

## **Times Higher Education University Rankings: Top 100 Best Universities by Country (2011–2025)**

*By Gregory T. Papanikos\**

*This paper uses the Times Higher Education (THE) university rankings to examine the convergence and concentration rates of the top 100 universities from 2011 to 2025. In particular, the number of universities per country in the top 100 list is of interest in this study. The list is dominated by a very few countries, notably the US, UK, Germany, and the US, which account for an average of 64% of the total number of universities in the top 100 list. The top eight countries account for an average of 85% of the total number of universities in the "industry." The Herfindahl-Hirschman Index (HHI) has indicated moderate competition since 2013. In 2011 and 2012, the market showed signs of oligopolistic competition. During this period, the HHI declined, indicating an increase in competition between countries in the top 100 list of universities.*

**Keywords:** *Times Higher Education, US, China, Top 100 Universities, Convergence, Concertation, CR4, CR8, HHI*

### **Introduction**

University rankings and evaluations have been an integral part of higher education processes. This paper examines the university rankings published by Times Higher Education (THE) from 2011 to 2025, focusing on the distribution of the top 100 universities by country. The aim of the paper is to analyze changes in the country concentration rate among these top-ranking universities. The selection of the top 100 universities is somewhat arbitrary. However, this group holds particular significance because top universities compete internationally for the best students, faculty, and researchers. Such competition ultimately attracts more funding to these institutions.<sup>1</sup>

There are two types of competition in higher education. First, there is competition between universities, independent of the countries they are located in. Second, there is competition between countries. This paper focuses solely on the competition between countries.

Countries compete to have as many of their universities as possible included in the top rankings, driven by reasons beyond strictly educational objectives—prestige

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<sup>1</sup>There are many other indices that rank universities, such as the QS rankings, for example. However, we focus on this index because it appears to be the most popular. Additionally, we concentrate on the top 100 universities, as these institutions typically attract international attention. Numerous studies analyze university rankings at the country level. For instance, Alduais (2019) examines university rankings in Saudi Arabia. Similarly, Almutiry et al. (2022) investigate higher education in Saudi Arabia, focusing on a single institution: Northern Border University. The internationalization of German universities is explored by Evrim Altin (2019). At the European Union level, Osmanović Zajić and Maksimović (2023) evaluate the Bologna Process, while Al Ghawiel (2020) assesses the Libyan education system.

among them. For some countries, building top universities serves broader purposes, such as economic, political, social, and cultural goals. However, these aspects are not examined in this paper.

In this study, I approach the top 100 universities globally as representing a single industry, with countries acting as firms operating within this industry. The number of universities a country has in the top 100 effectively represents its market share. Consequently, the absolute number of universities from a given country in the top 100 equates to that country's market share in this global industry.

Using these market shares, I estimate the level of convergence between countries and analyze the concentration rate of the international market for the top 100 universities. For convergence, I examine the trajectory of the standard deviation of the number of countries represented in the top 100 list. For concentration, I use metrics such as the CR4, CR8, and Herfindahl-Hirschman Index (HHI).

This paper is organized into five sections, including this introduction. The next section measures convergence by (a) the number of countries with at least one university in the top 100 list, and (b) the time trend of the standard deviation of the number of universities per country. The third section examines the concentration rate of the "industry" using two standard indices from the literature of industrial organization. The final section concludes.

## Higher Education in the Academic Literature

Higher education has been the subject of extensive academic research, reflected in numerous books, papers, conferences, and other scholarly events. For instance, the Athens Institute has organized conferences on education and higher education since 1995 and 2017, respectively, resulting in many book publications, including abstract books of these conferences. Many of these books address topics related to higher education. A notable example is a book edited by Papanikos and Pappas (2010), which includes several papers on higher education. Programs and abstract books for the two conferences are available at <https://www.atiner.gr/education> and <https://www.atiner.gr/coledu>, respectively.

Since 2014, a dedicated academic journal, *The Athens Journal of Education*, has focused on education, publishing numerous papers on higher education. Additionally, specific roundtable discussions have been organized on various issues related to teaching and researching in a globalized world. For details, including programs, presentations, and videos, see <https://www.atiner.gr/event>.

In this section, I briefly review the issue of higher education as examined in the aforementioned publications and forums. As I have discussed in Papanikos (2025c & 2025d), since ancient times—particularly during the golden era of ancient Athens—education, and higher education in particular, has served specific roles. One such role is to equip students with the skills and knowledge necessary for a trade or profession, enabling them to build careers and potentially change their social status. In many poorer countries, education remains the primary means for individuals from disadvantaged backgrounds to advance. For instance, Afriyie & Boohene (2014) examined how education fosters an entrepreneurial culture among students in Ghana,

aiming to transform them into job creators. This study is particularly significant as it highlights that entrepreneurial culture transcends specific fields of study. Similarly, Sodha et al. (2024) explore the topic of entrepreneurial education.

Beyond professional development, education plays a vital role in shaping better citizens, enabling them to manage their households and their *politeia* (community or state) more effectively. Higher education serves as the foundation for a better society, often associated with the ideals of a robust democracy. As I have argued in Papanikos (2022), the bright future of democracy lies in education. The relationship between good citizenship and education has been explored by numerous studies emphasizing ethical and moral behavior as well as community engagement. Notable contributions include works by Mortari & Ubbiali (2021), Muthanna (2022), Nicolaides et al. (2022), Tezera Taye & Alduais (2022), Vidanec (2014), and Wawrzinek et al. (2017).

Universities exist to serve students. Consequently, university rankings are a valuable resource for students to identify institutions that align with their abilities, aspirations, and potential. Various aspects of the student experience in higher education, including their relationships with teachers, have been explored by researchers such as Aloka (2023), Andrade (2014), Artar et al. (2021), Bardorfer (2024), Enesi & Trifoni (2023), Idzikowski (2014), King et al. (2021), Nguyen (2024), Papaieronymou (2017), Rudd & Honkiss (2020), Sousa & Mangas (2024), Tezera Taye et al. (2022), Tzanakis (2015), and Unruh (2015).

