

Section 5. Social Sphere

5.1. The Living Standards of Russia's Population in 2013

Over 2013, the population's real disposable income rose by 3.3%. The salary level in the budget-funded sphere was being raised at a high rate – which, however, proved to be insufficient to meet the targets set in the President of the Russian Federation's Executive Order of 7 May 2012, No. 597 'On Measures Aimed at the Implementation of Government Social Policy'. The income inequality index over the period January–September 2013 somewhat increased. The poverty level over the first 9 months of 2013 was 0.5 pp. above its level over the corresponding period of 2012, due in the main to the alterations introduced into the methodology applied for estimating the subsistence level. The impact of social transfers on the child poverty level in Russia is low by comparison with that in the European Union.

5.1.1. Population Income

In 2013, the average nominal monthly charged wage amounted to Rb 29,960, having risen on 2012 by 12.3%. As the Consumer Price Index increased by 6.8% in 2013¹, growth of the real average monthly charged wage over the course of that year was 5.2%.

Over the course of 2013, the average nominal monthly wages in arrears increased on the previous year by 24%² – from Rb 2,046.7m to Rb 2,536.9m. The real amount of average monthly wages in arrears remains at a low level: as of 1 January 2014 it amounted to less than 1% of companies' total monthly wages fund. The number of employees whose wages were in arrears over the year varied between 53 and 97 thousand. Wages in arrears arose, as a rule, due to lack of companies' own funds; the average monthly share of wages in arrears arising as a result of delays in money transfers from the budgets of all levels over the entire year, with the exception of February, was at the level of only 3–4% of the total amount of wages in arrears.

Over 2013, the size of labor pension was increased twice:

- from 1 February 2013, labor pensions were increased by 6.6 %,
- from 1 April, due an increase in the RF Pension Fund's revenues in 2012, an additional upward adjustment of labor pension by 3.3% was carried out.

In April 2013, the size of pensions paid under the government pension program was raised by 1.81%, while the monthly federal benefits paid to special categories of pensioners were increased by 5.5%.

¹ The period January–December 2013 against the period January–December of the previous year.

² Based on data reported by organizations other than small-sized businesses.

In August 2013, the size of pensions paid to working pensioners was adjusted, in accordance with the planned scheduler, by the amount of insurance contributions received in 2012 from their employers under the mandatory pension insurance program.

As result of all these measures, over the course of 2013 the average size of allotted monthly pension increased by 9.7%, thus amounting to Rb 9,918. Its growth in real terms amounted to 2.8%.

Over the course of 2013, the monthly per capita money income in nominal terms increased by 10.7% - to Rb 25,522. At the same time, the population's real disposable money income increased by only 3,3%.

The nominal indicators of the population's money income (salaries, pensions, other money incomes) for 2013 were slightly below the corresponding indicators for the previous year, while the inflation rate was higher (6.8% vs. 5.1% in 2012); as a result of these changes, growth of the population's real disposable money income over that period was less impressive than in 2012 (3.3% vs. 4.6% in 2012).

The movement of the real disposable money income in 2012 and 2013 is shown in *Table 1*.

Table 1

**Changes in the Real Disposable
Money Income, %**

| | As percentage of | |
|---------------|---------------------------------------|-----------------|
| | corresponding period of previous year | previous period |
| 2012 | | |
| Q1 | 102.2 | 76.4 |
| Q2 | 104.8 | 115.8 |
| 1st half year | 103.6 | |
| Q3 | 104.5 | 100.1 |
| Q4 | 106.0 | 119.7 |
| Year | 104.6 | |
| 2013 | | |
| Q1 | 105.6 | 76.1 |
| Q2 | 103.0 | 112.9 |
| 1st half year | 104.2 | |
| Q3 | 102.4 | 99.6 |
| Q4 | 102.9 | 120.2 |
| Year | 103.3 | |

Source: data released by Rosstat.

The salary raise in the budget-funded sphere (funded, in addition to other sources, also by the dotations transferred to regional budgets from the federal budget) resulted in a situation where, in 2013, the fastest growth rates were demonstrated by the average monthly charged wage indexes (less social benefits) in the public education sector (123.2%) and the public healthcare and social welfare sectors (118.9%). As a result, the average monthly salary in the education sphere grew to Rb 23,421, and that in the public healthcare and social welfare sectors - to Rb 24,564. In 2013, the upward movement of these indexes pushed up the sectoral-to-national salary ratios in these three sectors, which became as follows: in the public education sector - 78% of the average national salary and 82% of the national average for the processing industries; in the public healthcare and social welfare sectors - 81% of the average national salary and 85% of the national average for the processing industries.

In general over the year 2013, the salary levels of the relevant categories of employees in the budget-funded sphere of each RF subject shown as a percentage of the average monthly wage index were as follows:

- in the public education sector: 73.5% of the average monthly salary of secondary school teachers in a RF subject for tutors employed at educational establishments providing extracurricular education to children; 94.9% of the average monthly salary in the general education sphere in a RF subject for tutors employed at pre-school educational establishments; for teachers employed at secondary schools and other general-education establishments, and for the faculty members of higher (professional) educational establishments – 96.9% and 134.9% respectively of the average monthly wage index in a given RF subject;
- in the public healthcare sector: for nursing staff - 47.8% of the average monthly wage index in a given RF subject, and for physicians and other healthcare practitioners with higher education diplomas, employed at medical institutions and providing medical care services to the population - 141% of the average monthly wage index in a given RF subject.

The targets set in the RF President's Executive Order of 7 May 2012, No. 597 'On Measures Aimed at the Implementation of Government Social Policy' for the years 2012 and 2013 are as follows:

- in 2012, the average salary level of secondary school teachers and the tutorial staff of other general-education establishments should be raised to match the average salary for a given region's economy;
- by 2013, the average salary of tutors employed at pre-school educational establishments should be raised to match the average salary level in the general education sphere of each region.

If the salary raise targets for the budget-funded sphere are set against the actually achieved results, it will become evident that, as late as 2013, the average salary level of the staff of general-education establishments was still below that of each region's average salary, although it had been planned that this target should be already achieved in 2012. When the salary levels of the staff of general-education establishments are analyzed in relation to the form of ownership of each establishment, it turns out that, at present, the actual salaries at federal general-education establishments and those owned by RF subjects are higher than the targets stipulated in the RF President's Executive Order of 7 May 2012, No. 597 'On Measures Aimed at the Implementation of Government Social Policy'; however, the salaries of the staff of municipal schools amount to no more than 85% of the average salary index in a given RF subject.

The same, in fact, is true with regard to the salaries of tutors employed at pre-school educational establishments: in 2013, their level was still below the average salary level in the general education sphere of each given region, while the salary level of tutors employed at municipal pre-school educational establishments amounted to only 86.2% of the average salary in the general education sphere.

5.1.2. Socioeconomic differentiation

In 2013, the inequality in distribution of the population's money incomes became slightly less prominent.

The income inequality indices dropped on 2012 as follows:

- the Gini coefficient¹ - from 0.420 to 0.418;

¹ The Gini coefficient (income concentration index) is a measure of statistical dispersion intended to represent the income distribution of a nation's residents. Its value may vary from 0 to 1. The higher the value, the more unequal is the income distribution.

– R/P 10%¹ - from 16.4 to 16.2.

The declining inequality in the distribution of the population's money incomes was largely caused by the shrinking share of the fifth quintile (highest incomes) in the population's aggregate income (by 0.1 pp.) and the increasing share of the second quintile (also by 0.1 pp.). In the main, the income share's shrinkage was spawned by changes in the income level of the richest 10%. In 2013, the share of the richest 10% amounted to 30.7% of the population's total income against 30.8% in 2012.

The share of the poorest 10% remained at its 2012 level, thus amounting to 1.9% of the population's aggregate income.

The population distribution by per capita money income level is shown in *Table 2*.

