





## RESEARCH PAPERS IN ECONOMICS AND FINANCE

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### International mobility of students in modern conditions of transformation in the global market of services (regional aspect)

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#### ABSTRACT

Modern global processes are stated to have significantly influenced transformations in the higher education system. On the other hand, internationalisation of higher education has become a key factor in the development of global processes. Accordingly, it becomes necessary to determine the specific nature of the internationalisation processes of higher education in different countries, as well as the involvement thereof in the processes of academic mobility at establishing the educational space transformation under the conditions of globalization, at grounding the changing place and role of universities as higher education internationalisation contribute to enhancing the convergence of national educational systems, providing a significant influence on the level of competitiveness of national economies. The authors define the peculiarities of attracting countries to mobility processes and systematise the waves of international student mobility, taking into account the geopolitical and geo-economic factors of positive and negative influence of institutional drivers. Furthermore, dynamic shifts in international student mobility are calculated and the regional distribution of foreign students by educational level is determined. The purpose of the article is to identify the waves and substantiate the factors of international student mobility in the context of the transformation of the global market of educational services.

**Keywords:** geoeconomics, internationalisation, higher education, mobility, students.

#### 1. Introduction

Although internationalisation of higher education is a relatively new phenomenon in the modern world economy, the relevance of this issue has led to the emergence of a significant number of studies. Internationalisation has become not only an integral part of the continuous process of changes in higher education, the processes of internationalisation of higher education have basically become an important determinant of the development and reform of higher education. Internationalisation of education is beneficial both to universities and to national economies as a whole.

The analysis of scientific sources allows us to take up the position that the processes of internationalisation and globalization are interconnected and intertwined. Integration is a new stage of internationalisation, and its highest degree of manifestation is globalisation

(Wood, 2007). Internationalisation is a dynamic process, not a specific combination or set of isolated events that characterise the relevant phenomena (for example, integration may be considered both as a phenomenon and as a process) (Knight, Wit, 2018). The main aspects of internationalisation of higher education include (Scott, 1998, pp.117-119) the development of flows of students and administrative staff, the expansion of cooperation between universities in different countries, and, as a result, the development of flows not only of people, but also of ideas. In determining the essence of internationalisation of the higher world, it is essential to take into account the international component, which concerns not only all the components of the educational sphere, but also the place and role that education plays in the development of society as a whole. Defining the definition of internationalisation at the national, sectoral and institutional level, it is necessary to focus

on the goals and functions of higher education in the context of the integration process in the international, intercultural or global dimension (Knight, 2003, p.2).

Defining processes in the educational sphere that involve crossing borders: knowledge, mobility (Teichler, 2017, 182). On the other hand, internationalisation processes determine the general focus of changes and purposeful activities in the direction of greater "internationality". Chatlani (2018) draws attention to the global transformations that are taking place in the world's economy, affect the nature of university development and determine future trends in the internationalisation of higher education in the future. It should be noted that along with the spread and deepening of the processes of internationalisation of higher education, its globalisation, discussions related to skepticism about the internationalisation of higher education (Rhoades, 2017), the development of academic nationalism, protectionism are also actively developing (Wende, 2017).

Internationalisation contributes to the development of multilateral relations, as the processes of internationalisation from the micro to macro context develop (Heriansyah, 2014). Considering the impact of globalisation, modern universities are actively implementing their own strategies for the development of internationalisation (Rosyidah, N., Matin and Rosyidi, U. 2020), stealing relevant agreements at both regional and international levels (Jibeen, Khan, 2015).

Previous research by the authors (Bulatova, Zaikovsky, 2019) has shown that in the context of global transformations of the modern world, international cooperation has become an important indicator of the development of education, and universities themselves are becoming global institutions, with constantly increasing influence on the formation of competitive advantages of the national socio-economic system.

