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INTERNATIONALIZATION OF HIGHER EDUCATION: A CASE OF RUSSIAN UNIVERSITIES

Abstract. Our paper tackles the long-discussed processes of internationalization and globalization that is taking place in the sphere of higher education. We determine the levels and the attributes of internalization management of higher education on the global, national, and institutional level.

Our findings show that the main problems of Russian education are embedded into its integration into the global education area. We formulate these findings in the structured and holistic form. In addition, we carry out the comprehensive evaluation of attractiveness of Russian education in the world according to the student mobility criteria. We employ the quantitative evaluation of universities' internationalization level and its implementation using Russian top universities included in the QS World University Ranking as an example. Moreover, we propose a method for evaluating the internationalization level of universities that is universal and can be applied not only to Russian universities but on the wider world-wide level.

Keywords: internationalization, globalization, education, evaluation, institutional environment, Russian Federation

JEL classification: I3, I21, I28, P30

Introduction

Among many challenges Russian Federation faces today is the one of integration into the new global educational environment by involving Russian universities into internationalization and globalization processes. In this sense, the problem of internationalization of national education system in general and internationalization of its separate educational and business entities in particular become very important (Koudelkova et al., 2015).

The authors have taken this as an axiom that needs no proof the fact that internationalization is one of the factors which increases competitiveness of educational systems in general and of certain universities in particular (see Knight, 2007; Saginova, 2003; or Saginova, 2005). However, many researchers agree that the level of internationalization of Russian education is not high enough (see e.g. Smolentseva, 2003; Kirtchik, 2012; or Marginson, 2014).

The objective of the article is to elaborate methodological support that helps to carry out the quantitative evaluation of the university's internationalization level and to implement it using Russian top universities included in the QS World University Ranking as an example. The logical model of our research is shown in Table 1 that follows.

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Table 1. The logical research model of the Russian universities' internationalization

Object of the research	Internationalization and globalization in the sphere of higher education	
Theoretical review	Definition of internationalization and globalization of education	Management levels of higher education internationalization process
Empirical studies of the internationalization level	Evaluation of Russia's position in student academic mobility	Evaluation of Russian universities' level of internationalization

Source: Own results.

The objects of the research are the processes of internationalization and globalization in the sphere of higher education. The methods of investigation used by the authors include deduction, comparative and structural-logical analysis, as well as total placings method.

This paper is structured as follows: Section 2 provides an overview of the internationalization and globalization in the sphere of education. Section 3 brings the evaluation of Russia's position in the student academic mobility. Section 4 evaluates the internationalization level of Russian universities and includes the empirical model and its results. Finally, section 5 concludes summarizing the main findings and listing some useful policy implications.

Internationalization and globalization in the sphere of education: a theoretical review

Definition of internationalization and globalization processes of higher education

Internationalization and globalization processes are of key importance among the factors that determine the modern development of higher education system in the world (see Grishin, 2013). Different experts define the notion of internationalization of education differently. Knight (2003, 2007) has formulated the definition of internationalization of education that has been accorded wide recognition in the professional environment. According to her, internationalization is the process of integrating an international, intercultural or global dimension into the teaching, research and service functions of the institution. An important feature of the definition proposed by Knight is the fact that it reveals the interrelation of all the functions of the higher education in the process of internationalization and its comprehensive influence on these functions. So, internationalization in the sphere of higher education on the national, sector and institutional levels is the process in which the objectives, functions and organization of educational services provision acquire international dimension. It is also worth mentioning that experts distinguish such notions as internal and external internationalization. External internationalization is international academic mobility (education abroad, cross-country education, trans-border education). Internal internationalization is the implementation of world educational standards, intercultural programs, internationalization of educational programs and courses.

As for globalization, we think that the best definition of this term was given by Khazbulatov (2012). He sees this notion as a whole new process (and phenomena) of internationalization of all the social and economic spheres in the context of the contemporary stage of the international differentiation of labor which takes place on the basis of information and computer technology (Khazbulatov, 2012). It all concerns the educational sphere as well. Then, according to Khazbulatov (2012), globalization of education is the result and the top level of internationalization.