Table 2

The Population Distribution by Per Capita Money Income Level, %

| | 2013 | 2012 |
|---|------------|------------|
| Total population | 100 | 100 |
| including with per capita monthly money income level under Rb 5,000.0 | 4.4 | 5.8 |
| Rb 5,000.1–7,000.0 | 5.7 | 6.9 |
| Rb 7,000.1–10,000.0 | 10.6 | 12.0 |
| Rb 10,000.1–14,000.0 | 14.4 | 15.4 |
| Rb 14,000.1–19,000.0 | 15.3 | 15.5 |
| Rb 19,000.1–27,000.0 | 17.4 | 16.7 |
| Rb 27,000.1–45,000.0 | 19.1 | 17.1 |
| over Rb 45,000.0 | 13.2 | 10.6 |

Source: data released by Rosstat.

5.1.3. Subsistence level and poverty

In 2013, the subsistence level indexes were as follows (*Table 3*): national average – Rb 7,429 per month, including Rb 8,014 per month for the able-bodied population, Rb 6,097 per month – for pensioners, and Rb 7,105 per month – for children.

Table 3

Subsistence Level, Rb

| | Total population | Able-bodied population | Pensioners | Children |
|-------------|------------------|------------------------|--------------|--------------|
| | 2012 | | | |
| Q1 | 6,307 | 6,827 | 4,963 | 6,070 |
| Q2 | 6,385 | 6,913 | 5,020 | 6,146 |
| Q3 | 6,643 | 7,191 | 5,229 | 6,387 |
| Q4 | 6,705 | 7,263 | 5,281 | 6,432 |
| Year | 6,510 | 7,049 | 5,123 | 6,259 |
| | 2013 | | | |
| Q1 | 7,095 | 7,633 | 5,828 | 6,859 |
| Q2 | 7,372 | 7,941 | 6,043 | 7,104 |
| Q3 | 7,429 | 8,014 | 6,097 | 7,105 |

Source: data released by Rosstat.

The share of food in the consumer basket is highest (45.8%). The share of non-food products amounts to 23.4%, that of services – 23.6%. Mandatory payments and fees take up 7.2% of the consumer basket.

The ratios of the main population income indexes to the subsistence level in Q3 2013 were as follows:

– the ratio of per capita money income to the national average subsistence level – 335.5%,

¹ The ratio of the average income of the richest 10% to the poorest 10% (R/P 10%) describes a nation's socioeconomic differentiation.

- the ratio of the average monthly charged wage index to the subsistence level of the able-bodied population – 380.9%,
- the ratio of the average monthly charged pension index to the subsistence level of pensioners – 177.2%.

The poverty index for the first 9 months of 2013 was at the level of 17.8m, or 12.6% of the total population (*Table 4*), while the corresponding indexes for the same period of the previous year were 17.2m and 12.1% respectively. However, these changes are by no means indicative of a rising poverty level in Russia. The upward movement of these indexes has resulted from the alterations introduced into the methodology for calculating the subsistence level from 1 January 2013, which pushed up the subsistence level estimates.

Table 4

Number of People with Incomes Below Subsistence Level

| | Million | As % of total population |
|-------------------|---------|--------------------------|
| 2012 | | |
| Q1 | 19.1 | 13.5 |
| Q2 | 16.4 | 11.5 |
| 1st half year | 17.7 | 12.5 |
| January–September | 17.2 | 12.1 |
| Q4 | 12.5 | 8.8 |
| Year | 15.6 | 10.9 |
| 2013 | | |
| Q1 | 19.6 | 13.8 |
| Q2 | 17.2 | 12.1 |
| 1st half year | 18.4 | 13.0 |
| January–September | 17.8 | 12.6 |

Source: data released by Rosstat.

5.1.4. The Child Poverty Rate and the Effect of Social Policies on the Child Welfare Levels in the Russian Federation and the European Union

To obtain the child poverty rate estimates comparable with those in the developed countries, and to assess accordingly the effect of social transfers on child welfare in the Russian Federation, the relevant approaches practiced in the developed countries were applied¹.

¹ The estimates for EU countries are based, among other sources, on EU-Statistics on Income and Living Conditions (EU-SILC). The estimates for the Russian federation are based on the results of 21st round of the Russian Monitoring of the Population's Economic Status and Health, which took place in October–December 2012.

The household's aggregate income was set against the value of the 'total money income of all members of a household' variable. Out of these two variables, the one with the higher value was selected.

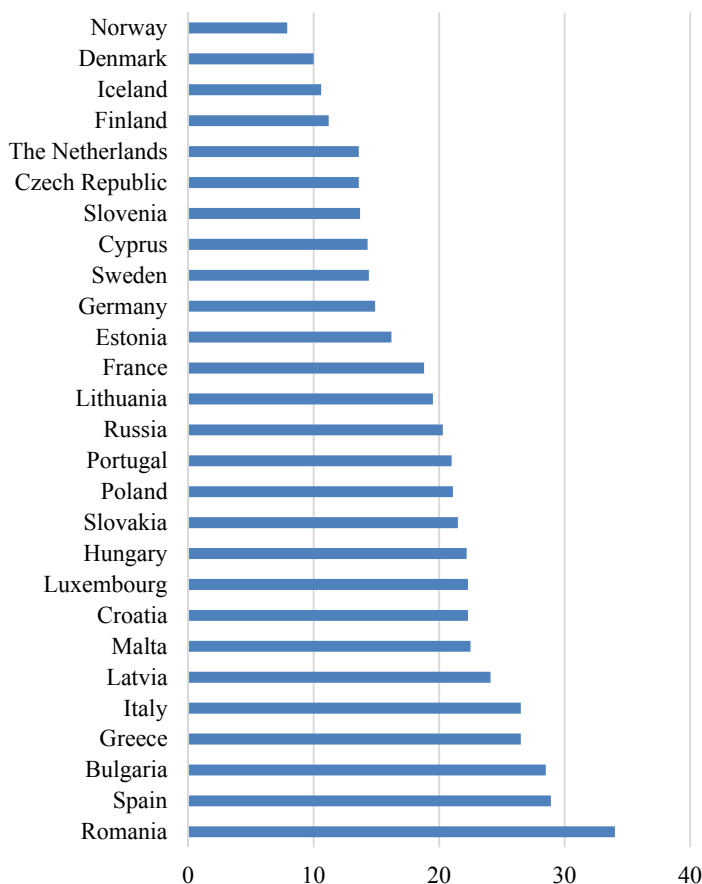
To adjust the results by economy of scale effect, the equivalence scale applied by the Statistical Office of the European Union (EUROSTAT) to weight household incomes in the developed countries was applied.

To determine the at-risk-of-poverty threshold, the value of 60% of the equivalent median disposable money income per household member was applied.

To measure the value of the total social transfer variable, the aggregate transfer index was applied, which included the following indices:

- dotations to cover the cost of fuel: natural gas, kerosene, coal, firewood, peat, etc.
- child care benefit, for parents with children aged under 1.5 years,
- monthly child benefit,
- welfare benefit,
- subsidies to cover the cost of housing rent and utilities,
- monthly money payments in lieu of in kind benefits,

Russia's child poverty rate, after the receipt of social transfers allocated in 2012, amounts to 20.3%. If Russia is to be compared with the developed countries, by its child poverty rate after social transfers it will fit somewhere in the middle of the list, as the at-risk-of-poverty threshold amounts to 60% of the equivalent median disposable money income of all households after social transfers (*Fig. 1*).



Source: calculations based on EU-Statistics on Income and Living Conditions (EU-SILC) and RLMS data.

