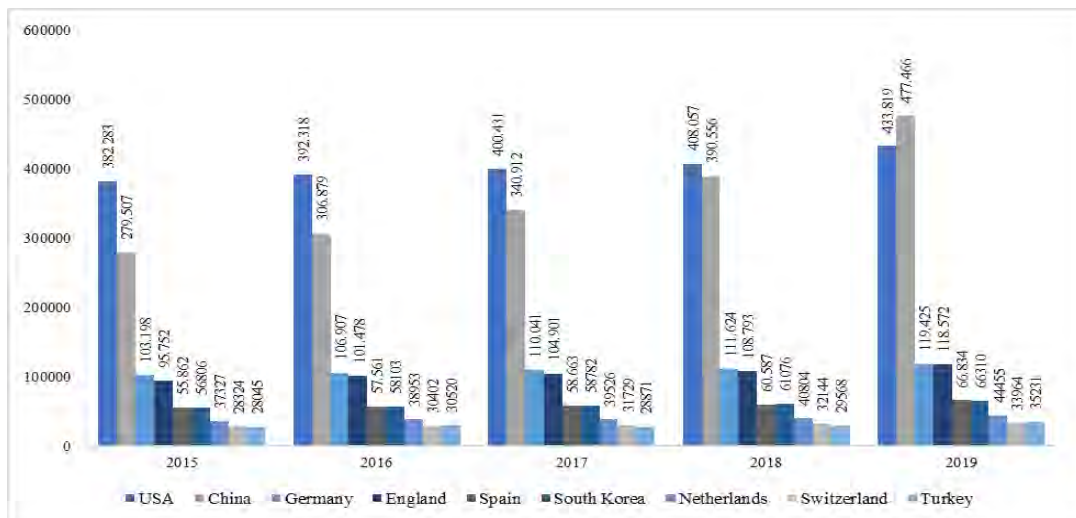

Figure 6
Number of WoS publications by various countries by years

Note. SSCI-SCI-AHCI indexes have been taken into account in WoS publications.

Source: Prepared by the researcher using data from "WoS (www.webofknowledge.com)."

The problem of autonomy and accountability

The concept of autonomy, which is used in the organizational sense, means that the individuals can be free enough to fulfill their duties and responsibilities and to protect their own identity (Erdem, 2013; Fielden, 2008). The concept of autonomy proceeds in parallel with the concept of freedom. Therefore, if these concepts are provided at the same time, then they become meaningful (Günay, 2011). University autonomy, on the other hand, means that higher education institutions can freely form their

own policies in organizational, financial, employment, and academic matters against the state and all other forces of society and realize this within their own system. However, there is no higher education institution with full autonomy in today's world. There are degrees of autonomy (relative autonomy). The important thing is to maintain this autonomy in a harmonious manner (Erdem, 2013; Günay, 2011; Meriç, 1999; Yavuz, 2012). Accountability, on the other hand, includes situations such as being able to explain the duties and authorities of the employees in an institution to the responsible people, caring and evaluating the feedbacks, and taking responsibility in adverse situations. If this responsibility is made against a certain authority, it is called accountability (UNDP, 1997). Although the concept of accountability has come to the fore with its financial dimension recently, it actually refers to an ethical process. Accountability consists of three basic dimensions. These are political, administrative, and accountability responsibilities to citizens (Kesim, 2005). In the context of autonomy and accountability, the European University Association (EUA) has defined four basic dimensions of autonomy based on the Lisbon Declaration (EUA, 2007). These dimensions and their explanations are presented in Table 1 below.

Table 1
Dimensions of EUA autonomy

Organizational Autonomy	Financial Autonomy	Employment Autonomy	Academic Autonomy
Choosing the top manager	Being decisive in the type and duration of public funds	Deciding on recruitment processes	Determining the total number of students
Determining the criteria for selecting the top manager	Keeping the increasing revenues of the university	Determining the wages of all staff	Selecting undergraduate and graduate students
Dismissing the top manager	Borrowing money	Laying off staff	Opening new academic programs
Determining the tenure of the top manager	Owning the facilities	Determining the ascension conditions	Ending academic programs
Electing external members on boards of directors	Determining the amount of the tuition fee		Determining the language of instruction
Deciding on academic structures	Determining the amount of the tuition fee		Choosing quality assurance mechanisms and providers
Creating a legal entity			Determining the curricula of the programs

Source: Estermann, Nokkola, and Steinel, 2011, p. 53-62.