Internationalisation of education covers various forms of international cooperation, which are related not only to the traditional academic mobility of both applicants for higher education and teaching staff, but also to the development of new forms of institutional mobility associated with the formation and implementation of joint educational projects, the expansion of integration mobility, which is associated with the introduction of international educational standards that ensure educational integration and the creation of joint educational spaces. Along with the development of modern information technologies, opportunities for developing joint distance learning programs and courses

have significantly expanded, and new forms of e-mobility (mass open online courses) are spreading. Finally, various forms of strategic educational alliances, associations and partnerships that are actively created between universities and countries and expand new forms of institutional partnership in the global economy play an important role in the internationalisation of higher education. The information above gives grounds to consider the internationalization of higher education from two aspects:

- *internal* (provides for the introduction of an international component in all areas of University activity) and

- *external* (related to the introduction of an international component in all areas of university activity, which involves crossing national borders).

Thus, recent research, defining the essence of internationalisation of higher education, focuses on the integration process in the international dimension, which is associated with training, research activities and other functions of educational institutions. However, as it turned out in practice, globalisation has influenced the development of the processes of internationalisation of higher education so substantially that now the latter has become an important factor in the development of global processes. Accordingly, it is necessary to determine the features of internationalisation processes not only at the national level. Thus, it is of great significance and relevance to determine the specific nature of the higher education internationalisation processes in different countries, as well as the involvement thereof in the academic mobility processes, etc.

## 2. Modern transformations in the global market of educational services

Modern global processes have significantly influenced the transformation of the higher education system, which is confirmed by the following: promotion and expansion of academic mobility, development of new forms of mobility (institutional, electronic), formation of international campuses, development of international scientific cooperation and deepening of global competition for talents, which together contribute to the development of the world knowledge economy. The global gross enrollment rate for higher education in the world economy as a whole increased from 14% in 1993 up to 38% in 2017 (the average for the same period increased from 55% in 1993 up to 77% in 2017) (World Economic Situation and Prospects, 2019). Argentina, Brazil, China, India, Indonesia, the Russian Federation, Saudi

Arabia, South Africa, and other countries have had the main impact on global growth in higher education coverage over the past decade. In 2005, almost every sixth person in the world aged 25-34 with higher education was from the United States. Since 2013, China has taken the first position (17%), followed by the United States and India accounting for 14% each. Maintaining this trend will ensure the dominance of China and India among the G20 countries in terms of young people aged 25-34 with higher education. The forecast expectations for 2030 are 300 million people, while the European Union and the United States together make up less than a quarter (OECD, 2015).

In the wake of the gradual expansion of the knowledge economy expectations (Global Trends in Higher Education and geographic perspectives, 2017, Education Indicators Focus, 2015) regarding education provision, it is estimated that the level of primary education coverage of population in the whole world economy will be 91%. More than a half of the world's population (55%) will have secondary / higher education, and the knowledge gap between the developed and developing countries will be reduced. The number of young people with higher education (25-34 years) in the OECD and G20 countries will continue to grow. The increase will be mainly provided by countries such as China and India, the contribution of which to the formation of labour force with higher education in mathematics, technology and natural sciences until 2030 is estimated to be 60% of the total labour force of the G20 countries.

The growth of the middle class increases the demand for quality education. Early in 2017, the middle class of the world's economy constituted about 3.2 billion people (Kharas, 2017, pp. 11-15). About 140 million people join the middle class every year – which means that by 2020, half of the world's population will be in the middle class. While the growth of the middle class is slow in developed countries, in developing countries this growth increases every year, and especially in China and India, where the quantitative assessment of the middle class is 350 million and 380 million respectively. As a result, by 2030, people of Asian origin will account for 2/3 of the world's middle class. In developed countries, middle-class consumption is growing from 0.5 up to 1% annually, meanwhile in developing countries, consumption is growing much faster – from 6 to 10%. The growth in the consumption of the middle class is becoming a relevant driver of development and growth. This will require an appropriate

response from higher education schools, which should satisfy more demanding consumers of educational services. In addition, the increase in life expectancy, the development of medical technologies will affect the increase in the number of non-traditional students of older age, and thus, the demand for new retraining programs, re-education, professional development, etc., will increase every year.