Fig. 1. Child Poverty Rate after Social Transfers and Taxes, at the At-risk-of-poverty Threshold of 60% of the Equivalent Median Money Income in the EU Countries and the Russian Federation in 2012, %

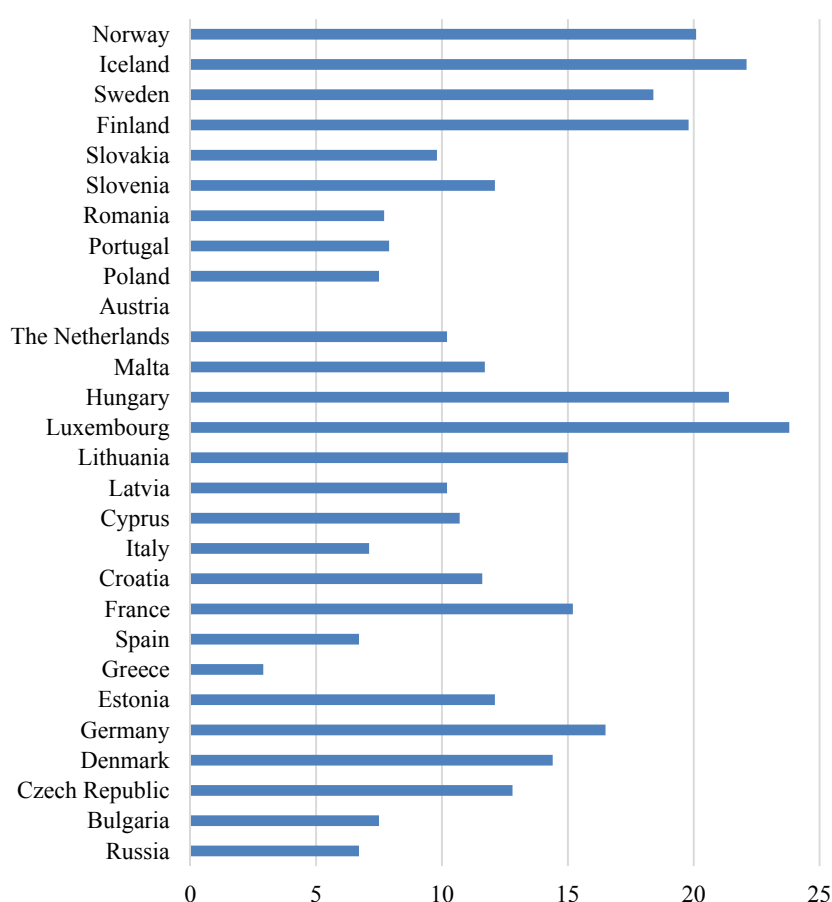
The amount of child social transfers in Russia, if set against the standards applied in the developed countries, is low; besides, such transfers are not highly targeted, and so it can

- pensions,
- stipends,
- unemployment benefits,
- deductions from the cost of housing rent and utilities,
- tax deduction granted to cover the cost of tuitions, medical care or purchase of housing.

For the purpose of imputation of minimum salary level data, the amount of salary declared by an adult able-bodied household member was set against that of the minimum salary index. If the amount of salary declared by an adult able-bodied household member was found to be lower than the minimum salary index, the latter value was entered in the statistics file.

hardly be expected that their effect will match the effect of their counterparts in the developed countries. Besides, it should be noted that the population welfare surveys conducted in the RF do not take into account the data on all the social transfers received by families with children. The results of our estimations are not adjusted by the effects of taxes on Russia's child poverty rates, because the relevant data are not available. As noted in many studies, the level of personal income information concealment in the RF is very high; people prefer not to report the amount of their real income not only to tax agencies, but also to the interviewers collecting data for the population welfare surveys.

In 2012, social transfers (less pensions) in Russia brought down the child poverty rate before social transfers by 6.7 pp. By the value of its index of 'effect of social transfers (less pensions) on the child poverty rate', the Russian Federation falls far behind almost all of the EU countries, with the exception of Greece (*Fig. 2*).

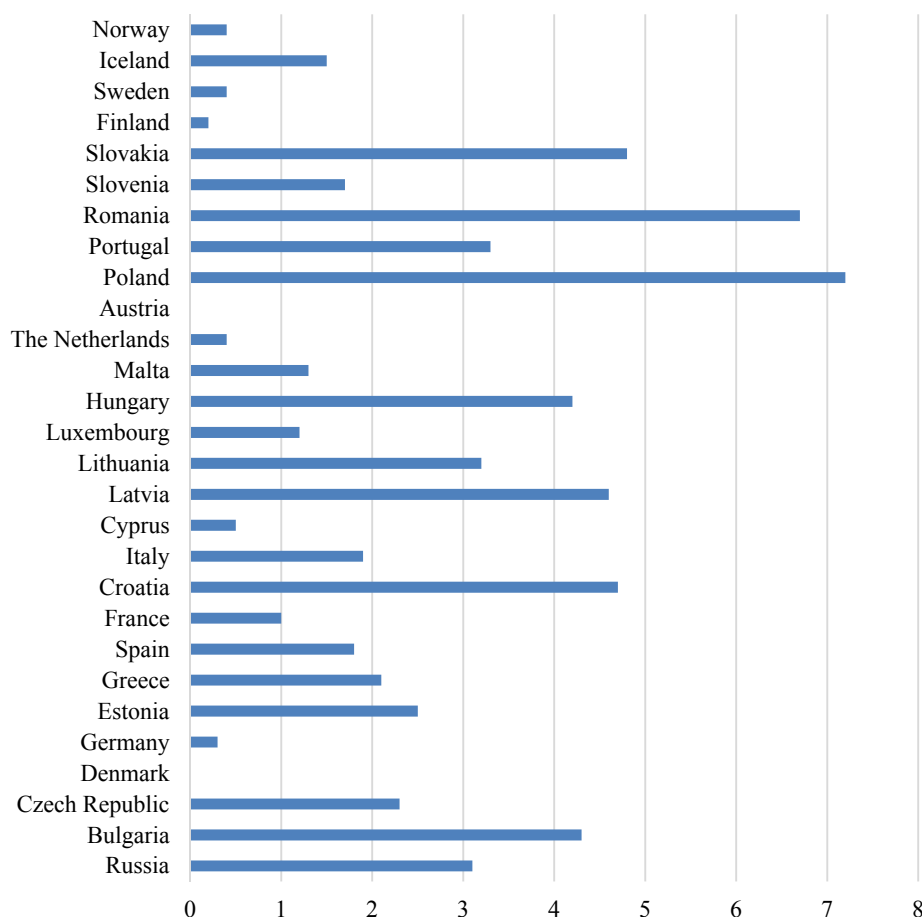


Source: calculations based on EU-Statistics on Income and Living Conditions (EU-SILC) and RLMS data.

Fig. 2. Differences between Child Poverty Rates before Social Transfers and Taxes (Pensions Not Included in Social Transfers) and Child Poverty Rates after Social Transfers and Taxes (Pensions Included in Social Transfers), at the At-risk-of-poverty Threshold of 60% of the Equivalent Median Money Income in the EU Countries and the Russian Federation in 2012, as Percentage Points

The effect of pensions on the child poverty rate in the Russian Federation, by the standards applied in the developed countries, is rather high. Such a situation is more typical of the EU

countries with lower levels of economic development, where grownup children after getting married prefer to stay in the home of their parents even after the birth of their own children. As seen in *Fig. 3*, the way that the amount of pension influences Russia's child poverty rate is closer to the similar effects observed in countries like Bulgaria, Hungary, Lithuania, Portugal, and Croatia, than in more developed countries like Denmark, Finland, Germany, or The Netherlands.



Source: calculations based on EU-Statistics on Income and Living Conditions (EU-SILC) and RLMS data.