Many studies focus on the development of higher education at the national or program level. For example, Cabau (2014) examines higher education in Hong Kong, highlighting its emergence as a significant university hub. Daniel & Burgin (2019) analyze the development of an English program in Ecuador, while Didou Aupetit (2015) addresses issues of equity in Latin America. Egne (2022) investigates educational practices in Ethiopia, and Rautenbach et al. (2023) examine the role of universities in rural South Africa. The university-industry nexus in Turkey is explored by Dayioglu Ocal & Kavak (2018), and motivation in Lebanese higher education is studied by Hussein et al. (2016).

As highlighted below, researchers and universities across different countries often collaborate on research projects and innovations. Regional organizations, such as the European Union, frequently support these efforts. For example, Cyran (2023) evaluates the Horizon program. Universities, as organizations, require effective management to function optimally. Various aspects of university management have been analyzed by Peterson (2014) and Walsh (2019).

One of the most significant developments in global higher education has been the rapid technological advancements enabling online education, particularly in response to the challenges posed by COVID-19. Distance and related costs have largely been mitigated. Studies addressing this transformation include Bennett & Abusaleem (2024a & 2024b), Jereb et al. (2023), Katz (2014), King et al. (2021), Lecon & Oder (2016), Oberhelman & Dunn (2019), and Tarbutton & Doyle (2023).

In conclusion, this eclectic review of the literature on higher education reveals that the field has become more internationalized than ever before. University rankings serve a critical function by providing valuable guidance to the global

education community, including students, parents, teachers, researchers, and other stakeholders in higher education.

### Global Representation in the Top 100 Universities

Table 1 presents data on the countries and the number of universities appearing at least once in the Top 100 Universities List from 2011 to 2025. The total number of universities exceeds 100 in some years because the last position was shared by multiple universities. This occurred in 2013, 2014, and 2018. While this 15-year period is too short to infer long-term trends, several notable observations can be made.

Countries are listed in descending order based on the number of universities in the final year (2025). Their rankings for 2025 are shown in Figure 1. That year, the US ranked first with 38 universities, followed by the UK with 12. These two countries consistently held the top two positions throughout the analysis period (2011–2025).

In total, 22 countries appeared in the Top 100 list over the 15 years. The table's last column indicates the frequency with which each country appeared at least once. Eleven countries were featured consistently throughout the entire period.

Eight other countries had intermittent appearances. For example, the Netherlands appeared 14 times, Belgium 13 times, and Finland 10 times. Denmark was listed five times, while Ireland, Taiwan, Italy, Turkey, and Russia each appeared only once.

A significant issue not explored here is the relationship between population size and the number of universities on the list. Interestingly, smaller countries such as Sweden and Switzerland had at least one university ranked in the Top 100 every year, making it worthwhile to compare their populations with those of larger nations like China and the United States.

Table 1 also reveals distinct trends. Notably, the number of US universities in the Top 100 appears to be declining. In 2011 and 2012, more than half of the top 100 universities were based in the US. However, this figure dropped below 50 in 2013 and has consistently remained under 40 in the following five years.

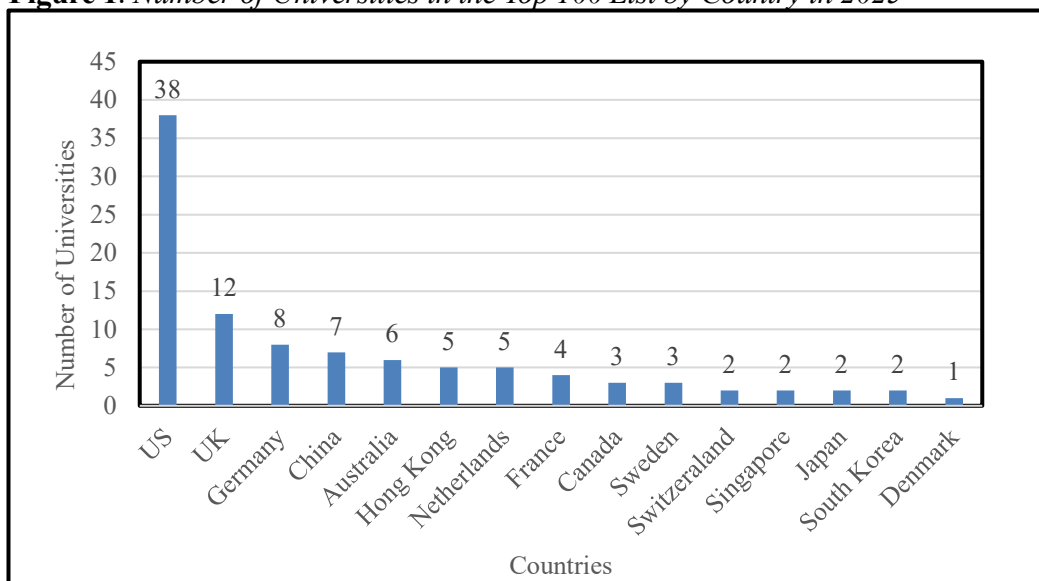
**Table 1.** *Countries with at Least One University on the Top 100 Best List*

|    | Year        | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | f  |
|----|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | US          | 53 | 51 | 47 | 46 | 45 | 39 | 41 | 43 | 41 | 40 | 37 | 38 | 34 | 36 | 38 | 15 |
| 2  | UK          | 14 | 12 | 10 | 11 | 11 | 16 | 12 | 12 | 11 | 11 | 11 | 11 | 10 | 11 | 12 | 15 |
| 3  | Germany     | 3  | 4  | 4  | 6  | 6  | 9  | 9  | 10 | 8  | 8  | 7  | 7  | 9  | 8  | 8  | 15 |
| 4  | China       | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 6  | 6  | 7  | 7  | 7  | 15 |
| 5  | Australia   | 5  | 4  | 6  | 5  | 5  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 7  | 6  | 6  | 15 |
| 6  | Hong Kong   | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 3  | 3  | 4  | 5  | 5  | 5  | 15 |
| 7  | Netherlands |    | 4  | 7  | 8  | 6  | 8  | 8  | 7  | 7  | 7  | 7  | 7  | 7  | 6  | 5  | 14 |
| 8  | France      | 3  | 3  | 4  | 3  | 2  | 1  | 1  | 1  | 2  | 3  | 3  | 3  | 4  | 4  | 4  | 15 |
| 9  | Canada      | 4  | 5  | 5  | 4  | 4  | 4  | 3  | 4  | 5  | 5  | 5  | 5  | 4  | 3  | 3  | 15 |
| 10 | Sweden      | 2  | 3  | 2  | 1  | 3  | 3  | 3  | 3  | 3  | 2  | 1  | 1  | 1  | 2  | 3  | 15 |
| 11 | Switzerland | 4  | 3  | 3  | 3  | 3  | 2  | 3  | 3  | 3  | 4  | 4  | 3  | 4  | 3  | 2  | 15 |
| 12 | Singapore   | 1  | 1  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 15 |
| 13 | Japan       | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 15 |