The increasing interdependence and interconnectedness of the world's countries requires appropriate skills from the workforce, which are increasingly important in the global context. Markets are becoming more globalised, and as a result, education received abroad contributes to getting closer to these markets.

### 3. International student mobility: regional shifts

The number of international students is growing annually in the world, given indicators of academic mobility, as shown in Figure 1. According to UNESCO, in 1990 the number of international students was 1.3 million, in 2000 – about 2 million, and in 2017 their number was just over 5 million.

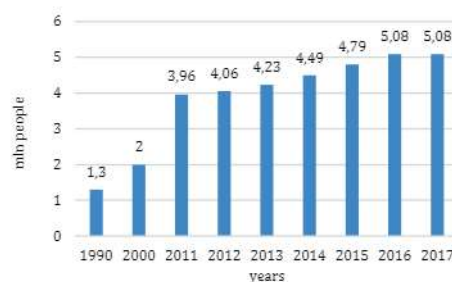


Figure 1. Dynamics of the number of international students in the world, million people  
Source: own research

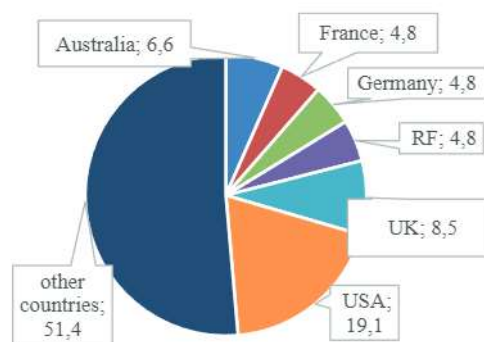


Figure 2. Main countries for attracting foreign students in %  
Source: own research

International student mobility is actively developing in favour of the OECD countries. Almost half of the total number of foreign students in 2017, selected the curriculum and were enrolled in such countries as the USA (971,4 thousand students or 19.1% of the total), the UK (432,0 thousand or 8.5%), Australia (335,5 thousand or 6.6%), France (245,3 thousand people or 4.8%), Germany (244.6 thousand people or 4.8%) and the Russian Federation (343,8 thousand people or 4.8%) (Figure 2). Among European countries, flows of academic mobility from the South to the North are linked to the impact of the Euro crisis. Special attention should be paid to academic mobility of the most populous countries of the world – China and India, which is associated with the return of ethnic diasporas to their historical homeland. Thus, the change in the number of foreign students is extremely uneven among countries that occupy the leading positions in the market of educational services. The main directions of flows of students, doctoral students and researchers are flows from Asia, directed to the United States (the largest flows), to Europe, and so on.

As the level of education increases, the number of foreign students in both absolute and relative dimensions increase (Figure 3). For example, in OECD countries, the share of foreign students in the total number of undergraduate students (which is 3.52 billion students) is 4% (OECD (2018), p.220). Luxembou-

urg (27%), Austria (18%), New Zealand (16%), Australia and the United Kingdom (14% each), Canada and Switzerland (10% each) show the highest level of student enrollment in undergraduate programs. The percentage of foreign students enrolled in master's programs is already 12%, and in some countries it is still much higher – in Luxembourg (73%), Australia (46%), the UK (36%), Switzerland (29%), New Zealand (26%), Austria, Belgium (20% each). Among post-graduate students who master educational and research programs in the OECD countries, in fact, one in four is a foreign applicant, and in some countries their share exceeds 40%, among them Belgium, France, Luxembourg, the Netherlands, New Zealand, Sweden, Switzerland, the United Kingdom. In the United States, among the leading countries in attracting foreign students, the share of the latter almost coincides with the general indicators for OECD countries, although they are the largest in terms of the number of students in absolute terms, which is 0.97 billion foreign students. The attractiveness of educational programs also increases with each new level: 4% of foreign students study in the bachelor's programs, one in ten in the master's programs, and 40% in the doctoral program. It should be noted that students from the United States prefer British universities (one in five American students enroll in educational programs at universities in this country).

