Creation of a Turkish University League Based on the Contribution of their Economics Departments to Economics Education

İktisat Bölümlerinin İktisat Eğitimine Katkısına Dayalı Bir Türk Üniversite Liginin Oluşturulması

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Özet

Bu çalışmanın amacı, Türkiye'de bulunan üniversitelerin iktisat bölümlerinin lisans öğretimi boyunca öğrenciler üzerinde yarattığı katma değerin ölçülmesidir. Çalışmanın analiz kısmında, üniversitelerin iktisat bölümlerinin; 2000–2012 yılları giriş taban puanı girdi ve 2004–2016 yılları Kamu Personeli Seçme Sınavı (KPSS) iktisat testi net ortalaması ise çıktı olarak kullanılmıştır. Veriler *min–max* yöntemine göre normalize edilmiş ve *"Borda count"* metoduna göre puanlama yapılıp, üniversiteler sıralanmıştır. Sıralama sonuçlarına göre Ankara Üniversitesi ilk, Hacettepe Üniversitesi ikinci ve Orta Doğu Teknik Üniversitesi (ODTÜ) üçüncü sırada yer almışlardır. Sıralamanın ilk on sırasının altısında başkent Ankara'da bulunan üniversiteler elde etmiştir. Ankara'nın ön plana çıkmasında şehirdeki üniversitelerin köklü oluşu, KPSS ile ilgili destekleyici eğitim ve materyallere ulaşım kolaylığı ve çeşitliliği, akademik personeldeki istikrar, şehirdeki üniversitelerin ağırlıklı olarak tekli eğitim yapması, ülkedeki kamu kurumlarının merkezlerinin burada olması ve böylece öğrencilerin üst düzey kamu görevlileri ile daha fazla irtibat halinde olmalarından dolayı motivasyonlarının artmasının etkili olduğu düşünülmektedir.

Anahtar sözcükler: Ankara, katma değer, KPSS, normalizasyon, üniversite sıralaması.

Abstract

This study aims to measure the added value created by the economics departments of the universities in Turkey for students throughout their undergraduate education. For the analysis section, the minimum admission scores of the universities' economics departments for the years from 2000 to 2012 were used as input and the net average scores obtained in the economics tests of Public Personnel Selection Examination (PPSE) for the years from 2004 to 2016 were used as output. The data were normalized using the *min–max* method and the universities were ranked using the *"Borda count"* method. According to the results, Ankara University ranked the 1st, Hacettepe University the 2nd and Middle East Technical University the 3rd. The first six positions in the top ten ranking are held by the universities located in the capital, Ankara. This is attributed to various factors such as the long-established character of the universities in the capital city, availability and diversity of training courses and materials for PPSE, permanency of the academic staff, prevalence of standard daytime education in these universities, and the role of the capital as the seat of public institutions, resulting in greater motivation among students as they have more contact with senior government officials.

Keywords: Added value, Ankara, normalization, PPSE, university ranking.

Universities play a vital role in raising the much-needed human capital for the economic growth and development of countries (Jalaliyoon & Taherdoost, 2012). In the strongly competitive environment of today's world, the global expansion of access to higher education has resulted in greater demand for information about academic quality, urging the development of university ranking systems or league tables in many countries around the world (Dill & Soo, 2005). University rankings have become an important part of the higher education landscape and have a significant impact (Kiraka, Maringe, Kanyutu, & Mogaji, 2020). As the name suggests, league tables are drawn up to translate the performance of all institutions into a single set of comparable and quantifiable indicators. In most ranking systems, comparison is based

on a three-step process: The first step involves the collection of data on the indicators. Secondly, the data are graded for each indicator; and thirdly, the scores for each indicator are weighted to attain a final total (Usher & Savino, 2007).

Just like all other institutions in the world, universities are constantly monitored in terms of their service quality. Thanks to greater access to information via the internet, researchers and students are more interested in the services offered by universities in various countries (Saka & Yaman, 2011). As a natural result of this increasing interest, the number of national and international university ranking systems in the world has exceeded 100 as of 2018 (Doğan & Al, 2018). In addition, policy makers and educationalists are keen in knowing how much of the differences in post-graduation success owes to university education rather than the quality of admitted students, which requires measuring the added value created by universities (Shavelson et al., 2015).