The degrees of autonomy of higher education institutions in 26 countries have been evaluated with a 100-point system, based on the four dimensions in Table 1, which are the determinants of autonomy by EUA. The values obtained regarding the evaluation results are presented in Table 2.

Within the scope of financial autonomy, the budgets prepared by universities in accordance with Article 130 of the 1982 Constitution (Amended: 29.10.2005-5428/1 art.); "After examination and approval by the Council of Higher Education, it is submitted to the Ministry of National Education and is put into effect and supervised by being processed in accordance with the principles on which the central government budget is attached." Therefore, the financial autonomy of universities in Turkey is quite limited (Gürüz, 2008; World Bank, 2008). One of the most important reasons for this is that universities do not have the economic capital to maintain their own existence. Another reason is that education in Turkey is seen as a public service at all levels. As a matter of fact, the state's contribution rate in higher education financing in Turkey is 74% as of 2016 (Altbach et al., 2009; CHE, 2007; Çetinsaya, 2014; OECD, 2019).

Table 2
Ranking of universities by relative autonomy

Rank	Countries	Relative Autonomy Index			
		Organizational Autonomy	Financial Autonomy	Employment Autonomy	Academic Autonomy
1	England	100%	89%	96%	94%
2	Denmark	94%	69%	86%	56%
3	Finland	93%	56%	92%	90%
4	Estonia	87%	90%	100%	92%
5	North Rhine-Westphalia	84%	58%	61%	69%
6	Ireland	81%	66%	82%	100%
7	Portuguese	80%	70%	62%	54%
8	Austria	78%	59%	73%	72%
9	Hessen	78%	35%	61%	69%
10	Norway	78%	48%	67%	97%
11	Lithuania	75%	51%	83%	42%
12	Netherland	69%	77%	73%	48%
13	Poland	67%	54%	80%	63%
14	Latvia	61%	80%	92%	55%
15	Brandenburg	60%	44%	55%	67%
16	France	59%	45%	43%	43%
17	Hungary	59%	71%	66%	47%
18	İtalia	56%	70%	49%	57%
19	Spain	55%	55%	48%	57%
20	Sweden	55%	56%	95%	66%
21	Switzerland	55%	65%	95%	72%
22	Czech Republic	54%	46%	95%	52%
23	South Cyprus	50%	23%	48%	77%
24	Iceland	49%	43%	68%	89%
25	Slovakia	45%	70%	54%	56%
26	Greece	43%	36%	14%	40%
27	Turkey	33%	45%	60%	46%
28	Luxemburg	31%	91%	87%	74%

Source: Estermann, Nokkola, and Steinel, 2011, p. 53-62.

Within the scope of employment autonomy, the fact that some or all of the employees at universities in Turkey have civil servant status, especially in terms of salary and dismissal, severely restricts universities. However, there are various additional limitations such as staff recruitment, number of academic staff, and promotion. Along with this, institutions in Turkey have some high-level administrative flexibility in terms of determining the requirements sought in new personnel recruitment, especially in academic announcements. However, this flexibility is sometimes abused by universities. This raises the issue of re-questioning the partially recognized employment autonomy in Turkey.

Within the scope of academic autonomy, there are various restrictions on the capacity of universities in Turkey to decide on the overall student numbers and to determine admission mechanisms. The general student numbers in Turkey are determined by CHE. However, there is a distinct difference between entry to undergraduate and graduate programs. While universities in Turkey can determine admission criteria for graduate students, an entrance exam is applied for college and undergraduate students. In

addition, in some programs, aptitude tests can be applied in addition to the entrance exam score. Finally, universities have to negotiate the opening or closing of programs with CHE.

When the autonomy rankings prepared by EUA are evaluated as a whole, it is seen that higher education institutions in Turkey have very limited autonomy. It is at a moderate level in all autonomy dimensions (Estermann et al., 2011). This centralized system is in contradiction with almost all of the developed countries. However, there are different practices in countries with high autonomy. For example, the appointment of the rector by the government in European countries is not seen as a factor reducing autonomy compared to the USA. The rector, elected by the government, has wide powers and has the obligation to be accountable to a number of individuals or committees. The situation in Turkey is exactly the opposite. Six Rector candidates are selected by the faculty members. Then, the General Council of Higher Education reduces these candidates to three. Finally, one of these 3 candidates is appointed by the President. However, the elected rector has no accountability to politicians, public or university staff. Therefore, higher education institutions in Turkey are far behind in terms of accountability (Günay & Kılıç, 2011; Gür, Çelik, Kurt & Yurdakul, 2017; Küçükcan & Gür, 2009; Ortaş, 2008). Although it has been stated in the 9th and 10th Development Plans in Turkey that higher education institutions will reach an autonomous structure in every aspect in terms of performance and accountability, there has been no significant development in this direction yet (Çelik & Gür, 2014).