Fig. 3. Differences between Child Poverty Rates after Social Transfers and Taxes (Pensions Not Included in Social Transfers) and Child Poverty Rates before Social Transfers and Taxes (Pensions Included in Social Transfers), at the At-risk-of-poverty Threshold of 60% of the Equivalent Median Money Income in the EU Countries and the Russian Federation in 2012, as Percentage Points

If we attempt to eliminate, in part, the effect of the factor of personal income concealment in Russia, and to replace the absent or evidently underestimated (by comparison with the minimum salary index) data on salary levels by the available data on the incomes of adult able-bodied RF citizens, the resulting children poverty rate for Russia will become somewhat lower (see *Table 5*).

These results have confirmed the necessity of conducting some additional studies in order to develop a methodology for additional data imputation in the personal income indexes

applied in the Russian Federation, which will be suitable for estimating the child poverty rate and the effects of social transfers and taxes on child welfare on the basis of the methodologies applied in the EU countries.

Table 5

**Child Poverty Levels in the RF Without and With Imputation
for Minimum Salary Data, %**

| | Without imputation for minimum salary data | With imputation for minimum salary data |
|---|---|--|
| Child poverty rate after social transfers and taxes, calculated for poverty threshold set at 60% of median household income after social transfers, % | 20.3 | 18.7 |

Source: calculated on the basis of RLMS data.

5.2. The Migration Policy and Migration Processes

In 2013, both sudden growth in public interest in migration issues and explosive increase in the number of statutory acts initiated in that field were observed. A new surge of interest in migration was triggered by the Biryulovo developments in October and the election campaign of the Mayor of Moscow which took place a little earlier¹.

5.2.1. Changes in the Institutions of Residence and Temporary Residence in the Russian Federation

Amendments to the legislation regulating (often tightening) the situation of migrants in Russia were introduced into all the key federal laws on migration. In particular, in 2013 amendments to the **Federal Law on the Legal Status of Foreign Nationals in the Russian Federation**² were introduced 16 times (for comparison: 6 times in 2012)³.

The above amendments dealt with the following key points:

1. The period of a temporary stay in the Russian Federation of a foreign national who arrived in the Russian Federation in accordance with the procedure which does not require a visa *cannot exceed ninety days totally within each period of one hundred and eighty days* except for cases provided for by the existing Federal Law, as well as in case such a period has not been extended in accordance with the existing Federal Law (Federal Law No.389-FZ as amended of December 28, 2013);

2. From 2014, an amendment will be in effect as regards *a possibility to reduce the period of a temporary stay of foreign nationals* "if the conditions changed and circumstances under which a foreign national was permitted to enter the Russian Federation ceased to exist. *The period of a stay of a foreign national in the Russian Federation is reduced in case a decision on a ban on entry into the Russian Federation was taken in respect of that national in accordance with the adopted procedure, as well as in other cases provided for by the Federal Law*" (Federal Law No.224-FZ as amended of July 23, 2013 and Federal Law 386-FZ as amended of December 28, 2013);

3. The grounds for refusal in issuing or cancellation of a temporary residence permit (Article 7), residence permit (Article 9) and work permit (Article 13) have been tightened,

¹ For more details – see L.B. Karachurina. Migration Processes //Economic Development of Russia. 2013. No.12. pp. 38–41.

² Federal Law No.115-FZ of July 25, 2002 on the Legal Status of Foreign Nationals in the Russian Federation

³ A portion of amendments came into effect as early as 2013, while other, from 2014.

including the following: “a temporary residence permit to a foreign national *is not issued, while the one issued earlier is cancelled in case a decision on undesirability of a visit (stay) in the Russian Federation or a decision on a ban on entry by that foreign national into the Russian Federation have been taken in accordance with the adopted procedure*” (Cl.1.2 of Federal Law No.224-FZ as amended of July 23, 2013)¹;

4. The terms of participation of foreign nationals in employment relations with legal-entities–employers have been specified: *the age of 18* and the existence of a work permit with a foreign national and an employer’s permit to employ foreign nationals (Article 13), as well as the list of criteria which those conditions do not apply to:

- persons studying in the Russian Federation at professional vocational establishments and higher education establishments and performing jobs (rendering services) during holidays or working during their free time at those educational establishments, business entities or business partnerships established by state-financed or autonomous establishments of higher education in which they undergo training;
- persons invited to the Russian Federation as researchers or educators to carry out research or teaching activities;
- persons who are workers of accredited representative offices of foreign legal entities registered in the Russian Federation;

5. The procedure and *the time-limits for an exchange of information on foreign nationals between executive authorities in the field of migration and tax authorities* have been determined. The individual taxpayer number is becoming an immanent factor and responsibility for all the foreign nationals;

6. An requirement has been introduced that in applying for a permit to work in housing and public utilities, retail trade or public amenities *a person is to have a command of Russian at the level which is not lower than the base one* and that level is to be confirmed by one of the listed documents (the state test certificate or documents on education) (Cl. 4 of Federal Law No.185-FZ as amended of July 2, 2013);

7. The specifics of carrying out by foreign nationals of labor activities in the territory of the Russian Federation due to measures provided for by the Federal Law on Preparation and Carrying Out of the 2018 FIFA World Cup and the 2017 FIFA Confederations Cup in the Russian Federation have been determined;

8. A few amendments as regards specification of the deadlines and the procedure for a temporary stay of students in Russia have been introduced;

9. The specifics of performance of labor activities by high-skilled experts (HSE)-foreign nationals, the eligibility criteria of that group of workers (work experience, skills and achievements in a specific line of activities and the amount of remuneration), as well as requirements to employers of such workers have been elaborated on. The mechanism of supervision over such employers which engage HSE has been tightened as regards fulfillment by employers of their obligations related to payment of wages and salaries, timely submission by them of the information on termination of labor contracts and provision to them of unpaid leaves for a period of more than a calendar month within a year and other;

¹ Similar to residence permit – Cl. 2 of Federal Law No.224-FZ as amended of July 23, 2013; work permit - Cl. 9.1 was introduced by Federal Law No.60-FZ of May 6, 2008; Federal Law No.224-FZ of July 23, 2013 as amended.

10. The terms of re-admission¹ – handover, delivery, temporary accommodation, personal inspection of persons subject to re-admission and other - have been specified.

So, the general line of the amendments introduced is quite evident: it is a trend towards tightening of administrative control and creating of barriers on the way of migration from CIS states in conditions of a visa-free regime (it is to be noted that though that regime is still in force it is highly disputed)². Toughening of requirements concerned primarily those foreigners who failed to secure within the first 90 days either a work permit or license to work with individuals. If earlier upon the expiry of the above period those migrants could leave Russia for their homeland or go to the nearest bordering country to return to Russia on the next day to continue their stay in Russia, from 2014 the above practice becomes illegal. Having left Russia upon the expiry of a 90-day period, a foreign national is allowed to return only 90 days after. If a foreign national exceeds the period of a stay, he/she faces an administrative fine with deportation or a ban on entry to Russia in case he/she attempts to enter the country next time.

The second trend consists in making it simpler for students from CIS states to come and work in Russia. At present, those students can work in Russia without securing a permit from the Federal Migration Service (FMS) and beyond the quota.

The Draft Law on Rubber Flats was debated throughout 2013 and approved late in the year³. The Law on Rubber Flats introduced amendments to the Law on the Right of Nationals of the Russian Federation to Freedom of Movement and Choice of the Place of Stay and Domicile Within the Limits of the Russian Federation⁴, the Law on Migration Registration of Foreign Nationals and Stateless Persons⁵ and the Criminal Code of the Russian Federation and the Criminal Procedure Code of the Russian Federation.

In accordance with the approved amendments to the existing statutory acts, for a sham registration at the place of a stay and the place of residence of Russian nationals, foreign nationals and stateless persons a fine of Rb 100,000 to Rb 500,000 can be charged and penalties in the form of compulsory labor for the term of three years or imprisonment for the same term can imposed.

In addition to the above, an article as regards a stay in an apartment of a national of the Russian Federation without registration and approval by the owner of the housing of such a stay for over the established period (90 days) was introduced in the Administrative Violations Code. For such a violation, tenants, owners of apartments and legal entities will be charged a fine of Rb 2,000-Rb 3000, Rb 2,000-Rb 5,000 and Rb 250,000-Rb 750,000, respectively.

