The Dynamics of Network Activity of Russian Universities in the International Ranking Webometrics (2007–2010)

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Abstract[1]

A wide coverage of world universities in the ranking Webometrics, a transparency of its results, published twice a year, promote the development of network activity of a large number of universities and allow to judge of the national higher education system not only by individual institutions-leaders, but by all set of universities making it. Among 3000 top world universities there are higher education institutions of all Russian federal districts. Starting with a sample of 4000, Russia by number of national universities is among the top ten countries.

1. Introduction

In the project «Webometrics» (Webometrics Ranking of World Universities) [1] the estimation of higher education institutions is defined by the content and popularity of an institution web site. The indicators of the rating provide a comprehensive picture of the university, its network activity, the presence on the Internet its faculty, staff and students. A wide coverage of universities of the world, greatly exceeding the coverage of higher education institutions in other ratings of universities (in the latest ranking of universities ranked 8000 out of 18 000 considered), a transparency of the results, published twice a year, create unique conditions for the development of schools, analyzing their positions in the ranking for each indicator. It is not less important that the results of Webometrics allow to judge of the national higher education system not on individual institutions-leaders, but on all set of universities making it. Of the 191 countries only in 10 countries the number of national universities ranked consistently exceed 2% of the best universities in the world. During the period under review (July 2007 – January 2010) Russia belongs to these countries.

2. The position of Russian universities in the Webometrics ranking (2007-2010)

In 2009-2010 in the first hundred of world universities there were 69-70 U.S. universities and 15–17 European universities, not any from Russia. In the second hundred – Lomonosov Moscow State University. In the first thousand there are only 3-6 Russian universities. St. Petersburg and Novosibirsk State Universities are stable in the top 1000. State University Higher School of Economics in 2010 took the second place after Moscow State University. With the addition of each following thousand share of Russian universities increases by an average of 0,5%. Taking into account the scale factor Russia goes to the leader - consistently among the ten leading countries, starting with a sample of 4000.

We track the position of Russian universities in the Webometrics rankings since July 2007, publishing the results of the analysis after each rating [2–5].

Fig.1 shows the number of Russian universities among top 1000, 2000, 3000, 4000, 5000, 6000, 7000 и 8000 world universities in six Webometrics rankings 2007 – 2010. We can see that in July 2009 there was achieved a significant improvement in Russia's position compared to four previous rankings: for the first time there has been passed a boundary in 2 % from 3000 world best higher education institutions (Russia in the top ten countries starting with a sample of 3000) [2,3]; in a sample of 2000 - 1,8% of Russian universities (12-th place).The improvement of positions of Russia in July, 2009 was due to strong promotion of a large number of regional universities [2,3], especially the universities of Siberian and Volga districts. Unfortunately, in the latest ranking (January 2010) Russia was unable to hold its position: 1,6% of Russian universities in a sample of 3000 (13-th place – fig.2) and 1% in a sample of 2000 (16- 17 place). And only, since sample 4000, Russia is included into ten countries-leaders in January 2010: 10-th place in a sample of 4000 (fig. 3), 9-th – in 5000, 7-th – in 6000 (fig. 4) and 8000.
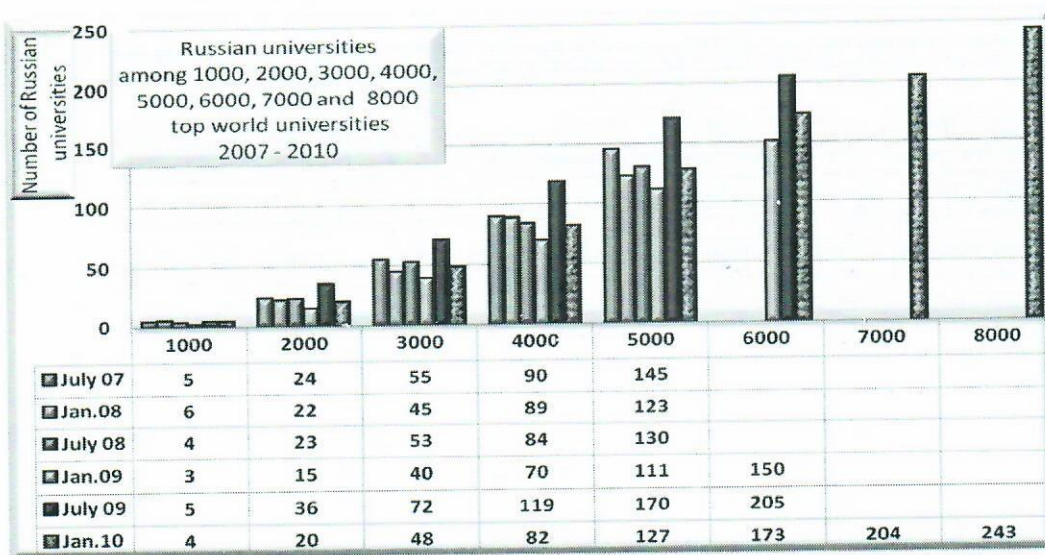
	1000	2000	3000	4000	5000	6000	7000	8000
▣ July 07	5	24	55	90	145			
▣ Jan.08	6	22	45	89	123			
▣ July 08	4	23	53	84	130			
▣ Jan.09	3	15	40	70	111	150		
▣ July 09	5	36	72	119	170	205		
▣ Jan.10	4	20	48	82	127	173	204	243