Internationalization in higher education

Internationalization has profound effects on the political, economic, and cultural life of today's countries. One of the points where this effect is seen most is undoubtedly higher education. Internationalization in higher education in the world continues to grow every year in line with the increasing demands. The number of foreign students enrolled in higher education programs worldwide increased from 0.8 million in 1975 to 5.3 million in 2017 (OECD, 2019). This number has reached 5.5 million as of 2018. Internationalization, whose prevalence is increasing on a global scale, is gaining importance in Turkey as well as in every other country (Özcan, 2011). In this context, the number of international students in higher education in the world and in Turkey between the years 2004-2020 is presented in Figure 7.
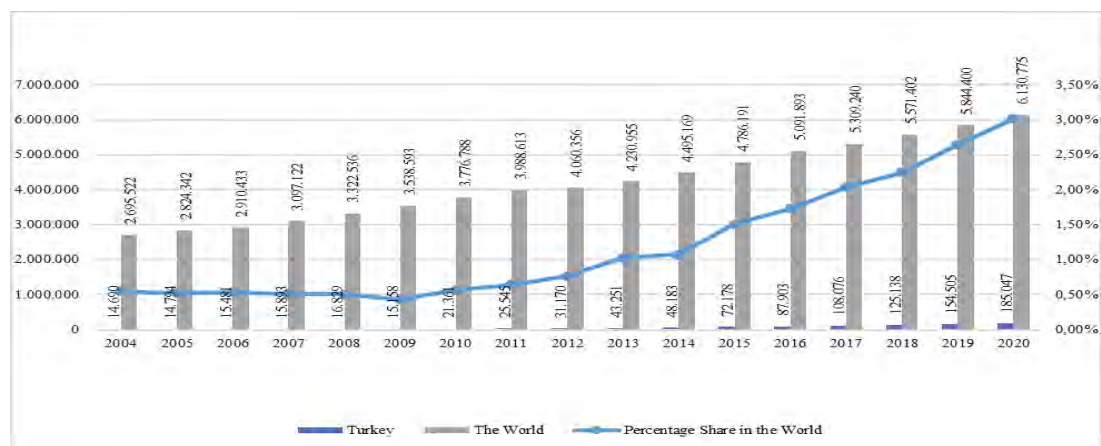

Figure 7
Number of international students in the world and in Turkey

Note. The number of international students in the world in 2019 and 2020 is estimated by taking into account the percent increase in 2018.

Source: Prepared by the researcher using "Higher Education Information Management System (https://istatistik.yok.gov.tr/)   and   UNESCO   data (http://data.uis.unesco.org/Index.aspx?queryid=172)."

As seen in Figure 7, Turkey, which initially lagged behind in terms of internationalization in higher education, reached a remarkable position in the international context, especially with the quantitative increase in higher education institutions. In this context, Turkey entered the top 10 in the world in terms of the number of international students in 2018. However, in order to obtain a significant share from the number of international students, which is constantly increasing on a global scale, Turkey must increasingly continue this development (CHE, 2019). At this point, it is very important to differentiate and diversify the distribution of international students coming to Turkey by country. In order to reveal the current situation, the distribution of international students who came to Turkey in 2018 by country is shown in Figure 8.
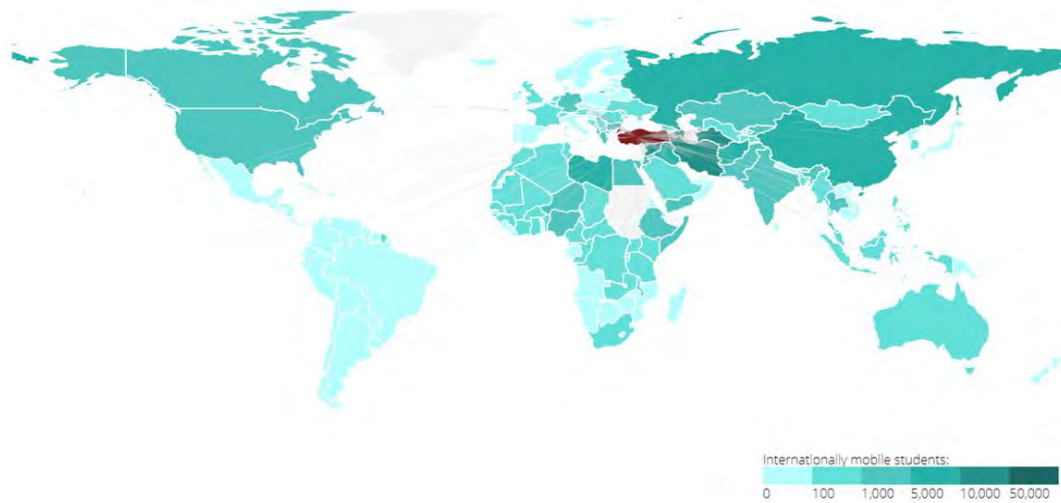