In Turkey, a country with a considerable young population, the university admission examination and the Public Personnel Selection Examination (PPSE), aiming to select civil servants, are both held centrally in test format. The growing importance of central exams was largely due to the increase in the number of applicants and the need for a more objective basis for assessment (Doğan & Şahin, 2009). What the two exams have in common is that both are competitive tests mainly assessing the level of knowledge and marking a turning point in lives of young individuals, and are administered by a single center named the Assessment, Selection and Placement Center (ÖSYM).

One of the greatest challenges awaiting Turkish universities has to do with their (lack of) success in institutional exams taken by the students following undergraduate education. Two approaches stand out on this background of different opinions. The first approach argues that undergraduate programs in universities should not have any pretense to train their students for any competitive exam, while the other one is concerned with the fact that universities should not be generating abstract policies by breaking away from social realities. In this current context of unfolding controversy, this study adopts the second approach in an attempt to add a different point of view in line with its aims.

Just like business departments, economics departments are found in most of the universities in Turkey with high student quotas, a case clearly illustrated in ■ Table 1. Particularly, this excess in the number of students in these departments has raised doubts among a considerable portion of the society about the quality of education that these departments offer. ■ Table 1 shows the number of economics graduates who took the PPSE exam and the number of economics departments whose students took the PPSE exam during the 2004–2016 period. Throughout this twelve-year period, the number of economics departments almost doubled, which is also reflected in the number of PPSE applicants. A fluctuating pattern is observed in the number of PPSE applicants by years with alternate decreases and increases in numbers year by year. This pattern has to do with the differences in the staff job listings posted every year by relevant public authorities.

Although there is a considerable number of economics departments and students in Turkey, relevant research is limited particularly when it comes to those that measure added value based on two central examinations. As a review of literature would show, Yamak and Topbaş (2006) used in their study the minimum scores for admission into the economics departments of 42 universities as measured in the 2000–2001 university admission exam along with the total net score for the 2004-2005 PPSE exam and ranked the universities according to the added value they created for students. They calculated the added value by subtracting the minimum university admission score ranking four years prior from the PPSE ranking of the university in the relevant year. The university with the highest positive difference ranked the top among others. As a result, the top ranker was Gaziantep University for 2004 and Erciyes University for 2005. Yeşilyurt (2009), on the other hand, examined the education performance of the economics departments of 48 Turkish universities based on 2007 PPSE scores using data envelopment analysis. As revealed by the analysis results, five departments were identified as efficient boundaries, which were the economics departments of Ankara, Boğaziçi, Hacettepe, METU and Yıldız Technical Universities.

■ **Table 1.** The number of PPSE taking graduates and the number of economics departments by years.

Years	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of PPSE exam taking economics graduates	14,101	7,912	13,552	8,372	16,780	16,253	22,724	18,094	26,688	18,658	27,852	21,192	26,069
Number of economics departments	48	49	51	50	52	54	60	64	69	75	81	88	97

The present study aims to measure the added value created by the economics departments of Turkish universities for their students throughout their undergraduate education. It is distinguished by the methodology it uses to measure added value, its scoring system and the length of the study period. ▮▮ Figure 1 shows the Spearman rank correlation coefficients pertaining to the whole study period for the minimum university admission score ranking for economics departments and the PPSE average net score ranking four years later than the former. Correlation coefficients were found to be positive, strong and statistically significant at 1% level for all the years in question, which made it much more precise to measure the added value that the universities created for their students. The subsequent sections of the study are as follows: Section 2 introduces the data and methodology employed in the study; Section 3 summarizes the empirical results, and the final section comprises the conclusion and suggestions.

