

# Optimizing Talent:

*Closing Educational and Social Mobility Gaps Worldwide*

## **Access to Higher Education in the Post-Soviet States: Between Soviet Legacy and Global Challenges**

Anna Smolentseva

National Research University – Higher School of Economics, Moscow, Russia

Salzburg Global Seminars  
Salzburg, Austria  
October 2-7, 2012

# **Access to Higher Education in the Post-Soviet States: Between Soviet Legacy and Global Challenges**

Anna Smolentseva

National Research University – Higher School of Economics, Moscow, Russia

In the USSR education, especially vocational and higher education, became an effective tool to support the development of the national economy, and the access to education has expanded dramatically, that over seventy years generated comparatively high educational attainments. By the fall of the USSR the gross enrollment rates for higher education ranged from 10% in Turkmenistan to 24% in Russia. Higher education was free.

In 1991 three hundred million population of the former USSR found themselves divided by the boundaries of 15 newly independent states<sup>1</sup>. Political, economic, socio-cultural environments in the respective countries, neoliberal reforms brought in by the West, globalization in its multiple manifestations have shaped the path each of the country chose or had to follow in the last twenty years. The transformations in educational systems in many ways were similar: reforms of admissions to higher educational institutions, transition to the two-tier bachelor-master system, introduction of non-state higher education, shrinking of the free higher education, etc. The countries also faced cuts in public funding, further decline of the academic profession and massification of higher education participation.

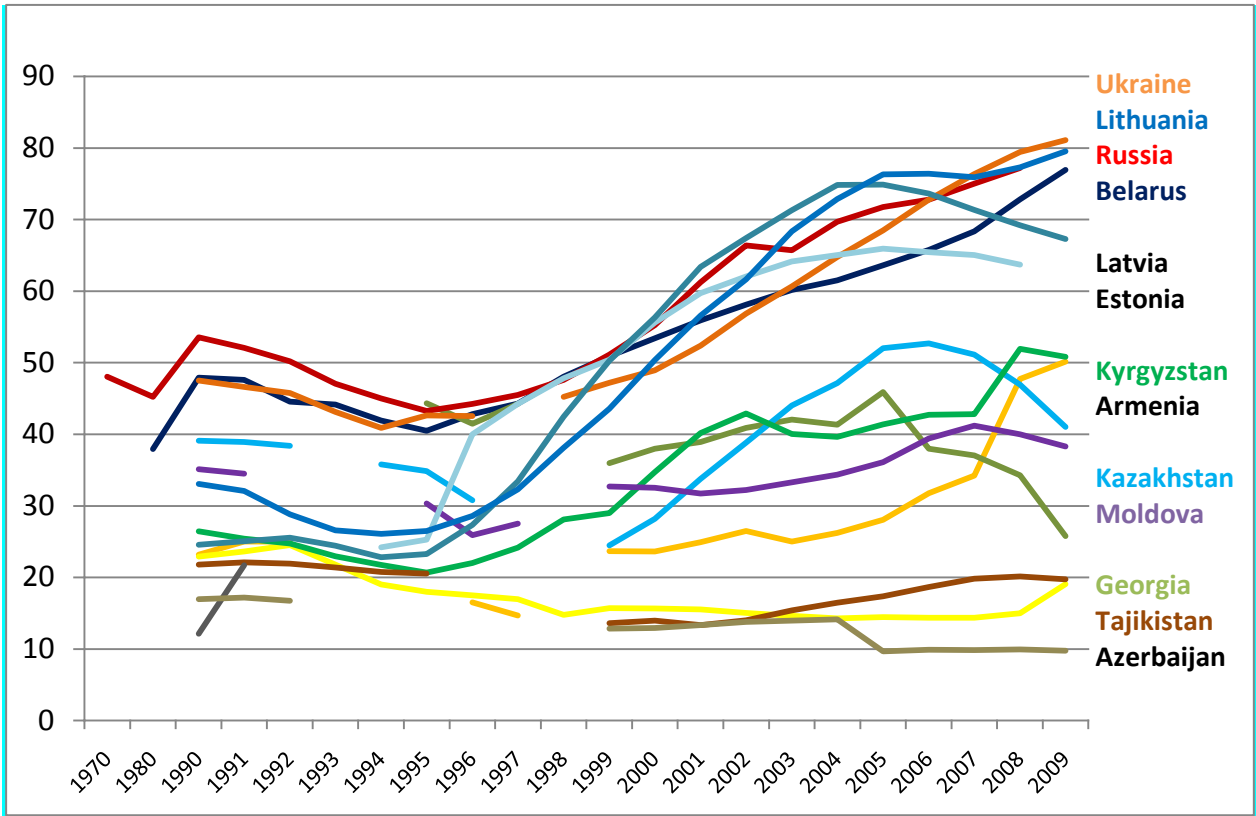
If we look at the gross enrollments rates in higher education, several patterns of the Post-Soviet developments can be identified. The strongest systems located in the European part of the region – Russia, Ukraine, Belarus and three Baltic states – further expanded higher

---

<sup>1</sup> The independence of three Baltic States was recognized first in 1991 (later these countries joined European Union). Next, in 1991 other twelve republics signed an agreement establishing the Commonwealth of Independent States (CIS); Georgia joined it in 1993, and in 2008 withdrew after armed conflict with Russia in South Ossetia.

education participation and reached the stage of universal access (60-80%). The systems with lowest indicators of access (10-20%) - Uzbekistan, Azerbaijan, Tajikistan (no current data on Turkmenistan available) – experienced some changes in numbers, but have not made any breakthrough beyond the Soviet achievements. The “middle access” group (25-50%) seems to be more diversified: Armenia and Kyrgyzstan have gradually moved towards universal access, Georgia and Kazakhstan allowed some massification, but later the enrollments notably dropped, Moldova demonstrates a light form of the latter trend.

**Diagram 1. Higher education expansion in the region (1970-2009), gross enrollments ratio**



Source: World Bank/UNESCO data.

As the access is different across countries, the issues and gaps the states are facing vary. For the most mass systems the challenges are largely focused between access and quality, elite and non-elite higher education, rather than access to higher education as such.

Nevertheless, for the majority of the systems the essential inequality factors have persisted since the Soviet time: social, economic and cultural capital of the family.

The lack of primary and secondary on the higher education developments in the region is a major difficulty in trying to analyze the transformations of the systems and higher education access issues. That could be referred both to the statistics and research/publications on the topic. However it should be accepted that the range of the information available has increased over last years, although not for all of the countries of the region. The countries do not participate in international comparative studies, such as Eurostudent, are not involved in international programs of more detailed educational statistics collection (such as OECD data in contrast to UNESCO/World Bank data). Even for Russia, an accessibility of the simple data might be surprising (e.g. admissions by bachelor/master/specialist level; full-time students paying for education in public sector, etc.). An important source of information about the region is the database of the CIS Statistical Committee which aggregates data for the countries of the region and releases comparative databases, but the data available is limited by some general educational indicators.

This paper focuses on the twelve countries of the former USSR excluding the Baltic States, which are not part of the political union of the Commonwealth of Independent States, but members of the European Union. The most of the analysis will be with the reference to Russia not only because of the data availability, but also with recognition the size of the country and its higher education system incomparable to its neighbors (7 mln students vs . 2 mln in Ukraine, 600 thousands in Kazakhstan and from 100 to 400 thousands in each of the other nations).

We start with the overview of the region, then moving to the expansion of the higher education over last decades, important points in educational policy, analysis of inequalities in

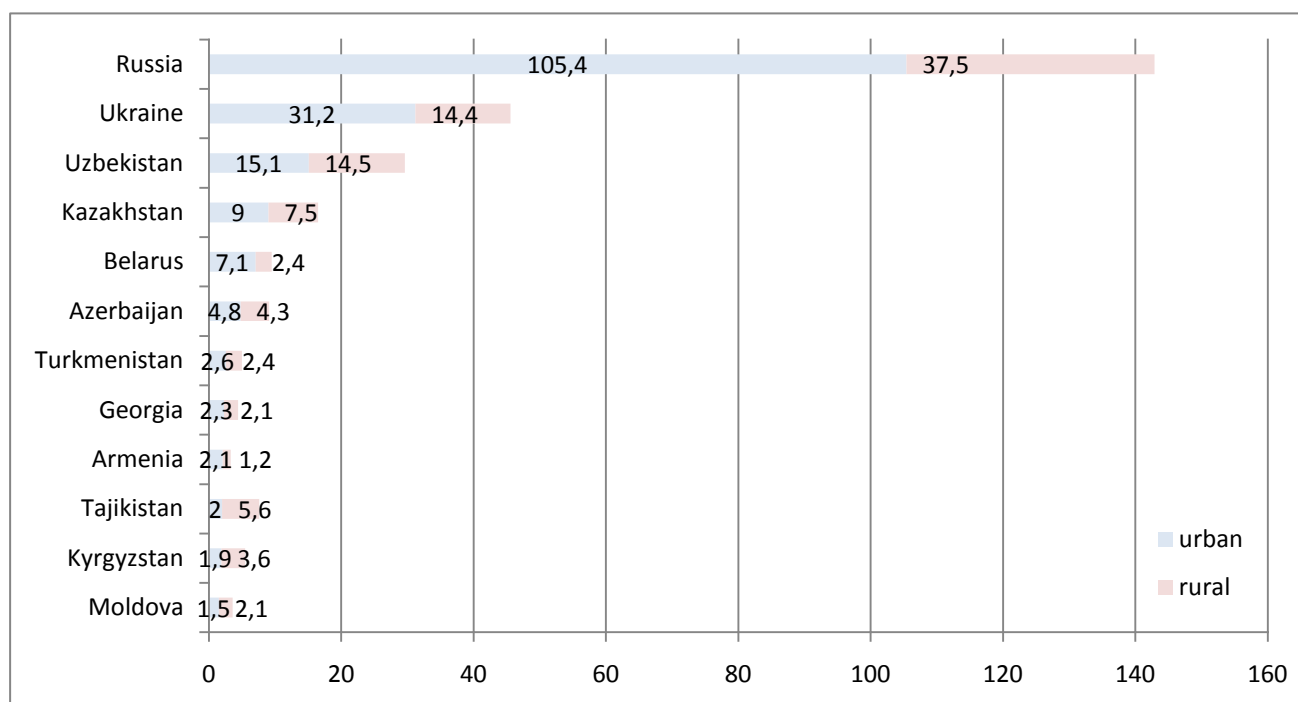
access to higher education and suggesting some further directions for research of education and equitable access.

## **1. Overview of the region**

The region of the former USSR, which in Soviet was called one sixth of the land, can not be considered as a homogeneous entity, but rather as a complex of heterogeneous systems highly differentiated at the international and national levels. In this section some background information helps understand the framework and the trends in the recent developments of the countries and their educational systems.

The population of the region differs across countries by the number, level of urbanization, educational attainment, variety of ethnic groups. The largest countries are Russia with about 140 mln. people, Ukraine (45 mln.), Uzbekistan (30 mln.), Kazakhstan (16 mln) (Diagram 2). Predominantly urban populations are mostly located in the European part of the region – Russia, Ukraine, Belarus, but also in Armenia. Kazakhstan, Uzbekistan, Georgia, Azerbaijan, Turkmenistan can be treated as countries with a middle level of urbanization. Mostly rural nations can be found in Central Asia (Tajikistan, Kyrgyzstan) and in Eastern Europe (Moldova).

**Diagram 2. Urban and rural populations by country, 2010 (mln.people)**

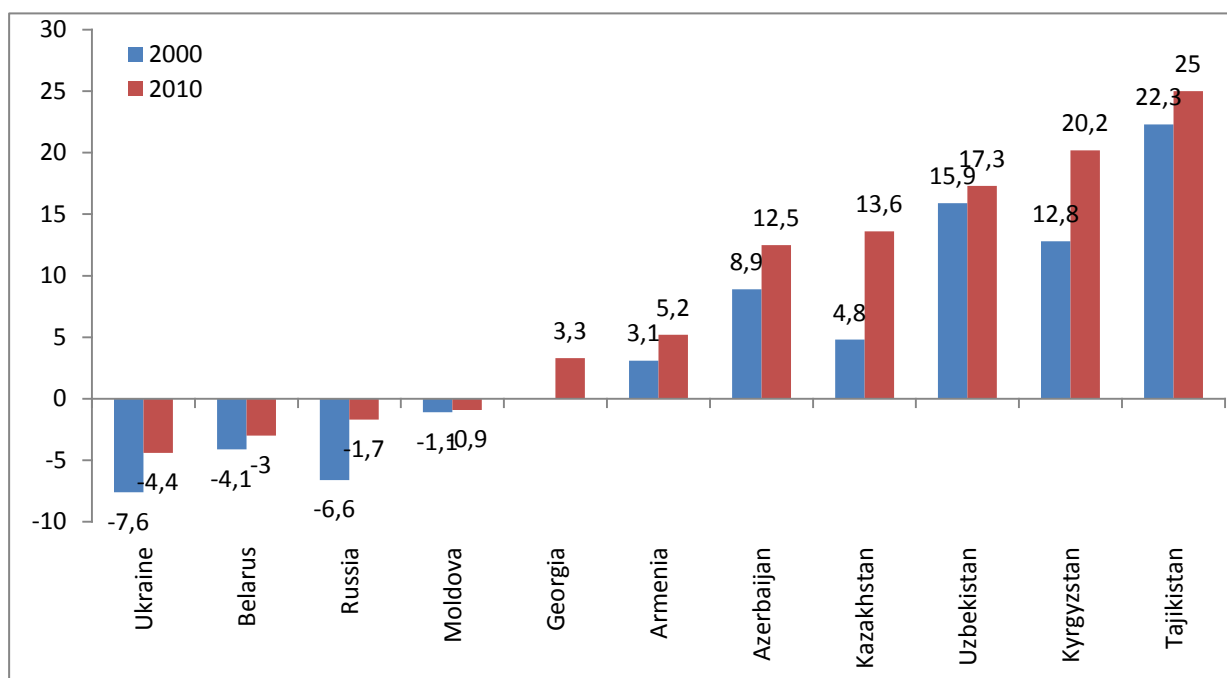


Source: CIS Statistical committee 2010 data. Georgia: Geostat: National Statistics Office of Georgia. [http://www.geostat.ge/index.php?action=page&p\\_id=152&lang=eng](http://www.geostat.ge/index.php?action=page&p_id=152&lang=eng) (2012). Uzbekistan: The State Committee of the Republic of Uzbekistan on statistics: [http://www.stat.uz/upload/iblock/50e/tab1\\_ru\\_2012.doc](http://www.stat.uz/upload/iblock/50e/tab1_ru_2012.doc) (2012). Turkmenistan: WorldBank data on the number of population (2010). <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/TURKMENISTANEXTN/0,,contentMDK:20371296~menuPK:300761~pagePK:141132~piPK:141109~theSitePK:300736,00.html> National Statistics Office – on the proportion of the urban population (50,8% - 2011). <http://www.stat.gov.tm/ru/content/info/turkmenistan/>

The demographic trends also differ in the region. Using natural increase rate<sup>2</sup> as one of the indicators of the demographic processes (Diagram 3) one can see that a demographic decline is a characteristic of the European, most urbanized part of the region and can be observed in Russia, Ukraine and Belarus as well as in Moldova. Central Asian nations demonstrate population growth, and there is a quite a moderate increase in Caucasian countries.