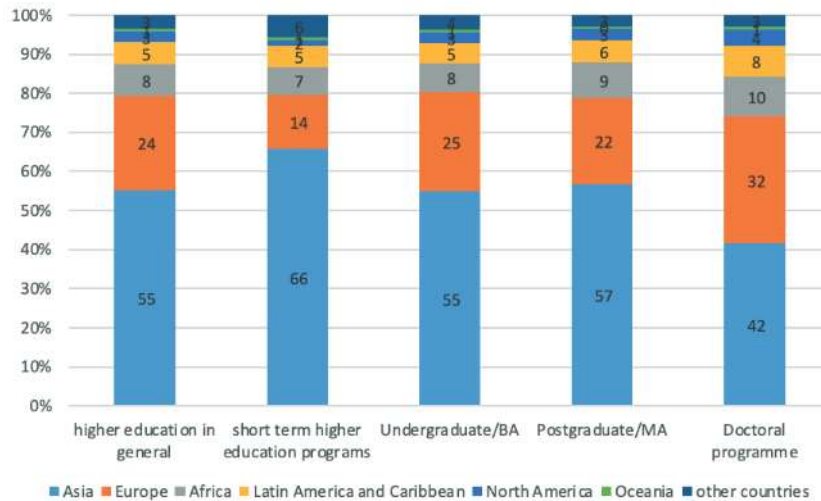


Figure 3. Regional distribution of foreign students by level of education (2016, in %)

Source: own research

Among foreign students who have come to study at OECD higher education institutions, the largest number is represented by students from Asian countries – 55% of the total number of foreign students' study at the bachelor's programs, 57% at the master's programs and 42% at the doctoral programs. First and foremost, these are Chinese students, whose number at all levels of higher education is 0.86 billion in the OECD countries. 2/3 of Asian students are from universities in three countries – the United States (38%), Australia (15%) and the United Kingdom (11%). Students from developing countries prefer universities from such developed countries that have certain historical, cultural and linguistic ties (including former metropolis countries). Thus, about 75% of students from African countries choose to study at universities in France (35%), the UK (12%) and Germany (7%), among Latin American students in OECD countries, 12% choose to study in Spain, and students from the former Soviet republics tend to study in the Russian Federation, where Azerbaijan (6%), Belarus (6%), Kazakhstan (28%), Turkmenistan (7%), Ukraine (9%) and Uzbekistan (8%) are represented in the structure of foreign students (OECD (2018), 221). It should be noted that the language factor is one of the key ones when it comes to choosing the country of study for foreign students. Undoubtedly, English-language higher education programs have an advantage. This explains why four countries – the United States, the UK, Canada and Australia account for more than half of foreign students.

A quarter of international students in OECD countries are from European countries (0.845 billion people). This high level of mobility has made it possible, first of all, to develop the European higher education space, which has a high level of academic mobility (1.6 billion students according to 2016 data). 4/5 of European students choose to obtain higher education

diploma in another European country, the leaders of which are France and Germany, the main host countries for foreign students.

In summary, we should highlight the positive and negative consequences of the expansion of international academic. The increase in the number of foreign students is positively perceived by the countries to which they come to study, as they expand the demand in the domestic market, provide additional foreign exchange earnings and develop the national labour market. Attracting foreign researchers contributes to the development of innovation in national economies. At the same time, attention should be paid to the negative effects of expanding international mobility.

There are risks of transforming universities into global markets, where the disproportionate privileges of foreign students in relation to local students arise, and hence the problems of xenophobia and discrimination. In this case, the internationalisation of higher education acquires the characteristics of an elite project, which strengthens sentiments against the use of English for teaching and learning; against the use of the university rating system and other forms of manifestation of "academic capitalism", which intensifies discussions on academic protectionism. Another potential risk of internationalisation is brain drain (a particularly crucial issue for developing countries).

