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## Higher Education, the Key to Russia's Competitiveness

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**Tatiana  
Kastueva-Jean**

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## Summary

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In terms of higher education, Russia displays indicators worthy of enthusiasm: a high level of people benefiting from higher education, an increase in the number of students and the multiplication in the number of higher education establishments. Higher education is increasingly in demand, since diplomas have both professional and social value. This educational boom seems to correspond to the Russian authorities' declared aim to develop a "knowledge economy." After a period of crisis during the 1990s, public policy in this domain is gaining strength. Nevertheless, questions remain unanswered: will this policy be pursued after the presidential elections of March 2008 and will it be able to take on the challenge that Russian growth represents?

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## Introduction

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Today's Russia is no longer the one that Vladimir Putin took the helm of when he came to power. The most notable difference lies in its macro-economic indicators. Energy income has contributed to Russia's economic growth rate of 5 to 7% a year since 2000 and has fed a large Stabilization Fund (157.38 billion US dollars as of 30 January 2008) as well as record foreign exchange reserves (424 billion US dollars at the same date).<sup>1</sup> Another characteristic of today's Russia is its openness to the global economy. In 2006, Russia's external trade totaled 47.6% of GDP and the annual volume of foreign investments reached 5% of GDP.<sup>2</sup> The main Russian companies are now listed on the stock exchange, and global financial fluctuations no longer spare Moscow. In addition, Russia is seeking to acquire foreign assets, including shares in strategic Western companies (for example the acquisition of a 5% stake in EADS by Vnechtorgbank in 2006).<sup>3</sup>

These factors are fueling new Russian ambitions both internationally and domestically. Russia has left behind the crises of the 1990s, and aims to take its economic and political place among developed countries and be competitive on the global stage. "Competitiveness" has become a watchword for Russian leaders. The country's opening up is seen both as an opportunity and as a challenge because of the accumulated economic lag and the "curse" that energy resources represent, possibly condemning Russia to the role of a "world supplier of raw materials."<sup>4</sup>

To this particular concern are added worries about the limits of growth founded on exhaustible fossil fuel resources.<sup>5</sup> Thus, while Russia keeps cashing in on its natural resource assets, for the past five years the Russian leadership's central concerns when defining the strategic aims of the country have been "diversification" of the economy and "transition to a knowledge-based economy." Russia carefully examines the educational models of developed and emerging countries (particularly China) in order to plan its own development strategy. Science, innovation, high technology

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Translated from French by Jessica Allevione-Dellecker.

<sup>1</sup> Site of the Russian Ministry of Finance <www1.minfin.ru>.

<sup>2</sup> *Biannual Report of the World Bank on the Russian Economy*, No. 15, November 2007, p. 8. These investments are primarily concentrated in the primary resources sector; their share in secondary industries is weak.

<sup>3</sup> These shares were sold on at the end of 2007 to a third party supposed to sell it back to the Russian public holding *United Aircraft Corporation* (UAC). *La Tribune*, 20 December 2007.

<sup>4</sup> Introduction to the work of two academicians, L. Makarov and A. Varshavsky (eds.), *Nauka i vysokye tekhnologii Rossii na rubezhe tretyego tysyachyaletiya* [Science and High Technologies in Russia at the Threshold of the Third Millenium], Moscow, Nauka, 2001, 631 p.

<sup>5</sup> The last report of the World Bank mentions that the Russian economy has reached its "maximum potential," *Biannual Report of the World Bank on the Russian economy*, *op. cit.* [2], p. 2.



and education are perceived as the main vectors of competitiveness in a globalized world. Furthermore, for Russia—the former scientific and technological leader of the Soviet bloc—it is a matter of resuscitating and strengthening a heritage of excellence, against a background of favorable macroeconomic conditions.

## Aiming for a “Knowledge Economy”

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“Knowledge economy,” “knowledge-based economy,” “innovation economy” and “new economy” are terms which have been used frequently by Russian leaders in recent years to define the country’s strategic goals.<sup>6</sup>

These terms appeared as early as July 2000 in President Putin’s first annual address to the Federal Assembly.<sup>7</sup> As then Minister of Economic Development and Trade, German Gref, explained during a conference at the State University—Higher School of Economics (HSE) in December 2005, the knowledge economy means, first and foremost, a “new quality of economic growth,” assuming that the factors fueling growth in the economy, productivity, living standards and competitiveness are research and development (R&D), innovation and high technology supported by the people’s high level of education. Such a definition shows that the country’s political and economic leaders have become aware (at least in their discourse) of the limits inherent to a development model based solely on energy income (the latter can be used only as a “stabilization factor,” according to Gref). Such a requirement can be found in the Russian President’s stated desire before the Council for Science, Technology and Education in 2004: to see a “system for the competitive production, spread and use of knowledge [...] serving as a base for the country’s economic growth and bringing results comparable to those gained through exploitation of natural resources, but could eventually significantly surpass them.”<sup>8</sup> Putin’s last address to the State Council in February 2008, “On the Strategy of Russia’s Development until 2020,” was devoted to the