Method

The study data concerning the minimum admission scores for the economics departments (MASED) of Turkish universities for the years from 2000 to 2012, and the net average scores for the PPSE economics tests during the 2004–2016 period were retrieved from the official website of Assessment, Selection and Placement Center (ÖSYM, 2016). All of the university students were assumed to have graduated in four years. Minimum university admission scores are different for public universities offering evening education and/or economics education in English and the private universities that admit students with varying rates of scholarship; while they share the same set of average net scores for the PPSE exam. To reconcile such discrepancy concerning the data, the minimum admission scores

for economics departments were calculated using the weighted arithmetic average method based on the number of students admitted. To illustrate, let us assume that University A admitted 60 students in the year 20XX with a minimum admission score of 320.255 for its economics department (standard daytime education); admitted another group of 60 students to evening education with a minimum score of 310.997; and 40 students to its economics program in English with a minimum score of 341.119. Hence, the minimum score for the economics department of University A was calculated as follows:

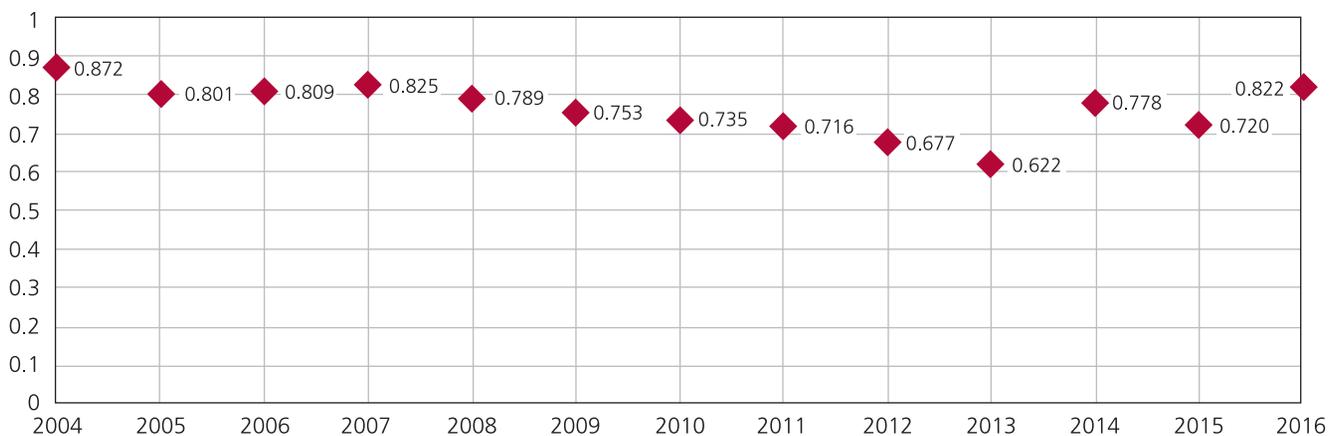$$[(320.255*60)+(310.997*60)+(341.119*40)]/[60+60+40]=321.999$$

The methodology employed to rank the universities in terms of performance according to the added value they created for their students throughout their undergraduate education involves three stages and uses the Borda count scoring procedure.

At the first stage, the minimum university admission scores for the 2000–2012 period and the average net PPSE scores pertaining to the program for the 2004–2016 period were separately normalized using the min–max method as shown in Formula 1:

$$I_{q,c}^t = \frac{x_{q,c}^t - \min x_q^t}{\max x_{q,c}^t - \min x_q^t} \quad (1)$$

$x_{q,c}^t$: *indicator q (minimum admission score for the economics department/ average net PPSE score) for university c in year t*

$I_{q,c}^t$: *normalized indicator q for university c in year t*

The second stage involves finding the arithmetic average (reference point) for MASED and average net PPSE scores normalized for each year. Formula 2 is then used to deter-

Figure 1. Year-by-year correlation between the minimum university admission scores and PPSE rankings for economics departments.

mine for a given year how higher/lower the university is in terms of percentage when compared to the reference point:

$$PI_{q,c}^t = \frac{I_{q,c}^t - I_{\bar{q}}^t}{I_{\bar{q}}^t} \quad \textbf{(2)}$$