#### 4. Waves of International Student Mobility

In the development of international student mobility, three waves can be identified which are determined by the corresponding trends and factors affecting student mobility (Choudaha, 2017). They are systematised in Table.1.

The development of the first wave of international student mobility in the world was primarily determined by the rapid development of information and communication technologies,

Table 1: Waves of International Student Mobility

Waves	Period	Geopolitical and Geo-economic Factors of Influence	Students Demand	Institutional Drivers
First wave	1996-2006	development of information and communication technologies, dissemination of the Internet, terrorist attacks on the United States, increased global demand for highly skilled labour force	financial support	research
Second wave	2006-2013	financial and economic crisis	academic support	finance
Third wave	2013-2020	China's economic slowdown, Brexit, D. Trump's policy	career support	innovations

Source: own research.

the deepening of international competition in the scientific and technical fields, and, as a result, the increasing demand for highly trained labour force. This was facilitated by the processes of increasing funding for research in the leading countries, which actively attracted talented young people. Attracting talented international students is recognised as a strategic benchmark for the United States, which will provide economic advantages. The deepening of cooperation between European countries in the field of education, the adoption of the Great Charter of Universities, the Bologna Declaration and the definition of the fundamental principles of the European educational and scientific space (university autonomy, unity of science and education, freedom of research, education and training, etc.) have positively influenced the expansion of students' academic mobility. Of about 2 billion foreign students, 22.7% studied in the United States, among European countries; the leaders were the United Kingdom (10.6% of the total number of foreign students), France (6.5%), and about 5% of students studied in Australia. In addition to these countries, Germany, Japan, Belgium, South Africa, Spain and Canada are among the top ten countries that accounted for more than half of foreign students (over 1.3 billion). The main countries supplying students during this period were China, South Korea, Greece, Japan, India, Malaysia, Germany, Turkey, France and the United States.

The first wave of mobility is characterised by high motivation of foreign students themselves, a significant part of whom chose Master's and Doctoral programs at research universities, which already required from students to have a high training level, so their training level was in line with academic expectations. High motivation of foreign students was influenced by the corresponding state policy of these students' countries of origin. Thus, China's strong economic growth, development of the middle class, political stability, government incentives for Chinese students who return to their homeland, improved quality of life, support for professional self-realization, ideas of national patriotism, and a sense of a common national goal contributed to an increase in the number of returning Chinese students (Kellogg, 2012, p. 15). Due to the return of highly qualified specialists trained abroad, numerous high-tech companies emerged in China, contributing to the progress of development of the Chinese economy.

Among the geopolitical factors affecting academic mobility, which also determined the nature of the first wave, we should separately highlight the terrorist attacks on the United

States in September 2001, which caused an increase in the level of terrorist threats in the world affecting visa restrictions as well as training of foreigners.

During the second wave, students' academic mobility was expanded due to a significant impact of the financial and economic crisis, as a result of which financing of the educational field was significantly changed in the countries of the world economy which were the leading centers of foreign students' training. It is at this time that the place and role of foreign students are being reviewed, as in the short term they have become an important source of budget revenues (tuition fees, costs of domestic consumption by foreign students), which increases the impact on the countries' balance of payments. For foreign students, the cost of tuition is higher than for domestic students in Australia, Austria, Belgium, Canada, Denmark, Estonia, Ireland, the Netherlands, New Zealand, Russia, the United Kingdom, and the United States. France, Germany, Italy, Japan, Korea, Mexico and Spain used the same tuition rates for both domestic and foreign students (OECD, 2010, pp. 310-317).

In the long-term perspective, attracting foreign students may become an important source of highly skilled labour force. In many developing countries, studying abroad is beginning to be seen as an important alternative to the national educational system development support under the conditions of limited resources, which has a positive effect on the effectiveness of providing education to citizens. The majority of foreign students in this period are accepted by Australia, France, Germany, the United Kingdom and the United States, and the main countries that provide students are China and India.