Figure 8
Number of students coming to Turkey by country as of 2018, Source: Retrieved from http://uis.unesco.org/en/uis-student-flow#slideoutsearch.

The diversity of international students, which was previously limited to the Balkan countries and Turkic Republics by the Council of Higher Education and Presidency for Turks Abroad and Related Communities (YTB), was provided through the Turkish Maarif Foundation (TMF) that was established in 2016 with the Law No. 6721, has 428 schools in 49 countries as of 2022. In cooperation with stakeholder institutions such as CHE and YTB, TMF not only provides its own students to apply for the Turkish Scholarships program, but also ensures that the Foreign Student Examination (FSE) is held at Foundation schools in the relevant countries. In this way, the number of the exam centers and accordingly the number of students applying to the exam have increased considerably in recent years. TMF plays a critical role due to restrictions such as the inability of CHE to open a representative office abroad and the restrictions in the law numbered 5978 of YTB that does not include international students coming to Turkey within the scope of projects carried out within the framework of the European Union or international students coming to Turkey with their own means.

CONCLUSION AND IMPLICATIONS

Despite the increasing number of higher education institutions after the 2000s, the ratio of supply to demand is gradually decreasing. In order to meet the demand in higher education in Turkey, the amount of supply must be increased above the demand. In Article 548 of the Eleventh Development Plan (2019-2023), "Access to education will be provided at all levels on the basis of equality of opportunity" (Strategy and Budget Presidency, 2019). In addition, the statement "To improve the student capacity in the higher education system in terms of quantity and quality" (CHE, 2019) in Objective 1.3 of the CHE 2019-2023 Strategic Plan also supports this. These objectives can be considered as an indicator that some policies will be produced in order to increase access to higher education. However, it should be taken into consideration that these increases in the amount of supply bring up the debates about quality in higher education, especially due to the lack of faculty members (Kavak, 2011). On the other hand, there has been an increasing imbalance in supply and demand in recent years. While some programs are in high demand, some departments are almost not demanded. One of the main reasons for this is the relationship between supply-demand-employment. Although special incentive scholarships have been given to some programs recently in order to ensure the supply-demand imbalance experienced in the transition to higher education, the desired success cannot be achieved due to the problems experienced at the employment. The CHE and universities should constantly monitor the needs of the labor market, regulate quotas and redesign their departments, academic programs, and curricula (CHE, 2019; Özoğlu et al., 2016). In this context, existing higher education access policies should be reconstructed by considering them in the context of supply, demand, and employment.

Although the number of faculty members working in higher education institutions has increased continuously over the years, the number of students per faculty member is still quite high (Gür et al., 2017). Moreover, the imbalance in the number of students per faculty member between universities and departments negatively affects the quality of education. In this context, in order to bring the ratio of students per faculty member to international standards, the number of faculty members should be increased gradually, starting with universities and departments that are in a disadvantageous position. In this process, the imbalance in the ratio of students per faculty member among departments should also be eliminated (Çelik & Gür, 2014; DPT, 2010). Because the high number of students has a negative effect on the academic success of the students (Babatunde & Olanrewaju, 2014; Nidup, 2022). On the other hand, another problem is the prolongation of the doctorate graduation period or the dropouts experienced in this process. In order for graduate students to complete their education within the normal period, facilitating solutions can be produced such as adding the course periods to certain days of the week or easing the course and student burden on the advisors (Özer, 2011; TÜBA, 2006). In addition, various attempts can be made to solve the problem by making detailed scans about the problems experienced in graduate education and school dropouts for the training of faculty members. Finally, although the WoS publication performance of academic staff has increased over the years, it is far behind developed countries. It might be more effective for policy makers to develop policies that will first develop the basic research competencies of researchers and then implement incentive policies (Demir, 2018b; Gür et al., 2017).