$I_{\bar{q}}^t$: *arithmetic average normalized indicator q for year t*

$PI_{q,c}^t$: *percentage of increase/decrease in indicator q for university c in year t compared to the reference point*

At the third stage, Formula 3 is used to measure the added value. By using Formula 3, the added value is obtained based on normalized data by calculating the difference between the percentile increases/decreases in the minimum university admission scores four years prior and the average net PPSE scores in the relevant year when compared to their reference points:
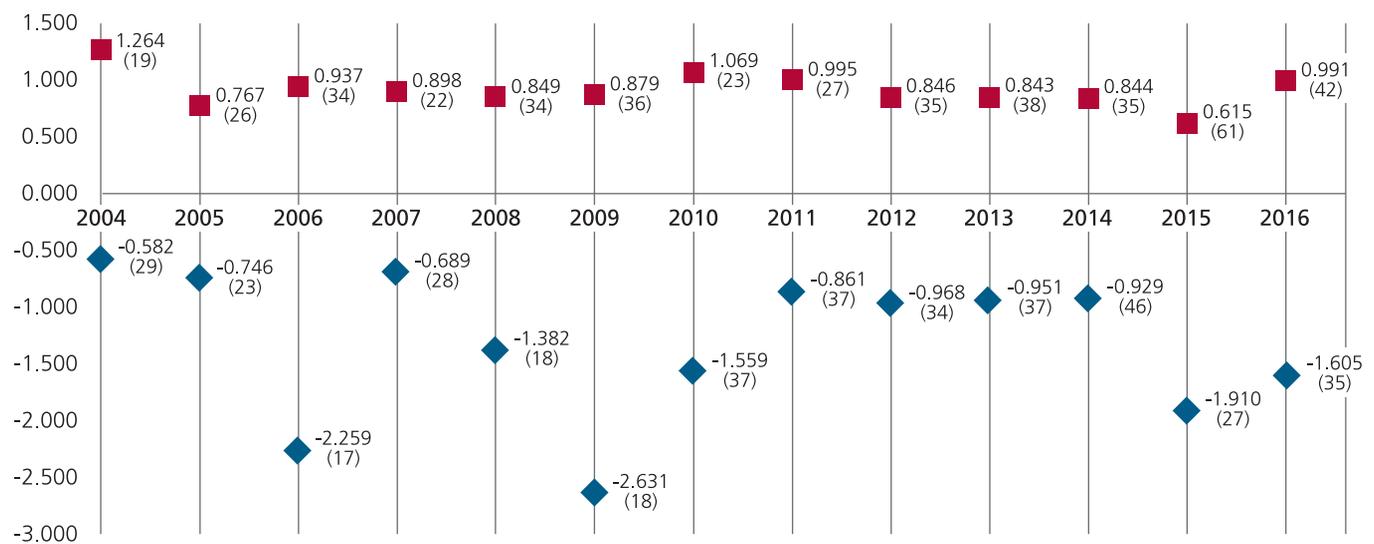
$$\text{Added value} = PI_{\text{PPSE},c}^t - PI_{\text{MASED},c}^{t-4} \quad \textbf{(3)}$$

Finally, in the last stage, the top 10 universities with the highest added value are ranked using the "Borda count" scoring system. Accordingly, the top-ranker is assigned a score of 10, second 9, and so on down to 1 for the tenth. Thus, the universities are ranked according to the ratio of their total score / number of years qualified (this procedure is followed since some universities lack data for the overall 13-year period). The university attaining the highest value ranks the first as the one with the highest added value. The data and the analysis results for PPSE 2004 / MASED 2000 are shown in ■ Appendix 1.

Results

According to the study results, ■ Figure 2 displays the levels of added value for the highest- and lowest-ranking universities as well as the number of universities that generated positive/negative added values for the study period. Accordingly, the difference between the extreme values was the highest in 2006 and 2009, and the lowest in 2005. During 8 years out of the 13-year study period, the number of universities generating positive added value exceeded those with negative value, while the opposite holds true for the remaining 5 years.