Fig. 1. The number of Russian universities among the top world universities
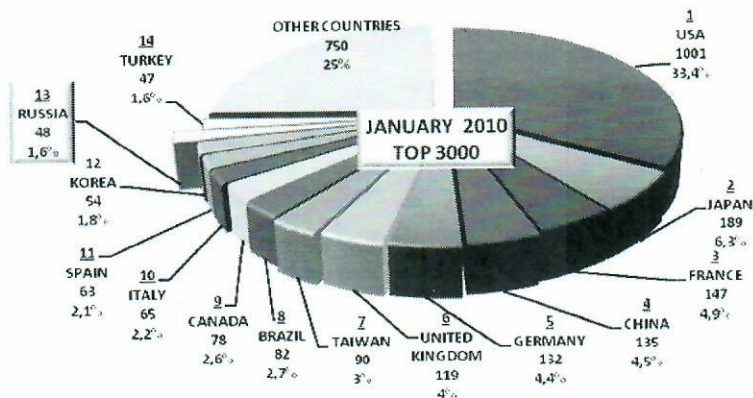

Fig. 2. Distribution by countries of top 3000 world universities – January 2010
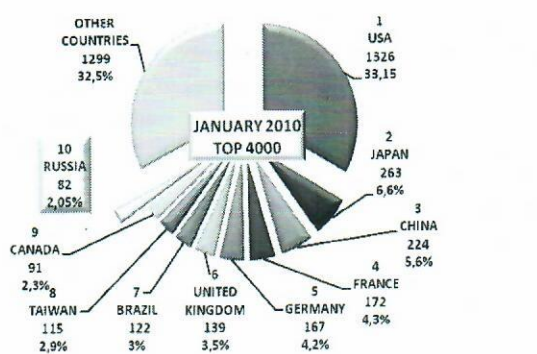

Fig. 3. Distribution by countries of top 4000 world universities – January 2010
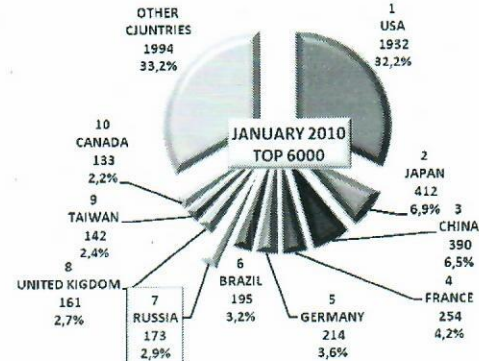