|    |                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|----|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 14 | South Korea        | 2   | 2   | 3   | 3   | 3   | 1   | 2   | 2   | 2   | 2   | 2   | 2   | 3   | 3   | 2   | 15 |
| 15 | Denmark            |     |     |     |     |     | 1   | 1   |     |     |     | 1   | 1   |     |     | 1   | 5  |
| 16 | Ireland            | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1  |
| 17 | Belgium            |     | 1   | 2   | 2   | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 2   | 1   | 1   |     | 13 |
| 18 | Finland            |     | 1   | 0   | 1   | 0   | 1   | 1   | 1   | 1   | 1   | 1   |     |     |     |     | 10 |
| 19 | Taiwan             |     |     |     |     |     |     |     |     |     |     | 1   |     |     |     |     | 1  |
| 20 | Italy              |     |     |     |     | 1   |     |     |     |     |     |     |     |     |     |     | 1  |
| 21 | Turkey             |     |     |     |     | 1   |     |     |     |     |     |     |     |     |     |     | 1  |
| 22 | Russia             |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     | 1  |
|    | Total Universities | 100 | 100 | 101 | 101 | 100 | 100 | 100 | 102 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |    |

Source: Times Higher List ([https://www.timeshighereducation.com/world-university-rankings/latest/world-ranking#!/length/100/sort\\_by/rank/sort\\_order/asc/cols/scores](https://www.timeshighereducation.com/world-university-rankings/latest/world-ranking#!/length/100/sort_by/rank/sort_order/asc/cols/scores))

**Figure 1. Number of Universities in the Top 100 List by Country in 2025**



The next section examines whether this trend indicates long-term convergence. It also explores the political debate surrounding China's rise in global university rankings, addressing the question of whether China may surpass the US in the coming years and establish itself as a global leader in innovation. I have examined the issue of innovation competition between China and the US in Papanikos (2025a).

### Global Convergence

I have borrowed two important concepts from the economics literature. The first is the convergence rate, which was applied to analyze country achievements in terms of how many universities were able to make it onto the top 100 list. Convergence rates are typically used to analyze the convergence of per capita GDP among different groups of countries. The convergence issue is discussed in this section.

The second concept is the concentration rate, borrowed from industrial economics literature. I treat the international higher education provision as a kind of "industry,"

with various countries acting as the "firms" of this industry. The issue of concentration is examined in the next section.

If knowledge is widely disseminated, countries that invest in top universities may secure at least one prominent institution in global rankings. Higher education has become an international market characterized by the high mobility of students, faculty, and researchers. Many students worldwide aspire to study at top universities, and rankings, such as those presented in the previous section, help guide their choices among thousands of institutions globally.

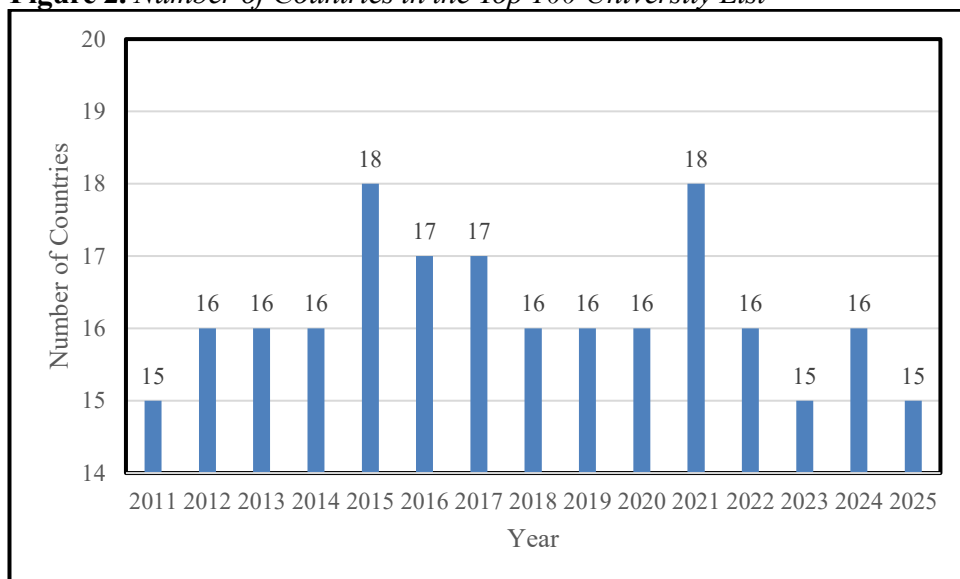
Professors and researchers follow similar migration patterns, often seeking opportunities to study, teach, and conduct research at leading universities. This competition is fierce due to its economic, social, political, and cultural implications. A notable rivalry exists between the US and China in attracting top talent, which, in turn, enhances the rankings of their universities.

This section analyzes trends in the rankings of countries with at least one university featured during the 2011–2025 period. Figure 2 illustrates the number of countries represented in the Top 100 Universities List each year. Presumably, the higher the number of countries, the higher the convergence, meaning that more countries are represented in the top list and the distribution is more equally spread around the world. However, convergence may also occur if the existing countries in the list redistribute universities from those with above-average representation to those with below-average representation.

The highest number of countries, 18, appeared twice: in 2015 and 2021. This was followed by 17 countries, which also appeared twice, in 2016 and 2017. The minimum number of countries, 15, was recorded in three years: 2011, 2023, and 2025. In the remaining eight years, 16 countries had at least one university in the Top 100, making 16 both the mode and the median of the distribution.

The average number of countries across the period is 16.2. The range is narrow, spanning just three countries, and the standard deviation—a measure of variation—is less than one (0.94).