■ Appendix 2 lists the top ten ranking universities in terms of their added value for the 2004–2015 period. During the 13-year period METU, Çankaya University and Atılım University ranked the first twice; while Ege, Balıkesir, Zonguldak Bülent Ecevit, Kadir Has, Yeditepe and Karadeniz Technical Universities each ranked the first once. Throughout the 13-year study period, public universities displayed the top seven times. Ankara University and METU ranked among the top three four times; while Atılım and Yeditepe Universities were the top-three performers three times. On the other hand, Ankara and Hacettepe Universities ranked among the top ten universities in 7 out of a total of 13 years, thereby emerging as the best performers. During the initial years of the study period, private foundation universities ranked less frequently in the top ten due to their relatively smaller number and young age, a case that changed after 2010 with a trend in their favor. The years 2012 and 2014 are striking in such regard, when four of the top five positions were held by private foundation universities.

Figure 2. The number of universities generating maximum/minimum and positive/negative added value by years.

Table 2 presents the top ten performers among the 97 economics departments in Turkey in terms of the annual average score calculated using the aforesaid scoring system for the 2004–2016 period. Ankara University stands out as the best performer both in its total score and annual average score. It is followed by Hacettepe University with a score of 46 and annual average score of 3.54 in the second rank, and by METU as the third with a score of 43 and an average annual score of 3.31. Six out of ten top performers are found in Ankara, and two in Istanbul. Of the universities in the provinces, only Zonguldak Bülent Ecevit University and Karadeniz Technical University managed to qualify among the top ten. Further, private foundation universities accounted for half of the top ten.

Conclusion

There exists a positively strong correlation between the minimum admission scores of the economics departments in Turkish universities for the 2000–2012 period and the average net scores in the PPSE economics test for the 2004–2016 period. The study measured the added value created by the economics departments for their students throughout their undergraduate education, and ranked them accordingly. As a result, the top-ranking universities are Ankara University, Hacettepe University and METU, respectively. A great majority of the top ten universities are located in the capital city of Ankara. In contrast, only Zonguldak Bülent Ecevit University and Karadeniz Technical University ranked in the top ten among all provincial universities. Moreover, both of the top-ranking universities in Istanbul are private foundation universities. While at the end of their study Yamak and Topbaş (2006) have reported that the most successful economics departments among the universities in the year 2004 and 2005 were

Gaziantep University and Erciyes University, respectively. In our study, METU and Ege University have settled first rank respectively regarding in these years.

It is a clear finding of the study that the universities in Ankara perform better their counterparts all around Turkey. This is attributed to the following factors:

- Ankara is the principal center for public service examinations. Until recently, most of the central exams administered to select civil servants were only held in Ankara, which gives the capital city special advantage over other provinces particularly with regard to the access to and diversity of PPSE training courses and materials. This creates an obvious advantage for the university students in Ankara.

- The apparent success of the universities in Ankara may also be attributed to the stability of the staff structure in the long-established universities in the capital while a general, nationwide lack of stability is observed for all academic staff of higher educational institutions. As far as the Turkish academy is concerned, the notion of specialization is somewhat overlooked in the organization of academic staff. Indeed, the insufficient number of qualified faculty members forces them to teach outside their areas of specialty, while the universities in Ankara are adequate in terms of both the quality and quantity of their academic staff, which is arguably a factor contributing to the success of the capital city.

- As the top performers, Ankara University, Hacettepe University, Middle East Technical University, and Gazi University are among the most prestigious educational institutions of not only the city itself but the whole country. In addition to these long-established public universi-

Table 2. Overall ranking of Turkish universities according to their added value in the PPSE 2004–2016 / MASED 2000–2012 period.