Fig. 4. Distribution by countries of top 6000 world universities – January 2010

3. Regions of Russia in the world educational space

It is important to note that, since the sample of 3000, among the best universities in the world, as before, universities of all federal districts of Russia are included – fig. 5. As well as in the previous rankings, it is necessary to allocate universities of Volga and Siberian federal districts. The sample 2000 along with the six best Moscow universities includes four universities from Siberia and Volga districts. With increase in sample the gap between the number of Moscow and regional universities increases - Fig.6. The most part of Northwestern district are in St.Petersburg. Quite good results have shown the Central, Southern and Ural districts. As well as in the previous rankings the Far Eastern district lags behind – fig. 7.
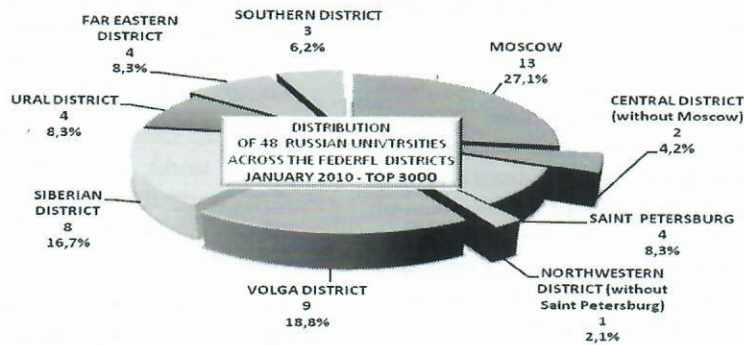

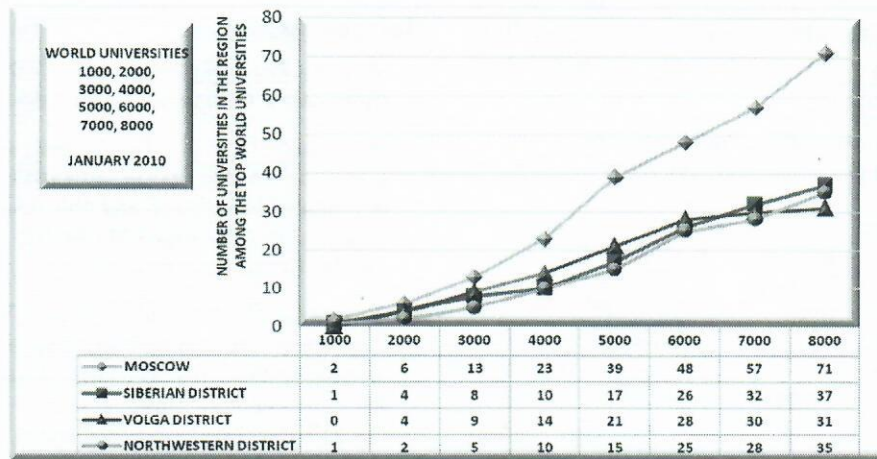**Fig. 5. Regions of Russia in the world educational space – January 2010**

WORLD UNIVERSITIES 1000, 2000, 3000, 4000, 5000, 6000, 7000, 8000 JANUARY 2010	1000	2000	3000	4000	5000	6000	7000	8000
MOSCOW	2	6	13	23	39	48	57	71
SIBERIAN DISTRICT	1	4	8	10	17	26	32	37
VOLGA DISTRICT	0	4	9	14	21	28	30	31
NORTHWESTERN DISTRICT	1	2	5	10	15	25	28	35

Fig. 6. Number of universities of Russian regions among the top world universities: regions with the highest results – January 2010