<sup>2</sup> Natural increase rate is calculated as crude birth rate minus crude death rate divided by 10, where birth and death rates are in per mil; this indicator does not consider migration impact.

**Diagram 3. Natural increase rate in the CIS, 2000 and 2010**



Source: CIS Statistical committee data. Georgia: Geostat: National Statistics Office of Georgia.

In assessing educational attainment of the population, I tried to rely on the data by national agencies (the WB data is as of 2000). Because of the different time points ranging from 1995 to 2009, it is quite difficult to make an accurate comparison. For instance, the recent data available for Ukraine refers to the census of 2001. Generally, the nations are very differentiated by educational level, and most educated populations are concentrated in Georgia, Russia, Belarus, Armenia, Ukraine, Kazakhstan.

**Table 1. Population with tertiary education (population over 15 years of age, %)**

Countries	Population age 25-35 with higher education (%), censuses of 1999-2001(CIS Statistical Committee)	Population over 15 years old with tertiary education
Georgia	32,3	n/a
Armenia	23,7 (age 26-39)	17,0 (2001)
Russia	21,3	22,8 (2010)
Belarus	19,1	18,9 (2009)
Ukraine	18,4	14,0 (2001)
Moldova	15,6	11,1 (2004)
Kazakhstan	15,2	19,8 (1999)
Kyrgyzstan	12,1	12,4 (2009)
Azerbaijan	11,8	12,2 (2009)

Turkmenistan	11,8	9,2 (1995)
Tajikistan	10,7 (age 30-39)	7,6 (2000)

Source: CIS Statistical committee data. Kazakhstan 2010: National Statistics Committee.

Ekonomicheskaya aktivnost' naselenia Kazakhstana

<http://www.stat.kz/publishing/20111/%D0%AD%D0%BA%D0%BE%D0%BD%D0%BE%D0%BC%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B0%D1%8F%20%D0%B0%D0%BA%D1%82%D0%B8%D0%B2%D0%BD%D0%BE%D1%81%D1%82%D1%8C%20%D0%BD%D0%B0%D1%81%D0%B5%D0%BB%D0%B5%D0%BD%D0%B8%D1%8F.pdf>. Russia 2010: Rosstat: Educational attainment of the population over 15 years: [http://www.perepis-2010.ru/results\\_of\\_the\\_census/tab8.xls](http://www.perepis-2010.ru/results_of_the_census/tab8.xls). Ukraine: National statistics office: Labor in Ukraine 2009 [http://www.ukrstat.gov.ua/druk/katalog/pracia/Pracsa\\_09.zip](http://www.ukrstat.gov.ua/druk/katalog/pracia/Pracsa_09.zip).

An important feature of the region is its variety of ethnic groups and languages. While Russian was a dominant language if the USSR, special policy aimed at preservation of other languages and cultures was also implemented. Since Soviet time, primary and secondary education might operate on languages other than Russian (how many national schools?). After the fall of the USSR, the nation states started to build their own national identity, and transition to a national language in public administration and education marked a new period in this process.

**Table 2. Ethnic variety of the population**

<i>Countries, sorted by % of titular nation population</i>	<i>All nationalities, thousands</i>	<i>Titular nation, %</i>	<i>Largest minorities</i>
Armenia 2001	3213	98	1,2% Yezed
Azerbaijan 2009	8922	92	1,3% Armenian, 1,3% Russian
Belarus 2009	9504	84	8% Russian
Georgia 2002	4371	84	6% Azerbaijani, 6% Armenian
Tajikistan 2000	6127	80	15% Uzbek
Russia 2010	142857	78	3,7% Tatar
Ukraine 2001	48241	78	17% Russian
Turkmenistan 1995	4438	77	9% Uzbek, 7% Russian
Moldova 2004	3383	76	8% Ukrainian, 6% Russian
Uzbekistan 1989	19810	71	8% Russian, 5% Tajik, 4% Kazakh
Kyrgyzstan 2009	5363	70	14% Uzbek, 8% Russian
Kazakhstan 2009	16010	63	24% Russian, 2,9% Uzbek, 2,1% Ukrainian, 1,4 Uyghur, 1,3% Tatar

Source: CIS Statistics Committee. <http://www.cisstat.org/base/preditog11/1/136-146.zip>. Kyrgyzstan (2009). National Statistics Data.

<http://212.42.101.112/pxlocal/Database/STATRU/%D0%94%D0%B5%D0%BC%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B0%D1%8F%20%D1%81%D1%82%D0%B0%D1%82%D0%B8%D1%81%D1%82%D0%B8%D0%BA%D0%B0/%D0%9D%D0%B0%D1%81%D0%B5%D0%BB%D0%B5%D0%BD%D0%B8%D0%B5/%D0%9D%D0%B0%D1%81%D0%B5%D0%BB%D0%B5%D0%BD%D0%B8%D0%B5.asp>. Georgia Census 2002 Data (2002).

[http://www.geostat.ge/cms/site\\_images/files/english/census/2002/03%20Ethnic%20Composition.pdf](http://www.geostat.ge/cms/site_images/files/english/census/2002/03%20Ethnic%20Composition.pdf). Armenia National Statistics Data (2001) [http://www.armstat.am/file/article/armenia\\_11\\_3.pdf](http://www.armstat.am/file/article/armenia_11_3.pdf).



In Russia, census of 2002 reported 182 ethnicities and ethnic groups (Bogoyavlenskiy 2008). As of 2010, 78% of the population referred themselves as Russians. Among minorities the largest groups comprising over 1 mln. people are Tatars (3,7% of the population), Ukrainians (1,3%), Bashkirs (1,1%), Chuvashs (1,1%), Chechens (1,1%), Armenians (0,8%). Within Russia, Russian language shares its official status in some regions with the national languages of the titular nations of those regions such as Bashkortostan, Tatarstan, Yakutia, Chuvash Republic, Mordovia, etc.

The most ethnically diverse population in the region one can find in Kazakhstan where only 63% comprise titular nation citizen. One out of four in Kazakhstan is Russian. Here, although the Kazakh language is an official language, Russian is used in public and municipal organizations and administration along with the Kazakh. In fact, besides Kazakhstan, it is only Belarus and Kyrgyzstan where Russian language is formally recognized as an official language together with the language of the titular nations.

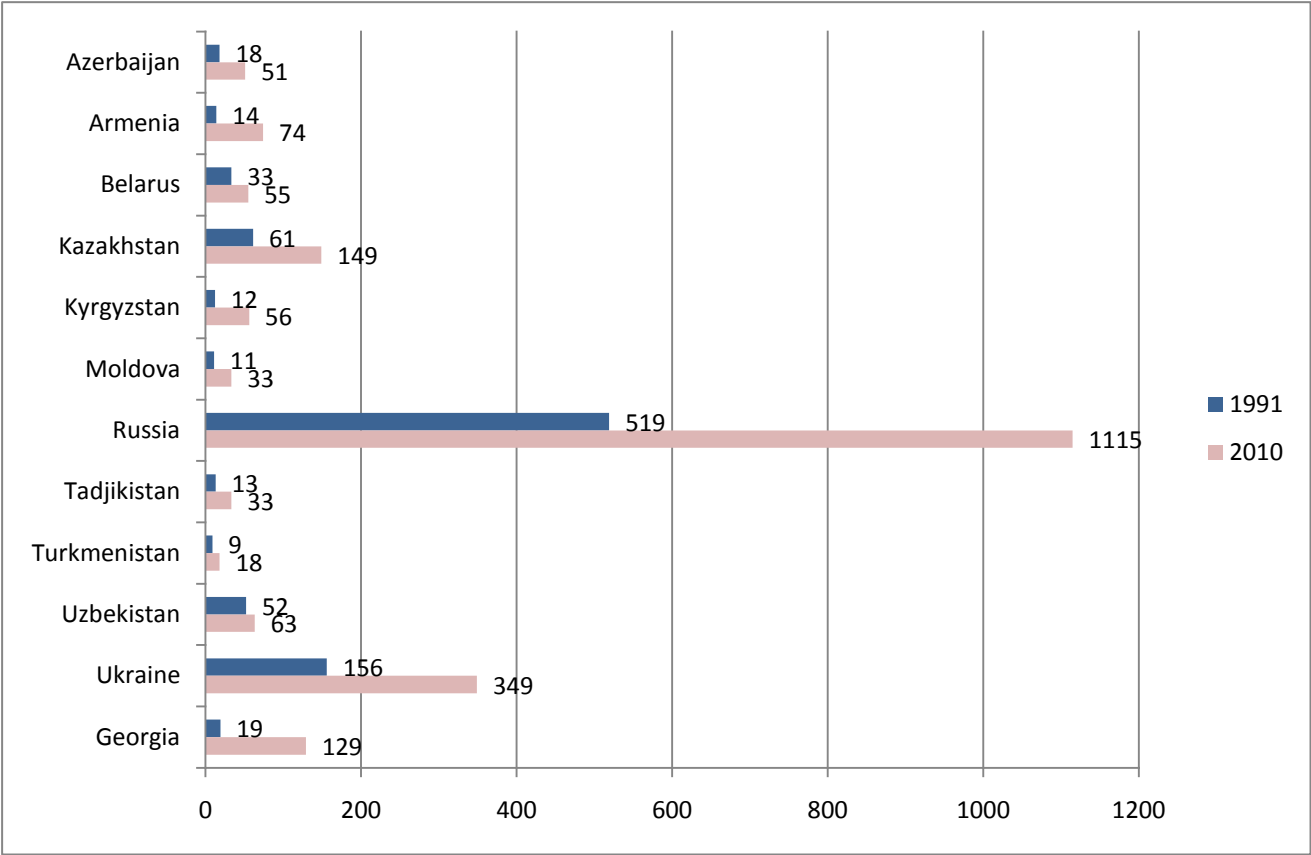
## **2. Higher Education Expansion in the Region**

As we already mentioned, the higher education expansion has started in 1960-1970s when Soviet Union focused on the development of the national economy in which high qualified manpower played a crucial role. After the fall of the USSR the countries of the regions have to face a number of challenges: economic collapse, political reforms, economic transformations as well as globalization challenges. Orientation towards Western standards of “normal” organization of society and economics on the pillars of democracy and market, various programs of international aid to Post-Socialist nations have notably shaped the similar vector of development of the countries of the regions, but on the other hand, the specifics of

socio-economic and cultural foundations in each of the nations have formed individual trajectories and pace of transformations.

Here the data enables to grasp recent developments in higher education sector over last twenty years. Massification has become a common trend for Post-Soviet states. Like in many other countries, the number of institutions at least doubled (except for Belarus and Uzbekistan).

**Diagram 4. Number of Higher Education Institutions, 1991-2010**



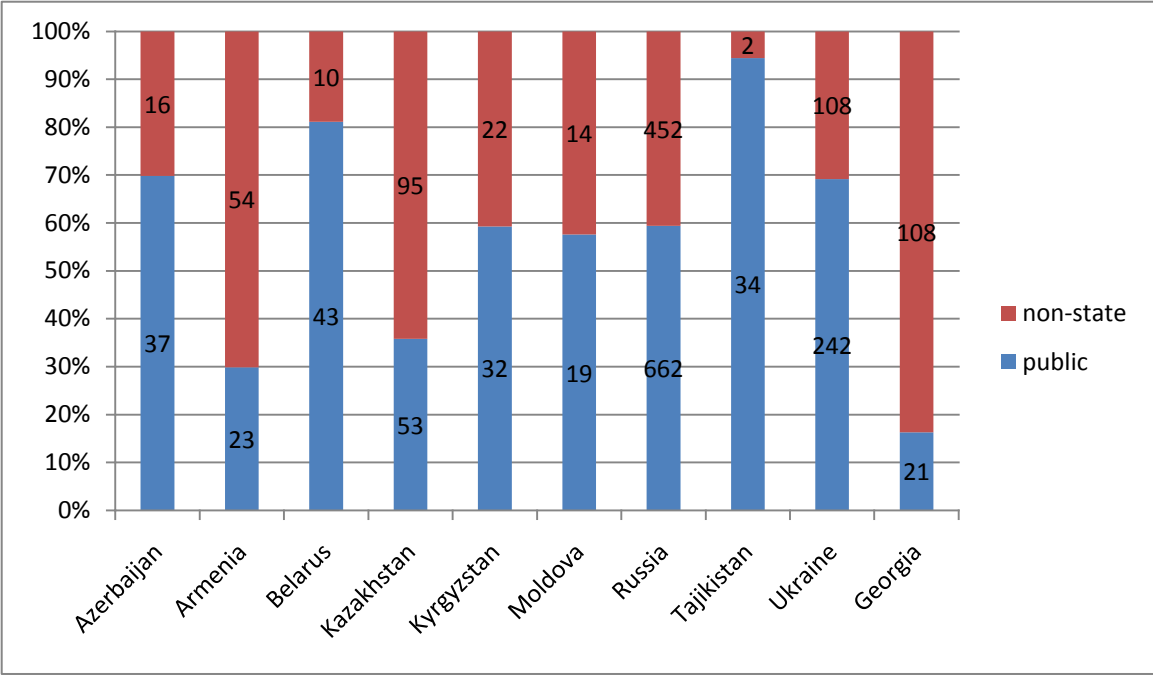
Source: CIS Statistical Committee. Uzbekistan, Georgia – data for 2009.

In most of the countries, establishment of the non-state sector of higher education, which became possible just after the fall of the Soviet economy, provoked quantitative growth of higher educational institutions. New educational institutions fallen short of the expectations to cater the needs for higher quality of education, differentiated curricula, innovative teaching

and learning and thus seriously compete with the inertial public sector weakly subject to transformations. Partly it can be explained by the fact that non-state sector proved to be under the strong governmental regulation in terms of accreditation and licensing and also have not been supported by only emerging private sector of the economy. Besides, the powerful incentive for the development of non-state higher education came not from the hopes for educational innovations, but the need for survival of the public higher education. Thus, so called “educational services”, or charging tuition, within public institutions as well as “next to” it, in non-state institutions, established by public sector and its current and former staff formed the basis for higher education development in the region.

At Diagram 5 one can see that the number of non-state institutions might be relatively high, but if we look at enrollments (Diagram 6), one can observe that share of non-state sector is not that significant.