At present, one can stay without registration only with his/her relatives and in the entire territory of the constituent entity provided that one has been registered at the place of domicile in the same constituent entity of the Russian Federation. In addition to the above, residents of the Moscow (Leningrad) Region may stay without registration in Moscow (St. Petersburg) and vice versa.

¹ Re-admission is a consent by the state to receive back to its territory its nationals (and in some cases foreigners which earlier stayed or resided in that state) who are subject to deportation from a foreign state.

² From 2015, one will be allowed to enter Russia only with a passport for trips abroad and not with an internal passport as it is practiced at present. In a sense, the above measure can be regarded as a first step to introduction of visas.

³ Federal Law No. 5242-1 of June 25, 1993 of the Russian Federation.

⁴ Federal Law No. 5242-1 of June 25, 1993 of the Russian Federation.

⁵ Federal Law No.109-FZ of July 18, 2006.

Different amounts of fines have been set for capital cities, their regions and the rest of the country. Experts say that such a situation is in conflict with the constitutional norm under which all the nationals are equal before the law regardless of the place of their residence.

In addition to the above, actual implementation of the draft law will require active measures on the part of district police officers who, firstly, have to prove that a person stays without a registration for over 90 days and, secondly, violate Article 182 of the Criminal procedure Code of the Russian Federation under which it is prohibited to enter the apartment without a consent and knowledge of the resident of that apartment unless there is a search warrant signed by a judge¹.

Experts believe that approval of the above draft law may have some negative consequences: on the part of district police officers there will be higher corruption related to migration and leaseholds rates will go up in case large-scale fines are issued on the basis of neighbors' evidence. According to V. Mukomel, Head of the Migration and Integration Processes Research Sector of the Institute of Sociology of the Russian Academy of Sciences, though the law is aimed at tightening of registration of foreign nationals it will complicate the life of Russians: "The issue of mobility of the Russian population is becoming more complicated as the Law is oriented at the Soviet-era model of registration. At present, we live in different conditions: people are registered at one region and work at another. The Law in question is a continuation of violations of Russian nationals' rights. In the 1990s, the Constitutional Court made a few decisions and rulings under which the existence or absence of registration should not prejudice the rights of nationals"².

Federal Law No.114-FZ of August 15, 1996 on **The Procedure for Entry to the Russian Federation and Exit from the Russian Federation** was also supplemented with the following points which provide for a ban on entry by foreign nationals to the Russian Federation if:

- within three years foreign nationals were repeatedly (two or more times) brought to administrative responsibility in compliance with the legislation of the Russian Federation for committing administrative violations in the territory of the Russian Federation – within three years from the effective day of the latest decision on bringing to administrative responsibility”;
- within a year a foreign national or a stateless person was repeatedly (two or more times) brought to administrative responsibility for committing an administrative violation related to infringement of a public order and public safety or the regime of stay (residence) of foreign nationals or stateless persons in the Russian Federation or the procedure for carrying out by the above persons of labor activities in the territory of the Russian Federation – within five years from the effective day of the latest decision on bringing to administrative responsibility”.

The amendment on the ban on entry to Russia by foreign nationals who committed an administrative violation (for instance, traffic rules) was introduced into the Federal Law on the Legal Status of Foreign Nationals in the Russian Federation.

¹ V. Novikov. Draft Law on Rubber Flats: Great Commotion About Nothing //Novosti RAPS. http://rapsinews.ru/legislation_publication/20130228/266554840.html#ixzz2qRYnPNmE. Date of application 17.02.2014.

² Yu. Mukhametshina, E. Pogorelova Moscow is Not Boundless //Gazeta. Ru. 23.12.2013. <http://www.gazeta.ru/social/2013/12/23/5816521.shtml> . Date of application 17.02.2014.

Late in 2013, the Government of the Russian Federation submitted for consideration **the draft law on amendments to the Labor Code of the Russian Federation**. Under the above draft law, in addition to the existing list of documents required for entering into the labor agreement “a foreign national or a stateless person who is seeking employment is to present to the employer an agreement (a policy) on voluntary medical insurance which is effective in the territory of the Russian Federation (except for cases where the employer concludes an agreement with a medical institution on provision of paid medical services or the agreement (policy) of voluntary medical insurance) – for foreign nationals or stateless persons who come to Russia for a temporary stay (except for foreign nationals or stateless persons who were engaged as high-skilled experts in accordance with the legislation on the legal status of foreign nationals in the Russian Federation)”¹.

Unlike 2012, in 2013 the issue of control over the situation in the field of employment of foreign workers from countries which maintain a visa-free regime with Russia was a topic of the **Annual Message of the President to the Federal Assembly**². The main emphasis was made on the following:

- continuation of the successful experience in issuing of licenses to workers from CIS states who work for individuals, legal entities and individual entrepreneurs. “The cost of a license will be determined by a constituent entity of the Russian Federation depending on the situation on the regional labor market and the average level of income of households in that territory. The system of licenses should be a differentiated one and create an incentive for, primarily, skilled and educated workers with knowledge of the Russian language and culture to come to Russia ... the license should be effective only in that region where it was bought”;
- tightening of control over the purposes of entry by foreign nationals to Russia and limitation of the period of a stay and banning of the entry to Russia by migrants who violated the rules of a stay (“Depending on the gravity of the violation, the period of a ban may vary from three to ten years).

Realization of a larger portion of legal innovations starts on January 1, 2014. Some instruments were actively engaged as early as 2013. For example, by the beginning of 2014 the rule of “a ban on entry to Russia of migrants who violated the rules of a stay” resulted in the fact that 500,000 migrants were denied entry to Russia. The imposition of that sanction in respect of those migrants took place due to violation by them of the rule of a stay in Russia. They were banned to come to Russia for three to ten years³.

So, in 2013 the total number of legislative initiatives in the migration field was that big so it can be regarded as the year of a new migration reform which took place a year after the

¹ Draft Federal Law No. 393946-6 on Introduction to the Labor Code of the Russian Federation of Amendments Related to the Specifics of Carrying Out by Foreign Nationals of Labor Activities.

² The Message of the President to the Federal Assembly. December 12, 2013. Published at <http://kremlin.ru/news/19825> . The date of application: 17.02.2014.

³ Such data was given at the press-conference of senior officials of the Federal migration Service of Russia with journalists. For more details see S. Lyutykh Malicious Offenders of the Migration Legislation will be Denied Entry to Russia for 10 Years //Vechernyaya Moskva. January 15, 2014 <http://vm.ru/news/2014/01/15/zlostnim-narushitelyam-migratsionnogo-zakonodatelstva-zakroyut-vezd-v-rossiyu-na-10-let-230980.html>. The date of application: 17.02.2014.

approval of the *Guidelines for the State Migration Policy of the Russian Federation until 2025*¹ which did not imply the above initiatives.

5.2.2. The Effect of Migration on the Number and Pattern of the Country's Population

Within 10 months of 2013 (January – October), the number of the population of Russia rose by 261,600 (migrants accounted for 93% of that growth). Within the above period, growth in migration amounted to about 245,000 persons and did not actually change as compared to the respective period of 2012.

