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# The Global Higher Education Market: Dynamics and Turbulence





#### Abstract.

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The relevance of the article is explained by the dynamics of the global education market development. The purpose of the article is to identify the main trends in higher education, i.e. the rapid increase in the number of students, the population with higher education, and international students. The increase in demand for higher education is reflected not only by the increase in the number of students, but also by the increase in the level of education of the population in general. The rapid growth in the number of students in the world is accompanied by another important trend - an increase in its international segment. The process of internationalization of education is manifested in the growth of the number of foreign students in the world in absolute and relative terms. The structure and development trends of the global education market have been disclosed (the increase in the number of international students by countries and in general, the market share of countries). This trend means that along with the rapidly growing part of other countries in the global market,

there are new actors, who have\_choosen an active strategy of educational services exports.

**Keywords**: higher education, global market, international students, foreign students.

The competitive advantages of the country and its actors in the modern globalized and computerized world are provided not so much by the capacity of basic industries as by many factors related to the quality and activity of human resources. The education sector is becoming an important bridgehead to ensure international competitiveness of each country and, moreover, it is involved in the process of internationalization.

Strengthening of internationalization and globalization have a transformative impact on the economic conditions and the forms of organization of educational activities. The main current trends should include the following: increasing the scale of education in the knowledge economy; diversification of funding sources and the organizational forms of educational activities; internationalization and globalization of education.

The availability of intellectual resources is a prerequisite for achieving intellectual leadership of the country, expanding its capabilities in the knowledge economy in a globalized world. The growth in demand for higher education is explained by such indicators as the increase in student population and the proportion of the population with higher education. According to Table 1, you can follow the process of the rapid growth in the number of students in higher education institutions in individual countries and the world at large. For 17 years, from 1999 to 2016, the student body in the world grew by 232%, reaching from 93 to nearly 216 million. The increase in the number of students is observed in all countries, but mostly in the countries with transition economies and dynamic development (Table 1).

The majority of the countries in the TOP-10 are developing countries, showing an increase at least at the level of the average global growth over a specified period. Absolute championship is held

		%			
	2005	2006	2015	2016	2016/2005 or the most relevant year
Turkey	2 106 351	2 342 898	6 062 886		287,84
India	11 777 296	12 852 684	32 107 419	32 391 800	275,04
Luxemburg		2 692	6 896		256,17
China	20 601 219	23 360 535	43 367 394	43 886 104	213,03
Hong Kong (China)	152 294	155 324	298 643	300 316	197,19
Colombia	1 223 594	1 314 972	2 293 550	2 394 434	195,69
Chile	663 694	661 142	1 221 774	1 236 701	186,37
Brazil	4 572 297		8 285 475		181,21
Mexico	2 384 858	2 446 726	3 515 404	4 244 401	177,97
Netherlands	564 983	579 622	842 601	836 946	148,14
Switzerland	199 696	204 999	294 450	295 149	147,80
World	139 648 065	147 371 357	214 083 295	215 945 197	154,64

#### TOP-10 COUNTRIES BY INCREASE IN NUMBER OF STUDENTS, 2005–2016

Source: compiled after<sup>1</sup>

by Turkey, India and China with the increase of more than 200%. Of course, one of the reasons for such an increase in student contingent is the large population and the presence of significant potential for the expansion of higher education. It is noteworthy that the advanced countries of the world do not demonstrate the high dynamics of the number of students because of the high level of education of the entire population.

Thus, among the leaders there are 4 countries, where the number of students exceeds one million. There are also more than one million students in countries such as China, India, the USA, Brazil, Russian Federation, Turkey, Japan, Mexico, Korea, Germany, France, Great Britain, Colombia, Spain, Australia, Ukraine, Poland and Chile. These countries account for 68.65% of the total number of graduates. In general, countries have rather significant differences not only in the number of students, but also in the total number of people with higher education. For instance, despite the high growth of the number of students, in China, less than 10% of the population have higher education, which is one of the lowest rates among the countries under investigation. A similar situation can be noted for India, Colombia and Argentina. In general, according to the OECD, the proportion of people with higher education varies greatly (Fig. 1).