The limited autonomy of higher education institutions in Turkey and the lack of transparency and accountability mechanisms are an important social problem. Financial autonomy and flexibility levels should be increased in order for universities to increase their income outside the central budget and to use their resources more efficiently (Günay, 2008; Kurt & Gümüş, 2015) because academic autonomy means reaching scientific freedom (Günay, 2008). According to Bulut (2005, p. 39), limitations in scientific freedom other than those that pose a threat to human life may prevent society from meeting scientific ideas as well as preventing reaching reality. However, with the "Public Financial Management and Control Law No. 5018", universities that receive their resources from the state are

expected to be accountable and open to external audit. Managers of higher education institutions should be accountable to university staff and society (Gür et al., 2017). In other words, accountability and transparency in higher education institutions should be developed simultaneously (Kurt & Gümüş, 2015; Özoğlu et al., 2016; Nkrumah-Young et al., 2008). In particular, the recruitment of academic personnel should be structured through a central system, and applications, examinations, and recruitments should be carried out in an accountable and transparent manner. Where necessary, it should be ensured that all processes can be controlled step by step.

Turkey has to focus more on policies that include all activities of internationalization in order to get a larger share from the internationalization pool in higher education, which is becoming increasingly widespread globally. Higher education should be considered as a state policy in order for internationalization to be successful, and all regulations and plans in this field should be built accordingly (CHE, 2019; Development Research Center [KAM], 2015). In the implementation of these policies, attention should be paid to increasing cooperation and coordination among stakeholder institutions such as CHE, YTB, TMF and showing a holistic institutional structure. Along with this, universities should be encouraged to adopt their own internationalization strategies (Çetinsaya, 2014). In order to attract more international students, current legislation should be reviewed, and policies should be developed to encourage international cooperation and mobility. In addition, attempts should be made to expand the scope of existing programs to provide education accepted at international standards at all levels of higher education. Finally, increasing the number of double major and minor undergraduate programs at all levels of higher education may be another factor that attracts students.

When the basic problems of higher education in Turkey are evaluated as a whole, it is understood that these problems have been continuing for many years. It is obvious that these problems cannot be overcome with small-scale policies or superficial solutions, as has been tried for years. Although a very long period of time has passed since 1982, and even important eras such as information and informatics have passed, a comprehensive reform has not been realized yet. This situation has caused the higher education institutions, which are expected to shape the society, not being able to respond to the changing and developing needs of the society in Turkey. More specifically, based on the study's results, it is considered that the most fundamental problem to be solved in higher education in Turkey is autonomy and accountability. At this point, the authorities of the CHE should be reduced and become a higher board responsible for coordination and planning, the administrative and financial autonomy of the universities should be provided, and their accountability should be increased (CHE, 2007; DPT, 2000; DPT, 2006; Eurydice, 2016; TÜBA, 2003; TÜSİAD, 2003). For permanent normalization in higher education, the relationship of higher education with society and the state should be restructured (Gür & Çelik, 2011; Kurt & Gümüş, 2015). In this context, policies should be produced and implemented to benefit from the potential of information and communication technologies in the creation and dissemination of knowledge (Livari et al., 2020; Teixeira et al., 2021; Torres & Ortega-Dela Cruz, 2022). The aim of this reform should be to achieve what Prensky (2009) calls "digital wisdom". On the other hand, in order to improve the management of resources (human, economic, etc.) and to develop internal democracy, in-house organization in universities should be restructured. Finally, it should not be forgotten that each solution proposal presented for the problems in the reforms carried the potential to reveal new problems. As Senge (2006) states, yesterday's solutions in education have the potential to produce today's problems. For this reason, care should be taken that the "new" should not be "worse" than the "old" in proposed solutions or reforms to be made.

LIMITATIONS

This research has some basic limitations. The first is that the research ignores more local and specific problems, as it focuses on the main problems of higher education in Turkey. The second, these basic

problems will not be at the same level for every university or department. The third, the research excluded the relationship between the number of university graduates and employment, considering it more in the context of government policies and economy. The fourth and final limitation is related to the quality and validity of the data used in the research. Since the data used will change over time, the inferences and suggestions made are more cross-sectional rather than covering the whole.

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