**Diagram 5. Public and Non-State Higher Educational Institutions, 2009 (numbers and %)**

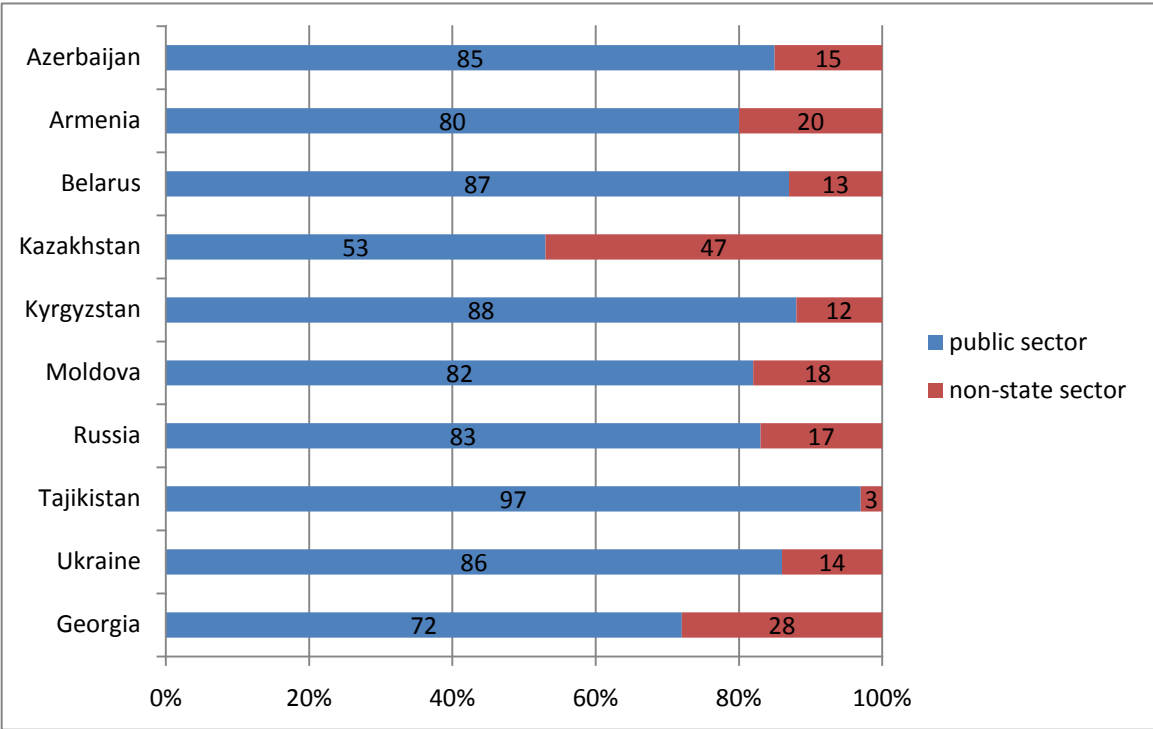


Source: CIS Statistical committee 2010 data.

To put it shortly, a typical non-state establishment of higher learning in Post-Soviet states (and in many Post-Socialist nations of Eastern Europe) is a small institution funded mostly from student tuition and offering degree programs in socio-economic disciplines, management and law.

The highest participation share in non-state sector is in Kazakhstan (47%) and Georgia (28%). The smallest share of enrollments is in Tajikistan (3%). In other countries this indicator varies from 13% to 20%. The most notable example of non-state higher education development can be found in Kazakhstan, where private enrollments account for almost a half of the total number of students, and a number of formerly public institutions were literally privatized in 1990s.

**Diagram 6. Proportions of students in public and non-state higher educational institutions, 2009 (%)**

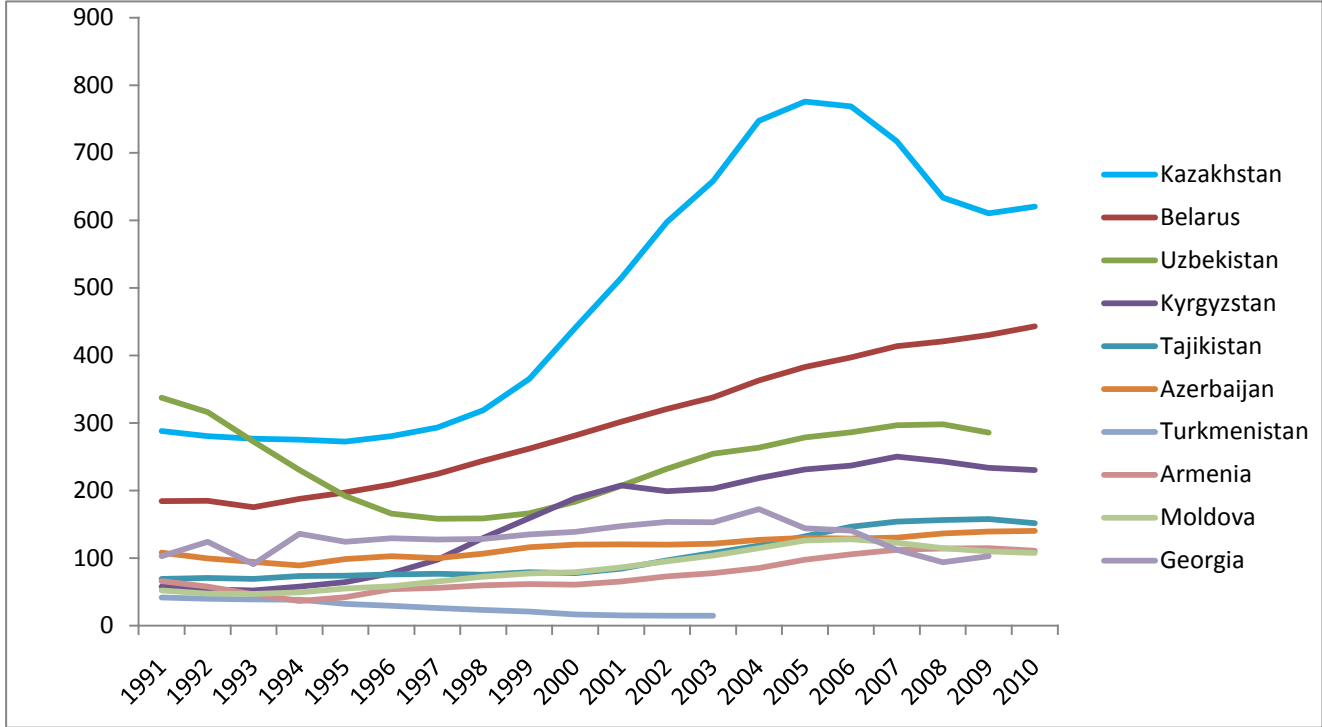


Source: CIS Statistical committee 2010 data.

In most of the countries higher education enrollments doubled over last twenty years: in Russia, Ukraine, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Moldova and others. But Uzbekistan still has not reached the indicators of the Soviet time. Georgia demonstrates a moderate increase, but then decline. No recent data on Turkmenistan.

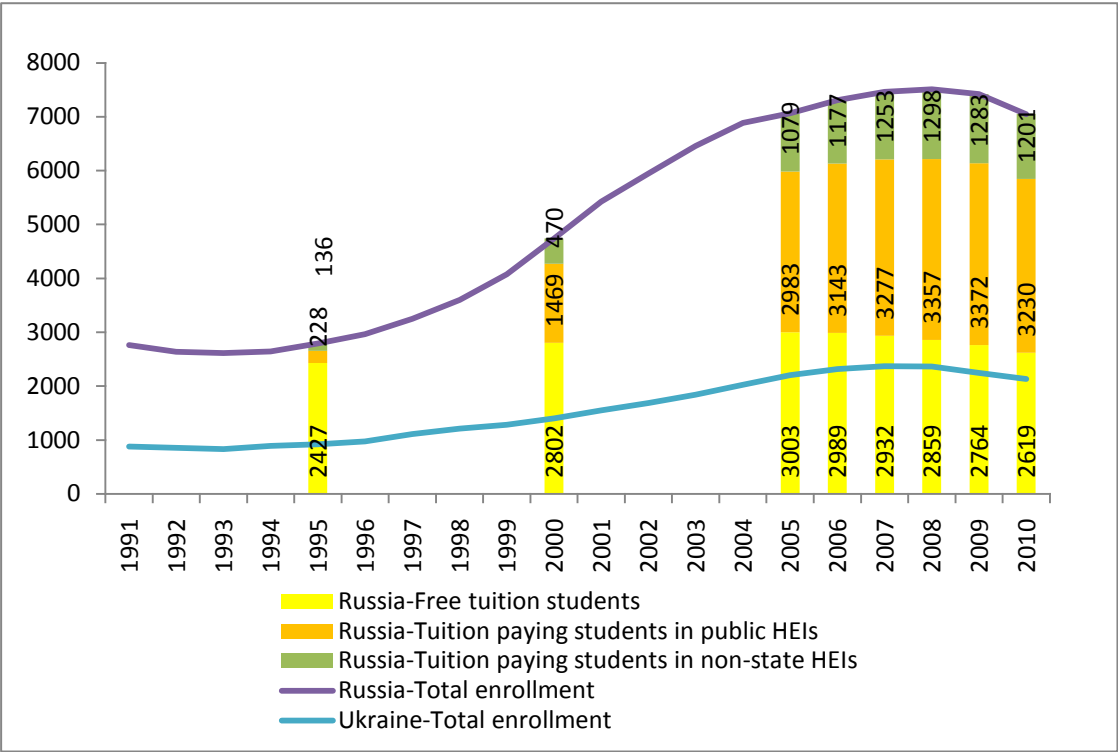
The enrollments indicators are presented on two diagrams (Diagram 7 and 8), with Russia on and Ukraine on e separate graph. For Russia and Ukraine the size of student body is much higher than in rest of the countries, and for Russia we have more detailed data about the dynamics of number of students with free and non-free tuition in public and non-state sector.

**Diagram 7. Higher Education Enrollments in the CIS, 1991-2009 (thousands)**



Source: CIS Statistical committee, UNESCO, national statistical agencies.

**Diagram 8. Higher Education Enrollments in Russia and Ukraine, 1991-2009 (thousands)**



Source: CIS Statistical committee, UNESCO, Russian statistical committee.

The data on the make-up of the student body in Russia allows to conclude the basis of massification of higher education was the expansion of tuition paying segment. Despite some statements that it is government which accounts for the unprecedented higher education growth, the data shows that governmental contribution to the financial support of the massification was not that significant: over 10 years (1995-2005) budget enrollments increased only at 20%. The main increase in the number of students is associated with the growth of fee-paying sector within public higher education, to compete with which emerging non-state institutions were unable. Over the same period the growth of tuition paying students in public institutions increased as much as twice (92%). Non-state enrollments also nearly doubled (87%), but in absolute numbers the size of non-state sector is 3 times less than tuition charging programs in public institutions.

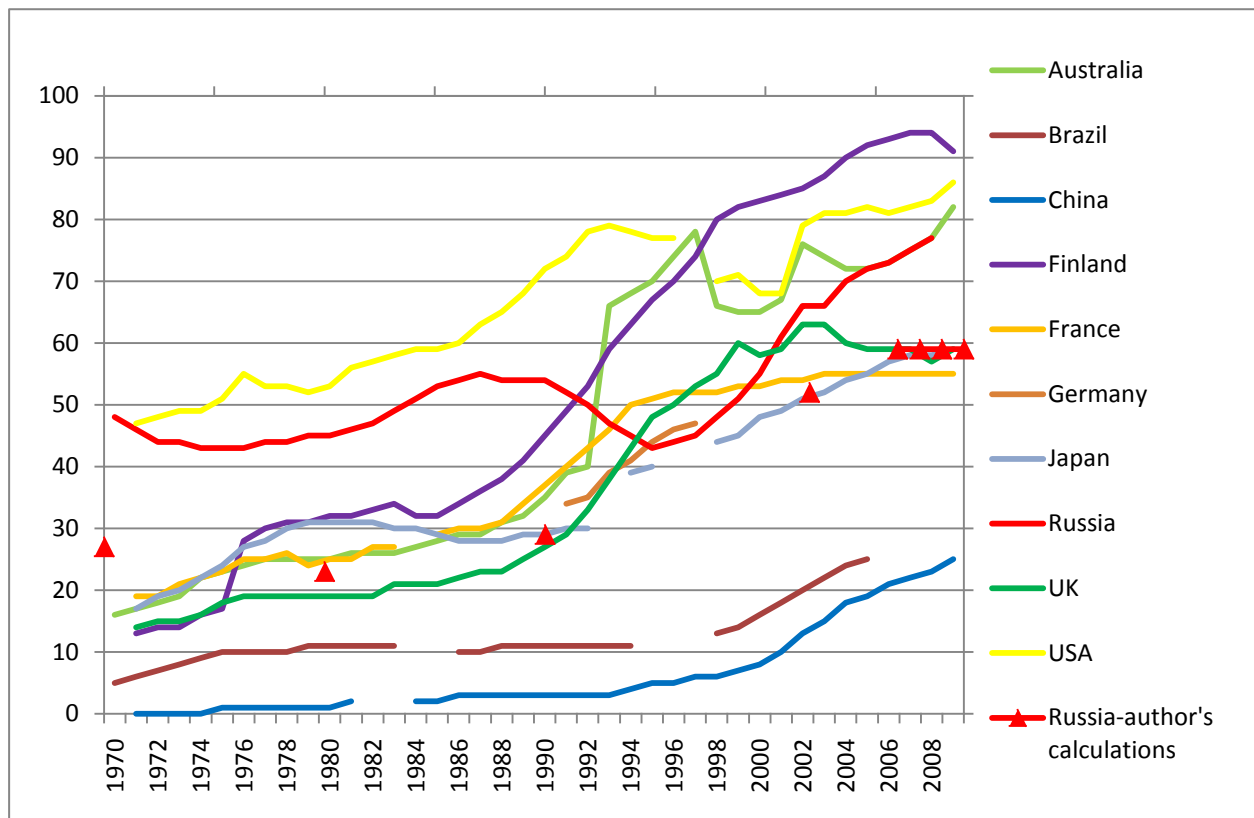
Hence the market of “educational services” has formed both in public and non-state sectors. Tuition charging has become the most important source of funding for public and non-state institutions of higher learning. As a result, non-free enrollments in public universities have rapidly become comparable with free enrollments and in 2006 exceeded them.

It is important to note that level of participation of population in higher education in Soviet time was on average not lower than in developed world. By UNESCO/World Bank data massification in Russia became a fact as early as in 1970s when the participation rate reached 40% and was comparable to the USA level, usually considered as the first country with a mass system (Trow 2006), while Western European indicators did not exceed 20%. Possibly, the quality of this data might not be entirely reliable, but it gives some sense of the level of education in some parts of the region.

Author’s calculations based on national statistics shows that the above data might be overestimated, however even lower indicators of the Soviet time outperform leading Western countries in the participation rate: 27% in 1970, 23% in 1980, 29% in 1990 (Diagram 9), after which the participation has doubled during next fifteen years (Smolentseva 2012).

Meanwhile, at the beginning of reforms international experts estimated the level of participation of the USSR population as much as twice lower than in Western Europe pointing to the limited access to higher education which should be overcome by means of development of non-state sector of education and user fees in public sector (Heyneman 2010). Those measures were aimed at meeting “student demand”, and eventually led Russia, Ukraine and Belarus to the world top countries by highest rates of participation. Current level of gross enrollment ratios here is comparable to the level at some developed (Australia, Finland, Denmark, Korea, USA) and Post-Socialist nations (Slovenia, Lithuania, Poland).

**Diagram 9. Higher education expansion in international perspective (gross enrollment ratios, 1970-2009)**



Source: World Bank/UNESCO data. For author's calculations: Russian statistical committee data, 20-24 age cohort (Smolentseva 2012).