The 21st century has brought new waves and processes for the development of higher education and the global market for educational services. These are rapid processes and undeniable tendencies of globalization, the internationalization of higher education, the spread of its mass character and the intensification of competition at all levels, and



Figure 1. Share of people with higher education in OECD countries, 2016,  $\%^2$ 

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<sup>&</sup>lt;sup>1</sup> Enrolment in tertiary education, total number. UIS. UNESCO. URL: http://data.uis.unesco.org/#

 <sup>&</sup>lt;sup>2</sup> Educational attainment and labour-force status. OECD.
URL: https:stats.oecd.org/Index.aspx?DataSetCode=EDU\_
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so on. These trends were so clear that they were identified as dynamic vectors for the development of higher education. The first confirmation of this was the rapid increase in the number of foreign students in the world, with rates higher than the total number of students. The number of foreign students slowly increased from 0.8 million in 1975 to 1.7 million in 1995. From the beginning of the XXI century it is gaining momentum: in 2005 - 3.0 million, in 2010 - 4, 2 million, in 2011 - 4.4 million, in 2014 - 4.6, in 2016 - 5,0 million people. Table 2 presents data on the general and regional dynamics of the number of foreign students in the world.

Table 2 DYNAMICS OF THE NUMBER OF FOREIGN STUDENTS IN THE WORLD  $^{1}$ 

	2000	2005	2010	2011	2016
Worldwide	2,1	3,0	4,1	4,3	5,0
OECD	1,6	2,4	3,2	3,3	3,5
Non-OECD	0,5	0,6	0,9	1,0	1,5

In recent years, the turbulence of the global educational environment has undergone rapid changes, which rapidly change the balance of forces and cause the emergence of new processes and phenomena. This is manifested, above all, in reducing the market share of OECD countries. In general, the share of OECD countries fell from 76.2% to 70.0% during 2000-2016. The positions of many active figures (Australia, Austria, Germany, France, Great Britain and others) have decreased or remained at the same level, although the total number of foreign students has increased.

The most attractive for students are the educational systems of the United States, Great Britain, Australia, Russia, France, Canada, Germany and Japan, where the number of students from abroad exceeds the number of those who left the country by more than 100,000 people. Table 3 presents data on the number of foreign students in the countries with the highest dynamics for 2012–2016. These countries have the largest share of the world market of foreign students (more than 1%) (Table 3).

At the same time, volatility in attractive countries is much lower and demonstrates a steady tendency to an increase of the balance. Australia, Canada, the USA, the Russian Federation and the Netherlands have the highest growth, with rates of 68%, 375%, 56% and 233%, respectively. It should be noted that the growth of the number of foreign students in Russia is due to the involvement of students from Asia, while European countries have a broader geography of students. Table 3