The majority of researchers define globalization of education in a broad sense as a process of creation of a single unified world system which enables to eliminate differences between its educational systems (see e.g. Cabelkova et al. 2015). The narrow definition is the process of increasing adaptation of academic system to the demands of global market economy. Re-

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cent decades have seen the appearance of a conceptual model of national educational systems globalization that considers education as an enterprise (Australia, Great Britain, Germany, and USA) and is aimed at financial benefits in the international market of educational services. At the same time globalization processes mainly concern the highest level of education – universities which train competent staff – the resource that is economically important. As a result, the idea of the Single World Educational System based on unified educational standards has appeared. The demand for education, especially for higher education, is rising sharply; the forms of education are changing radically; open and distance learning are developing rapidly and the system of education itself is now considered as the sphere of entrepreneurship, investments and fee-based services (see Altbach and Knight, 2007; Altbach, 2013; or Kupriyanova-Ashina and Ju, 2013; Bilan & Jarecki, 2012).

Management levels of internationalization process of higher education

Let us look at the management levels of internationalization process of education (Table 2).

Table 2. Management levels of the internationalization process of education

Levels	Subjects	Processes	Driving force
Global	UNESCO	Globalization of educational space	Globalization of world processes
National	National governments	Integration of national educational systems	
Institutional	Higher education institutions	Internationalization of all the spheres of a higher educational institution	

Source: Own results.

Internationalization process of education on the global level is managed by such international institutions and organizations as the UN, UNESCO, the OECD, the World Bank, under the guidance of UNESCO. The main profiles of the organization in the sphere of education is the contribution to the peace building and security by extending co-operation of peoples in the sphere of education, science and culture; regulatory activity of the national policy in close co-operation of education, personnel training and employment; the exchange of information by distributing special reference books and catalogues, research papers reflecting the latest trends in the sphere of education.

On the national level the management of internationalization process of educational is effectuated by national governments and is determined by the state policy in the sphere of education. It becomes obvious today that the national systems of higher education cannot develop beyond global processes and trends, beyond the demands of the world labor market. When solving the problems of reforming and development of educational systems of certain countries one can no longer be guided only by the criteria on the national level. According to many experts, in the present context no higher school in any country is be able to train specialists that meet the requirements of postindustrial information-oriented society.

Globalization has both direct influence on national educational systems, the increase in education and science financing, for example, in the USA requires additional investments in these spheres in European countries, and indirect influence which means compliance of students' professional competences with technological and economic requirements of the constantly developing labour market.

The analysis of the Russian state policy in the sphere of education shows that it's based on the creation of conditions that favor the integration of the national educational system with those of other countries. According to the Russian legislation in the sphere of education, in-

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ternational cooperation in the sphere of education has to be developed in five areas: 1) the elaboration and implementation of educational and scientific programs in the sphere of education together with international and foreign organizations; 2) the training of students, teachers and researchers of Russian educational institutions at foreign educational establishments which includes the granting of scholarships for studies abroad and also the enrollment of foreign students, teachers and researchers to Russian educational institutions for studying, further training and improvement of scientific and educational activities including the international academic exchange; 3) joint researches, fundamental and applied scientific researches in the sphere of education, joint innovative activities; 4) participation in the network form of educational programs implementation; 5) participation in the activities of international organizations as well as in international, scientific research and technical projects, congresses, symposiums, conferences, seminars and the organization of the abovementioned activities together with the bilateral and multilateral exchange of academic and scientific literature (Law on education in Russian Federation, 2012).

However, we shouldn't forget that the most important condition of integration of national educational systems is their compatibility and, consequently, their certain transformation. Transformation demands evolutionary changes which lead to a whole number of problems for national educational systems. The analysis of the contemporary state of Russian education shows that Russian educational system while demonstrating external integrity contains internal problems and contradictions. Let us single out the main problems that Russian educational system is facing and the solution of which lies in the sphere of globalization and education: 1) the formation of internationalization strategy by the subjects of educational system; 2) the development of transnational education; 3) the guarantee of international quality; 4) the development of regional and interregional cooperation; 5) the implementation of contemporary information and communication technology; 6) the creation of virtual universities; 7) the solution of inequality and education accessibility problems. But the key problem for Russian educational system is the settlement of a conflict between the contemporary and the traditional, the international and the national. In this sense it's relevant to elaborate a methodology (approaches, methods and criteria) that makes it possible to evaluate the level of the internationalization of the system and its elements where globalization is a creative process.

The institutional level of the management of education internationalization process comprises higher educational institutions. They have the leading role in the implementation of national educational systems integration process. Internationalization on the level of the university is the process of transformation of the national university into the international one, inclusion of the international aspect into all the spheres of its activity in order to improve the quality of educational process and scientific research.