**Figure 2.** *Number of Countries in the Top 100 University List*



The evidence suggests that the elite countries form a nearly closed club, consistently dominating the rankings. This indicates minimal convergence between these countries and those outside the elite circle.

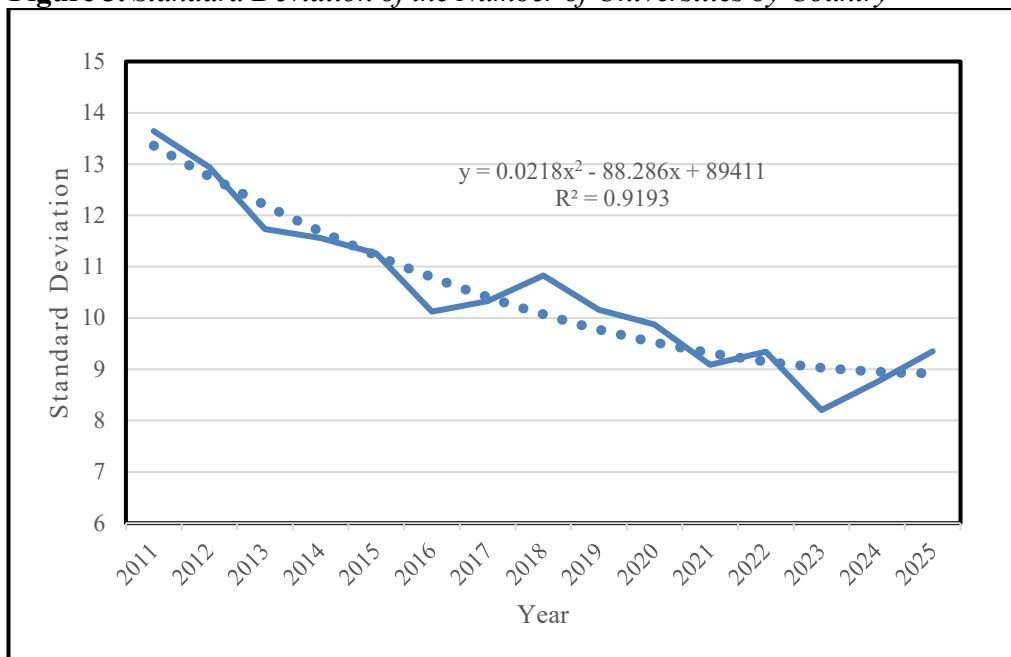
Another aspect of convergence is whether differences in the number of universities within the elite group are narrowing. As previously noted, the US has seen a decline in the number of ranked universities, while Germany and China have experienced growth. But how does this affect the overall performance of the elite group?

One way to measure this type of convergence is by examining the trend in the standard deviation of the number of universities each elite country has in the rankings annually. A decreasing standard deviation would indicate convergence. Figure 3 illustrates the evolution of the standard deviation from 2011 to 2025.

The most apparent observation is that the standard deviation decreased from a peak of 13.64 universities in 2011 to its lowest value of 8.1 universities in 2023. However, it increased slightly in 2024 and 2025, reaching 8.75 and 9.35, respectively. The overall decreasing trend is best approximated by a second-degree polynomial, indicating that the rate of decrease is slowing over time. This suggests that some differences will persist, reflecting factors such as population size, government policies, and societal attitudes toward education and research. The examination of these factors is not the focus of this paper.

It can be concluded that there is a non-linear trend of convergence between the elite countries—that is, the countries that have consistently appeared in the top list throughout the period from 2011 to 2025.

**Figure 3.** *Standard Deviation of the Number of Universities by Country*



In the next section, we borrow from industrial concentration literature to introduce measures that account for the concentration rate. As mentioned above, we treat each

country as a firm, with the number of universities representing the "firm's" output. In this case, the "industry" refers to the Top 100 University List.

### Measuring Concentration

As mentioned above, the ranking of higher education institutions can be analyzed using an economic methodology that is part of industrial organization analysis. In this context, countries are treated as “firms” competing in the “industry” of the top 100 universities. The number of universities on the list are the “products” they are able to sell in this “industry.”

The competition between countries can be measured using two indices: the Concentration Ratio (CR) of the top X countries and the Herfindahl-Hirschman Index (HHI). In this study, based on the data presented in Table 1, I specify X as being equal to four and eight, symbolized by CR4 and CR8, respectively.

In what follows, I discuss these indices and present the estimates using the data from Table 1.

#### *The Concentration Ratio for the Top 4 Countries (CR4)*

The CR4 is defined as follows:

$$\text{CR4} = \text{Market Share of Country Ranked Number 1} + \\ \text{Market Share of Country Ranked Number 2} + \\ \text{Market Share of Country Ranked Number 3} + \\ \text{Market Share of Country Ranked Number 4} +$$

The CR8 is defined as the sum of the shares of the top 8 countries in the ranking of the number of top 100 universities.

#### *Herfindahl-Hirschman Index (HHI)*

The HHI is given by the following sum:

$$\text{HHI} = \sum_{i=1}^v S_i$$

Where:

$S_i$  = Market share of country i

$v$  = Number of countries on the top 100 list

The strength of competition can be measured using the HHI index. Three cases of competition are of importance:

- (1) If  $\text{HHI} < 1,500$ , then the industry is characterized by a low concentration rate, i.e., the market for elite universities can be considered competitive.
- (2) If  $1,500 < \text{HHI} < 2,500$ , then there is moderate concentration.

- (3) If  $HHI > 2,500$ , then there is high concentration, i.e., the market for elite universities can be considered less competitive.

The difference between the CR index and the HHI is that the latter takes into consideration the entire distribution of market shares, while the former considers only the top countries.

Table 2 reports the estimation of CR4, CR8, and HHI using the country shares from the 2011–2025 period. Summary statistics are given in the bottom five rows of the table. It should be noted that the higher the value of the index, the less competitive the market is, and therefore fewer countries dominate the international university market.

In 2025, the share of the top four countries was 65%, and the share of the top eight was 85%. The average CR4 index was 64.4%, with a maximum value of 60% in 2023 and a maximum of 73% in 2011. The average value of the CR8 index for the entire period from 2011 to 2025 was 82.2%, with a minimum value of 79% in 2015 and a maximum value of 85% in 2025.