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<sup>6</sup> Attributed to F. Machlup (1962) and P. Drucker (1970), the term “knowledge-based economy” is a subject of theoretical debate in the West: some think the definition must stay narrow including only high technologies; others would give it a broader signification adding all the mechanisms necessary for its production and learning processes. Since the middle of the 1990s, the term has been applied broadly by international organizations such the World Bank, the Organization for Economic Cooperation and Development (OECD), the United Nations Development Program (UNDP), which have worked out a range of indicators and have drafted many reports, some of which are specifically dedicated to the transition to a knowledge-based economy in Russia. See, for example, UNDP, *Doklad o razvitiĭ chelovecheskogo potentsiala v Rossiyskoy Federatsii 2004. Na puti k obshchestvu, osnovannomu na znaniyakh* [Human Development Report 2004, Russian Federation: Towards a Knowledge-based Society], Moscow, 2004, available at: <hdr.undp.org/en/reports/nationalreports/europethesis/russia/russia\_federation\_2004\_en.pdf>. According to the OECD definition, a knowledge economy is “directly based on the production, the spread and the use of knowledge and information,” OECD, *The Knowledge-based Economy*, Paris, OECD, 1996.

<sup>7</sup> “We are losing competitiveness on the global market which is increasingly directed to [...] the new economy—the economy of knowledge and technology”, President Putin’s annual address to the Federal Assembly of the Russian Federation, 8 July 2000, <www.kremlin.ru/appears/2000/07/08/0000\_type63372type63374type82634\_28782.shtml>.

<sup>8</sup> 26 October 2004, <www.kremlin.ru/eng/speeches/2004/10/26/2137\_type82912type82913\_78537.shtml>.

importance of innovation, knowledge and investment in human potential for Russian development.<sup>9</sup>

This view is widely shared by the Russian elite. Even during the post-Soviet period's worst times, the idea of giving up the country's rebirth as a scientific and technological power and importing new technologies from abroad was never seriously considered in Russia. Yet the issue has become more pressing since teachers are aging, and the young have lacked interest in scientific and academic careers in the past fifteen years. Finally, the Russian state, which has grown stronger under Putin, wishes to re-engage in fields it has neglected for too long.<sup>10</sup>

Russia's new ambitions have now been formulated in medium- and long-term economic strategy documents. In July 2007, the Ministry for Economic Development and Trade (MERT, by its Russian acronym), headed by German Gref between May 2000 and September 2007, drafted a paper entitled "Socioeconomic Development Concept for the Russian Federation until 2020."<sup>11</sup> It describes three economic growth scenarios: a conservative one (the present model based on energy income), maximum accelerated exploitation of raw materials, and, finally, the creation of an economic model based on innovation and knowledge.

The declared goals of the third scenario, presented as the most desirable, are extremely ambitious. In 2020, the share of high technologies would have to reach at least 17-20 percent of Russian GDP (in 2006, it represented 10.5 percent); the share of innovation sectors in annual GDP growth, at least 2.5-3 percent (1.3 percent in 2006); the proportion of industries participating in technological innovations should amount to 40-50 percent (9.3 percent in 2005), that of innovative products in industrial production, 25-35 percent (2.5 percent in 2005). Russia should be an important actor (at least 10 percent) on the global market for high technology products and services in four to six domains. Such a scenario involves an increase in domestic spending on R&D to 3.5-4 percent of GDP (in 2006, it stood at 1 percent), and up to 5-6 percent of GDP on education (3.6 percent in 2006).

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<sup>9</sup> 8 February 2008,

<[www.kremlin.ru/eng/speeches/2008/02/08/1137\\_type82912type82913\\_159643.shtml](http://www.kremlin.ru/eng/speeches/2008/02/08/1137_type82912type82913_159643.shtml)>.

<sup>10</sup> See the article by C. Sigman ("The Impact of 'New Public Management' on Russian Higher Education," *Russie.Nei.Visions*, No. 30, April 2008) which examines educational reform in the broader context of state reform.

<sup>11</sup> *Konceptsiya dolgosrochnogo sotsialno-ekonomicheskogo razvitiya Rossiyskoy Federatsii do 2020 goda* [Socioeconomic Development Concept for the Russian Federation until 2020], July 2007, available at: <[www.economy.gov.ru](http://www.economy.gov.ru)>.

**Table 1. Comparison between data from 2005-2006 and the objectives for 2020 in the MERT's third scenario**

	<b>2005-2006 Data</b>	<b>2020 Goals</b>
Share of high technology in Russian GDP	10.5% (in 2006)	17-20%
Contribution of innovating sectors in annual GDP growth	1.3% (in 2006)	2.5-3%
Share of companies contributing to technological innovation	9.3% (in 2005)	40-50%
Share of innovative products in industrial production	2.5% (in 2005)	25-35%
Domestic spending on R&D (% of GDP)	1.24% (in 2006)	3.5-4%
Domestic Spending on education (% of GDP)	3.9% (in 2006)	5-6%

Source: *Konceptsiya dolgosrochnogo sotsialno-ekonomicheskogo razvitiya Rossiyskoy Federatsii do 2020 goda [Socioeconomic Development Concept for the Russian Federation until 2020]*, July 2007.