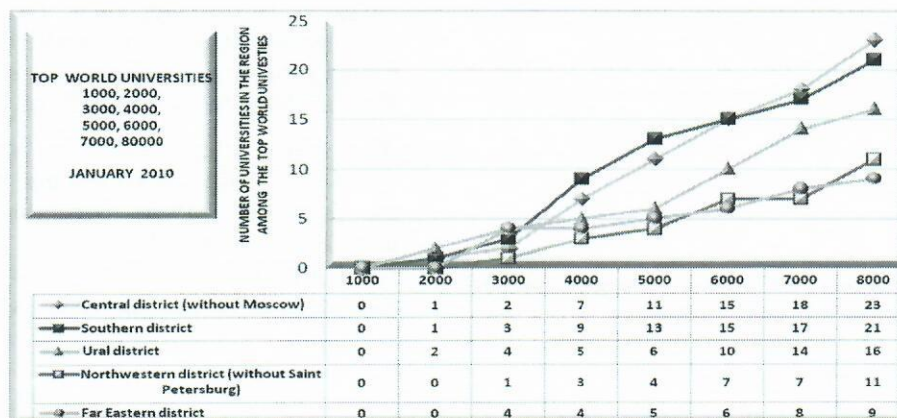| TOP WORLD UNIVERSITIES 1000, 2000, 3000, 4000, 5000, 6000, 7000, 80000 JANUARY 2010	1000	2000	3000	4000	5000	6000	7000	8000
Central district (without Moscow)	0	1	2	7	11	15	18	23
Southern district	0	1	3	9	13	15	17	21
Ural district	0	2	4	5	6	10	14	16
Northwestern district (without Saint Petersburg)	0	0	1	3	4	7	7	11
Far Eastern district	0	0	4	4	5	6	8	9

Fig.7. Number of universities of Russian regions among the top world universities: Central, Southern, Ural, Far Eastern district – January 2010

4. The dynamics of the network activity of Russian universities

The analysis of July 2009 rating showed strong promotion of a large number of Russian universities. In July 2009, compared with the January rating of the same year, have improved their positions 37 of 40 leading Russian universities. Moreover for 9 of them improvement has made more than 50 %. In comparison with July 2007 positive dynamics for 36 universities has been noted, thus 17 of them have improved their positions more than on 25 % [5].

Now the picture is different. Nine universities from twenty of leading Russian universities have worsened their position in the ranking as compared to July 2009, and only four universities have a positive trend over the same period. The leader on dynamics of advancement of a web site in January 2010 is State University Higher School of Economics which for half a year has improved the position by 27 %. Further follow Moscow State Institute of International Relations (8,6 %), Kazan state university (6,5 %), Saratov state university (6,5 %).

Change of positions of universities with positive dynamics is shown in Table 1. Compared with July 2007 there was a marked improvement in the positions of all four universities.

Table 1. Russian universities, leading by the dynamics of Internet sites in January 2010

University	Ranking January 2010	Change of positions compared with July 2007
State University Higher School of Economics	591	37%
Moscow State Institute of International Relations	1456	33,5%
Kazan state university	1122	11,5%
Saratov state university	1475	23%

5. Conclusions

1. Among the recognized international ratings a special place occupies Webometrics ranking in which the estimation of world universities is based on the analysis of a university web site.

2. A distinctive feature of Webometrics Ranking of World Universities is a wide coverage of universities (8000 in the latest ranking). Taking into account the scale factor Russia leaves on in the lead positions - consistently among the ten leading countries, starting with a sample of top 4000 universities.

3. In July 2009 there was achieved a significant improvement in Russia's position compared to four previous rankings: for the first time there has been passed a boundary in 2 % from top 3000 world universities. (Russia in the top ten countries from the sample of 3000).

4. In the latest ranking (January 2010) Russia was unable to hold its position: only, since the sample of 4000, Russia is included into ten countries-leaders in January 2010.

5. Since the sample of 3000, among the best universities in the world, as before, universities of all federal districts of Russia are included. It is necessary to allocate universities of Volga and Siberian federal districts.

6. The development of network activity of Russian universities occurs explosively. Many schools showed the instability of results.

References

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