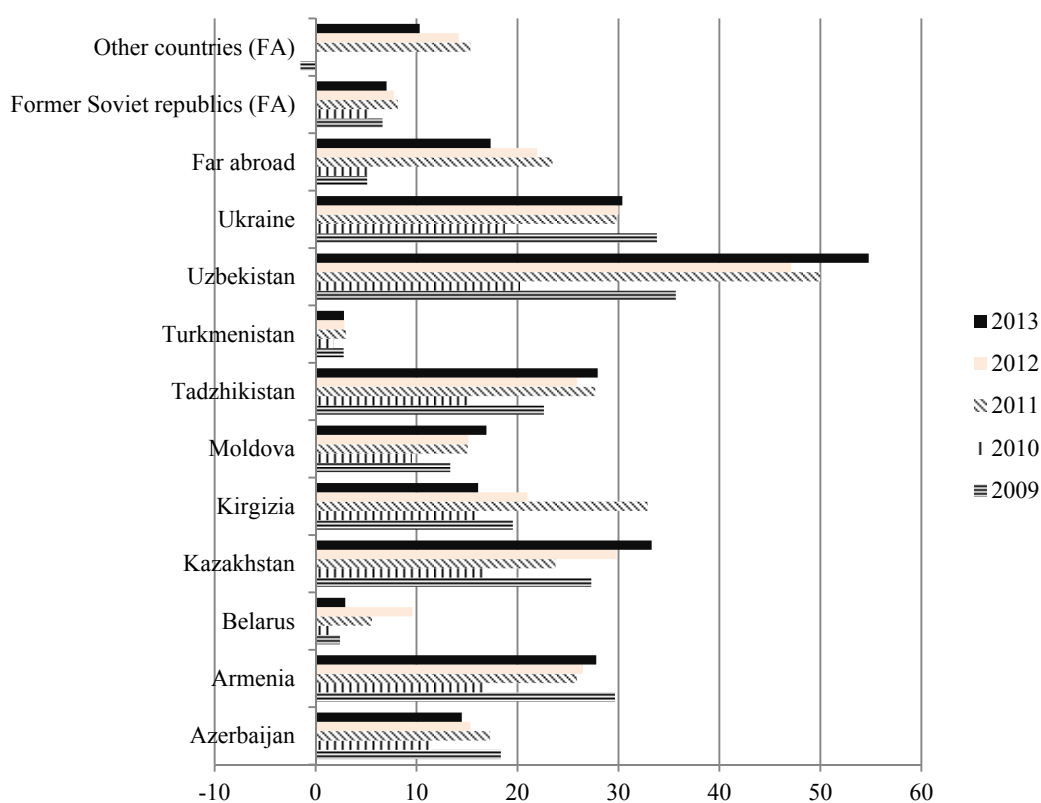
However, it is to be reminded that from 2011 in migration growth not only persons registered at the place of residence are accounted for (as it was from 1995 when that type of registration replaced the system of registered domicile), but also those registered at the place of their stay for the period of over 9 months. Changes in the methods had an effect on the number of *arrivals* to Russia registered by the statistics nearly from the beginning of 2011, while closer to the end of 2011 and starting from 2012, that is, with a certain time lag they had an effect on the dynamics of *departures* from Russia: from that period the number of departures rose dramatically as they started to be registered “automatically”, that is, upon the expiry of the period, for example, of 9 months in registration at the place of a stay. In that sense, in 2013 the general pattern of migration which was formed in the previous year did not change neither in terms of its dynamics, nor from a perspective that a certain share of a temporary (labor) migration is now statistically accounted for in Russia's migration growth. According to the estimated data, in 2012 external migrants registered in Russia at a new place of a stay accounted for about 35% of migration growth in Russia (that is, a little more than 100,000 persons). Others were registered for different periods of temporary registration which means that earlier (as a minimum migrants registered for the period of 9 months are included in that growth) or later (5 years) they will be automatically deregistered. Some will renew then their registration, other will not. Indirectly, a country vector of departures from Russia permits to determine the extent of a share of the labor migration in migration growth. In 2012, of all the migrants earlier registered at the place of their stay and who left (automatically) for foreign countries 32% of migrants went to Uzbekistan, 10% each to Kirgizia and Tadzhikistan and 8% to Ukraine. So, the actual migration growth in Russia which could be considered in traditional coordinates of growth in the number of the population of the country is much lower than the reported one. In addition to that, there is a large number of migrants who stay in the country for an indefinitely long period of time and are invisible to the statistics, but it is another story². Like many other indices, the distribution of the net migration by the period of registration in 2013 has not been calculated by the Rosstat yet. However, nearly a complete matching of the “base” figures of migration growth and its pattern by the type of migration

¹ Web-site “The President of Russia”, June 13, 2012 <http://президент.рф/acts/15635>. The date of application: 17.02.2014.

² According to the data of K. Romodanovsky, Head of the Federal Migration Service of the Russian Federation, “...in the territory of Russia there is 3.6m labor migrants who can be attributed to the so-called risk group . Those migrants work illegally and exceeded the period of their stay “ // The FMS of the RF counted 3.6m illegal migrants in Russia and recognized the fact of existence of ethnic conflicts. Web-site: Newsru. December 16, 2013. <http://www.newsru.com/russia/16dec2013/fmsnelegaly.html>. The date of application 17.02.2014.

flows in January – October 2013 with those of the respective period of 2012 permits to suggest that such distribution is stable.

If in January-October 2013 the volume of the net migration with the CIS states was almost identical to that of the previous year, some specifics was observed in the exchange with individual countries (*Fig. 4*). The main changes concerned the exchange with Belarus; the volume of growth in migration from that country fell more than three times over. The factor behind that was sudden growth in departures with almost the same volume of arrivals in Russia. However, there are no real explanations of the observed surges in the exchange with Belarus. It is to be noted that bilateral migration relations between Russia and Belarus were specific in the 1990s, too. Unlike all the other republics of the former USSR, Russia has annually a small, but stable net loss in the exchange with Belarus. In the 2000s, for Russia the migration exchange changed from negative to positive, but a number of factors (special grounds for migration within the frameworks of the Union State and preservation of a special procedure for “statehood” in the Republic in combination with territorial proximity to Russia and its individual most poorest regions of the European part of the country) make the migration exchange with Belarus unstable.



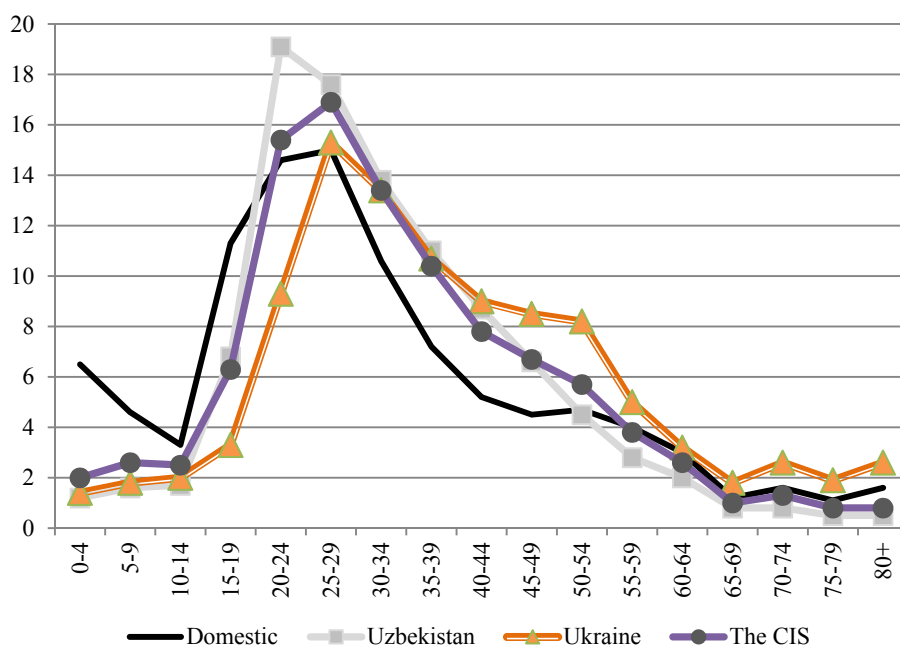
*FA is the far abroad (it includes countries of “traditional abroad, as well as the Baltic States and Georgia).