The standard deviation measures the variability of the data, and for the CR4 and CR8 indices, it is 3.36% and 1.52%, respectively. However, given the large differences in their means, the CR4 and CR8 variability cannot be compared using standard deviations. Instead, I calculated the coefficient of variation, which takes into account the differences in the average values of CR4 and CR8. The CVs are reported in the last row of Table 2. The CR4 variability is much higher than that of the CR8; the latter shows relatively higher stability.

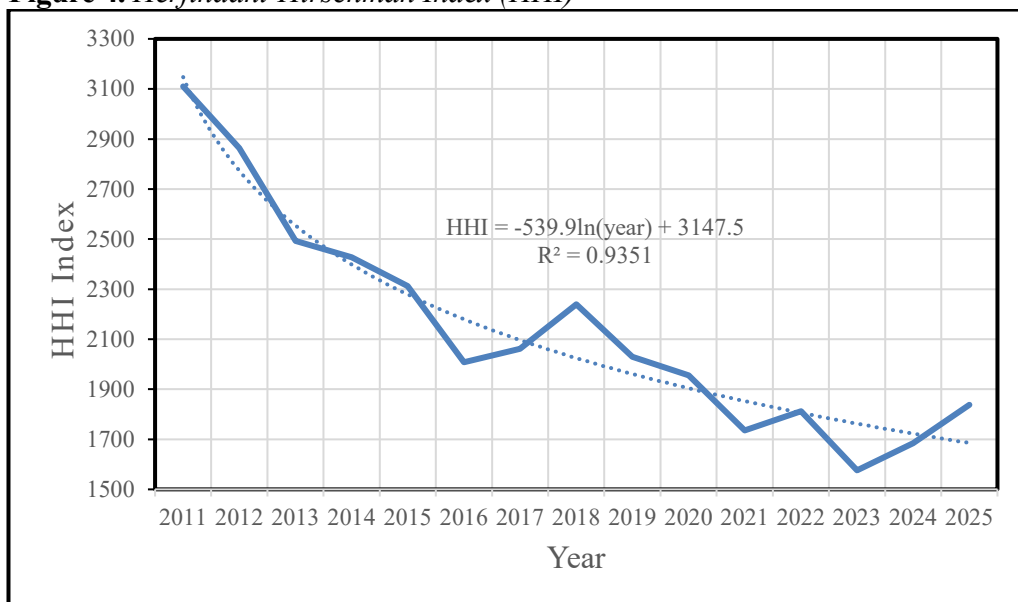
**Table 2.** The CR4, CR8 and the HHI Indices

| Year              | CR4   | CR8   | HHI  | Competition   |
|-------------------|-------|-------|------|---------------|
| 2011              | 73%   | 83%   | 3110 | Oligopolistic |
| 2012              | 69%   | 82%   | 2864 | Oligopolistic |
| 2013              | 63%   | 82%   | 2493 | Moderate      |
| 2014              | 65%   | 83%   | 2427 | Moderate      |
| 2015              | 64%   | 79%   | 2312 | Moderate      |
| 2016              | 66%   | 83%   | 2008 | Moderate      |
| 2017              | 64%   | 82%   | 2062 | Moderate      |
| 2018              | 67%   | 84%   | 2240 | Moderate      |
| 2019              | 63%   | 81%   | 2030 | Moderate      |
| 2020              | 62%   | 81%   | 1956 | Moderate      |
| 2021              | 61%   | 80%   | 1736 | Moderate      |
| 2022              | 62%   | 82%   | 1812 | Moderate      |
| 2023              | 60%   | 83%   | 1576 | Moderate      |
| 2024              | 62%   | 83%   | 1684 | Moderate      |
| 2025              | 65%   | 85%   | 1838 | Moderate      |
| Average ( $\mu$ ) | 64.4% | 82.2% | 2143 | Moderate      |
| Maximum           | 73%   | 85%   | 3110 | Oligopolistic |

|                                                           |              |              |              |                 |
|-----------------------------------------------------------|--------------|--------------|--------------|-----------------|
| <b>Minimum</b>                                            | <b>60%</b>   | <b>79%</b>   | <b>1576</b>  | <b>Moderate</b> |
| <b>Standard Deviation (<math>\sigma</math>)</b>           | <b>3.36%</b> | <b>1.52%</b> | <b>437</b>   |                 |
| <b>Coefficient of Variation (<math>\mu/\sigma</math>)</b> | <b>4.69%</b> | <b>2.35%</b> | <b>20.4%</b> |                 |

The problem with CR4 and CR8 is that they do not take into account all the values of the distribution. The HHI, however, does consider all shares. The estimates of HHI are also reported in Table 2. Figure 4 depicts the trend, which can be best captured by a semi-logarithmic function. The average value of the HHI index was 2143, indicating moderate competition. The highest value occurred at the beginning of the available data period, with a value of 3110, which is similar to the CR4 index but not to the CR8. The same is true for the minimum value, which for the HHI measurement occurred in the same year as the CR4, in 2023.

**Figure 4.** *Herfindahl-Hirschman Index (HHI)*



The semi-log trend line in Figure 4 shows that competition is increasing, albeit with some ups and downs. It should be noted that this applies only to the top 100 list of universities and the few countries represented there. If all universities worldwide were included, the story might be different, but not much different, considering that the countries with universities in the top 100 list are those with a relatively large number of universities. This important issue is left for future study.