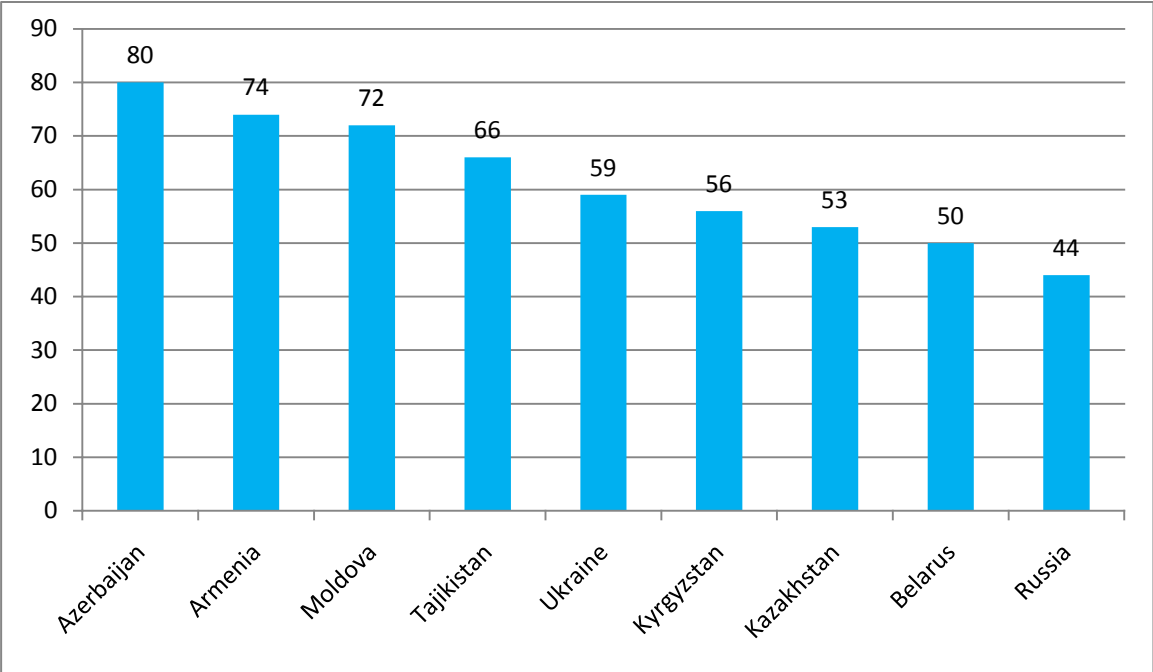
**Demographic decline** is one of the serious challenges for the stability of societies and their education systems in the European part of the region. In Russia and Ukraine there is a decrease of the number of students which started in 2008 as a result of the low birthrate in transitional 1990s, and a slight increase of the demographic waves is expected by mid 2020s when the cohort of those born in mid 2000s will start entering higher education.

Another characteristic of the dynamics of higher education expansion in the former USSR is expansion of **full-time or part-time education**. In this respect, Azerbaijan, Armenia, Moldova and Tajikistan are leaders in full-time participation: these systems enroll at least two out of three students on this basis. In contrast, in Russia the majority of students study part-time (full-timers are 44% in general, 49% in public sector, 20% in non-state sector). Thus growth of part-time education accounts for massification of higher education.



From 1990 to 2010 the number of part-time students tripled and comprised 4 mln. people, while the number of full-time students only doubled and comprised about 3 mln. people.

**Diagram 10. Full-time students, 2010 (% of total enrollments)<sup>3</sup>**



Source: CIS Statistical committee 2010 data.

The **reasons** of enormous massification in Russia have puzzled many experts because national economy has not provided any sign of demand for higher qualified labor force. The massification tended to erode traditional higher status of higher education degree and became a challenge for policy-makers. There are following explanation of this phenomenon.

First of all, the **structural transformation** of the Soviet centrally planned economy and the transition away from a military-industrial system towards the development of a modern service sector created new occupations and consequently produced new demands for vocational training. The educational system, still centralized and static, was not able to meet the changing needs of the labor market. In a planned economy, the system of vocational training had no need to adjust to the labor market, as the number of students in each field of

<sup>3</sup> No data found on Turkmenistan, Uzbekistan, Georgia.

specialization was defined centrally, and every graduate had guaranteed employment (although, of course, the system did not work smoothly as it was impossible to estimate exactly the number and type of specialists required, and many had to work in positions which called for a different specialization or lower qualifications).

The economic transformation might also explain doubled demand for higher education in 1960s, however in that period the state played a dominant regulating role in higher education expansion. In 1990s, on the contrary, government has largely lost its regulating function in higher education enlargement having introduced this sector to the market of “educational services”.

In Post-Soviet period higher education has become a prerequisite for a “good job”, which usually implies higher income (as Russian and Ukrainian public opinion surveys suggest, e.g. see Dubin et al 2004, WCIOM 2011, Gorshenin Institute 2012). A substantial majority (60% in Russia) considers it most important to complete higher education before commencing work than gaining some working experience and then enrolling in university (Vysshee obrazovanie v Rossii: prestizh i dostupnost', 2005). Higher education has largely become only an instrumental function in obtaining certain social goals.

Besides, **economic returns on higher education** becomes significant at the level of individual and society. Gimpelson and Kapelyushnikov (2011). conducted a thorough analysis of the Russian situation. They show that higher education has impact on all key indicators of the labor market including economic activity, employment and unemployment rates. Increasing level of credentials leads to higher participation in the labor force (for higher educated – 90%), growth of employment (83% vs 53% for general secondary education populations), decreasing risk of unemployment as much as twice than on average for the country. It is also a characteristic of younger cohorts with higher education who belong to the generation of mass and universal access. Higher educated population also have better

employment conditions (higher proportion of working with a written labor contract with unstipulated term), less risk of part-time and informal employment.

The benefits of higher education can be observed in income of universities graduates. Depending on the source of data for analysis and gender, they comprise 50-90% comparing to the income of those with general secondary education. Interestingly, return for women is usually 15-20% higher than for men and that fit with the data of higher participation of women in higher education. The rates of return also demonstrate high regional disparities within Russia. Gimpelson and Kapelyushnikov conclude that higher education has been of relative advantage at the Russian labor market so far and the rate of return corresponds to those in OECD countries

Not only economic, but also **social reasons** contributed to the massification of higher education. Higher education was associated with the prestige of non-manual work occupations and considered a social lift in a Soviet society, an opportunity to change one's social status; not necessarily economic status, since in a regulated system salaries of workers could be higher than those of higher educated staff (e.g. engineers). The break-up of the old social structure in the 1990s provoked a need to maintain or strengthen one's social statuses and life chances, and higher education became, rather, the only way to do this.

Survey research shows that **higher education becomes a social norm** in contemporary societies with mass higher education systems (Smolentseva 2007). Even among groups which have not traditionally shown much interest in obtaining higher education qualifications (such as rural population) higher education aspirations are growing and enrolment is now considered a possibility by many (for Russia see: Dubin et al 2004, Abankina T. et al 2011). Vast majority of Russians and Ukrainians (about 80% in each country) believe that higher education is a necessity for their children and grandchildren (WCIOM 2011, Gorshenin Institute 2012). Remarkably, in both countries most of interviewed

preferred “traditional” (Soviet) higher education degree completed within 5-6 years of study (66% and 64% respectively), while Bologna-style first cycle degree (3-4 years) is recognized in a much lesser extent (found it sufficient respectively 13% and 14%). And 6% and 5% want their kids earn a doctorate (Candidate of Sciences degree).

Considering higher education outcomes for individual and society, economists also usually point to externalities defined as “benefits realized by others in the society that are not realized by those people who do the investing in education, whether it be students, families, or researchers. These externalities can be either monetary or non-monetary spillover benefits to others” (McMahon 2009, 193). Among which are one’s own and family health, child’s education and cognitive development, job conditions, etc. Not all outcomes of higher education could be measured and quantified, while McMahon provides estimates for some of the above. We can point to the some accessible evidence of higher education benefits in the region, first of all, for health. Survey research data obtained in eight former USSR countries including Russia demonstrates that population with higher education is as much as twice more likely to consult a doctor while being ill than groups with lowest education (Balabanova et al 2004).

### **3. Educational Policy and Access to Higher Education**

Post-Soviet reforms started in early 1990s after the fall of the USSR and followed a neoliberal course. For higher education, neoliberal reforms usually mean introducing market into the sector, reducing state funding, privatization of costs, demand for accountability for performance and emphasizing higher education’s role in the economy (Neave and Van Vught 1991 cit.by Marginson and Rhoades 2002).

Neoliberalism is built on the assumption of the priority of market and a rational individual. Over recent decades it has become the worldwide paradigm in making economic and social reforms in developed and developing countries, and its expansion received a considerable attention of social scientists. The dominance of this approach in the modern economic and social order can be explained in various ways. Neoliberalism maintains an idea of the manifestation of power relations among nations via increasing control of capital over labor, or of international agencies imposing certain disciplinary policies on states (such as conditional loans, etc.). Practitioners and experts argue that the policies they carry out simply “work” better; others believe the economic globalization is exogenous or there are international normative pressures to construct liberalization as “inevitable” (Fourcade-Gourinchas and Babb 2002).

The direction of educational reforms in Post-Soviet countries are largely supported by a normative argument stating that similar changes in education of the former USSR can not be a result of the forces of globalization which local institutions can not withstand nor can it be consequences of pressures of powerful international organizations like the World Bank, but can rather be explained by the similarity of requirements for excellence in higher education (Heyneman 2010). The same normative rationale is shared by national governments.

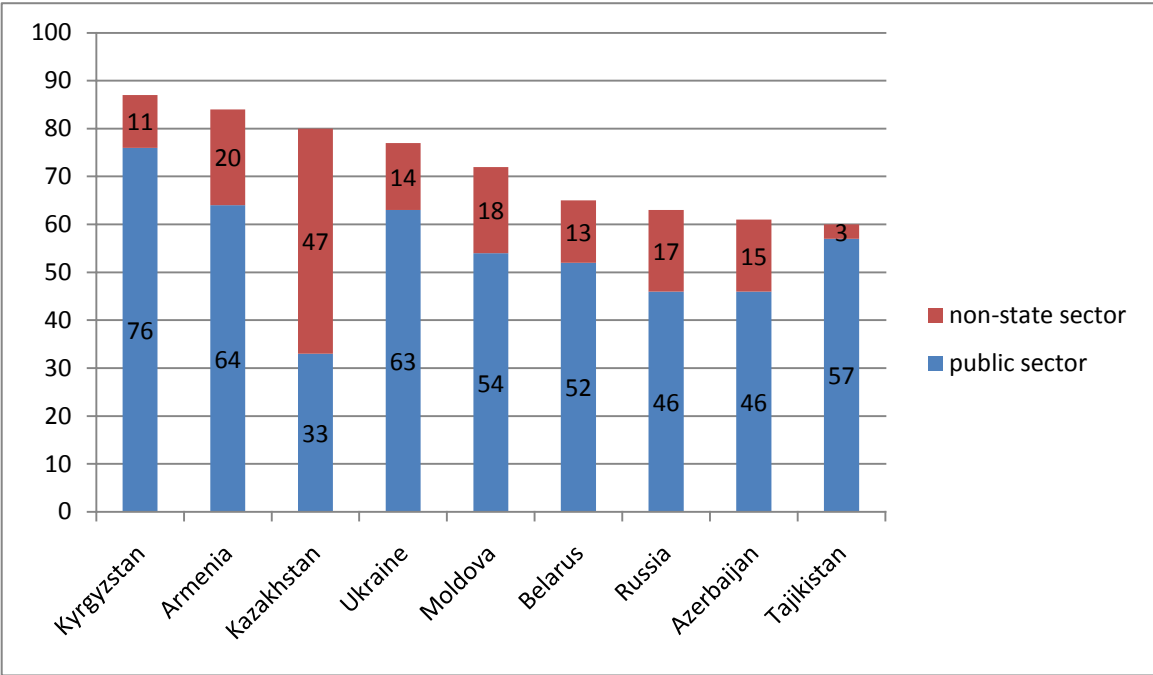
Despite the similarity of efforts undertaken by governments across the globe, there is little evidence that suggest that higher education systems, even within larger regions sharing common histories such as Latin America, Europe or Eastern Europe, has been moving towards convergence (see for instance, Torres and Schugurensky 2002, Gornitzka et al 2007, Silova 2010). Economic sociologists analyzing economic transformations in comparative perspective highlight the critical role of the local institutional conditions determining the way in which neoliberal transformations were carried out, which in turn lead to differentiated outcomes (Fourcade-Gourinchas and Babb 2002).

The set of reforms in higher education in the countries of the region was similar including establishment of non-state sector, user fees in public sector, national test to replace graduation exams in secondary school and admission exams to higher education, per capita funding, loans for education, differentiation and stratification of institutional landscape. The policy did not involve any special measures to expand access to higher education except for the national exam systems. Besides, the educational attainment of the population was relatively high, although in some countries it suffered from the outbound migration of population after the fall of the USSR (e.g., Russians moving from Central Asian countries to Russia). In this paper we will consider only few most important results of educational policy in the region.

The **privatization of costs of higher education** - user fees in public sector, non-free non-state higher education, loans - has become one of the fundamental transformations in higher education in Post-Soviet states.

Comparative data shows that in most of the states of the regions free higher education is rather a history than reality (Diagram 11). In Kazakhstan, Kyrgyz Republic, Armenia more than 80% pay for higher education. In the rest of the nations this number is no less than 60%, and non-free higher education is largely supplied by public sector.

**Diagram 11. Proportions of fee-paying students in public and non-state higher educational institutions, 2009 (% of total enrollments)**



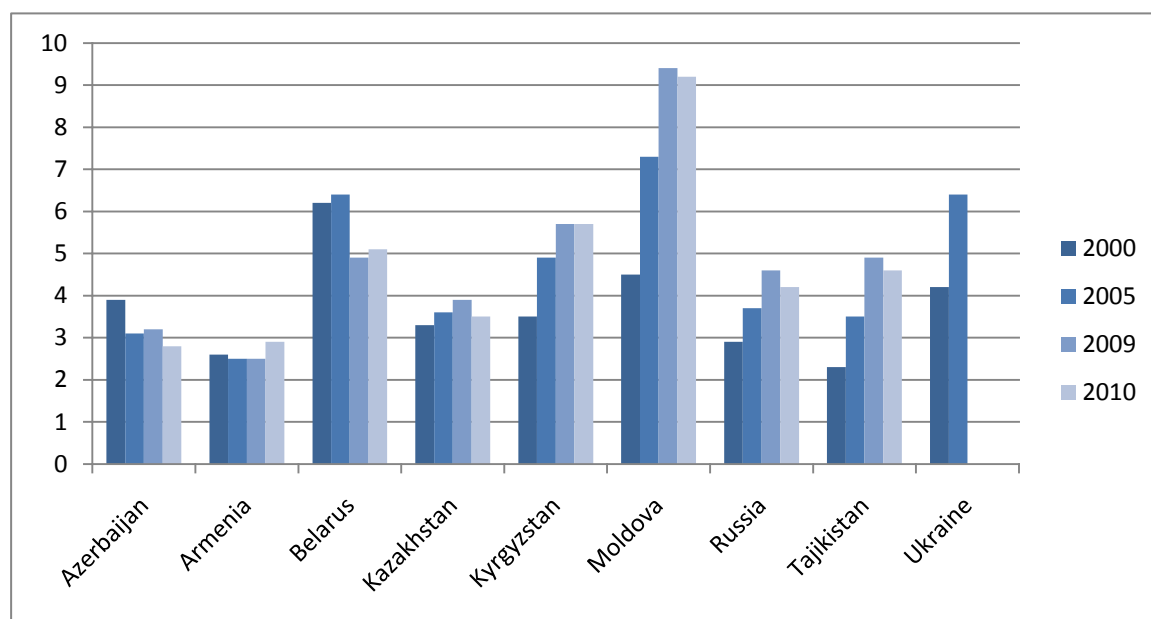
Source: CIS Statistical committee 2010 data.