There is debate concerning Russia's capacity to realize this scenario. For some, the fast growth of industry (raw materials aside), the large investments in secondary industries and trade, the will to stimulate innovative sectors (or even to punish sectors which do not innovate<sup>12</sup>) are undeniable. Proponents of this vision conclude that the passage from years of crisis and of "recuperation growth" to a genuine and promising "development logic" has been effected.<sup>13</sup> Some recent high-profile decisions seem to support this interpretation; the creation of the *Rosnanotech* State Corporation is a good example,<sup>14</sup> with 130 billion rubles starting capital (5.3 billion US dollars), an unprecedented amount for a single research sector in Russia.<sup>15</sup>

For others, in spite of Russia's encouraging economic indicators, today Russia is just catching up with 1990s levels. Other countries have not been idle during the last decade, and Russia's accumulated backwardness is considerable. Some persistent obstacles (the absence of an efficient banking system, technological lag and the weak competitiveness of

<sup>12</sup> In April 2007, First Deputy Prime Minister S. Ivanov put forward some measures to stimulate, and even force, companies in all branches of industry to modernize and innovate and even suggested financial sanctions. "S. Ivanov: we must stimulate companies to innovate," RIA Novosti, 19 April 2007, <[www.rian.ru/economy/20070419/63923060.html](http://www.rian.ru/economy/20070419/63923060.html)>.

<sup>13</sup> J. Sapir, *La situation économique de la Russie en 2006* [Russia's Economic Situation in 2006], CEMI-EHESS, Franco-Russian seminar, XXXIII session, 4-6 July 2007.

<sup>14</sup> The Russian nanotechnology corporation (*Rosnanotech*) is in keeping with the strategy of creating big public groups in several domains judged a priority. In April 2007, Putin spoke of it for the first time in his annual address to Parliament as a "key factor in the development of industry and modern science." In July 2007, the law enacting its creation was signed. According to CEO Leonid Melamed, the aim is to increase Russia's share of the global market for nanotechnology to 4% (between 1.2 and 2.9 trillion US dollars) by 2015. But some of the principles of its operations have raised much criticism due to their opacity (the corporation is only accountable to the President, cannot declare bankruptcy, etc.). See the criticism expressed by the Deputy President of the Russian Academy of Sciences, A. Nekipelov, *Nezavisimaya Gazeta*, 18 January 2008, <[www.ng.ru/economics/2008-01-18/4\\_nanotehnologii.html?insidedoc](http://www.ng.ru/economics/2008-01-18/4_nanotehnologii.html?insidedoc)>. Several interviews conducted by the author in Moscow in October 2007 confirm such skepticism.

<sup>15</sup> This allocation of resources proves that the sector is privileged. In comparison, in 2007, the structures of the Russian Academy of Sciences obtained 40 billion rubles funding altogether.

products) render the “inertia scenario” based on the use of the energy income increasingly likely.<sup>16</sup>

Many factors must be taken into account in order to assess whether Russia is really supporting a “new quality” of its growth with all the means necessary. One needs to examine especially the higher education system,<sup>17</sup> which plays a crucial role in a “knowledge economy.” Economically speaking, higher education carries out three essential functions:<sup>18</sup>

- 1) It is the tool used to transmit knowledge from one generation to another, a means to train a qualified workforce capable of creating and making the best use of knowledge, thus increasing productivity.
- 2) It contributes to the creation of new knowledge through applied and fundamental research carried out in higher education establishments (HEE).
- 3) More recently, it was assigned another mission: ensuring the transfer of knowledge to industry via, for example, the setting up of technology parks and laboratories.<sup>19</sup>

Through these three economic tasks, higher education lies at the heart of the debate over Russian growth and competitiveness.

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<sup>16</sup> *Dolgosrochnyj prognoz razvitiya ekonomiki Rossii na 2007-2030*, [Long-term Forecast of the Development of the Russian Economy, 2007-2030], Russian Institute of Economic Forecasting, Moscow, May 2007, p. 4, <[www.ecfor.ru/pdf.php?id=forecast/ltf](http://www.ecfor.ru/pdf.php?id=forecast/ltf)>.

<sup>17</sup> In Russia, “higher education” is equivalent to level A5 of the International Standard Classification of Education—ISCE 1997.

<sup>18</sup> OECD, *Education at a Glance 2007*, Paris, OECD, 2007, <[www.oecd.org/dataoecd/16/51/39308942.pdf](http://www.oecd.org/dataoecd/16/51/39308942.pdf)>.

<sup>19</sup> See J. Sutz, “The New Role of the University in the Productive Sector” in H. Etzkowitz, L. Leydesdorff (eds.), *Universities and the Global Knowledge Economy. A Triple Helix of University-Industry-Government Relations*, Pinter, London and Washington, 1997, p. 11-21; L. E. Weber, J. J. Duderstadt, *Universities and Business: Partnering for the Knowledge Society*, London-Paris-Geneva, Economica, 2006, 297 p.