The evaluation of Russia's position in the student academic mobility

We can state that since the 1990s, the scale of international activity in the sphere of higher education has been continuously growing together with the expansion of the range of forms of higher education internationalization. According to the OECD, in 2011 the world market of higher education included more than 4 million students. From 1975 to 2011 the number of students studying abroad increased five times. Over the last three decades this figure grew almost four times from 1,1 million students in 1980 to 4,3 million in 2011. The main countries supplying educational services are Australia, Canada, France, Germany, Great Britain and the USA. These five countries accept more than 50% of foreign students from all over the world (OECD, 2013).

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As for Russia, today, according to the OECD, it accounts for only 4% of foreign students. At the same time from 2000 to 2011 the part of Russia as the host country grew from 2 to 4% which means that Russian education has become more attractive for other countries.

The data on the dynamics of foreign students studying at Russian universities at the programs of higher professional education is represented in Table 3.

Table 3. Foreign students at Russian universities (programs of higher professional education)

	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	Growth rate, %
Total number of students (1000's)	7419	7050	6499	6075	5647	76,1
Number of foreign students (1000's)	145,9	153,8	158,4	165,9	205,7	141,0
Ratio of foreign students to the total number of students (%)	2,3	2,2	2,4	2,7	3,6	156,5

Source: Own results.

Over the last five years the number of students at Russian universities has decreased almost one fourth which is explained by a complicated demographic situation and the reduction in the number of secondary school leavers. At the same time amid the reduction in the total number of students the number of foreign student studying at Russian universities shows great potential for growth. Over the period in question the number of foreign students went up more than 40%. Their ratio to the total number of students grew 1.5 times and amounted to 3,6%. Just to compare, the similar figure in the OECD countries is twice as high and is about 7%. As for the structure of the foreign students groups studying in Russia, the following points should be singled out (Figure 1).

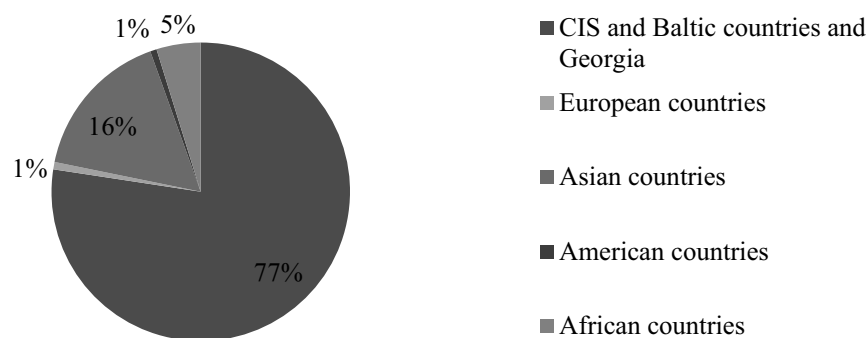


Figure 1. Foreign students groups at Russian universities (programs of higher professional education)

Source: Own compilations.

The analysis of the structure of the foreign students groups allows us to make a conclusion about its stability over the past 5 years. More than 70% are from CIS countries, mainly Russian speakers or ethnical Russians. The part of Russia in the international stream of foreign students is mainly formed by Russian speaking students from CIS countries: Kazakhstan, Belarus and Turkmenistan.

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Language barrier is one of the main factors that hamper the inflow of foreign students to Russia. The OECD annual report qualifies the Russian Federation as a country where universities almost don't have educational programs in English (OECD, 2013). Additionally, more than half of students studying in Russia are from Asia which complies with the world trends. It can be also shown that the part of Russian students studying abroad is not more than 1% from their total number.

All the above mentioned factors show that Russian universities haven't attained high level of internationalization and that Russian students are not involved enough in exchange processes according to the student academic mobility criteria. Moreover, student academic mobility, being one of the most important indicators, can't reveal all the spectrum of internationalization directions in the higher education system.

Empirical model of internationalization of Russian universities

The processes of internationalization and globalization of the national educational system are manifested in the enhancement of the international dimension of national universities activities and in the growth of their competitiveness in the global educational space. Rankings have become in the recent years the tool for public and world evaluation of the quality of scientific and educational activities at Russian universities (see Sadlak and Cai, 2009; Salmi, 2009; or Salmi and Frumin, 2013). In the USA, Europe and in the emerging countries such rankings have acquired qualities of global benchmarks for assessing universities' competitiveness. As a basis for international positioning of national universities Russian experts have chosen one of the most prestigious rankings – QS World University Rankings that is made annually by Quacquarelli Symonds. In QS rankings universities are evaluated according to six criteria: 1) academic reputation – 40% of the total grade; 2) employer reputation – 10% of the total grade; 3) citations per faculty – 20%; 4) faculty student ratio – 20%; 5) proportion of international students – 5%; 6) proportion of international faculty – 5%.