In Russia, public higher education sector enroll 55% of tuition paying students (as of 2010). Available data do not allow to analyze the trends in privatization of costs of full-time higher education. The data we have involve only public institutions under the Ministry of education and science which accounts for 60% of total enrollments in the country. And for this group of institutions more than a half of full-time students (61%) pay for education.

Uzbekistan has also moved to mostly non-free educational model. The admission plan for 2012 in Uzbekistan allocates 65% slots for tuition-paying students out of overall 56 thousand enrollment at undergraduate level, and 75% out of 6300 places at master’s level (Uzinform 2012).

Privatization of costs went at the backdrop of dramatic decline of public funding of education which started in early 1990s (Smolentseva 2007). As a relative share of GDP the expenditures has grown in many countries, but in absolute numbers they are still low.

**Diagram 12. Public expenditures on education, % of GDP (2000-2010)**



Source: CIS Statistical committee 2010 data.

For instance, according to UNESCO data, four Post-Soviet states are in the top ten nations with lowest share of per capita GDP expenditure per tertiary student – Armenia, Kazakhstan, Georgia and Russia. The position of Armenia and Russia also exacerbated by high participation rate in general and high participation in public sector.

**Diagram 13. Countries with the Lowest Share of p.c. GDP per Tertiary Student (2007-2010 data, year varies across countries depending on data available)**

		Share of pc GDP for tertiary	Ratio of Tertiary to Primary	Ratio of Tertiary to Secondary	Tertiary Gross enrollment ratio	Private Enrollment Share (%)
1	Armenia	7.4	0.42	0.26	50.1	22.8
2	Kazakhstan	7.9			39.5	47.3
3	Liechtenstein	9.2	0.85	0.48	34.7	100.0
4	Philippines	9.5	1.06	1.05	28.7	65.9
5	Korea, Rep.	10.1	0.52	0.44	100.0	80.4
6	Lebanon	10.2			52.5	56.0
7	Georgia	11.2	0.77	0.74	25.8	28.5
8	Chile	12.1	0.82	0.76	54.8	78.0
9	El Salvador	13.7	1.61	1.51	24.6	66.4
10	Russian Fed.	14.2			77.2	14.2

Source: UNESCO Institute for Statistics in EdStats, July 2011. Note: Figures are for the most recent year with data available. Data were not available for 106 countries.

<http://siteresources.worldbank.org/EXTEDSTATS/Resources/3232763-1194387694925/TertiaryEd.zip>



It is important to mention that the amount of studentship provided by government in public sector in many countries still lags behind of official minimal standards of living (which itself does not cover a minimal cost of living) and comprises in Kyrgyzstan 8%, Russia 19%, Belarus, Azerbaijan, Moldova – 38-50% of it (CIS Statistical Committee).

According to Russian statistics, an average tuition fee per semester in 2010 comprised 22984 rub in non-state sector and 25520 rub. in public sector (Abankina I. et al 2012), which is approximately USD770 and USD850 (USD1540 and 1700 a year). Average income per capita comprised in 2010 18887 rub (Russian statistical committee), which comprise an annual income of about USD7555.

An introduction of educational loans proved to be fairly ineffective in the context of transitional economies. The lack of economic and social stability, low income of majority of population, insufficient financial culture of the population, information asymmetry regarding university diplomas and labor market perspectives and high interest rate at banks restrained loan expansion in the country. Say, in Russia and Kazakhstan only limited number of banks offers this kind of service at 9-15% interest rates. In Russia, banks also could support education only at certain higher educational institutions.

**Admission reform** (transition to unified national tests) was one of the key transformations to assess quality of secondary education and enhance access via decreasing formal and informal cost of admissions (preparation to entrance exams, coming to selected institutions to pass entrance exams, corruption). Proponents of the reform believe that common subject exams will provide a unified system of management for education and facilitate admissions by selection of students by merit (exam scores). The exclusion of subjective factors which are inevitable in local written and oral entrance examinations would enable to improve equality of access. Since early 1990s Azerbaijan (1992), Kazakhstan (1999), later Georgia (2005), Armenia (2007), Russia (2009) introduced new national

examinations in the form of standardized subject tests. In some countries national tests served both as an assessment tool of academic achievements of secondary education and entrance exam (such as in Russia), in other countries two sets/levels of test were introduced for those intending and not intending to continue education at tertiary level (e.g. in Georgia).

The reforms also involved transformation in the Soviet **degree system**, which involved five year training towards specialist diploma and 3-4 years of study for first doctorate (Candidate of Sciences), and second (advanced) doctorate (Doctor of Sciences). In early 1990s countries of the region started to introduce new bachelor-master degree system, and here the pace of the full transition was different ranging from 1990s in Kazakhstan to 2011 in Russia. Few countries entirely adopted western three-tier system, including PhD degree and abolished second doctorate degree (Kazakhstan, Georgia).

At different time points many countries of the region joined **Bologna** declaration, among which are Azerbaijan, Armenia, Georgia, Kazakhstan, Russia, Ukraine.

#### **4. Persisting Inequalities in Access to Higher Education**

Soviet government followed an egalitarian ideal of society, and right after revolution opened access to education for all social groups regardless of gender, social origin or ethnicity. The system provided a range of special-entry arrangements for members of the rural population, for those directed to study by industrial enterprises or collective farms, and for those returning to education (following work experience). In spite of these measures, equal opportunity was still something of a myth, as was revealed by a number of sociological studies started in the Soviet period.

As early as in 1960s sociological studies found a number of factors which influence educational and education-to-work trajectories of Soviet youth. Konstantinovskiy and Shubkin

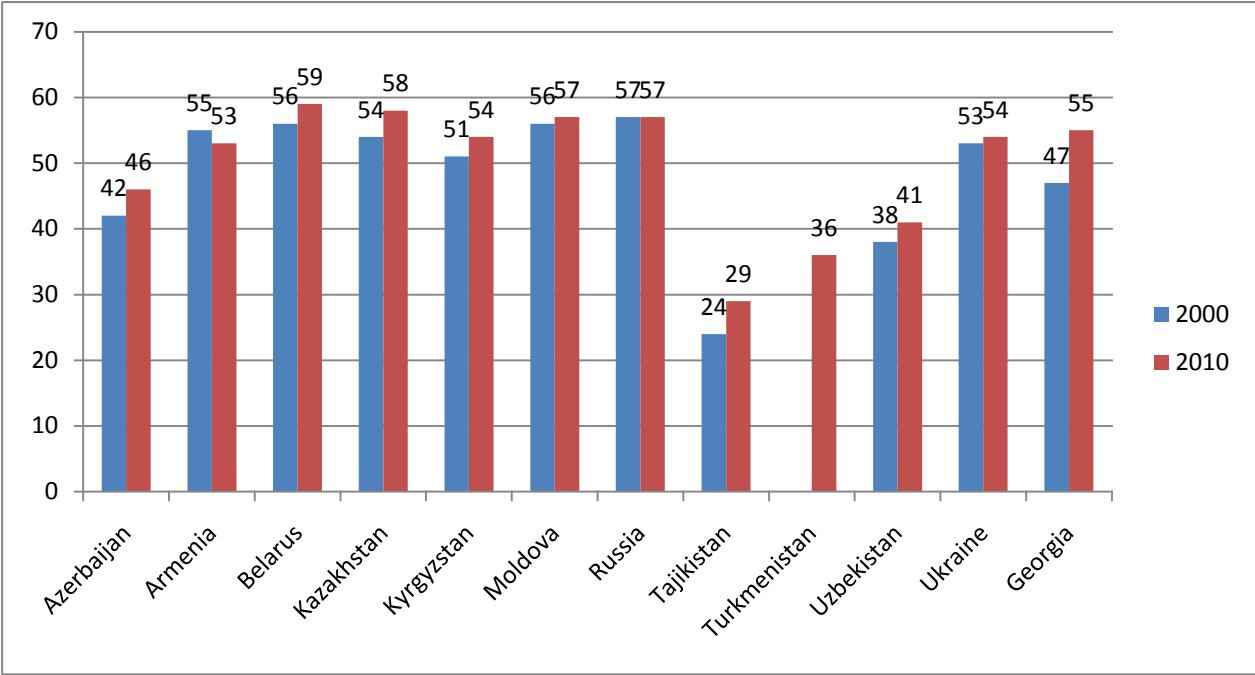
(1977) revealed the importance of larger social and economic factors on individuals' educational aspirations and choices, such as manpower needs in specific industry sectors or occupations (labour-market demand in today's language) including numbers of new-entrants required, selection processes, and systems of training. They demonstrated significance of the structures and processes of socialization, such as the impact of one's place of residence, family background, peers, educational experience and the mass media, which shape interiorization and accumulation of knowledge, formation of views and attitudes. Their studies emphasized the role of personal attributes affecting educational goals and their realization, among which are individual needs, interests, psychological characteristics and personal abilities.

The research showed that individuals' educational goals, plans and their actual educational histories were dependent on levels of urbanization, the occupational and educational status of parents, and gender. Soviet researchers noted the self-perpetuation of social groups in the USSR: workers, peasants and intellectuals (Konstantinovskiy 1999, Rutkevich 2002). Positive attitudes towards higher education and their realization were more a characteristic of children from the families of intellectuals, specialists, professionals and civil servants rather than those of workers and peasants. In addition, graduates from urban schools had more opportunities than those from rural schools. This research also found some differences in educational pathways and outcomes for girls and boys. In general, the most important factors or barriers were traditional, just as in other societies. Subsequent analysis of educational differentiation by Gerber and Hout (1995), Gerber (2000) and Wong (2001) also demonstrated the influence of parents' educational attainment, occupational status and Communist Party membership.

Nonetheless, a number of traditional inequities in education have been overcome in Soviet time. An open access for **women** resulted in high participation of women population enabling to talk about feminization of higher education (Diagram 14). Women gained wide

representation in higher education systems of the region. Less than a half of student body females comprise only in Central Asian countries: Tajikistan (29%), Turkmenistan (36%), Uzbekistan (41%). Azerbaijan’s indicator approaches to one half (46%).

**Diagram 14. Women in higher education (proportion of women in student population,%)**



Source: CIS Statistical Committee. Georgia 2009 – National Statistics Office [www.geostat.ge](http://www.geostat.ge); Turkmenistan 2009; Uzbekistan – as of 2006.

It is important to mention that special measures aimed to regulate the social composition of students at higher educational institutions failed to a large extent. The attrition rates amongst students admitted by special-entry arrangements were comparatively high, as it proved more difficult for them to reach and maintain the required levels of academic achievement (Konstantinovskiy, 1999; Routkevich, 2002).

In Post-Soviet period the studies of educational inequality in higher education have been scarce. Among the studies focused on this topic there are longitudinal studies by D.Konstntinovskiy (Konstantinovskiy 1999, 2008) and project by Independent Institute of

Social Policy (Shishkin 2004) in Russia. The research again demonstrated that despite an expanding higher education system and greater involvement of young people in tertiary education, the factors of unequal opportunity remain persistent. First of all, these are economic and social status of the family, area of residence (major cities/towns/rural area/distance from cities-major educational centers), and type of secondary school. In Ukraine the study of educational opportunity in the context of intergenerational mobility also showed relatively high inequality associated with parental educational attainment both in Soviet and Post-Soviet period (Oksamitnaya and Khmelko 2012).

Access to elite education has been largely defined by family income and social resources. The chances of gaining admission to an elite university are better for the residents of Moscow and St. Petersburg, students of gymnasiums, students demonstrating the highest academic excellence, students having private tutors from a target university and the children of those with high business or bureaucratic status (top managers, administrators and so on). Access to mass, non-elite, higher education is correlated with urban (rather than non-urban) schooling, academic excellence, availability of a computer class in school (which could indicate the quality of the school), higher education of parents, family size (which could correspond inversely to income) and attending preparatory courses at a selected university (Shishkin 2004, Roschina 2006).

Data from the National Survey of Household Welfare and Program Participation (NOBUS) survey exhibit fewer opportunities for higher education for poor populations: in this group, 40% of aged 15-35 received higher education, while among the other income groups this figure rises to 69% (Zaborovskaya & Shishkin, 2005). Students from these income groups tend to enrol on a fee-paying basis (54%) in contrast to those from poor backgrounds (38%). However the costs of higher education are a much greater burden for the poor: education fees comprise 46% of poor households' budgets against 27% in those of other

households, although the difference in the cost of tuition for these two groups is not very great (for poor households it was approximately 10,000 rubles a month in 2003, for other households 14,000 rubles). Positive correlation between higher family income and higher national test results have also been confirmed in a recent study in Russia major cities (Prakhov and Yudkevich 2012).

Geographical location is another barrier to equity in access to higher education. The most vulnerable groups here are rural populations and the populations of small towns. The lower aspirations of these populations for higher education are associated with their perception that higher education is less accessible for them. According to some estimates, higher education is 1.7 times more accessible for urban residents than for rural ones (Dubin et al 2004), 1.14 times more accessible for the graduates of urban schools (compared to rural schools), and is 1.56 times more accessible for the graduates of secondary vocational institutions in urban areas (compared to those in rural areas) (Voznesenskaya 2004). The generally lower quality of education delivered in rural schools is one of the factors contributing to this inequality (rural secondary school students comprise 29% of total number of students at this level). Also, higher educational institutions are located unequally across the country (most of them are in the European part of Russia and usually only in major cities, the capitals of the states of the Federation), thus living in a small town or a rural area immediately presents a barrier to higher education.

The lower income of the population in less urbanized areas is another barrier to equal opportunity, as admission to higher education requires resources to support needed preparation to pass the national exam or to take up fee-paying education. In addition, rural families have to consider the costs of a child's moving to town and his/her living expenses away from home. However, currently rural populations express high aspirations to participate in higher education (Abankina T. 2012).

Even in Soviet times the allowance for students did not fully cover the cost of living, but it was then relatively higher than now and was available to everyone. In this context, the search for employment has become essential for current full-time students - a fact which affects the quality of their learning, and eventually the effectiveness of the entire higher educational system. On average, about half of full-time higher education students work, but only 14% combine full-time study with full-time work, according to national student survey “Monitoring of economics of education” (Smolentseva 2012). Motives for working do not solely relate to financial concerns: students need to acquire professional experience in order to improve their chances of gaining employment after graduation.