# Russian Higher Education's Contradictory Indicators

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Even if Russia's higher education benefits from a rich heritage,<sup>20</sup> it displays so many contrasting indicators that today it would be difficult to consider it an indisputable asset and a resource allowing Russia to reach its new goals and to significantly improve its global competitiveness.

Even if the link between investments in human capital and economic performance seems obvious, it is nevertheless difficult to "empirically and consistently" prove it since such investments "generate variable output and have effects of variable duration."<sup>21</sup> Usual statistical indicators (yearly expenditure per student as a percentage of GDP, proportion of students amongst adults, availability of computer and laboratory equipment) only give information about resources committed to education,<sup>22</sup> not about the returns on these investments, which melt into indicators such as the contribution of high technologies to GDP, patent registration, innovative activity of companies, and so on. Analyzing national statistics and various international rankings while taking into consideration the "education" factor leads to three main conclusions:

1) In international comparisons, higher education indicators drag Russia's ranking up; for instance, the World Bank's system of indicators (*Knowledge for Development Program*) is considered as the most elaborate in measuring the knowledge-based economy. This method (called KAM, or *Knowledge Assessment Methodology*) includes 83 structural and qualitative indicators (for 140 countries) split into four groups (called indexes) which together form the *Knowledge Economy Index* (KEI): Economic Incentive and Institutional Regime; Education; Innovation; and Information and Communications Technologies (ICT).<sup>23</sup>

Examining each of these four groups shows that Russia's weaknesses lie in the institutional regime (2.99, while G7 countries average 7.50) and information and communications technologies (6.19 against the average for G7 countries of 8.5). But it is catching up with G7 countries in terms of innovation and education (literacy rate, number of people in secondary and tertiary education), outpacing even Italy and far beyond the other so-called BRIC group countries (Brazil, India and China).

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<sup>20</sup> See B. Saltykov, "Higher Education in Russia: How to Overcome the Soviet Heritage?", *Russie.Nei. Visions*, No. 29, April 2008.

<sup>21</sup> *Education at a Glance 2007*, *op. cit.* [18], p. 32. OECD studies put 50% of GDP growth per inhabitant between 1990 and 2000 down to increased work productivity, largely due to the extension of studies duration and the improvement of teaching quality.

<sup>22</sup> Nevertheless, a comparison of "input" indicators with those of other countries is informative.

<sup>23</sup> The variables collected for each country are then "normalized" on a scale of 1 to 10, KAM Database (*Knowledge Assessment Methodology*), <[go.worldbank.org/JGAO5XE940](http://go.worldbank.org/JGAO5XE940)>.

**Table 2. Some comparisons of KEI Indexes (KAM 2007)**

Country	Rank	Knowledge Economy Index	Economic Incentive Regime	Innovation	Education	ICT
Sweden	1	9.26	8.59	9.72	8.98	9.76
US	10	8.80	8.45	9.44	8.35	8.95
Germany	15	8.54	8.38	8.93	8.08	8.79
France	20	8.36	8.02	8.59	8.52	8.31
<b>Russia</b>	<b>47</b>	<b>5.94</b>	<b>2.99</b>	<b>6.92</b>	<b>7.66</b>	<b>6.19</b>
China	75	4.42	4.27	5.09	4.09	4.21

Source: World Bank, KAM 2007.

2) High education indicators do not translate to global competitiveness:

– According to the aforementioned World Bank system of indicators, Russia is the lowest ranking G8 country with an average knowledge economy index of 5.94 (8.5 being the average for the rest of the G8 countries).

– According to the World Economic Forum’s competitiveness index, Russia ranks 58<sup>th</sup> (in comparison, China ranks 34<sup>th</sup> and India 48<sup>th</sup>).<sup>24</sup>

– The share of high technologies in exports is 3.1%, corresponding to that of India (3.2%), but still weak in comparison with China (15%).

– Considering the Human Development Index, which takes into account three factors—life expectancy, literacy and educational level, standard of living (income measured by purchasing power parity)—Russia ranks only 67<sup>th</sup> (Mexico, for example, ranks 52<sup>nd</sup>).<sup>25</sup>

Thus, human, economic and organizational means presently at work in terms of education do not translate to higher indicators of living standards and competitiveness. This is due, on the one hand, to factors outside of education (such as the general institutional environment) and, on the other, to the contradictions within the system, which lends itself to highly ambiguous indicators.

3) Indeed, Russian indicators for higher education can place the country at either extreme of the international scale. Referring to some quantitative indicators, such as the number of students with respect to the total population, Russia ranks 1<sup>st</sup>, ahead of all OECD (Organization for Economic Cooperation and Development) countries or any of the organization’s other partner-economies.<sup>26</sup> Thus, in 2006-2007, it counted 7.31m students, or 514 out of 10,000 people.<sup>27</sup> Today, it has become common to mention the “overproduction” of graduates compared to economic needs, this being fed by employer requirements and the increasing demand of families and their ability to pay.<sup>28</sup> By contrast, in terms of intensity indicators, such as annual expenditure per student, Russia ranks last, spending a little over 2,000 US dollars (the OECD

<sup>24</sup> < www.gcr.weforum.org />.