Russian universities have been in QS rankings since 2005. The number of participant since then was growing: 3 participants in 2005, 5 in 2008, 18 in 2013, and 21 in 2014. At the same time it is worth mentioning that Russian universities have very competitive faculty student ratio, the weakest points being citations per faculty and proportion of international faculty.

To run the empirical model of the determinants leading to the increase in ranking and internationalization of Russian universities, we employ the model based on sample covariances. The advantage of this approach is that it allows us to estimate all of the relationships at the same time while testing the indirect effects implied by the model and obtaining the overall goodness-of-fit indices.

Table 2 reports the means, standard deviations, and inter-correlations for the variables included in our Russian university model. Overall, our model fits the data very well ($\chi^2 = 11.12$, $df = 12$, $p = 0.22$; comparative fit index (CFI) = 0.46, goodness-of-fit index (GFI) = .43, root mean square error of approximation = 0.02, standardized root mean residual = 0.02.

It appears that total publications were positively related to total citations and accounted for 44% of the variance in total citations. Moreover, we also found that the number of rewarded doctorates, amount of research expenditures, university endowment assets, and university size were all were positively related to university publications. These predictors accounted for 42% of the variance in total Russian university publications. Our findings suggest that Russian universities that are larger and possess greater resources in terms of doctoral students, research expenditures, and endowment assets tend to produce more research output.

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Table 2. Means, standard deviations and inter-correlations of Russian university characteristics

	M	SD	1	2	3	4	5	6	7	8
Age of the University	71.41	26.43								
University type	0.71	0.24	0.08*							
Presence of I/O dep.	0.73	0.24	-0.07	-0.17*						
Size (enrollment)	12.13	5.01	-0.04	-0.28*	0.13*					
Doctorates per year	131.25	91.27	0.13*	-0.07	0.01	0.32*				
Research expenditures	10.003.00	8.414.00	0.11*	-0.10*	0.02	0.28*	0.33*			
Endowment assets	736.115.00	1.455.106.00	0.26*	-0.24	-0.11*	-0.03	0.28*	0.15*		
Total publications	111.13	87.43	-0.13*	-0.04	0.03	0.27*	0.37*	0.34*	0.25*	
Total citations	2.332.00	2.255.00	-0.12*	-0.02	0.01	-0.21*	0.38*	0.26*	0.24*	0.46*

Note: The reported means and standard errors register raw scores; the inter-correlations yield corrections for skewness for those variables where appropriate; * $p < 0.05$

Source: Own results.

Our results also indicate that the number of doctorates awarded per year was influenced by the university size. Furthermore, the number of awarded doctorates was also positively related to whether the university was private and the age of the university age. These predictors accounted for 38% of the variance in this variable. Research expenditures were positively related to university size. Moreover, research expenditures were also positively related to university age which implicates that older universities spend more on research than the younger ones. These two predictors accounted for 28% of the variance in research expenditures. Finally, it appears that the university endowment assets were positively related to the university's size, or its status as a private university, as well as its age. These predictors accounted for 27% of the variance in the university's endowment assets.

Finally, although we examined the effect of the presence of an I/O psychology department as a covariate, this factor showed no significant effects.

From our point of view, the participation of Russian universities in world educational rankings, on the one hand, is one of the directions of Russian education internationalization and, on the other hand, is definitely the result of internationalization of all the Russian universities activities.

Moreover, since 2012 Russian universities have been evaluated according to the efficiency evaluation method worked out by the Ministry of Education and Science of the Russian Federation. The main evaluation criteria are: 1) academic activity – the average grade at the Unified State Exam for the enrolled students; 2) scientific and research activities – the volume of funds allocated for research and design and experimental work per one faculty member; 3) international activity – the proportion of foreign students from the total number of students at a higher educational institution; 4) financial and economic activity – income per one faculty member; 5) infrastructural capacity – total area of academic facilities and infrastructure per one student; 6) employment rate – the ratio of university graduates who didn't register with employment offices during the first year after graduation and the total number of graduates. This evaluation, in our opinion, can with certain reservations be equaled to the system of the national evaluation of competitiveness and rankings.