The impact of **secondary education system** and the way it shapes further trajectories of the graduates is an important topic in studies of educational inequality. Like in other Post-Soviet states, in Russia the size of private sector in secondary education is very small enrolling less than 1% of total number of students, but the public system is quite differentiated. Thus, admission to a secondary school with a higher status (lyceums, gymnasiums, schools with profiled curriculum (foreign languages, math, etc.)) becomes an important transition point and a bottleneck to further opportunities (Konstantinovsky 2008, Shishkin 2004). The students of better schools have not only higher chances to overcome the barriers to higher education, but also more resources to increase those chances by advanced preparation with private tutors, special courses at higher educational institutions. The inequality of schools and schools performance is correlated with parental background, which means the concentration of resource in certain schools and high level of segmentation of secondary education system. Thus, not only in science (as Robert Merton did), but at school one can observe a Mathew effect: the chances to increase chances are not equal (Konstantinovsky 2008). In such a differentiated system inequality of chances in admissions to better schools can be traced back to the access to differentiated early education system (kindergartens).

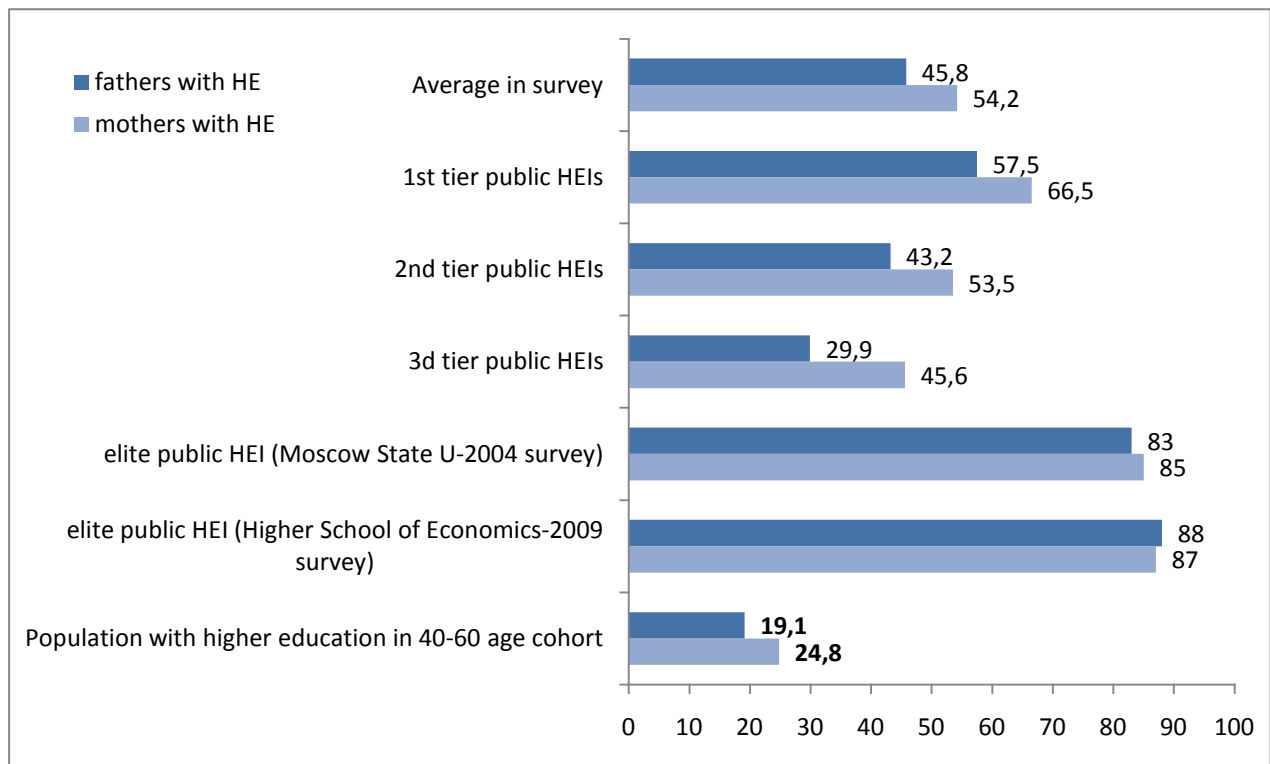
Despite the similarity of factors contributing to educational opportunity around the world, the research might be enriched by considering access in a **comparative perspective**. An interesting example of such comparative analysis is provided in studies focusing on social origin of student body (Eggins 2010, OECD 2008). They employ ratio of parental education (higher education vs others) and occupation (“blue collars” vs others) among students to those among 40-60 age cohort population as an indicators of accessibility of higher education for various social groups. The studies use data from international comparative survey “Eurostudent”, in which former Soviet state do not participate.

Lack of recent data on access to higher education in Russia encourages to take advantage of opportunity to use data of recent national student survey (“Monitoring of economics of education”) to analyze Russian situation in a comparative perspective. The Monitoring has started in 2004, but manage to achieve a reasonably representative sample by 2006. The comparison of parental educational attainment and occupational status of students included in a sample of 2006 and 2011 have not showed any significant difference, so we use most recent data of 2011. We use data for full-time students only (for part-time students no data available).

First, simple comparison of the social origin of students with the social structure of society demonstrates high disparities (Diagram 15). Russian students keep being reproduced within the higher educated social groups. The share of students coming from families with higher educated parents as much as twice exceeds the respective share of higher educated 40-60-year olds to which students’ parents could be theoretically referred: for men it is 45,8% vs. 19,1%, for women 54,2% vs. 24,8% (Smolentseva 2012).



**Diagram 15. Inequalities in Access to Higher Education by Parents Education (Russia, students' parents with higher education, %)**



Source: Monitoring of Economics of Education data, 2011; for average in survey: public and private HEIs, full-time students; for 3 tiers of HEIs: survey data, 2011; public HEIs (N=37), 1288 full-time students. Population with higher education in 40-60 age cohort: data of Russian Monitoring..., 2010. Data on Moscow State University 2004: Gasparishvili & Toumanov 2006. Data on Higher School of Economics: Higher School of Economics Center for Institutional Research 2009.

However, it is especially interesting to compare the chances of access to elite and mass higher education. The institutions in the sample were divided into three groups depending on the average national test score of students enrolled at tuition free basis. For first tier institutions an average score was set at 70 and higher, for second tier – between 60 and 69, and for the third tier 59 and lower (the max score at any subject test is 100). The difference among three tiers was remarkable (Diagram 15). At leading institutions higher educated families present the majority of the contingent (57,7-66%), at second tier that indicator decreases to about a half (44,6-54,0%), and at lower tier institutions they comprise a minority (30,1-45,5%) (Smolentseva 2012). The data on two public elite institutions, Moscow State University and Higher School of Economics, is quite consistent with these results and demonstrates an increased inequality: the proportion of higher educated families constitutes an absolute majority (over 80%). This trend has been long standing: in a 1994 survey of first-

year Moscow State University students, over 80% (fathers 84%, mothers 83%) originated from higher educated families (Vasenina & Sorokina 2002). Moreover, even a century ago, parental education was an important characteristic of student body at this institution: 26% came from families where father had higher education, 6% - mother (Gasparishvili & Toumanov 2006).

Interestingly, the social make-up of current students studying for free and paying for education does not significantly differ by parental education and social status (workers, specialists, etc.). Partly that could be associated with the inaccuracy of the instrument measuring social status, and on the other hand, with the complexity of implementing a finer instrument embracing all the multiplicities of social dimensions and ambiguity of social structure of Post-Soviet society, into a student questionnaire. It also should be mentioned that free higher education in a public sector, more prestigious in general, serves an incentive for higher mobility of students: among students studying for free the share of those who came from other regions is higher than among those who pay for education (43,3% vs. 29,0% study at other region).

Let us consider Russian data in a comparative perspective following P.Clancy's (2010) comparative analysis of access to higher education in 22 countries participated in Eurostudent survey (Table 3). This methodology employs odd ratios where numerator is a ratio of parents with higher education to population of 40-60 age cohort with higher education, and denominator is a ratio of parents without higher education to relevant age cohort population without higher education. By analogy he calculated odd ratios for parental occupation, but numerator here is an indicator of odds of non-belonging to blue collars class, and denominator is odds of students of blue collar origin. So calculations for Russia presented in the Table 3 shows that Russia could be treated as a country of higher level of inequality comparing to other European countries (Smolentseva 2012).

**Table 3. Inequalities in Access to Higher Education by Parents' Education and Social Background: Analysis of EUROSTUDENT 2008 Data\* + Russia**

<i>Country</i>	<i>Fathers ' Higher</i>	<i>Mothers ' Higher</i>	<i>Fathers ' Social Class</i>	<i>Mothers ' Social Class</i>	<i>Composi te Rank</i>
Netherlands	1.65(2)	1.37(3)	1.68(3)	0.79(3)	1
Switzerland	1.73(4)	1.19(1)	NA	NA	NA
Finland	1.75(5)	1.47(5)	1.17(1)	1.04(4)	2
Scotland	1.33(1)	1.22(2)	1.68(4)	1.69(9)	3
Slovenia	1.71 (3)	1.59(6)	1.58(2)	1.38(6)	4
Norway	1.75(6)	1.38(4)	NA	NA	NA
Ireland	1.65(7)	1.50(7)	2.04(7)	0.49(2)	5
Italy	1.93(8)	1.84(8)	1.97(6)	0.40(1)	6
Sweden	2.09(10)	1.85(9)	1.36(5)	1.36(5)	7
Spain	2.07(9)	1.90(10)	4.75(18)	1.45(8)	8
Czech Republic	2.66(14)	1.91 (11)	3.11 (9)	2.86(14)	9
Slovak Republic	2.62(13)	2.85(14)	3.07(11)	1.71 (10)	10
Germany	3.78(19)	2.54(12)	2.11 (8)	2.05(11)	11
Austria	2.50(11)	2.62(13)	2.76(14)	2.25(13)	12
Estonia	3.55(17)	3.24(17)	2.55(12)	1.45(7)	13
England & Wales	2.85(12)	NA	1.79(15)	NA	NA
Romania	3.86(21)	4.16(20)	2.81 (10)	2.08(12)	14
Latvia	2.89(15)	2.93(15)	6.78(19)	3.29(15)	15
France	3.24(16)	3.15(16)	2.92(16)	6.14(18)	16
Portugal	3.78(20)	3.51 (19)	2.74(13)	4.99(17)	17
Turkey	3.62(18)	3.43(18)	2.04(17)	7.43(19)	18
Bulgaria	5.41 (22)	5.47(21)	12.77(20)	4.95(16)	19
<b>Russia (survey data for 40-60 population)</b>	<b>3.6 (18)</b>	<b>3.7 (19)</b>	<b>15 (21)</b>	<b>2.7 (13)</b>	
<b>Russia (census 2010 data for 40-59 population)</b>	<b>2.9 (16)</b>	<b>3.35 (18)</b>			

Source: Clancy P. (2010). Measuring Access and Equity from a Comparative Perspective. In Eggins, H. (Ed.). Access and Equity. Comparative Perspectives. Sense Publishers. P.91. Data on Russia: author's calculations, Smolentseva (2012).

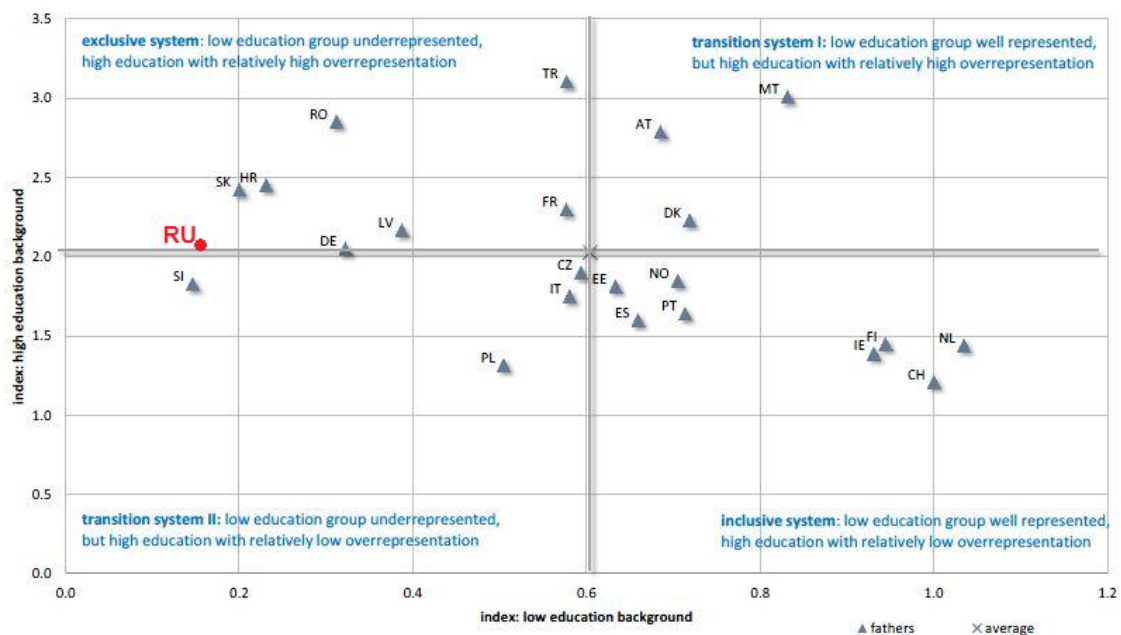
\*Relative odds of accessing higher education where parents have HE versus those without HE and where parents are from 'other ' occupational groups versus parents from 'blue collar' occupational groups. Figures in parenthesis refer to country ranking on each of the indicators. Data on Russia: author's calculations on 2010 surveys (Smolentseva 2012). Russia is included as an addition to the original ranking (no change in original order).

Meanwhile, not all Post-Socialist countries exhibit the same level of inequality: the situation looks better in Slovenia, Czech Republic, Slovak Republic. Not all countries with universal access to higher education tend to be unequal to the same extent: the access seem to be more equitable in Finland and Slovenia.

We can also employ another methodology used to estimate higher education access (Haaristo et al 2012). It implies only simple ratios for higher educated group (higher educated father to respective population indicator) and group with the lowest education (lowest educated fathers to population indicator). Correspondingly, two axes build a space which reflects the extent to which national student body represent social structure of society (by education). Russian data contain only one possible indicator for lowest education – general secondary (4,6%). The 2010 census offers data on educational attainment of 40-59 age men: 22,6% have higher education and above, lowest education – 31,2%. Thus, ratio for higher education comprised 2,02, for lowest – 0,15, which again led Russia to the position among countries inclined to excludable higher education systems with low representation of low educated group and overrepresentation of higher educated group (Diagram 12) (Smolentseva 2012).