University	Ranking	Total score	Annual average score	Province	Type of university
Ankara University	1	55	4.23	Ankara	Public
Hacettepe University	2	46	3.54	Ankara	Public
METU	3	43	3.31	Ankara	Public
Yeditepe University (11 years)	4	34	3.09	İstanbul	Private
TOBB University (8 years)	5	23	2.88	Ankara	Private
Zonguldak Bülent Ecevit University	6	36	2.77	Zonguldak	Public
Atılım University	7	34	2.62	Ankara	Private
Gazi University	8	33	2.54	Ankara	Public
Karadeniz Technical University	8	33	2.54	Trabzon	Public
Kadir Has University (10 years)	10	25	2.50	İstanbul	Private

Note: The figures in brackets indicate the age of the university, in the lack of which the given scores cover the entire 13 year study period.

ties, young private foundation universities in Ankara also attained considerable success and it would not be wrong to attribute this success to inner-city mobilization of the faculty. Consequently, through this inner-city mobilization process, accumulated knowledge and experience is transferred to the newly-established universities in the capital city, which could, as a whole, account for the success of the universities located in Ankara.

- Generally speaking, there are a lot of private training centers in Ankara where courses for PPSE and other career examinations are taught by the academic staff of the universities in the city. This means that these faculty members always have to keep their memories refreshed about career exams with diligent follow-ups on them. As a positive externality, this knowledge transfer from the service sector to universities through the faculty might be another factor that accounts for the success of the relative success of the universities in Ankara.

- In general, education in Turkish universities has long been conducted in a dual framework consisting of daytime and evening education. This puts a strain on the university faculty members as they have to teach the same courses both to their daytime and evening classrooms. When a faculty member teaches two courses at a university with dual education, it means that s/he has a course load of 4 for the same two courses; i.e., two daytime and two evening courses. This practice doubles the workload and reduces productivity. Dual education is not conducted in any of the universities in Ankara, except for one. And this is believed to be another factor that promotes success for the universities in the capital city.

- As the capital city, Ankara is the seat of the headquarters of all government institutions.

Therefore, there is a much greater chance for the university students in Ankara wishing to be civil servants at a high-level government institution upon graduation to meet the current holders of those positions on various occasions than university students in other provinces. Arguably, this raises awareness among students who look up to senior public executives as role models, resulting in greater success for these students.

In future studies, new rankings can be made using different normalization and scoring techniques. In addition, preparing students for institutional exams, determining courses according to exams and solving exam questions are controversial issues in universities. As a suggestion, offering elective courses in the last year for students targeting PPSE and guiding students about exams are considered as issues that can increase success.

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■ **Appendix 1.** The data on PPSE 2004 / MASED 2000 and analysis results.