Sources: The Social and Economic Situation in Russia. The 2009-2013 Statistical Bulletin of Rosstat. Rosstat, 2009, 2010, 2011, 2012 and 2013.

Fig. 4. Russia’s migration growth with the CIS states and far abroad states, January-October 2009–2013, thousand persons

From year to year, in Russia's migration growth the unit weight of the Central Asian vector is growing with absolute domination of Uzbekistan. At present, the Central Asian component amounts nearly to 42%, while that of Uzbekistan, to 22%; it is to be noted that five years ago the above indices amounted to 33% and 15%, accordingly. It is the Central Asia which the center of population growth in the post-Soviet space. Throughout the past quarter of a century, average annual growth rates of the population in Tajikistan, Uzbekistan and Turkmenistan amounted to 3% and more¹. By virtue of the above, they have the youngest workforce in the post-Soviet space which forms the outgoing young migration flows.

Migration activity in any country is formed at young age groups; a selective function of migration is evident in that. In migration flows arriving in Russia, it is intensified due to the above young age pattern of the population of the Central Asia which is Russia's main migration donor (*Fig. 5*).



Source: the data of the Rosstat.

Fig. 5. The age pattern of migrants arriving in Russia by individual lines in 2012, %

5.2.3. External Labor Migration

The extent of the temporary labor migration to Russia is still considerable and difficult to estimate. As before, those difficulties are related to the following two components: quite unclear extent of migration flows to the country, uncertain large volumes of the informal economy and informal employment in Russia². It is impossible to exit from that situation with knowledge of only one side of the issue.

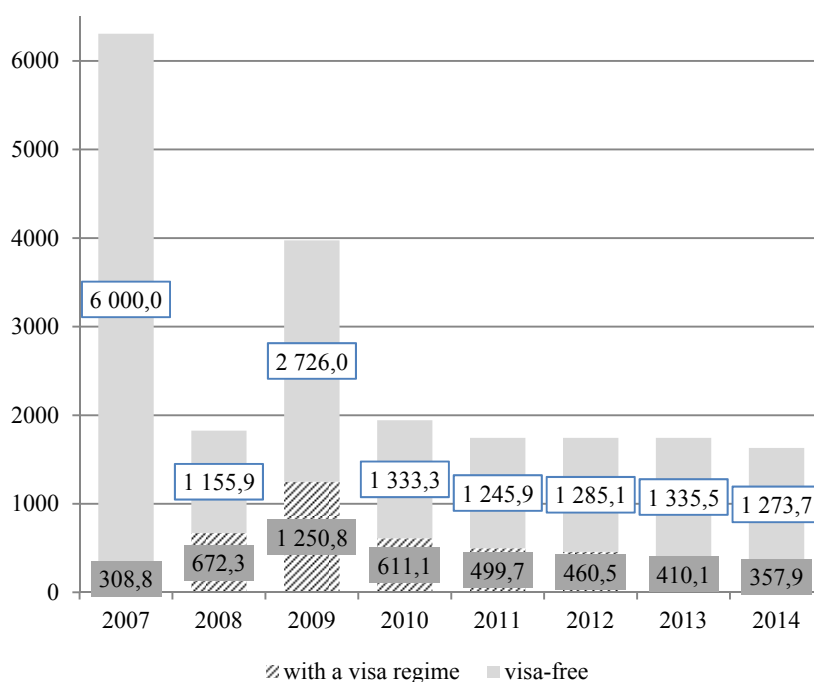
¹ E.M. Scherbakova. 25 Years from the Date of the Last All-Union Census of 1989 //Demoskop Weekly. No. 581-582. January 1-26, 2014. <http://demoscope.ru/weekly/2014/0581/barom02.php>

² For more details, see: In the Shadow of Regulation: Informality on the Russian Labor Market. Scientific Editor V.E. Gimpelson and R.I. Kapelyushnikov . Moscow: Publishing House of NRU HSE, 2014.

At present, there are a few channels of attraction of foreign workers to Russia:

- on the basis of a permit to work (with a legal entity) – for migrants from any country within the frameworks of the annual quota for employment of foreign workers and beyond the quota – granted to representatives of individual professions in accordance with the annually approved list;
- on the basis of a work permit issued to high-skilled experts (HSE);
- on the basis of the license (for work with individuals) – issued to migrants from the CIS states;
- without permit documents – for migrants from member-states of the Customs Union within the frameworks of the Eurasian Economic Community (Kazakhstan) and union state -- Belarus.

Work Permit. In 2013, the need in foreign workforce whose formation from the very beginning of calculation of that parameter leaves many questions unanswered and, nevertheless, is a turning point in determination of the size of quotas amounted to 1,745,584 persons. With accuracy up to the last digit, the same number was set in government documents in 2011 and 2012 (in the total calculation of workers from countries with a visa regime and visa-free countries) (*Fig. 6*). In economic terms, such stability means as a minimum a lack of connection to any macroeconomic parameters of development of the country, as well as weak elasticity of the instrument. The above mentioned tightening of the migration policy which took place in 2013 contributed to a 7% reduction in the declared need in foreign workers in 2014.



Source: Resolutions of the Government of the RF (for each subsequent year) On Determination of the Need in Attraction of Foreign nationals into the Russian Federation and Approval of Relevant Quotas for 20...

Fig. 6. The declared need in foreign workforce (quotas), 2007–2014, thousand persons.

The pattern of need in section of professional and skilled groups is shown in *Table 6*. The most explicit trend is annual reduction of work permits to unskilled workers. The above may point either to a substantial growth in labor efficiency and refusal by the economy to utilize on a large- scale basis the unskilled workforce, or overstated rates of utilization of such labor earlier or the new need in such labor with Russians.

Table 6

Distribution of the need in attraction of foreign workers to Russia by the most represented professional and skilled groups in the 2012--2014 period, %

| | In 2012 | In 2013 | In 2014 |
|---|---------|---------|---------|
| Workers engaged at mining, mining-capital, building and installation and repair and building jobs | 30.4 | 33.4 | 34.1 |
| Unskilled workers, general for all branches of the economy | 24.0 | 21.0 | 16.9 |
| Drivers and operators of mobile equipment | 6.4 | 7.0 | 7.3 |
| Workers of metalworking and engineering industries | 5.6 | 6.2 | 6.6 |
| Skilled workers of commercial agriculture, forest industry, game husbandry, fish farming and fishing industry with market orientation | 6.4 | 6.0 | 5.2 |
| Other professions of skilled workers of large and small industrial enterprises | 4.5 | 4.8 | 5.0 |
| Managers of entities, institutions and enterprises and structural units thereof (services) | 5.0 | 4.3 | 4.9 |
| Other | 17.7 | 17.3 | 20.0 |
| Total | 100 | 100 | 100 |

Source: Resolution No.892 of November 3, 2011 On Determination of the Need in Attraction of Foreign Workers to the Russian Federation and Approval of Relevant Quotas in 2012; Resolution No.1137 of November 3, 2012 On Determination of the Need in Attraction of Foreign Workers to the Russian Federation and Approval of Relevant Quotas in 2013; Resolution No.977 of October 31, 2013 On Determination of the Need in Attraction of Foreign Workers to the Russian Federation and Approval of Relevant Quotas in 2014.

On the basis of the need in foreign work force, work permit quotas and invitations for work are issued to migrants from the visa-free space of CIS states and countries which Russia maintains a visa regime with, respectively. In 2013, they amounted to 1,335,458 and 410,126, respectively.