### Diagram 16. Typology of social inclusiveness of higher education systems (EUROSTUDENT data + Russia, by fathers education)

Figure 1: Typology of social inclusiveness of higher education systems - highest educational attainment of students' fathers as a share of corresponding age group in general population (index: 1 = perfect balance) in %



Source: EUROSTUDENT IV, Subtopic C.3 and national statistics/LFS. No data: LT, SE, E/W. No part-time students in sample: DK, LV. High education background oversampled: DK. Low education includes ISCED 3C: CZ. Males of corresponding age are defined as males between the ages of 40 and 60 years old. Update 12.1.12

Source: Haaristo H., Orr D., Little B. (2012). EUROSTUDENT Intelligence Brief: Is Higher Education in Europe Socially Inclusive? [http://www.eurostudent.eu/download\\_files/documents/IB\\_HE\\_Access\\_120112.pdf](http://www.eurostudent.eu/download_files/documents/IB_HE_Access_120112.pdf)

The above research exercise conducted by two methodologies provides similar results. In both cases a group of countries with more equitable access remain the same, including Netherlands, Finland, Switzerland, Ireland, while Russia persistently demonstrates misrepresentation of social composition of the society within its huge higher education system.

Generally, situation in Russian higher education might reflect high social differentiation inherent in Russian society. The expansion of higher education participation which could lead to increasing chances for higher education, in fact goes along with the reproduction of existing social disparities of Russian society.

It is important to note that there is little research which would allow to conclude whether the transition to the **new admissions scheme** has been successful for the populations previously underrepresented in higher education and elite higher education. For Russia, the student survey data demonstrates quite a little, if any, mobility increase between 2006 and 2011 (in 2009 new admission rules were introduced nation-wide). Only for Moscow we might observe a 14% increase in the number of students coming from other regions, but this conclusion requires further research in order to obtain valid evidence. At the same time, comparison of 2006 and 2011 data shows that by parental education the social make-up of the student body has not changed, which means that recruiting students is still produced within the same social strata, however its mobility patterns within higher education system might slightly change (Smolentseva 2012).

Thus, higher education massification has not brought equal opportunities in access, and traditional barriers are enduring and still to be overcome.

## 5. Further directions for educational inequality research in a mass higher education system

As early as in 1970s American sociologist Martin Trow suggested division between elite, mass and universal stages in the development of higher education systems depending on the participation of age cohort (Trow 2006). These stages in the expansion of higher education reflect not only quantitative shift in a share of age cohort involved in higher education, but also qualitative changes in the nature and role of higher education in a society which transforms from reproduction of the elite through training a broad range of professionals to an adaptation of wider population to rapid social and technological changes in a society. It is critical that transition from one stage to another does not eliminate institutions evolved in a previous stage, but promotes institutional differentiation with a diverse scope of roles and missions in a changing society.

Both sociological and economic perspectives provides us with the evidence that in a mass system, differentiation of higher educational institutions within national framework forms different tracks fostering or blocking social mobility. One can see it through a **sociological** model of effectively maintained inequality which finds that once at a given level of education saturation has been achieved, quantitative inequalities in the odds are replaced by qualitative inequalities in the odds of getting on the more selective track (Lucas 2001, Ayalon and Shavit 2004). Hence, in a mass and especially universal access system, where a majority of age cohort attends higher educational institutions, social justice regarding access to higher education means not an accessibility of higher education as such, but higher education with certain characteristics, produced within different kind of institutions. Access to what? That is the question currently being asked in various parts of the world – North America, Europe, Asia, Russia (e.g. Bastedo and Gumport 2003, Eggins 2010, Shishkin 2004).

**Economic** approach to education is quite consistent with the results of sociological analysis. A universal educational practice to implement market mechanisms into education resulted in a fact that many higher education systems economists treat as market or quasi-market. The prevailing model of organization and governance of higher education (New Public Management) is built on the assumption that higher education can operate as a market, and higher educational institutions as market agents.

In this framework higher education is a **positional good** which provides its holder with a relative advantage in a competition on the market of labor and social statuses. The most important features of positional goods are their absolute scarcity at each level of position, its rivalrous and excludable character. Positional goods concept emphasizes dynamics of educational competition, the absolute scarcity of more advantageous/prestigious social positions and mechanisms for distributing relative advantage, capturing both the role of educational merit and the social limits on meritocracy (Hirsch 1976).

The higher involvement of population in education, the higher its role as an allocator of positions. When the number of educated people with a given level of **credential** increases, the value of that credential must decline. At the same time, the growth of educational credentials reduces the positional information brought by each credential. In rapidly expanding educational systems, labor market, employers and professional groups, intensify the screening of credentials, thus raising the necessary level of credentials, and stimulating higher levels of investment in education. 'The job formerly open to high school graduates now demands a college degree' (Hirsch 1976).

The sociologists observe the same trend, in particular R.Collins (1979, 2002) noted the incredibly high credentialism of American society of 1970s argues that credentials inflation is a process more determined by supply than demand. He compares it with the process of printing paper by government in a situation when there is no pressures to increase real level of

qualification of labor force. Even in high technology sector there is no need to higher level of credentials, since training in most recent knowledge and skills is provided by employers at workplace, and not at universities which are unable to transfer the latest knowledge and skills.

Thus, massification of education along with credentialism can not be associated with higher demand of the labor market or employers, but is rather a self-reproducing process generated by public pressure to expand access of population to higher education. An analysis of American society is especially interesting as an example of a model where higher education system largely involves market elements, and also became a pattern for transformation for many countries of the world. So the situation Collins could only expect in a credential society –janitors with PhD – today is quite imaginable in Russia, where under condition of massification the job announcements quite often require higher education for driver or courier position.

However, credential inflation is only one of the implications of higher education as a positional good. Positional goods tend to operate on highly segmented markets where positional competition works not as in normal markets (Hirsch 1976). On elite market a seller is dominant rather than buyer. Leaders of elite education accumulate their resources, reputation and symbolic capital over decades, and thus they choose students, not students choose institutions. Moreover, strengthening competition in this segment might not lead to increasing effectiveness or customer responsiveness, but in any case strengthens relative advantages of elite sellers protecting them from normal market pressures. Only low segment (mass higher education) the competition works by its regular rules on the basis of effectiveness and orientation towards catering students' needs. And it is mostly important, the attempts to improve educational quality in this segment are underestimated, because in terms of positional competition these institutions are locked within lower status positions disregards their efforts (Marginson 1997).



Also, the increasing gap between elite and mass sectors in prestige and spending might lead to the further inequalities in the prestige and future income of higher education credentials from different kinds of institutions (Carnoy 2011).

Generally, the invisible hand of market does not work on education markets: normal market rules do not work in elite segment, and lower segment is limited by positional ceiling of any social value of their educational products. As a result, introduction of market mechanism can not ensure increasing effectiveness of educational system and only fix the gaps between elite and non-elite sectors (Marginson 1997).

Employing positional good as an intellectual device enables to see another important thing – social limits of meritocracy. More investment in education by one person reduces the value of the positional investments of others, positional goods are intrinsically inter-dependent. Competition for a fixed number of positional goods at each level of advantage is a zero-sum game where one individual wins only at the expense of another. Marginson (1997) argues that positional good concept comparing to Bourdieu's cultural capital manages to capture the inter-dependent character of educational goods, but “cultural capital is sensitive to ways in which social groupings are signified, such as languages and behaviors”. It is also important that higher education meet the expectations of “customers” in terms of future income, status, knowledge and skills. Being a positional good it might be valued only in a hope for relative advantage and in fear of relative disadvantage.

Overall, the system constantly producing statuses and competitions can not ensure social justice, so the topic of further discussion could be how to organize educational system in way to minimize risks associated with the market approach to education and reduce inequalities in higher education.

However, just opposing market and non-market systems in education could not be conceptually fruitful itself. Even if looking at non-market experience of higher education,

which one can find in Soviet system, higher education did still have a relative social advantage. Not surprisingly, the issues of occupational prestige became one of the notable directions in the development of Soviet sociology. The studies traced the fact that despite governmental improvement of social and economic status of workers occupations, the social prestige of professions not associated with manual work has gradually increased and higher education provided access to those occupations. The group of elite institution also has formed at that time, and thus parental social and cultural capital defined accessibility of elite education.

Another issue for discussion would be an overall organization of educational system with universal access to higher education. Some systems are already experiencing this social phenomenon: most Nordic countries, Australia, USA, Korea, some Eastern European, and Post-Soviet Russia, Ukraine, Belarus. How the educational system should be organized if almost everyone gets higher education, 50-70% of age cohort?

One of the risks is a relative decline of the status of higher education degree and credentials inflation mentioned above. Hirsch (1976) finds that following the logic of positional good there might be two solutions: to restrict access to this level of education and to develop a vertical hierarchy to enhance relative advantage for more prestigious institutions. Russian policy-makers tend to do both. Excellence programs in the region tend to stimulate major research institutions which traditionally belonged to elite sector (“old” Moscow and St. Petersburg State universities, leading polytechnics, as well as new Nazarbaev University in Kazakhstan). Elite institutions train future elite of public administration and management (“old” Moscow University for International Relations, Financial Academy not supported by excellence program, but highly prestigious, and relatively new Higher School of Economics in Moscow, etc.). Separation of elite sector would allow to concentrate financial and human resources, but also would increase the gaps between elite and mass sector of higher education.

It is also expected that demographic decline will foster decline of “less demanded” part of the mass sector (by invisible hand of market).

Additionally, Russian policy-makers are discussing a possibility of restriction of access to this level of education (at least to cut off free enrollments) pointing to the demographic situation and arguing that national economy does not need such a great number of higher educated labor force, and dissatisfaction of the population with their declining perspectives after graduation would increase chances of social conflicts and protests in the society.

In the stage of universal access, further analysis of differentiated populations entering higher educational institutions with various missions and quality is required. Eggin and her colleagues (2010) in their comparative analysis of higher education, however, note that due to the small number of countries with diversified higher education systems in their OECD members dataset it is impossible to highlight the advantages of diversified systems in contrast to unitary and binary in regard to higher participation in tertiary education. They recognize that their structural approach may not capture the essential variability of higher education systems, and thus the relations between higher education structures and participation are to be further studied.

The **quality** of education is another issue to consider in a mass system. No scholarly tool was used to measure educational quality at tertiary level in Russia (except for started AHELO project by OECD), but the commonly shared impression is that it has been declining. Certainly, there is indirect evidence in favor of this observation: decline of the academic profession over last twenty years which could not maintain the standards in the rapidly expanded system (Smolentseva 2003), low research and publications indicators of Russian universities, modest performance of Russian 15-year-olds at PISA. No external accreditation

agency was established yet in Russia, although it is implied by Bologna declaration which Russia joined in 2002.

Economists note that the chase for diplomas might lead to the larger extent of insufficient usage of human capital, which is already quite notable in Russia, and a dramatic decrease of rate of return on education, like it already happened in Georgia (Gimpelson and Kapelyushnikov 2011). In a massified system, additional diplomas – second bachelor's degree, master's and doctoral degrees might serve as a relative advantage on a labor market thus intensifying diploma mill.

Further research on equity in higher education should also incorporate **international** dimension of higher education. Marginson and Rhoades (2002) emphasized global, regional, national and local dimensions which are simultaneously important in constructing agencies acting in higher education. This approach embraces the complexities, integrities and interdependence of contemporary world by framing global/national/local dimensions, agency as organized agencies or agency of human action, and concepts of reciprocity, strength, layers, conditions and spheres.

In the logic of positional good, international higher education or education abroad is indeed a relative advantage of an individual in the domestic labor market upon return. But globalization of education and labor market could smoothen this trend which also requires further investigation.

Post-Soviet countries like other countries consider internationalization of higher education a priority, but as a nationally funded system of training students abroad and then bringing them home it works not that wide. Kazakhstan is one of the countries which funds education abroad. “Bolashak”, a Presidential program, supported about 7 thousand people to enroll undergraduate and graduate programs world-wide over 2005-2011 (Bolashak statistics 2012). Eligible students must have higher education and high GPA. Students can get

admissions independently or rely on the help of the program, have to provide mortgage and upon return must work in Kazakhstan during five years. In contrast, Russian program under the President of the RF supports only about 100 students a year, for one-year study abroad, for students who demonstrated academic excellence and, what is more important, were recommended by their universities. Few opportunities are available through international agencies such as British Council or USAID. Generally, students of the region, as well as students in many other countries, can mostly rely on family resources, and in this sense international education becomes another level of status hierarchy in higher education.

Overall, the following directions for further policy research might be suggested for further discussion.

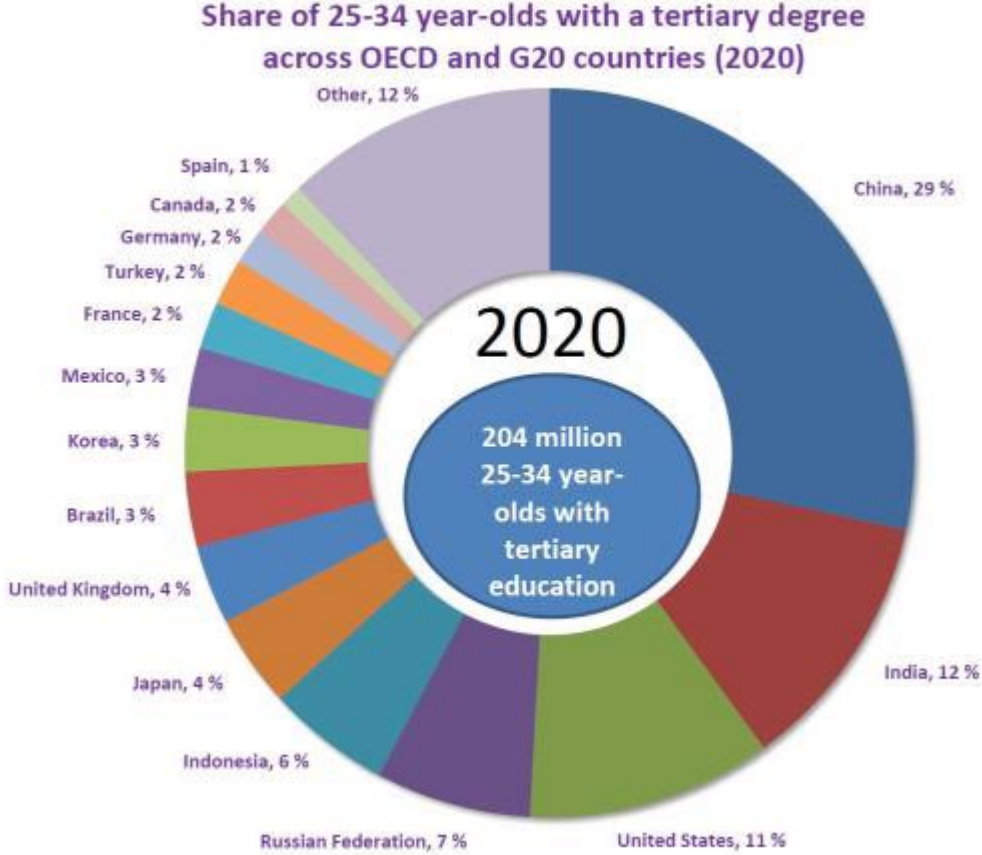
1. The conceptual framework of human capital and higher education as a market/quasi-market embraces only economic dimension of education which constitute only one facet of education and intrinsically can not catch the essence of education as developmental process of gaining knowledge, skills and experiences. However, this conceptual framework became a predominant rationale in educational policy-making and that substantially limits its effects leading to excessive expansion and credential inflation. The market-like model of higher education which often can be found in developing/transitional societies reflects high social disparities inherent to those societies and fosters differentiation and segmentation in higher education. Hence, the equalization of opportunities does not accompany an expansion of higher education sector in those countries. New conceptual framework treating market and non-market mechanisms only as instruments for achieving larger social goals of the nations should be on the agenda.