The following main factors will determine the nature of the development of the third wave in the future:

- slowdown in the economic growth in China, the largest supplier of foreign students;
- exit of Great Britain from the European Union – the largest EU country by the number of foreign students;
- change in the political course of the United States associated with the election of D. Trump as President of the United States – the world's largest country, where one in five students is a foreign student.

The restrictive migration policy implemented by the Trump administration has significantly affected foreign demand for higher education in the United States and reduced the quantitative results of international student mobility. Thus, despite the fact that the total number of foreign students who receive edu-

cation at American universities remains the highest in the world, the number of new international students amounted to about 272 thousand people, which is 6.6% less than the pre-

vious year and 10% less than in the 2015-2016 academic year, when the largest number of foreign students joined American universities (Table 2) (Open Doors, 2018).

Table 2: Number of new international students enrolled in US universities

Educational program	Academic year							
	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Bachelor's course	84 543	90 903	102,069	109,486	112,765	119,262	115,841	108,539
Master's course	89 505	92 211	100,129	108,519	121,637	126,516	124,888	117,960
Other programs	40 442	45 353	48 722	52 123	59 364	54 965	50 107	45 239
In total	214,490	228,467	250,920	270,128	293,766	300,743	290,836	271,738
Annual change, in %	5.7	6.5	9.8	7.7	8.8	2.4	-3.3	-6.6

Source: own research.

Among the factors that check the mobility of foreign students, visa procedures (delays, restrictions, etc.), which are associated with the changes in foreign policy implemented by the Trump administration make the most negative impact. The social and political environment in the United States, as well as the cost of education have a significant impact (Table 3). In turn, among the factors of positive influence one can distinguish strengthened career guidance, a university's profile abroad, interaction with students who have already been attracted to American universities.

The total number of foreign students studying at universities in the European Union in 2017 was 1.7 million, a significant number of whom (25.5%) were from universities in the UK. The majority of foreign students studied either for a bachelor's degree (45.6%) or for a master's degree (41.9%), while 9.3% studied for a doctorate. At present, Europe attracts 45% of all international students worldwide, but reducing the number of foreign students remains an urgent problem for EU countries.

According to expert estimates of the international company Hobsons (Redden, 2016), which conducted a survey among students of British universities on the eve of the Brexit referendum,

35% of foreign students who came to study at UK universities from non-EU countries, and 82% of students from EU countries found it less attractive to study at UK universities should the country leave the EU. The number of students from EU countries studying at the UK universities, which had been steadily increasing every year, began to decline after the announcement of Brexit. While the number of students increased by 7% in the 2016-2017 academic year, the number of students decreased by 3% in the 2018-2019 academic year, including 9% for postgraduate studies (Jack, 2019). It can be assumed that the situation will only become more complicated, since the UK will not be able to receive research grants under the Horizon 2020 program, the European research Council, or participate in the Erasmus+ program under the previous conditions after leaving the EU. In addition to uncertainty in relation to students from the EU countries, current anti-migration attitude in the implementation of Brexit also does not attract foreign students from other countries to study at British universities. They are likely to redirect their applications to universities in Canada, Australia, EU countries, where the learning environment is more certain and where there is no anti-migration attitude.

Table 3: Waves of International Student Mobility

Negative influence factors	In %	Positive influence factors	In %
Visa procedure	83	Strengthened career guidance	58
Social and political environment in the United States	60	University's increased profile abroad	48
Admission to universities in other countries	59	Interaction with the previously-enrolled students	47
Tuition fee	55	Deepening cooperation with recruitment agencies	26
The feeling of undesirability in the United States	49	Growth of scholarship programs for international students	24
Employment in the United States after graduation	44	Strengthened cooperation with foreign universities	23
Physical security in the United States	44	Government scholarship programs	21

Source: own research.