<sup>25</sup> UNDP, <hdrstats.undp.org/countries/country\_fact\_sheets/cty\_fs\_RUS.html>.

<sup>26</sup> *Education at a Glance 2007*, op. cit. [18], p. 34.

<sup>27</sup> Goskomstat, <www.gks.ru/free\_doc/2007/b07\_11/08-10.htm>. In light of these figures, it is useful to note that approximately 50% of students attend evening or correspondence courses.

<sup>28</sup> 88% of parents want their children to receive a higher education and 54.7% claim to accept to pay for it. *Monitoring ekonomiki obrazovaniya*, No. 1, 2007, p. 9.

average is 11,000 US dollars, and over 22,000 US dollars in the United States).<sup>29</sup>

Such a contrast can also be found in the 2007-2008 Global Competitiveness Index, elaborated each year by the World Economic Forum, where the indicators relating to Russian education are split between important “competitive advantages” and “competitive disadvantages.”

**Table 3. Global Competitiveness Index 2007-2008 (extracts)**

Notable Competitive Advantages	Notable Competitive Disadvantages
<b>5<sup>th</sup> pillar: Higher education and training</b>	
Tertiary enrollment	Extent of staff training
Quality of math and science education	Local availability of specialized research and training services
Quality of the educational system	Quality of management schools
Secondary enrollment (hard data)	Internet access in schools
	Inadequately educated workforce
<b>12<sup>th</sup> pillar: Innovation</b>	
Availability of scientists and engineers	Government procurement of advanced technology products
Quality of scientific research institutions	University-Industry research collaboration
Utility patents (hard data)	Capacity for innovation
Company spending on R&D	

Source: *The Global Competitiveness Report 2007-2008*, World Economic Forum, <[www.gcr.weforum.org/](http://www.gcr.weforum.org/)>.

Lastly with regard to international comparisons, the market for higher education is developing in a context of strong international competition. In this regard, Russian higher education establishments are modestly placed in international rankings.<sup>30</sup> In 2007, only two Russian universities appeared among the top 500 of the Shanghai Ranking; Moscow State University-MGU ranked 72<sup>nd</sup> and St. Petersburg State University 340<sup>th</sup>. The Russian educational space has lost some of its attractiveness, including for its traditional Community of Independent States (CIS) and Chinese “customers.” Even if the Soviet Union hosted many students, Russia now attracts a mere 3.3% of the world’s international students, while the United States is home to 26.6%; the United Kingdom 11.7%; Germany 9.5%; France 8.7%; Australia 6.5%; Japan 4.6%.<sup>31</sup> Foreign students bring 18 billion US dollars to the United States each year, compared to between 300 and 400 million US dollars to Russia.<sup>32</sup>

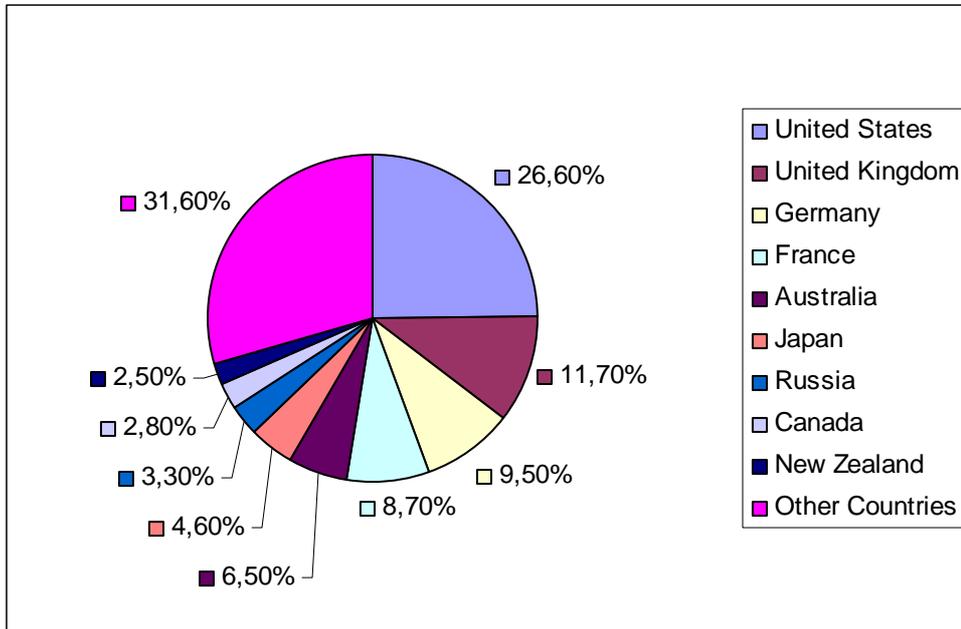
<sup>29</sup> *Education at a Glance*, op. cit. [18], p. 34.