### The China-US “Rivalry” for the Top Universities Rankings

One issue with political and mass media interest is the alleged rivalry between the US and China. During the era of mercantilism, when trade secrets were a key international comparative advantage, such rivalries made perfect sense. Today,

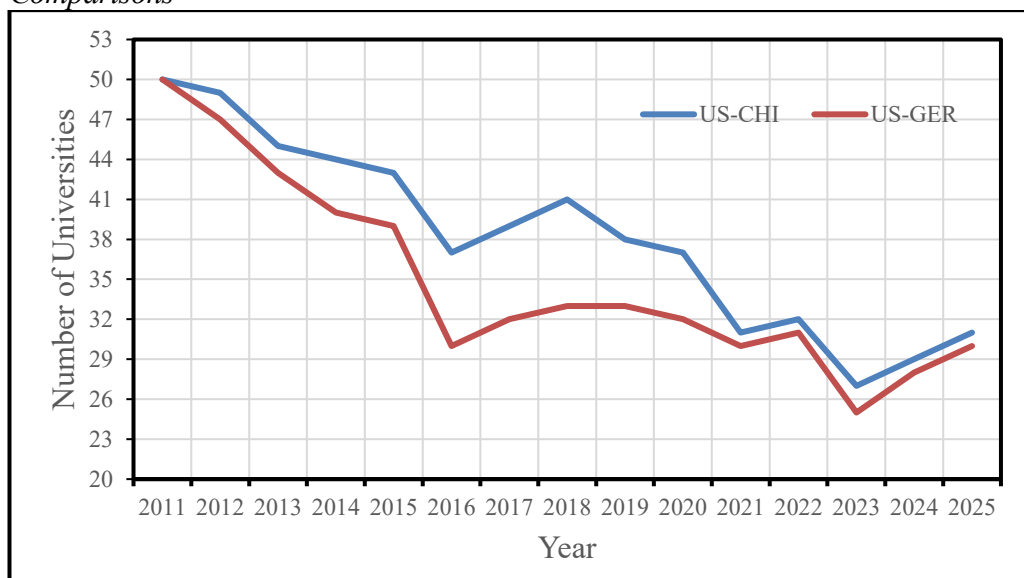
however, this is no longer the case. The high international mobility of students, teachers, and researchers has rendered national identities less relevant in this context. Nonetheless, it is still a worthwhile exercise to examine how top performers rank in terms of the number of universities on the top 100 list.

As I explained in my paper on the innovation gap between the US and China (Papanikos, 2025a), the disparity in the number of top universities is significant because it is at these institutions that new ideas and innovations emerge. However, equally important is the rate of convergence between countries. The raw data reported in Table 1 above clearly show that the number of US universities in the top 100 is declining. This decline could be attributed to a deterioration in the performance of US universities, improvements in universities from other countries, or a combination of both.

Given the political tensions fueled by the rivalry between the US and China, it is worth analyzing the difference in the number of universities from each country that make it to the top 100 list. Specifically, I address the question: Is the improvement in Chinese universities relative to the rest of the world driving this trend, or is it part of a broader pattern in which many other countries are narrowing the gap with US universities? For this analysis, three countries are particularly relevant for comparison: the US, Germany, and China.

Figure 5 illustrates the differences in the number of universities on the top 100 list between the US and Germany, as well as the US and China. The UK, which consistently ranks second, is excluded because its position and number of universities have remained relatively stable. In terms of the coefficient of variation, the US and the UK show similar values of 0.1314 and 0.1323, respectively, indicating relatively low variability. In contrast, the corresponding variabilities for Germany and China are higher, at 0.295 and 0.577, respectively.

**Figure 5.** *Differences in the Number of Top Universities: US-Germany and US-China Comparisons*



Additionally, I want to emphasize the contrast between the US and China. Why, then, include Germany? The reason is that China and Germany have followed a similar trajectory since 2011. Both countries have successfully increased the number of universities within their borders that make it to the top 100 list.

At the start of the period, both China and Germany had only three universities in the top 100, as shown in Table 1 above. Until 2020, China maintained a relatively stable count of 2–3 universities in the top 100. Germany, by contrast, steadily increased its numbers, reaching a peak of 10 universities in 2018. Since then, Germany has consistently maintained at least 8 universities in the top 100. After 2020, China also increased its count, reaching a maximum of 7 universities during the period.

In other words, while Germany has outperformed China, both countries have succeeded in narrowing the gap with the US, as shown in Figure 5. The inclusion of Germany highlights that closing the gap with the US is not unique to China. Based on the evidence presented in Figure 5, Germany has performed better than China in reducing the gap with the US.

Given the current emphasis on higher education by the Chinese government and its large, albeit aging, population, China will most likely surpass others in the near future. However, in the longer term, many other countries may emerge, primarily due to their large populations, such as India, which now holds the title of the largest population on Earth.

However, this may be of little significance given the global trends of globalization. As I explained in Papanikos (2024), the future of globalization looks promising, and this includes university collaborations across countries and continents. In a few decades, it may be very difficult to identify something as being specifically Chinese, European, or American, despite political voices that attempt to uphold national distinctions, as explained in Papanikos (2025b).

## Conclusions

Global university rankings are an important indicator of how countries perform in the international higher education sphere. Although they serve primarily as benchmarks to help individual universities improve, these rankings have also become a source of competition and rivalry between countries, particularly between the U.S. and China.

In this paper, I examined the relative rankings of countries based on their performance in the global university rankings reported by the Times Higher Education index from 2011 to 2025, with the most recent ranking covering the year 2025.

Using an economics methodology, I measured the convergence among countries whose universities appear in the top 100 list and analyzed their concentration trajectories over this period.

The findings reveal that while countries are converging in the number of their universities featured in the top 100 list, the U.S. remains significantly ahead. It accounts for approximately 40% of the top 100 universities—a dominance far greater than that of any other country. The U.K. has maintained a relatively stable position over the years, while China has been narrowing the gap but still represents only 7%

of the universities in the top 100. Interestingly, Germany has outperformed China during this period, which is notable given the comparatively limited attention Germany receives in discussions of global higher education.

The evidence presented in this paper shows that the top 100 university landscape has become more competitive, as indicated by a reduction in the Herfindahl-Hirschman Index (HHI). While almost the same countries continue to dominate the top 100 list, the distribution of universities per country has become more balanced over time.

It was also emphasized that competition among countries over how many universities they have in the top 100 list holds little significance in an era of unprecedented globalization, which facilitates the rapid transfer of knowledge. However, there is nothing wrong with countries competing to have the best universities and striving to improve (becoming more competitive). This represents healthy competition. It turns into unhealthy competition if the superiority in knowledge gained from having as many top universities as possible is used to gain a competitive advantage in building military equipment.