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	OF THE WORLD MARKET (%), $2012-2016^2$								
Australia $249\ 588$ $335\ 512$ $6,2$ $6,6$ Austria $58\ 056$ $70\ 484$ $1,4$ $1,4$ Belgium $42\ 914$ $61\ 102$ $1,1$ $1,2$ Canada $135\ 187$ $189\ 478$ $3,3$ $3,7$ France $271\ 399$ $245\ 349$ $6,7$ $4,8$ Germany $196\ 619$ $244\ 575$ $4,9$ $4,8$ Italy $77\ 732$ $92\ 655$ $1,9$ $1,8$ Japan $150\ 617$ $143\ 457$ $3,7$ $2,8$ Korea $59\ 472$ $61\ 888$ $1,5$ $1,2$ Netherlands $57\ 506$ $89\ 920$ $1,4$ $2,2$ New Zealand $40\ 995$ $53\ 854$ $1,0$ $1,1$ Poland $23\ 525$ $54\ 734$ $0,6$ $1,1$ Spain $55\ 759$ $53\ 409$ $1,4$ $1,1$ Switzerland $44\ 468$ $51\ 911$ $1,1\ 1,0$ United Kingdom $427\ 686$ $432\ 001$ $10,5\ 8,5$ USA $740\ 482$ $971\ 417$ $18,3\ 19,1$ China $88\ 979$ $137\ 527$ $2,2\ 2,7$ Malaysia $56\ 203$ $124\ 133$ $1,4\ 3,1$ RF $173\ 627$ $243\ 752$ $4,3\ 4,8$ Saudi Arabia $46\ 566$ $79\ 854$ $1,2\ 1,0$ South Africa $42\ 180$ $82\ 553\ 1,0\ 1,6$ Turkey $38\ 590$ $87\ 903\ 1,0\ 1,7$ Ukraine $43\ 609$ $54\ 144\ 1,1\ 1,1$ UAE $54\ 162$ $77\ 463\ 1,3\ 1,5$ </td <td>Countries</td> <td>of foreign students,</td> <td>of foreign students,</td> <td colspan="3">global market</td>	Countries	of foreign students,	of foreign students,	global market					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Austria Belgium Canada France Germany Italy Japan Korea Netherlands New Zealand Poland Spain Switzerland United Kingdom	$\begin{array}{c} 58\ 0.56\\ 42\ 914\\ 135\ 187\\ 271\ 399\\ 196\ 619\\ 77\ 732\\ 150\ 617\\ 59\ 472\\ 57\ 506\\ 40\ 995\\ 23\ 525\\ 55\ 759\\ 44\ 468\\ 427\ 686\end{array}$	$\begin{array}{c} 70 \ 484 \\ 61 \ 102 \\ 189 \ 478 \\ 245 \ 349 \\ 244 \ 575 \\ 92 \ 655 \\ 143 \ 457 \\ 61 \ 888 \\ 89 \ 920 \\ 53 \ 854 \\ 54 \ 734 \\ 53 \ 409 \\ 51 \ 911 \\ 432 \ 001 \end{array}$	$\begin{array}{c} 1,4\\ 1,1\\ 3,3\\ 6,7\\ 4,9\\ 1,9\\ 3,7\\ 1,5\\ 1,4\\ 1,0\\ 0,6\\ 1,4\\ 1,1\\ 10,5\end{array}$	$\begin{array}{c} 6,6\\ 1,4\\ 1,2\\ 3,7\\ 4,8\\ 4,8\\ 1,8\\ 2,8\\ 1,2\\ 2,2\\ 1,1\\ 1,1\\ 1,1\\ 1,0\\ 8,5 \end{array}$				
	Malaysia RF Saudi Arabia Singapore South Africa Turkey Ukraine	56 203 173 627 46 566 48 938 42 180 38 590 43 609	124 133 243 752 79 854 53 122 82 553 87 903 54 144 77 463	1,4 4,3 1,2 1,2 1,0 1,0 1,1	3,1 4,8 1,6 1,0 1,6 1,7 1,1				

THE NUMBER OF FOREIGN STUDENTS IN SOME COUNTRIES OF THE WORLD AND THE SHARE OF THE WORLD MARKET (%), 2012–2016<sup>2</sup>

The most attractive for foreign students is the United States, while it is possible to maintain its leadership positions through very active actions to attract foreign youth. At the same time, due to President Trump's adjustment policies, the United States has suffered a sharp decline in the inflow of foreign youth over the past year.