<sup>30</sup> In Russia, international classifications are seen as subjective and inapplicable to national specificity. Thus, V. Sadovnichy, Dean of Moscow State University, argues that the number of Nobel prizewinners working in a university (used by the Shanghai Ranking) is not a suitable criterion for Russia, given that during the Soviet era most research was surrounded by secrecy and the country was closed off from the world. Moreover, the classification would disadvantage countries which conduct research outside universities (in Russia—in the Russian Academy of Science). Interview with V. Sadovnichy, *Rossiyskaya Gazeta*, No. 4277, 25 January 2007. The MGU Institute for Research on Education and the ReitOR agency have begun designing a new global university classification, which would include the quality of teaching. See “Kak poschitat kachestvo obrazovaniya?” [How to Measure Teaching Quality?], *Ekspert*, No. 4, 28 January 2008, available in Russian at: <[www.expert.ru/printissues/expert/2008/04/kachestvo\\_obrazovanie/comments](http://www.expert.ru/printissues/expert/2008/04/kachestvo_obrazovanie/comments)>.

<sup>31</sup> *Education at a Glance*, op. cit. [18].

<sup>32</sup> Cited in *Nezavisimaya Gazeta*, 30 June 2006.

Figure 1. The share of various countries on the global education market



Source: OCDE / The Economist

## A Shift in Public Policy

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Economic needs, internal social pressures and international competition are such that few countries can avoid questioning the efficiency of their higher education, and the possibility of reforming it. International organizations are undergoing talks at the highest level, as well as comparative analyses in order to identify best practices.<sup>33</sup> Though they are often contested, rankings such as the Shanghai Ranking, are scrutinized and analyzed, notably by European institutions, so as to understand the reasons why Anglo-Saxon universities are faring much better relative to their competitors.<sup>34</sup>

The stakes are particularly high for Russia. After a period during which the HEE had resigned themselves to survival strategies, there has been a noticeable change in public policy. Several positive developments may be underlined:

– A realization, due to factors mentioned above, that matter is of importance. A number of important laws concerning education and science were adopted between 1992 and 1996 (such as the 1992 Law on Education and that on Higher and Postgraduate Professional Education of August 1996). After a period of relative disinterest, a new phase of legislative and regulatory activity began in 2002. Several laws, such as analytical prospective documents regarding education, have been passed since then (the Education Modernization Concept to 2010, passed in 2002; Law on the Status of Autonomous Educational Establishments passed in October 2006; Program on the Integration of Science and Higher Education 2002-2006; Federal Program for the Development of Education 2006-2010; Law on the introduction of the system of higher education at several levels passed in October 2007, etc.).

– A capacity to allocate more significant financial means to education, notably higher education. After a period of under-financing, the low point of which came between 1998 and 2000, spending on education began

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<sup>33</sup> In September 2007, UNESCO organized a Forum in China on Higher Education, Research and Knowledge; an informal meeting of Education Ministers from OECD member countries to evaluate higher education's results was held in January 2008 in Tokyo; the Second World Forum on Education will take place in March 2008 on the topic: *Bettering the Efficiency of Educational Systems*, and will put particular emphasis on teaching, teachers, and innovation in countries that are not members of the OECD, including Russia; the OECD is currently finalizing an important comparative study of 24 countries, with the participation of partner-economies, including Russia.

<sup>34</sup> See for example, "Why Reform Europe's Universities?," *Bruegel policy brief*, Issue 2007/04, September 2007, 8 p. or M. Barber and M. Mourshed, "How the World's Best-Performing School Systems Come out on Top," McKinsey & Company, September 2007, 49 p. Among the Russian analyses: D. Salmi and I. Frumin, "Rossiyskie VUZy v konkurentsii universitetov mirovogo klassa" [Russian HEE Competing with World Universities], *Voprosy obrazovaniya*, No. 3, 2007, p. 5-45.

increasing from 2001: starting at 8.95 billion US dollars in 2000, it reached 33.29 billion US dollars in 2005 (in five years funding increased more than three-fold), or from 2.9% of GDP to 3.7%.<sup>35</sup> Higher education has enjoyed privileged treatment; indeed, spending on higher education increased even more significantly (from 1 billion US dollars in 2000 to 5.25 billion US dollars in 2005) than for secondary or pre-school education. The national project “Education” was launched in September 2005 with significant financial backing, under the aegis of then First Deputy Prime Minister Dmitry Medvedev.<sup>36</sup> Even if these amounts remain insufficient compared to those of OECD countries (the OECD average being 5.4% of GDP, with Sweden and Norway at 7.6%), such progress is an encouraging sign and challenges the perception that the state is uninterested in this field.

– The beginning of true “strategic thinking” on this topic with recourse to national and international expertise. A Council for Science, Technology and Education (a consultative body) was created in August 2004 under the auspices of the President. Several teams of experts have been mobilized, notably the Higher School of Economics (HSE), an important center of expertise which conducts, among other things, a “Monitoring of the Economics of Education”.<sup>37</sup> A recent report by the Civic Chamber published under the eloquent title “Is Russia Ready to Invest in its Future?” was entirely devoted to education.<sup>38</sup> External pressure has also had a role. With the aim of joining the OECD,<sup>39</sup> Russia participates in studies led by this organization. One of the three main topics on the summer 2006 G8 Summit’s agenda, chaired by Russia, was devoted to the quality of education. Since 2003, Russia has also been involved in the Bologna Process. Its assimilation of Bologna requirements is far from being completed, yet accession is testament to the country’s will to increase its competitiveness on the international market by integrating into the European educational space.<sup>40</sup> This accession has been interpreted by several national and international experts as a source of “peer pressure” able to influence positively Russia’s educational system.<sup>41</sup>