## References

- Afriyie N, Boohene R (2014) Entrepreneurial education and entrepreneurial culture among university of cape coast students in Ghana. *Athens Journal of Education* 1(4): 309-322. <http://www.atiner.gr/journals/education/2014-1-4-3-Afriyie.pdf>
- Alduais A (2019) A proposed ranked-based ranking model on the impact of international ranking of higher education institutions on higher education reform in the kingdom of Saudi Arabia. *Athens Journal of Education* 6(4): 329-356. <https://www.athensjournals.gr/education/2019-6-4-5-Alduais.pdf>
- Al Ghawiel S (2020) Implementing quality to assess the performance of the educational system: A preliminary case study at the Libyan university Al Jabal Al Gharbi. *Athens Journal of Mediterranean Studies* 6(1): 67-88. <https://www.athensjournals.gr/mediterranean/2020-6-1-4-Ghawiel.pdf>
- Almutiry M, Alshehri MY, Sayed G (2022) Diffusion of high impact educational practices at a Saudi university. *Athens Journal of Education* 9(3): 413-428. <https://www.athensjournals.gr/education/2022-9-3-4-Almutiry.pdf>
- Aloka PJ (2023) Birth order differences and overall adjustment among first year undergraduate students in one selected university. *Athens Journal of Education* 10(3): 523-538. <https://www.athensjournals.gr/education/2023-10-3-9-Aloka.pdf>
- Andrade MS (2014) Higher education access and success through distance English language learning. *Athens Journal of Education* 1(3): 211-222. <https://www.atiner.gr/journals/education/2014-1-3-2-Andrade.pdf>
- Artar M, Karadeniz C, Ateş H, Doğan B (2021) A toy museum in education: Evaluation of Ankara university toy museum's training activities. *Athens Journal of Mediterranean Studies* 7(1):11-28. <https://www.athensjournals.gr/mediterranean/2021-7-1-1-Artar.pdf>
- Bardorfer A (2024) Fostering students' active participation in higher education: The role of teacher-student rapport. *Athens Journal of Education* 11(3): 227-246. <https://www.athensjournals.gr/education/2024-11-3-4-Bardorfer.pdf>
- Bennett L, Abusaleem A (2024a) Artificial intelligence (AI) and its potential impact on the future of higher education. *Athens Journal of Education* 11(3): 195-212. <https://www.athensjournals.gr/education/2024-11-3-2-Bennett.pdf>

- Bennett L, Abusalem A (2024b) Building academic integrity and capacity in digital assessment in higher education. *Athens Journal of Education* 11(1): 71-94. <https://www.athensjournals.gr/education/2024-11-1-5-Bennett.pdf>
- Cabau B (2014) Higher education ambitions and societal expectations. *Athens Journal of Education* 1(2):143-154. <http://www.atiner.gr/journals/education/2014-1-2-4-Cabau.pdf>
- Cyran KA (2023) Research and innovation staff exchange as a frame for collaboration of higher education with industry: Lessons learned from WrightBroS horizon 2020 EU project. *Athens Journal of Education* 10(4): 669-684. <https://www.athensjournals.gr/education/2023-10-4-6-Cyran.pdf>
- Daniel MC, Burgin X (2019) Investigating future educators training to teach English in Ecuador: An examination of one university's program. *Athens Journal of Education* 6(1): 33-52. <https://www.athensjournals.gr/education/2019-6-1-3-Daniel.pdf>
- Dayioglu Ocal S, Kavak Y (2018) Revisiting academic capitalism in Turkey: An interactional model for university-industry collaboration. *Athens Journal of Mediterranean* 4(2): 107-122. <https://www.athensjournals.gr/mediterranean/2018-4-2-2-Ocal.pdf>
- Didou Aupetit S (2015) Equity, diversity and internationalization in indigenous and intercultural higher education in Latin America. *Athens Journal of Education* 2(3): 245-256. <https://www.athensjournals.gr/education/2015-2-3-5-Aupetit.pdf>
- Egne RM (2022) Pedagogical science practices in public higher education institutions of Ethiopia: Progress made but challenges remain. *Athens Journal of Education* 9(2): 303-324. <https://www.athensjournals.gr/education/2022-9-2-7-Egne.pdf>
- Enesi M, Trifoni A (2023) An analysis of English writing errors of freshmen students' essays: The case of 'Aleksandër Moisiu' university. *Athens Journal of Education* 10(3): 481-506. <https://www.athensjournals.gr/education/2023-10-3-7-Enesi.pdf>
- Evrin Altin M (2019) Internationalization of the German higher education system new player in the market. *Athens Journal of Education* 6(3): 237-256. <https://www.athensjournals.gr/education/2019-6-3-5-Altin.pdf>
- Hussein B, Khachfe H, Haj Ali A, Aridi M (2016) Measuring the motivating potential score of academic staff at the Lebanese international university. *Athens Journal of Mediterranean* 2(2): 161-174. <https://www.athensjournals.gr/mediterranean/2016-2-2-3-Hussein.pdf>
- Jereb E, Jerebic J, Urh M (2023) Studying habits in higher education before and after the outbreak of the COVID-19 pandemic. *Athens Journal of Education* 10(1): 67-84. <https://www.athensjournals.gr/education/2023-10-1-4-Jereb.pdf>
- Idzikowski A (2014) Addressing the educational challenges of experiential learning in teaching of internet marketing at Thompson rivers university. *Athens Journal of Education* 1(2): 131-142. <https://www.atiner.gr/journals/education/2014-1-2-3-Idzikowski.pdf>
- Katz YJ (2014) Cognitive and affective aspects of SMS based learning at the university level. *Athens Journal of Education* 1(3): 259-270. <https://www.atiner.gr/journals/education/2014-1-3-6-Katz.pdf>
- King M, Courtier M, Shaw C, Anderson C, Widdowson J (2021) Different views? The experiences of international students studying HE in three non-university settings. *Athens Journal of Education* 8(3): 239-262. <https://www.athensjournals.gr/education/2021-8-3-2-King.pdf>
- Lecon C, Oder B (2016) E-tutorials as an addition to higher education learning scenarios. *Athens Journal of Education* 3(2): 121-136. <https://www.athensjournals.gr/education/2016-3-2-2-Lecon.pdf>
- Mortari L, Ubbiali M (2021) Service learning: A philosophy and practice to reframe higher education. *Athens Journal of Education* 8(2): 115-138. <https://www.athensjournals.gr/education/2021-8-2-1-Mortari.pdf>