Universities	PPSE 2004	MASED 2000	NORM PPSE	NORM MASED	% PPSE	% MASED	Change	Ranking	Scoring
Afyon Kocatepe University	5.100	163.846	0.0723	0.1687	-0.7166	-0.5392	-0.1774	30	
Akdeniz University	9.870	175.123	0.3723	0.3981	0.4588	0.0872	0.3716	9	2
Anadolu University	5.590	173.304	0.1031	0.3611	-0.5959	-0.0139	-0.5820	48	
Ankara University	16.050	194.057	0.7610	0.7832	1.9817	1.1389	0.8428	2	9
Atatürk University	4.200	160.727	0.0157	0.1053	-0.9384	-0.7125	-0.2259	34	
Atılım University	6.420	163.693	0.1553	0.1656	-0.3913	-0.5477	0.1564	15	
Aydın Adnan Menderes University	5.960	165.158	0.1264	0.1954	-0.5047	-0.4664	-0.0383	21	
Balıkesir University	7.230	171.118	0.2063	0.3166	-0.1917	-0.1353	-0.0564	22	
Başkent University	12.390	182.842	0.5308	0.5551	1.0798	0.5159	0.5639	5	6
Boğaziçi University	17.520	204.719	0.8535	1.0000	2.3439	1.7311	0.6128	4	7
Bolu Abant İzzet Baysal University	7.410	166.795	0.2176	0.2287	-0.1474	-0.3754	0.2280	11	
Bursa Uludağ University	7.270	175.169	0.2088	0.3990	-0.1819	0.0897	-0.2716	37	
Çanakkale 18 Mart University	5.430	170.540	0.0931	0.3049	-0.6353	-0.1674	-0.4679	44	
Çankaya University	3.950	155.551	0.0000	0.0000	-1.0000	-1.0000	0.0000	19	
Çukurova University	7.230	172.840	0.2063	0.3516	-0.1917	-0.0397	-0.1521	28	
Dokuz Eylül University	8.340	184.878	0.2761	0.5965	0.0818	0.6290	-0.5472	46	
Ege University	13.490	188.886	0.6000	0.6780	1.3508	0.8516	0.4992	6	5
Erciyes University	7.500	167.519	0.2233	0.2434	-0.1252	-0.3352	0.2100	12	
Eskişehir Osmangazi University	7.320	173.487	0.2119	0.3648	-0.1696	-0.0037	-0.1658	29	
Galatasaray University	16.360	202.761	0.7805	0.9602	2.0581	1.6223	0.4357	7	4
Gazi University	11.780	182.980	0.4925	0.5579	0.9295	0.5236	0.4059	8	3
Gaziantep University	6.970	165.853	0.1899	0.2095	-0.2558	-0.4278	0.1719	13	
Hacettepe University	15.830	193.862	0.7472	0.7792	1.9275	1.1280	0.7994	3	8
Harran University	3.950	160.897	0.0000	0.1087	-1.0000	-0.7030	-0.2970	38	
İhsan Doğramacı Bilkent University	13.550	195.282	0.6038	0.8081	1.3656	1.2069	0.1587	14	
İnönü University	4.930	161.267	0.0616	0.1163	-0.7585	-0.6825	-0.0760	25	
İstanbul University	9.860	187.522	0.3717	0.6502	0.4563	0.7759	-0.3195	39	
Kahramanmaraş Sütçü İmam University	4.720	160.091	0.0484	0.0923	-0.8103	-0.7478	-0.0624	24	
Karadeniz Technical University	5.410	166.120	0.0918	0.2150	-0.6402	-0.4129	-0.2273	35	
Kırıkkale University	7.090	167.205	0.1975	0.2370	-0.2262	-0.3527	0.1264	17	
Kocaeli University	7.260	176.682	0.2082	0.4298	-0.1844	0.1738	-0.3581	41	
Kütahya Dumlupınar University	4.650	162.915	0.0440	0.1498	-0.8275	-0.5910	-0.2365	36	
Manisa Celal Bayar University	5.230	169.738	0.0805	0.2885	-0.6846	-0.2120	-0.4726	45	
Marmara University	10.470	187.679	0.4101	0.6534	0.6067	0.7846	-0.1779	31	
Mersin University	6.370	169.900	0.1522	0.2918	-0.4037	-0.2030	-0.2007	32	
METU	19.850	203.333	1.0000	0.9718	2.9181	1.6541	1.2639	1	10
Muğla Sıtkı Koçman University	6.980	168.031	0.1906	0.2538	-0.2533	-0.3068	0.0534	18	
Niğde Ömer Halisdemir University	4.550	162.157	0.0377	0.1344	-0.8521	-0.6331	-0.2191	33	
Ondokuz Mayıs University	4.140	162.346	0.0119	0.1382	-0.9532	-0.6226	-0.3306	40	
Pamukkale University	6.590	168.284	0.1660	0.2590	-0.3495	-0.2927	-0.0567	23	
Sakarya University	6.850	170.476	0.1824	0.3036	-0.2854	-0.1710	-0.1144	26	
Selçuk University	4.750	169.426	0.0503	0.2822	-0.8029	-0.2293	-0.5736	47	
Sivas Cumhuriyet University	5.100	160.901	0.0723	0.1088	-0.7166	-0.7028	-0.0138	20	
Süleyman Demirel University	4.580	165.893	0.0396	0.2103	-0.8448	-0.4255	-0.4192	43	
Tokat Gaziosmanpaşa University	6.350	160.397	0.1509	0.0986	-0.4086	-0.7308	0.3222	10	1
Trakya University	6.210	172.248	0.1421	0.3396	-0.4431	-0.0725	-0.3706	42	
Yıldız Technical University	10.040	185.285	0.3830	0.6047	0.5007	0.6516	-0.1509	27	
Zonguldak Bülent Ecevit University	5.700	160.808	0.1101	0.1069	-0.5688	-0.7080	0.1392	16	
Average			0.2552	0.3662					

■ **Appendix 2.** Top ten ranking universities on an annual basis according to their added value for the PPSE 2004–2016 / MASED 2000–2012 period.