As is the case with economic issues in general, Russia does not hesitate to set extremely ambitious targets for higher education. It aims to create HEE able to compete with the best American universities. Notably through the creation of two federal universities (in the South and Siberian Districts), and two business schools (in the Moscow-Skolkovo region and St. Petersburg).<sup>42</sup> Aims for the coming decade include: winning a 10% share of the world’s educational market, increasing income from foreign students to 5 billion US dollars (revenue today stands at 100 million US dollars), a wage-scale for teachers that is comparable to that of

<sup>35</sup> *Monitoring ekonomiki obrazovaniya*, No. 1, 2007, p. 5.

<sup>36</sup> In 2006-2007, 57 HEE were selected (10 % of public HEE) and benefited from 30 billion rubles of public money.

<sup>37</sup> Official site <education-monitoring.hse.ru/>.

<sup>38</sup> Civic Chamber of the Russian Federation, report “Gotova li Rossiya investirovat v svoye budushchee?” [Is Russia Ready to Invest in its Future?], Moscow, 2007, 63 p., <www.oprf.ru/files/tcp\_ip/doklad\_s\_oblozhkoi.pdf>.

<sup>39</sup> Russia was invited in May 2007 to open accession talks.

<sup>40</sup> See T. Kastueva-Jean, “La Russie et le processus de Bologne: européenne par éducation ?” [Russia and the Bologna Process: European by Education?], *Politique étrangère*, No. 2, 2007, p. 411-423.

<sup>41</sup> Interviews in Moscow, October 2007, and at the OECD in January 2008.

<sup>42</sup> This decision was announced on 5 September 2005 by Putin during a meeting with members of government, leaders of the Federal Assembly and members of the Council of State.

developed countries, as well as an increase to 20 percent of the private sector's share in contributions to education (today it is only 5 percent).<sup>43</sup>

In Russia it is sometimes difficult to differentiate between rhetoric and the effective implementation of policy. Yet, it is impossible to deny the present dynamism. The combined pressures of foreign influence (the Bologna Process, WTO and OECD accession) and the domestic labor market are generating important changes. Certain characteristics of the model inherited from the Soviet era, which seemed to be well anchored in the Russian system, are presently being called into question. Higher education in Russia always presupposed an indivisible 5- or 6-year program, all changes (in program, institution, or geographical zone) being likely to penalize a student. Today, the problem of the system's rigidity is the subject of debate in Russia. This has led to certain measures (including legislative ones) that favor increased flexibility. Today, two qualification levels *bakalavr/magistr* (corresponding to Bachelors/Masters degrees in Europe) have been introduced. The principles of national and international mobility, as well as student choice in modules and educational trajectories are creeping into mentalities. The present evolution also concerns other subjects, such as independent quality evaluations and the participation of employers (now written into law). Such a situation is testament to gradual changes in approaches. Other principles, notably promoted by the OECD, are still absent from reflections on higher education, such as the question of the inequality of registration fees in Russian higher education.<sup>44</sup>

A significant number of "educational experiments" are being conducted throughout the country. Some are regional, while others are being applied at the federal level. The point is to test new management and financial tools or organizational models. Such experiments include: a national exam at the end of secondary studies (EGE); the aforementioned introduction, by law, of two qualification levels *bakalavr/magistr* (October 2007); and the creation of autonomous establishments and endowments (the latter having already been tested, for example by the Moscow State Institute for International Relations or the Higher School of Economics). New educational standards are also in the works. Based on an approach which favors skills, these are intended to take into account the views of society and employers. Such impressive dynamism is likely to bear fruit in the medium-term, so long as it is guided by a coherent policy and a will to overcome the inertia inherent to the system.

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<sup>43</sup> The article signed by the Minister of Higher Education and Science and two deans: A. Fursenko, D. Livanov, A. Volkov, "Vysshee obrazovaniye: povestka 2008-2016" [Higher Education: 2008-2016 Agenda], *Ekspert*, No. 32, 3 September 2007, available in Russian at: <[www.expert.ru/printissues/expert/2007/32/vysshee\\_obrazovanie\\_2008/](http://www.expert.ru/printissues/expert/2007/32/vysshee_obrazovanie_2008/)>.

<sup>44</sup> OECD, *Final Synthesis Report from the OECD Thematic Review of Tertiary Education*, OECD, Paris, 2008 (forthcoming).