- Muthanna A (2022) Higher teacher education: Raising awareness toward constructing teaching philosophy statements. *Athens Journal of Education* 9(2): 225-236. <https://www.athensjournals.gr/education/2022-9-2-3-Muthanna.pdf>
- Nguyen HTT (2024) Implementing feedforward-based collaborative assessment in higher education. *Athens Journal of Education* 11(4): 335-352. <https://www.athensjournals.gr/education/2024-11-4-5-Nguyen.pdf>
- Nicolaides A, Candice Austin A (2022) Community engagement as an ubuntu transformative undertaking for higher education institutions. *Athens Journal of Philosophy* 1(4): 185-202. <https://www.athensjournals.gr/philosophy/2022-1-4-1-Nicolaides.pdf>
- Oberhelman SM, Dunn CA (2019) Globally networked learning in a university classroom: A pilot program. *Athens Journal of Education* 6(1): 1-12. <https://www.athensjournals.gr/education/2019-6-1-1-Oberhelman.pdf>
- Osmanović Zajić J, Maksimović J (2023) The Bologna in the field of social sciences and humanities: A precondition for successful university education. *Athens Journal of Education* 10(4): 701-716. <https://www.athensjournals.gr/education/2023-10-4-8-Zajic.pdf>
- Papaieronymou I (2017) Teaching college probability for higher achievement. *Athens Journal of Education* 4(3): 199-210. <https://www.athensjournals.gr/education/2017-4-3-1-Papaieronymou.pdf>
- Papanikos GT (2022) The Bright Future of Democracy is in Education. *Athens Journal of Education* 9(2): 353-364. <https://bit.ly/3sJGsoN>
- Papanikos G.T. (2024) The Future of Globalization. *Athens Journal of Business & Economics* 10(2): 97-108. <https://bit.ly/4cCsKbv>
- Papanikos GT (2025a) The U.S.-China Innovation Gap: The Chinese Advantage of Backwardness. *Athens Journal of Technology & Engineering* (forthcoming) <https://bit.ly/4f3sgeG>
- Papanikos GT (2025b) The Trump Effect on Globalization: If the First Time was a Farce, Would the Second be a Tragedy? *Athens Journal of Business & Economics* (forthcoming) <https://bit.ly/3ZGFb1Q>
- Papanikos GT (2025c) Ethics and Academic Integrity: Lessons from Plato's Protagoras *Athens Journal of Humanities and Arts* (forthcoming) <https://bit.ly/414C5FJ>
- Papanikos GT & Pappas NC (2010) *Problems and Prospects in Higher Education*. Athens: Athens Institute for Education and Research (ATINER). [https://www.researchgate.net/publication/263441817\\_Problems\\_and\\_Prospects\\_in\\_Higher\\_Education](https://www.researchgate.net/publication/263441817_Problems_and_Prospects_in_Higher_Education)
- Peterson H (2014) An academic 'glass cliff'? Exploring the increase of women in Swedish higher education management. *Athens Journal of Education* 1(1): 33-44. <https://www.atiner.gr/journals/education/2014-1-1-3-Peterson.pdf>
- Rautenbach JV, Shoji N, Nicolaides A (2023) The implication of 'rurality' in terms of higher education in a rural South African context. *Athens Journal of Education* 10(4): 717-738. <https://www.athensjournals.gr/education/2023-10-4-9-Rautenbach.pdf>
- Rudd M, Honkiss L (2020) Analysing the correlation between English proficiency and academic performance among Thai university students. *Athens Journal of Education* 7(1): 122-138. <https://www.athensjournals.gr/education/2020-7-1-6-Rudd.pdf>
- Sodha MV, Vaghela JP, Kumar AA (2024) Perception of the university students on entrepreneurship education. *Athens Journal of Education* 11(2): 143-156. <https://www.athensjournals.gr/education/2024-11-2-4-Sodha.pdf>
- Sousa J, Mangas C (2024) Active teaching-learning methodologies in higher education: A project with the community. *Athens Journal of Education* 11(4): 289-300. <https://www.athensjournals.gr/education/2024-11-4-2-Sousa.pdf>
- Tarbuton T, Doyle LB (2023) Using teacher presence in online higher education to foster global citizenship among adult learners. *Athens Journal of Education* 10(2): 233-248. <https://www.athensjournals.gr/education/2023-10-2-3-Tarbuton.pdf>

- Tezera Taye M, Alduais A (2022) Exploring the practice of academic freedom and active learning in Ethiopia's higher education: A case study. *Athens Journal of Education* 9(4): 655-678. <https://www.athensjournals.gr/education/2022-9-4-7-Taye.pdf>
- Tezera Taye M, Muthanna A, Sang G, Alduais A (2022) Understanding effective teaching beliefs of instructors and students: A qualitative study at an Ethiopian university. *Athens Journal of Education* 9(4): 679-698. <https://www.athensjournals.gr/education/2022-9-4-8-Taye.pdf>
- Tzanakis M (2015) Does ethnicity moderate the longitudinal change in adolescent educational expectations for university study between ages 14-16? Understanding differences among white, Indian, Pakistani, Bangladeshi and black Caribbean pupils in England. *Athens Journal of Education* 2(3): 193-216. <https://www.athensjournals.gr/education/2015-2-3-2-Tzanakis.pdf>
- Unruh S (2015) Struggling international students in the US: Do university faculty know how to help? *Athens Journal of Education* 2(2): 99-110. <https://www.athensjournals.gr/education/2015-2-2-1-Unruh.pdf>
- Vidanec D (2014) Implementation of the ethical knowledge in the higher economic education. *Athens Journal of Education* 1(4): 324-340. <http://www.atiner.gr/journals/education/2014-1-4-4-Vidanec.pdf>
- Walsh P (2019) Establishment of an American branch-campus model of higher education: Qatar's early goals, rationales, and challenges. *Athens Journal of Education* 6(4): 271-290. <https://www.athensjournals.gr/education/2019-6-4-2-Walsh.pdf>
- Wawrzinek D, Ellert G, Germelmann CC (2017) Value configuration in higher education – intermediate tool development for teaching in complex uncertain environments and developing a higher education value framework. *Athens Journal of Education* 4(3): 271-290. <https://www.athensjournals.gr/education/2017-4-3-5-Wawrzinek.pdf>