2. An effective policy aimed at optimizing talents could be considered in two areas. First is a broader social and economic environment of a particular society which might lay beyond the reach of educational community, but still important. This area involves factors which traditionally shape educational opportunities: parental income and education. But we have to admit that we probably can't and in most cases should not eliminate the factor of family cultural capital. Second area is within the scope of educational policy, and thus more likely to be modified, but still difficult – improving educational quality at all levels, smoothing transitions between levels, enhancing mobility between levels and institutions.
3. Further interdisciplinary research is necessary to study the social consensus in transitional societies in order to identify the contours of the social justice ideal regarding free access to higher education and conceptualization of merit which needs to be supported by a society and government. The research also requires transformations in statistical and monitoring survey data collection by including relevant indicators in order to monitor the progress of the equitable access with finer methodology.

## **Conclusions**

According to OECD projections, Russia will contribute 7% to the higher educated young people of OECD and G20 countries being 4<sup>th</sup> after China (29%), India (12%), USA (11%).

**Diagram 17. Global Talent Pool by 2020 (OECD). Share of 25-34 year-olds with a tertiary degree by 2020**



Source: Garcia de León, P., Heckmann, C., and Rojas González, G. 2012. What will the global talent pool look like in 2020? <http://oecdeducationtoday.blogspot.fr/2012/05/what-will-global-talent-pool-look-like.html>.

And the question is what will the Russian global talent pool look like? Who will enter that group and how? Will they be able to realize their talents within current educational system? Here we can consider not only Russia, but all Post-Soviet states of the region.

Higher education systems of the region has expanded, and in many countries to a very large extent. And an important question is whether there is a ceiling of massification? Can the system of higher education embrace an absolute majority of age cohort?

I would suppose that massification has its limits at this stage of economic and social development and the ceiling is almost reached. The structure of national economy, social characteristics of population, shrinking economic benefits of higher education as well as

governmental policy at some point start to restrict increasing participation. Nonetheless, accepting high participation rate at the present moment, in the future Russia and some other countries of the region can enter the group of countries with highest educational attainment of the population.

Other important questions are how to organize such a huge educational system and to improve educational quality, and how to ensure equal opportunity. The research shows that it is mass sector of higher education with accounts for the massification, and that is what one can observe Post-Soviet countries. We can probably talk about higher accessibility of a mass sector, but the access to elite sector remains quite limited. The barrier at entrance is still high even under conditions of so called meritocracy (at the basis of academic merit measured by an “objective” standardized test) and defined by the level of previous academic performance, which in turn depends upon classical factors of inequality such as economic and social family capital (including type of school).

It is also important to consider changes in education systems within larger social context at local, national and global levels. The concept of lifelong learning will change an educational and social landscape in societies. Technological innovations and further globalization will continue to transform world social order and life paths of individuals. Some countries of the region will face population decline, ageing and migration; and by 2030 the cohort educated in era of massification of 2000-2010s will constitute the core of the labor force being responsible for the national economy, larger aged populations and certainly have a relative positional advantage of increasing migrant populations whose children will only start to realize their aspirations in post-secondary education by that time. Will world be more equal?



## References

Abankina I., Abankina T., Filatova L., Nikolaenko E., Seroshtan E. (2012). Disbalans sprosa i predlozhenia na rynke professional'nogo obrazovania v sovremennoi Rossii [Misbalance of demand and supply on the market of vocational education in contemporary Russia]. Paper presented at the XIII HSE International Academic Conference on Economic and Social Development at Higher School of Economics.

Abankina T. (2011). Vliyanie obrazovatel'nykh strategii sel'skikh shkol'nikov Rossii, Kitaya i Kazakhstana na smenu modelei social'noi dinamiki [Impact of educational strategies of rural secondary school students of Russia, China and Kazakhstan on the change of models of social dynamics]. Paper presented at the XIII HSE International Academic Conference on Economic and Social Development at Higher School of Economics.

Armenia National Statistics office <http://www.armstat.am>

Ayalon H. and Shavit Y. (2004). Educational Reforms and Inequalities in Israel: The MMI Hypothesis Revisited. *Sociology of Education* 77: 103-120.

Balabanova, D., McKee, M., Pomerleau, J., Rose, R., Haerpfer, C.W. (2004). Health service utilisation in the Former Soviet Union: evidence from eight countries. *Health Serv Res. Dec;39(6 Pt 2):1927-50*.

Bogoyavlenskiy D. (2008). Skol'ko narodov zhivet v Rossii? Demoskop Weekly, #319-320. <http://demoscope.ru/weekly/2008/0319/tema01.php>

Bolashak statistics (2012). Retrieved from <http://www.educip.kz/Media/Default/HtmlWidget/Articles/statistika2012new.pdf>

Carnoy, M. (2011). As Higher Education Expands, Is it Contributing to Greater Inequality? *National Institute Economic Review*, 215: R34

Clancy P. (2010). Measuring Access and Equity from a Comparative Perspective. In Eggins, H. (Ed.). *Access and Equity. Comparative Perspectives*. Sense Publishers.

Collins R., (1979). *The Credential society: an historical sociology of education and stratification*: Academic Press.

Collins, R. (2002). *Credential Inflation and the Future of Universities*. In Steven Brint (Ed.). *The Future of the City of Intellect: The Changing American University*. Stanford University Press, pp.23-46.

Dubin, B., Gudkov L., Levinson, A., Leonova, A. & Stuchevskaya, O. (2004). *Dostupnost' vysshego obrazovania: sotsial'nye i institutsional'nye aspekty* [Accessibility of higher education: social and institutional aspects]. In. S.V. Shishkin (Ed.). *Dostupnost' vysshego obrazovania v Rossii* [Accessibility of Higher Education in Russia]. Moscow: Independent Institute for Social Policy.

Fourcade-Gourinchas, M., Babb, S. (2002). *The Rebirth of the Liberal Creed: Paths to Neoliberalism in Four Countries*. *American Journal of Sociology*, Vol. 108, #3 (November 2002): 533–79.

Eggins, H. (Ed.). (2010). *Access and Equity. Comparative Perspectives*. Sense Publishers.

Garcia de León, P., Heckmann, C., and Rojas González, G. (2012). *What will the global talent pool look like in 2020?* Retrieved from <http://oecdeducationtoday.blogspot.fr/2012/05/what-will-global-talent-pool-look-like.html>.

Gasparishvili, A., Toumanov S. (2006). *Moskovskii student sto let nazad I nyne* [Moscow student 100 years ago and now]. In *Otechestvennye zapiski*, #3(30). <http://www.strana-oz.ru/?numid=30&article=1274>.

Georgian National Statistics. [www.geostat.ge](http://www.geostat.ge)

Gerber, T.P, & Hout, M. (1995). *Educational stratification in Russia during the Soviet period*. *The American Journal of Sociology*, 101 (3), 611-660.

Gerber, T.P. (2000). Educational stratification in contemporary Russia: Stability and change in the face of economic and institutional crisis. *Sociology of Education*, 73 (4), 219-246.

Gimpelson, V., Kapeliushnikov, R. (Eds.) (2011). *Rossiskii rabotnik: obrazovanie, professia, kvalifikatsia [Russian Worker: Education, Profession, Qualification]*. Moscow: Higher School of Economics.

Gornitzka, A., Maassen, P., Olsen, J., and Stensaker, B. (2007). “Europe Of Knowledge”: Search For a New Pact. In Maassen and J. P. Olsen (eds.). *University Dynamics and European Integration*, 181–214. Springer.

Gorshenin Institute (2012). Vneshnee nezavisimoe testirovanie v Ukraine (results of the phone poll of population, May 2012). Retrieved from [http://institute.gorshenin.ua/researches/110\\_vneshnee\\_nezavisimoe\\_testirovanie\\_v.html](http://institute.gorshenin.ua/researches/110_vneshnee_nezavisimoe_testirovanie_v.html).

Haaristo H., Orr D., Little B. (2012). EUROSTUDENT Intelligence Brief: Is Higher Education in Europe Socially Inclusive? Retrieved from [http://www.eurostudent.eu/download\\_files/documents/IB\\_HE\\_Access\\_120112.pdf](http://www.eurostudent.eu/download_files/documents/IB_HE_Access_120112.pdf)

Heyneman, S. (2010). A Comment on the Changes in Higher Education in the Former Soviet Union. *European Education*, 42 (1) (Spring 2010), pp. 76–87.

Higher School of Economics Center for Institutional Research (2009). Monitoring of student life-2009. Analytical report, Retrieved from [http://www.hse.ru/data/2011/04/15/1210154648/Report\\_MSZH\\_2009.pdf](http://www.hse.ru/data/2011/04/15/1210154648/Report_MSZH_2009.pdf).

Hirsch, F. (1976). *Social limits to growth*, Harvard University Press, Cambridge.

Kazakhstan National Statistics Committee. <http://www.stat.kz/>

Konstantinovskiy, D. & Shubkin, V. (1977). *Molodezh' i obrazovanie [Youth and Education]*. Moscow: Nauka.

Konstantinovskiy, D. (2008). *Neravenstvo i obrazovanie [Inequality and Education]*. Moscow.

- Konstantinovskiy, D. (1999). *Dinamika neravenstva* [The Dynamics of Inequality]. Moscow: Editorial URSS.
- Kyrgyzstan National Statistics Office
- Lazin F. (2011). Higher Education and Equality of Opportunity: A Survey of Recent Cross-National Research. Paper presented at the conference “Higher Education and Equality of Opportunity: a Survey of Recent Cross-National Research”, Centre for Advanced Academic Studies, Dubrovnik, Croatia, 10-12 June 2011.
- Lucas, S. (2001). “Effectively Maintained Inequality: Education Transitions, Track Mobility, and Social Background Effects.” *American Journal of Sociology* 106:1642–90.
- Marginson, S. (1997). *Markets in Education*. Allen and Unwin: Sydney.
- Marginson, S., Rhoades G. (2002). Beyond National States, Markets, and Systems of Higher Education: A Global Agency Heuristic. *Higher Education* 43: 281–309.
- Neave, G. and van Vught, F. (eds.) (1991). *Prometheus Bound: The Changing Relationship between Government and Higher Education in Western Europe*. Oxford: Pergamon Press.
- OECD (2008). Education at Glance. OECD Indicators.
- Oksamitnaya S., Khmelko V. (2012). Obrazovatel'noe neravenstvo i ekspansiya vysshego obrazovaniya v Ukraine [Educational inequality and expansion of higher education in Ukraine]. Paper presented at XIII HSE International Academic Conference on Economic and Social Development at Higher School of Economics.
- Prakhov I., Yudkevich M. (2012). Vliyanie dokhoda domokhozyaistv na rezultaty EGE i vybor vuza [Impact of household income on unified national exam scores and choice of university]. *Voprosy obrazovaniya*, 1, 126-147.
- Roschina, Y. (2006). Ch'i deti uchatsya v rossiiskikh elitnykh vuzakh? [Whose children are studying at elite Russian universities]. *Voprosy obrazovaniya*, 1, 347-369.

Routkevich, M.N. (2002). *Sotsiologia obrazovania i molodezhi: Izbrannoe (1965-2002) [Sociology of Education and Youth: Selected Papers (1965-2002)]*. Moscow: Gardariki.

Russian statistical committee data. [www.gks.ru](http://www.gks.ru)

Scott, P. (1995). *The Meanings of Mass Higher Education*. Open University Press.

Shishkin, S. (Ed.). (2004). *Dostupnost' vysshego obrazovania v Rossii [Accessibility of Higher Education in Russia]*. Moscow: Independent Institute for Social Policy.

Silova I. (Ed.). (2010). *Post-Socialism is not Dead: (Re)Reading the Global in Comparative Education. International Perspectives on Education and Society, Volume 14*.

Smolentseva, A. (2003). Challenges to the Russian Academic Profession. *Higher Education*, 45 (4), 391-424.

Smolentseva, A. (2007). Educational Inequality in Russia. In: Teese R., Lamb S., Duru-Bellat M. (Eds.) *International Studies in Educational Inequality, Theory and Policy*. Springer: Dordrecht, 2007, Vol.2, pp. 143-156.

Smolentseva, A. (2012). Trends in Public Demand for Higher Education in Russia: Sociological Analysis. Analytical report for a project "Trends in the public demand for higher education and estimation of economic consequences of restructurization of higher education in Russia" (PI – I.Abankina) supported by Program for Basic Research at National Research University – Higher School of Economics, 2012.

Statistical database of the Commonwealth of Independent States.

Torres, C. and Schugurensky, D. (2002). The Political Economy of Higher Education In The Era of Neoliberal Globalization: Latin America In Comparative Perspective. *Higher Education*, 43 (4), 429-455.

Trow, M. (2006). Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since WWII. In: Altbach

Ph.G., Forest J. (Eds.). *International Handbook of Higher Education*. Dordrecht : Springer, vol.1, pp.243-280.

Turkmenistan National Statistics office <http://www.stat.gov.tm/>

Uzbekistan State Committee. <http://www.stat.uz/>

Uzinform (2012). V Uzbekistane ob'yavleny kvoty priema v vuzy na 2012-2013 g.

Retrieved from <http://www.uzinform.com/ru/news/20120514/13095.html>

Vasenina, I. & Sorokina, N. (2002). Vysshee obrazovanie v sovremennom mire [Higher Education in Contemporary World]. In *Chelovek i sovremennyy mir* [Man and Contemporary World]. Moscow: Infra, pp.418-440.

Voznesenskaya, E., Cherednichenko, G. & Dymarskaya O. (2004). Dostupnost' obrezovania kak sotsial'naya problema [Accessibility of higher education as a social problem]. In S.V. Shishkin, (Ed.), *Dostupnost' vysshego obrazovania v Rossii* [Accessibility of Higher Education in Russia]. Moscow: Independent Institute for Social Policy.

WCIOM (2011). Vysshee obrazovanie v Rossii: kachestvo, tsennost', vostrebovannost'. Presentation. Retrieved from <http://wciom.ru/index.php?id=270&uid=112202>.

Wong, Raymond (2001). *Egalitarianism versus social reproduction: Changes in educational stratification in five Eastern European countries* [On line]. Paper to be presented at the Research Committee on Social Stratification and Mobility (RC28) of the International Sociological Association at Mannheim, Germany, April 26-28. Available: [http://www.mzes.uni-mannheim.de/rc28/papers/Wong\\_isa.zip](http://www.mzes.uni-mannheim.de/rc28/papers/Wong_isa.zip).

Zaborovskaya, A.C. & Shishkin, S.V. (2005). Obrazovanie kak resurs sodeistvia sokrascheniyu bednosti i bar'ery v dostupe k nemu [Education as a source of reducing poverty and barriers to access to education]. In L.N. Ovcharova (Ed.), *Dokhody i sotsial'nye uslugi: Neravenstvo, uyazvimost', bednost'* [Income and Social Services: Inequality, Vulnerability, Poverty]. Moscow: State University-Higher School of Economics.