Ranking	2004	2005	2006	2007	2008
1	METU	Ege University	Balıkesir University	*Atılım University*	*Atılım University*
2	Ankara University	Ankara University	*Yeditepe University*	METU	Gazi University
3	Hacettepe University	Hacettepe University	Pamukkale University	Ankara University	Akdeniz University
4	Boğaziçi University	Akdeniz University	Zonguldak Bülent Ecevit University	Hacettepe University	Bolu Abant İzzet Baysal University
5	*Başkent University*	METU	Bolu Abant İzzet Baysal University	Gazi University	Zonguldak Bülent Ecevit University
6	Ege University	Gazi University	Çukurova University	Akdeniz University	Gaziantep University
7	Galatasaray University	Balıkesir University	Erciyes University	Ege University	Karadeniz Technical University
8	Gazi University	Marmara University	Karadeniz Technical University	Dokuz Eylül University	Erciyes University
9	Akdeniz University	*Başkent University*	Kırıkkale University	Balıkesir University	Kahramanmaraş Sütçü İmam University
10	Tokat Gaziosmanpaşa University	Bolu Abant İzzet Baysal University	Tokat Gaziosmanpaşa University	*İhsan Doğramacı Bilkent University*	Afyon Kocatepe University

Ranking	2009	2010	2011	2012	2013
1	Zonguldak Bülent Ecevit University	METU	*Kadir Has University*	*Yeditepe University*	*Çankaya University*
2	Karadeniz Technical University	Ankara University	*TOBB University*	*İhsan Doğramacı Bilkent University*	Gazi University
3	Kafkas University	*TOBB University*	*Başkent University*	*Atılım University*	METU
4	Tokat Gaziosmanpaşa University	Hacettepe University	Ankara University	Ankara University	Hacettepe University
5	Bolu Abant İzzet Baysal University	*İhsan Doğramacı Bilkent University*	*Yeditepe University*	*Kadir Has University*	Ankara University
6	Kütahya Dumlupınar University	*Beykent University*	Hacettepe University	*Çankaya University*	Dokuz Eylül University
7	Afyon Kocatepe University	Boğaziçi University	*Atılım University*	Hacettepe University	Muğla Sıtkı Koçman University
8	Kahramanmaraş Sütçü İmam University	*İstanbul Kültür University*	*İhsan Doğramacı Bilkent University*	Muğla Sıtkı Koçman University	*TOBB University*
9	Aydın Adnan Menderes University	Galatasaray University	*Çankaya University*	*Maltepe University*	*Atılım University*
10	*Yeditepe University*	Gazi University	Bolu Abant İzzet Baysal University	Zonguldak Bülent Ecevit University	Afyon Kocatepe University

Ranking	2014	2015	2016
1	*Çankaya University*	Karadeniz Technical University	*Maltepe University*
2	*Kadir Has University*	Zonguldak Bülent Ecevit University	Afyon Kocatepe University
3	*Yeditepe University*	Afyon Kocatepe University	Muğla Sıtkı Koçman University
4	Galatasaray University	Erciyes University	Karadeniz Technical University
5	*İstanbul Kültür University*	Karamanoğlu Mehmet Bey University	Zonguldak Bülent Ecevit University
6	Ondokuz Mayıs University	Uşak University	Bolu Abant İzzet Baysal University
7	*TOBB University*	Kütahya Dumlupınar University	Aydın Adnan Menderes University
8	Zonguldak Bülent Ecevit University	Muğla Sıtkı Koçman University	Kütahya Dumlupınar University
9	Aydın Adnan Menderes University	Dokuz Eylül University	Karamanoğlu Mehmet Bey University
10	Muğla Sıtkı Koçman University	Sakarya University	Tokat Gaziosmanpaşa University

Note: Bold and italics are foundation universities.