In 2013 a group of Russian researchers using the tools of structural and logical and correlation analysis proved empirically that there's close connection between the ranking re-

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sults according to QS methods and the national method of monitoring the efficiency of higher educational institutions at top 10 universities in Russia. The research made it possible to prove the validity of the scientific hypothesis that similar principles and single-vector criteria make the basis of university rankings according to QS methods and the method of monitoring the efficiency of Russian universities (Bragin et al., 2013).

In the framework of the present research the authors of the article have made an attempt to evaluate the internationalization level of Russian universities based on the synthesis of QS methods and the monitoring of Russian universities efficiency. The objects of the research are top ten universities in Russia.

Step 1: When selecting educational institutions we were guided by the following criteria. First of all, they have to possess the legal status of the “university” and prepare bachelors, masters and postgraduate students as well as to carry out scientific research in different majors. Secondly, they have to be among top 15 Russian universities apart from Moscow and Saint-Petersburg State Universities that have the right to subsidies on implementing the plan for increasing international competitiveness of Russian top universities among world top research and educational centers. 54 Russian universities filed applications, 36 of them were admitted. These are the universities that meet the requirements for the level of universities’ scientific activities, the attractiveness of educational programs for entrants, the involvement of the university into the international academic market and also for the university position in world rankings. Thirdly, the selected universities have to be included on 2014 QS ranking.

Step 2: The selection of research objects according to the set criteria. The information on the selected universities is presented in Table 3 that follows.

Table 3. Evaluation criteria of universities’ activities

Nominal code	Name of the university
U1	Novosibirsk National Research University
U2	Moscow Institute of Physics and Technology (State University)
U3	Saint Petersburg State Polytechnic University
U4	National Research Tomsk State University
U5	National Research University Higher School of Economics
U6	National Research Tomsk Polytechnic University
U7	Kazan (Volga region) Federal University
U8	Ural Federal University named after the first President of Russia B. N. Yeltsin
U9	Far Eastern Federal University
U10	Lobachevsky State University of Nizhni Novgorod - National Research University

Source: Own results

The nominal code and the sequence number of the university are chosen according to the place of the 10 selected universities in 2014 QS ranking (from 328 to 701+ position).

Step 3: We make the system of evaluation criteria for assessing the level of universities’ internationalization based on the monitoring results of universities’ efficiency. The efficiency evaluation system for Russian universities implies the monitoring of their activity according to 12 criteria that cover almost all the university’s activities. The monitoring system used by the Ministry of Education and Science of the Russian Federation includes the methodological approach for determining the essence of globalization and internationalization of education as the enhancement of the international dimension of all the university’s activities. The authors found it necessary to place monitoring indices into 6 big groups: 1) the ratio of international

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students studying at bachelor, specialist and master programs to the total number of students; 2) the ratio of full-time bachelor, specialist and master students that have studied abroad for at least one semester (trimester) to the total number of full-time students; 3) the ratio of foreign faculty to the total number of faculty members; 4) the ratio of foreign postgraduate students to the total number of postgraduate students; 5) the volume of funds received by the university for R&D from foreign citizens and foreign legal entities (thousands of rubles); 6) the volume of funds from academic activity received by the university from foreign citizens and foreign legal entities (thousands of rubles).

Step 4: We fill in the matrix of evaluation criteria of the above mentioned universities (see Table 4) and range them using the total placing method. The rank equaling 1 is attributed to the university that has the highest value of the criteria.

Table 4. The matrix of evaluation criteria of universities' performance

Uni- versity	Criteria	Universities' real values of the criteria					
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	
U1	6,22	1,03	0,95	10,20	14852	20504	
U2	9,72	0	0,32	10,00	15353	15871	
U3	7,69	1,70	0,69	5,74	39849	13065	
U4	10,85	0,11	0,91	1,20	59464	30968	
U5	3,66	1,43	2,86	3,79	39368	42999	
U6	18,24	2,29	0,39	9,84	31042	16991	
U7	3,45	0,42	1,07	6,61	13382	2789	
U8	2,41	0,33	0,33	1,61	7505	4559	
U9	2,26	0,31	0,21	4,38	150	0	
U10	1,86	0,04	0.10	2,53	1253,5	23024,8	

Source: Own results.