## Future Uncertainties

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Nevertheless, despite these positive developments, several questions remain:

– Will the financial commitment be sustained? The 2008-2010 budget allocates only a very small increase in future spending.<sup>45</sup> As for the national project “Education,” its future is uncertain. It is worth noting that, at present, Stabilization Fund money is not spent on education. The prudent approach of the Minister of Finance, Alexey Kudrin, has the upper hand for now: since injecting large sums in the economy would risk fueling high inflation, it was decided to invest in foreign assets. The notable exception being the capitalization of the newly created state corporation *Rosnanotech*, financed from the Stabilization Fund.<sup>46</sup> This prudent management conforms with what experts on education advocate, they warn that injecting too large a sum of money before the necessary institutional reforms take place could shatter any incentive to change.<sup>47</sup>

– Will there still be a consensus among reformers beyond the presidential elections? In fact, a vague consensus exists among reformers concerning the necessity for change as well as the means to achieve it.<sup>48</sup> This represents an opportunity for the education sector. However, reformers do not take into account public opinion or the opinions of the majority of the teaching corps, who are wary of the EGE and the Bologna Process. Such reluctance is evident in various opinion polls. In the context of Putin’s strong popular support, the decisions that are reached stem from administrative and bureaucratic rationales, the consensus of decision-makers, rather than from that of the academic world, employers, students and their parents. While this may, at first, allow the State administration to impose its will and to move forward by passing laws, such a situation may, *in fine*, slow down reforms that are misunderstood by the population and find little support among teachers.

– How will the growing disparity between HEE be managed in the context of higher education’s generalization in Russia? The present tendency toward an elitist financial and institutional policy favors “centers of excellence,” that is, privileged institutions with good reputations. Parallel to so-called “basic financing” which covers overheads, wages and maintenance, there are calls for tender destined for the best and additional financing for innovative

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<sup>45</sup> In 2008—105%, in 2009—110%, but in 2010—only 92.3% of 2007 financing. Federal Law on the 2008 Federal Budget and allocations for the 2009-2010 period, <[www1.minfin.ru/ru/budget/federal\\_budget/](http://www1.minfin.ru/ru/budget/federal_budget/)>.

<sup>46</sup> Amendments to the Federal Law on the 2007 Federal Budget, <[document.kremlin.ru/doc.asp?ID=042429](http://document.kremlin.ru/doc.asp?ID=042429)>.

<sup>47</sup> See A. Fursenko, D. Livanov, A. Volkov, “Vyssheee obrazovaniye: povestka 2008-2016,” *op. cit.* [43].

<sup>48</sup> Contrary to the public health sector, for example, T. Klyachko, V. Mau, “Mezhdu dengami i institutami” [Between Money and Institutions], *Ekspert*, No. 33, 10 September 2007, available at: <[www.expert.ru/printissues/expert/2007/33/finansirovanie\\_vuzov](http://www.expert.ru/printissues/expert/2007/33/finansirovanie_vuzov)>.

HEE (national project “Education”) . The MGU is financed from a separate budget article. Each one of these types of financing favors the best performing institutes. The financing allocated for two business schools (Skolkovo and St. Petersburg) alone accounts for 250 million US dollars, or 13 percent of Russia’s entire higher education budget. Such “centers of excellence” coexist with establishments immersed in inertia and conservatism. The “weak” are kept alive through increases in financing for basic spending. In the regions, social considerations drive the authorities to preserve certain HEE. With the emergence of the status of autonomous institution, bankruptcies may multiply.<sup>49</sup>

– How will higher education’s three “economic” functions evolve in Russia? Higher education in Russia is presently centered primarily on its training role, and questions surrounding its quality and ability to meet the demands of the labor market remain numerous. With regard to the mission of knowledge production, since Soviet times, and even before, the role of teaching and research in Russia has been divided between universities and the structures of the Academy of Science. Since this role is only loosely fulfilled by universities, the third (that of innovation and the link to industry) is also weak, having little to offer to industry.

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<sup>49</sup> See C. Sigman’s article, *op. cit.*, [10].

## Conclusion

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**A**t the end of December 2007, Andrey Fursenko, Minister of Education and Science, declared that all necessary requirements for a new educational model were already in place.<sup>50</sup> The Minister may indeed be credited with fostering a modern institutional framework, the introduction of rules that render the system more supple, as well as closer correspondence with European norms. In spite of these results, it is nevertheless obvious that the project for higher education is only beginning. The creation of Federal universities and the link between research and teaching are for example only in their infancy.

An important assessment will come in the year 2010: by which time the Bologna Process, OECD and WTO accession, and the national project "Education" are all supposed to be completed. The Concept for the modernization of education also covers the period to 2010. Given the scale of transformations, this date is obviously very "optimistic" to see these changes bear fruit. For now, the higher education system operates in a form of "experimental regime" at various levels. Several challenges await, some of which reflect international trends (generalization of higher education), while others are specifically Russian (separation of science and education).

Nevertheless, the economic and political context seems favorable to the pursuit of reform. The election of Dmitry Medvedev may be understood as an encouraging sign, in the sense that national projects, including that on Education, helped him build up his popularity. It is now a matter of continuing the present efforts to transform the exceptional quantitative variables into real qualitative improvement of the Russian higher education system.

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<sup>50</sup> Speech given to the Council for National Projects and Demographic Policy, 26 December 2007, <[www.rost.ru/themes/2007/12/261713\\_12200.shtml](http://www.rost.ru/themes/2007/12/261713_12200.shtml)>. V. Putin and D. Medvedev have often manifested their satisfaction with the national projects' results.