Against this background, Canada and European countries are improving their position. There were new active actors in 2007-2016: China (increased its share from 1.4 to 2.7%, and the total number of foreign students by 2.5 times — from 42.1 thousand to 137.5 thousand), Saudi Arabia (from 0.6% to 1.6%, the number of students increased by more than 4 times — from 17.7 thousand to 79.9 thousand), the Russian Federation (from 2% to 4,8%, the number of students increased by 3.5 times — from 60.3 thousand to 243.8 thousand) and others. In general, among the countries leaders of the world market of educational services are: the USA, Great Britain, Australia, Germany, etc.

<sup>&</sup>lt;sup>1</sup> Education at glance 2013-2016. Paris: OECD...

<sup>&</sup>lt;sup>2</sup> Systematized by the author according to UNESCO. UIS. UNESCO...

Internationalization of education is manifested not only in the growth of the number of foreign students. Academic mobility as an expression of the internationalization of higher education itself is extremely diverse and has the following forms: the outflow of scientists abroad for work, internship, teaching (for a short time), participation in conferences; joint scientific work (writing articles, monographs, performing research grants); participation of students, postgraduates and teachers in various short-term training programs (courses, certificate programs, summer schools, etc.).

An important indicator of the export orientation of the economy is the ratio of foreign students and the total number of students in their country. Among OECD countries, the number of foreign students in relation to the total number of students in the country is the largest (44%) in Luxembourg. This figure is 19% in New Zealand, 18% in Australia and the United Kingdom, 17% in Switzerland, and 15% in Austria. On average, foreign students account for 6% in OECD countries, and 8%<sup>1</sup> in the EU-22.

Of course, for each country, the issue is important not only to attract foreign students to their national education system, but also to manage the dynamics of their youth outflow for studying abroad. It should be noted that this indicator is under the influence of many factors. The increase in the abroad travels for training is not always due to the unfavourable situation in the country. The impact of globalization manifests itself in the fact that young people are increasingly active in their search. As a result, we can see that both emerging and developed countries are leading importing countries.

Table 5 shows data on the number of foreign students by country of origin. Among the main leaders of the importing countries, we can see different countries: China, the USA, Saudi Arabia, Turkey, Japan, Vietnam, Russia, etc. Characteristically, the dynamics of the departure of young people abroad for the purpose of education is also very diverse in different countries. In countries such as Greece, Turkey, Japan, and the United Kingdom, the number of student dropouts tends to decrease. While countries such as Saudi Arabia, Vietnam, Brazil, Russia, Mexico, Ukraine, the USA, Georgia, Tajikistan and others, show a clear upward trend.

	1					ļ
Countries	Share of	A 07				
	All higher	Short	Bachelor	Master	Doctoral	Δ%, 2014/2013
	education	programs	programs	programs	programs	2011/2010
Australia	18	13.3	13.1	40	34	6
Austria	15	1.0	18.6	18	25	8
Belgium	11	4.9	8.2	20	37	24
Canada	10	9.0	8.1	14	27	12
Denmark	10	13.1	5.5	17	30	2
Finland	7	-	5.2	12	19	4
France	10	4,4	7,3	13	40	3
Germany	7	0	4,4	12	7	7
Ireland	7	1,1	5,8	14	23	11
Japan	3	3,4	2,5	8	19	2
Luxemburg	44	11,3	25,3	68	85	3
New Zealand	19	27,4	14,3	23	45	18
Sweden	6	0,2	2,4	9	33	0
Switzerland	17	0	9,9	28	53	5
United Kingdom	18	5,5	13,7	37	42	3
USA	4	2,0	3,5	9	35	7
OECD	6	3,0	4,9	12	27	5
EU22	8	4,5	6,1	13	22	4

#### INTERNATIONAL STUDENT MOBILITY IN OECD COUNTRIES,<sup>2</sup> %

Table 4

<sup>&</sup>lt;sup>1</sup> Education at a Glance 2016: OECD Indicators ...