If the criteria values of several universities have the same quantitative evaluation, the rank of these values equals the simple average of their corresponding placings (see Shmoilova, 2009). After the calculation of the connected ranks the normalized rank matrix is formed. The university's final rank is determined on the basis if the sum of the normalized ranks according to all the criteria – rank 1 is given to the university where the sum of the normalized ranks is the smallest (see Table 5). If several universities have the same sum of ranks, the higher final rank is given to the university that has the higher rank according to the first criteria – ratio of foreign students.

Table 5. The normalized matrix of rank evaluation of university performance

University	The normalized rank evaluation of university performance						Sum of ranks	Final rank
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6		
1	2	3	4	5	6	7	8	9
U1	6,22	1,03	0,95	10,20	14852	20504	23	3
U2	9,72	0	0,32	10,00	15353	15871	34	6
U3	7,69	1,70	0,69	5,74	39849	13065	25	4
U4	10,85	0,11	0,91	1,20	59464	30968	27	5
U5	3,66	1,43	2,86	3,79	39368	42999	21	2
U6	18,24	2,29	0,39	9,84	31042	16991	20	1

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1	2	3	4	5	6	7	8	9
U7	3,45	0,42	1,07	6,61	13382	2789	34	7
U8	2,41	0,33	0,33	1,61	7505	4559	46	8
U9	2,26	0,31	0,21	4,38	150	0	51	10
U10	1,86	0,04	0.10	2,53	1253,5	23024,8	49	9

Source: compiled by the authors.

Thence, based on our results, one can rank the analyzed universities according to the level of their internationalization (see Table 6).

Table 6. The ranking of Russian top universities according to the level of their internationalization

Ranking	Name of the university
1	National Research Tomsk Polytechnic University
2	National Research University Higher School of Economics
3	Novosibirsk National Research University
4	Saint Petersburg State Polytechnic University
5	National Research Tomsk State University
6	Moscow Institute of Physics and Technology (State University)
7	Kazan (Volga region) Federal University
8	Ural Federal University named after the first President of Russia B. N. Yeltsin
9	Lobachevsky State University of Nizhni Novgorod - National Research University
10	Far Eastern Federal University

Source: Own results.

The proposed method based on the classical tools – the ranking of the sum-total using the total placing method – does not help obtain the integral evaluation of internationalization level. It can be explained by the fact that the only information that is open to public is that on the volume of funds received by the university for R&D from foreign citizens and foreign legal entities (criteria No.5) and funds from academic activity received by the university from foreign citizens and foreign legal entities (criteria No. 6) in money terms. If the analyst has access to the financial statements of universities and can determine the proportion of funds received by the university for R&D from foreign citizens and foreign legal entities (criteria №5) and funds from academic activity received by the university from foreign citizens and foreign legal entities (criteria No.6) it will be theoretically possible to obtain the integral index of the university's internationalization. From our point of view the proposed method for evaluating the internationalization level is universal and can be applied not only to Russian universities.

Conclusions and policy implications

Overall, it appears that nowadays globalization represents is an important problem for higher education as the model of the future educational system and the personnel qualification depend on the proper integration of globalization and internationalization elements into the academic process.

Globalization is the top level of internationalization and it has an impact on education through the enhancement of its international dimension. Globalization of world processes is the main driving force of internationalization of education on all the management levels: global, national, institutional.

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Student academic mobility is one of the most important indicators that make it possible to make a quantitative evaluation of the internationalization level of higher education. The analysis of internationalization level of Russian higher education according to the student academic mobility criteria confirmed the proposed hypothesis that Russian education is not attractive enough considering the existing positive trends.

The processes of national educational system internationalization and globalization manifest themselves by the enhancement of the international dimension of national universities activities. It's worth mentioning that at 7 out of 10 Russian top universities that have been selected the portion of foreign students is much higher than the average figure in Russia, Tomsk Polytechnic University (18,24%), Tomsk State University (10,85%) and Moscow Institute of Physics and Technology (9,76%) being the leaders. At half of the analyzed universities this figure can be compared with average indices in the OECD countries (7%). The proportion of foreign postgraduate students and volume of funds received for R&D from foreign clients are very impressive which implies that the international dimension both in educational and research spheres has enhanced.

The proposed method of qualitative evaluation of universities' internationalization level is based on the synthesis of QS methods and efficiency monitoring of the Ministry of Education and Science of the Russian Federation and was tested on top 10 Russian universities. It helps to make the ranking and the comparative analysis of the universities according to the internationalization level of all the spheres (educational, research and financial) using the total placings method. The method is universal and can be recommended for evaluating university performance in different countries.

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