<sup>&</sup>lt;sup>2</sup> Education at glance 2016 Paris: OECD. URL: www.oecd.org/

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Table 5

Table 6

OF ORIGIN <sup>1</sup>						
Countries	1998	2000	2010	2015	2017	Δ %, 2017/1998
China	151 055	165 348	570 449	818 803	847 259	561
USA	38 208	43 482	57 506	67 356	68 580	180
Saudi Arabia	9 941	10 626	42 651	86 223	85 277	858
Vietnam	7 858	9 148	47 268	68 038	70 328	895
Russia	26 096	28 634	50 403	57 332	56 915	218
Turkey	51 067	51 604	51 885	45 921	45 331	89
Ukraine	13 064	20 891	36 203	68 279	76 181	583
Greece	62 059	63 676	29 226	37 092	37 484	60
Latvia	2 875	3 005	5 064	5 804	5 737	200
Japan	57 088	59 302	40 330	30 491	30 850	54
Brazil	15 596	17 274	27 753	42 645	43 438	279
United Kingdom	28 142	22 328	24 600	31 433	33 109	118
Mexico	13 149	14 230	26 072	30 194	30 646	233
Thailand	21 553	21 007	28 304	28 672	29 768	138
Sweden	12 819	12 601	15 540	17 378	17 567	137
Azerbaijan	4 882	4 862	14 302	39 970	41 762	855
Georgia	3 857	4 367	8 736	8 888	9 084	236
Tajikistan	1 292	1 396	8 342	15 677	20 623	1596

THE NUMBER OF STUDENTS STUDYING ABROAD — EMIGRANTS FROM THE COUNTRY OF ORIGIN $^{\rm 1}$ 

In Ukraine, the number of foreign students demonstrates high, but not stable dynamics (Table 6), since from 2000 to 2014 it increased by more than three times — to 60 thousand people.

But from 2014, with the onset of dramatic events in the south and east of the country, the number of foreign students is constantly decreasing. Among foreign students there are 1.3 thousand

#### DYNAMICS OF FOREIGN STUDENTS IN UKRAINE, 2000 - 2017<sup>2</sup>

	2000	2005	2010	2012	2013	2015	2016	2017
Number of foreign students in the country, total % of the total number of students in the country	17 210 0,8	29 614 1,0	38166 1,3	49 044 2,3	59391 2,9	53493 3.33	52147 3.3	48991 3.2
Number of Ukrainian students studying abroad, total % of the total number of students in the country	20 891 1.0	26 698 0.9	36 203 1.2	37 425 1.8	42 441 2.1	68 279 4.3	76 185 4.8	76 181 5.0

<sup>&</sup>lt;sup>1</sup> Education. UNESCO UIS Database ...

<sup>&</sup>lt;sup>2</sup> State Statistic Service of Ukraine. URL: http://www.ukrstat.gov.ua/

from China, 3.7 thousand from Turkmenistan, 7.7 thousand from India, 6.7 thousand from Azerbaijan. Along with this, the opposite is the alarming trend: a sharp increase in the outflow of Ukrainian youth to study abroad. If earlier their number was at the level of the number of foreign students in the country or even less, at the beginning of the 2017/18 academic year, 76 181 Ukrainians (1.5 times more than the number of foreign students in Ukraine) were already studying abroad.

#### Conclusions

The development of the modern education market at the global level is characterized by dynamics and complex structural processes associated with increased competition among countries. The centres and, respectively, the leading export-education countries have been formed. Rigid competition is constantly changing the position, however, the unconditional leaders remain: the United States, Great Britain, Australia, France, Germany, Russia, Japan, and Canada. New actors gradually replaced the leaders: China, Turkey, Saudi Arabia, Korea, South Africa, and others. The most attractive for foreign students is the curriculum of the master's and doctoral levels. The landscape of imports of educational services is also changing. The most active donors of foreign students are very different countries: strong countries (the USA, the UK, Japan), successful developing countries (Turkey, Brazil, Mexico), as well as the countries with some developmental problems (Ukraine, Vietnam, Georgia and etc.).

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