From the very introduction in 2007, the mechanism of quotas has drawn much criticism¹, however, lobbied by the Ministry of Labor it remains the main effective player on the field of foreigners' work with legal entities. In some years, quotas used to be exhausted many times over before April-May and then were gradually increased. However, with introduction of licenses such a need became less acute. Law-abiding migrants started to avoid situations where it is impossible for them to receive a work permit due to exhaustion of the quota (and consequently legalize their work) and buy a **Patent**, that is, a license to work with private households (baby-sitters, housemaids, janitors, gardeners and other – representatives of 37 professions in total). In the past few years, a comparative analysis of the data points to a trend in redistribution of importance of channels of labor migration (*Table 7*). In 2013, the number of people who received work permits decreased considerably by 10 p.p. as compared to 2012 and the number of migrants working on the basis of a patent exceeded for the first time the number of workers working on the basis of a work permit. The patent as an instrument to obtain a legal status and avoid the corruption-intensive mechanism of securing a work permit is used more and more actively. It is to be noted that on the basis of a sociological survey

¹ For more detail on that, see the previous Reviews: The Russian Economy in 2008: Trends and Prospects. Moscow: IEP, 2009. Section 4.2. pp. 342-359; The Russian Economy in 2010: Trends and Prospects. Moscow: IEP, 2011. Section 5.3. pp.343-361; The Russian Economy in 2012: Trends and Prospects. Moscow.: The Gaidar Institute, 2013. Section 5.2. pp.371-386.

carried out by the Levada-Center for the NRU HSE in 2011 61.5% of migrants with patents have no experience of work with individuals¹.

Table 7

**The main indices of the international labor migration to Russia
in the 2010–2013 period, thousand**

| | | 2010 | 2011 | 2012 | 2013 |
|--|-------------------|--------|--------|--------|----------|
| Quota (general) | | 1944 | 1746 | 1746 | 1746 |
| Work permit | Total | 1170.0 | 1219.8 | 1403.6 | 1274.0 |
| | FW* without visa | 894.2 | 941.1 | 1121.7 | 1274.0** |
| | FW with visa | 208.5 | 199.5 | 210.4 | |
| | Those with TRP*** | 67.3 | 79.2 | 71.5 | |
| Patents (sold to nationals from "visa-free" countries) | | 156.9 | 862.4 | 1289.2 | 1537.8 |
| High-skilled and skilled workers **** | | 3.1 | 11.3 | 55.8 | 155.8 |

*FW is foreign workers

** the data of the FMS of the Russian Federation is presented in the aggregated form for two groups of foreign workers

***TRP is a temporary residence permit; before 2012 included persons with TRP had to secure a work permit.

****The high-skilled workers category started to emerge from July 2010; before that there was only the skilled workers category.

Source: the data of the 1-RD form of the FMS of the Russian Federation.

The cost of the patent amounts to Rb 1,000. With monthly or quarterly contribution of Rb 1,000 made to the account of the Tax Service the term of the patent is extended; a payment receipt is a confirmation of validity of the patent and no confirmation of labor activities with an individual-employer is required. The latter is probably the most attractive factor for visa-free CIS states because if workers seek employment for the first time with legal entities they need to present a labor contract with the employer in order to secure a work permit (it is to be noted that they have to do that within 90 days from the day of entry to the territory of the Russian Federation). Another factor which makes a patent more attractive as compared to a work permit is the fact that a foreign worker does not need to apply to the migration service and other services which situation permits to avoid corruption payments and schemes. In the past few years, there was a wide-spread scheme under which intermediary firms giving themselves out for real employers participated in the campaign for formation of quotas for the next year, while later resold the granted quotas to those who actually needed workers charging up to Rb 25,000 per work permit². According to the 2012 statistics, 47%, 22% and over 9% of the patents were bought by nationals of Uzbekistan, Tajikistan and Kirgizia, respectively. Nationals of Azerbaijan and Ukraine bought 5% of the patents each, while Moldavians, 4%.

In 2012, the calculated monthly average number of workers with patents amounted to 355,200 persons³. A third of those workers is concentrated in the Moscow Region. Other

¹ O.S. Chudinovsky, M.B. Denisenko and N.V. Mkrtychyan Temporary Labor Migrants in Russia //Demoskop Weekly. Topic of the Issue 2013. No. 579-580. <http://demoscope.ru/weekly/2013/0579/tema02.php> . Date of application: 18.02.2014.

² O.S. Chudinovsky, M.B. Denisenko and N.V. Mkrtychyan Temporary Labor Migrants in Russia //Demoskop Weekly. Topic of the Issue 2013. No. 579-580. <http://demoscope.ru/weekly/2013/0579/tema02.php> . Date of application: 18.02.2014.

³ As patents can be issued for the term of 1-3 months and extended till a year, it is impossible to determine the accurate number of migrants working concurrently on the basis of a patent. The presented calculations are

regions, including Moscow accumulate maximum 5% of workers with patents each. By that index, St. Petersburg even together with the Leningrad Region is not in the top ten of regions. There are many workers with patents in the Tula Region, the Novosibirsk Region, the Rostov Region, the Irkutsk Region, Tatarstan, the Krasnoyarsk Territory and the Krasnodar Territory. Except for the Tula Region, capital cities of all the above regions are major Russian cities and have both vast labor markets and fairly high solvent demand.

In that sense, regional distribution of work permits as an instrument oriented mostly at the big business shows a vector in favor of industrial regions: in addition to capital cities and regions, as well as the Krasnodar Territory (Olimpstroi) a high unit weight of work permits (as compared to the nationwide index) is demonstrated by such regions as the Khanty-Mansiisk Autonomous Region, the Yamalo-Nenets Autonomous Region, the Sverdlovsk Region, Kaluga Region and the Primorsky Territory.

About 113,000 persons (within 11 months of 2013) beyond the quota of the so-called list of professions of the Ministry of Labor and Social Protection came to Russia as skilled workers¹. The list² numbered 59 professions (positions), which is 18 positions more as compared to 2012. It was formed for representatives of three groups: theatre and drama workers (21 positions in the list), managers (directors of departments, plants, representative offices and other – the total of 20) and engineering personnel (18). Growth in the latter group of workers is probably related to a sudden increase in the number of foreigners engaged over that channel of migration (a 150% increase on the 2012 figure).

The flow of high-skilled workers coming to Russia rose considerably by nearly 100% and amounted to 23,300 persons (within 11 months). They include foreign nationals “who have work experience, skills or achievements in specific areas of activities if conditions of engagement of such a worker in labor activities in the Russian Federation suggest receipt of a pay (remuneration)”³ in the amount: minimum Rb 1m a year for instructors and researchers; minimum Rb 700,000 for those attracted by residents for labor activities in a special technical promotional economic zone (except for individual entrepreneurs); without requirements to the amount of the pay for foreign nationals participating in realization of the Skolkovo project; minimum Rb 2m for other foreign nationals. A larger part of foreigners attracted as high-skilled workers are managers. The data on flows of high-skilled workers in 2012 shows that those workers are mostly male persons (93%) at the mature age of 40-49 years old.

Late in 2007, after events in Kondopoge (Karelia) sectorial limitations on labor activities by foreign nationals were introduced in Russia⁴. Officially, the “zero quota” in respect of sellers was introduced to make work places available to Russians and reduce the rate of unemployment. Actually, the above measure was aimed at reduction of flows of illegal

approximate ones and based on the number of migrants who received and extended patents for the period of 1, 2 and 3 months.

¹ O.S. Chudinovskikh, M.B. Denisenko and N.V. Mkrtychyan. Temporary Labor Migrants in Russia //Demoskop Weekly. Topic of the issue. 2013. No. 579-580. <http://demoscope.ru/weekly/2013/0579/tema01.php>. Date of Application: 18.02.2014.

² Order No. 568 of December 3, 2012 of the Ministry of Labor of the Russian Federation on Approval of the List of Professions (Professions and Positions) of Foreign Nationals – Skilled Workers Seeking Employment in Accordance with their Profession to Which the 2013 Quotas on Labor Activities by Foreign Nationals in the Russian Federation are not Extended.

³ Article 13.2 of Federal Law No. 115-FZ of July 25, 2002 on the Legal Status of Foreign Nationals in the Russian Federation.

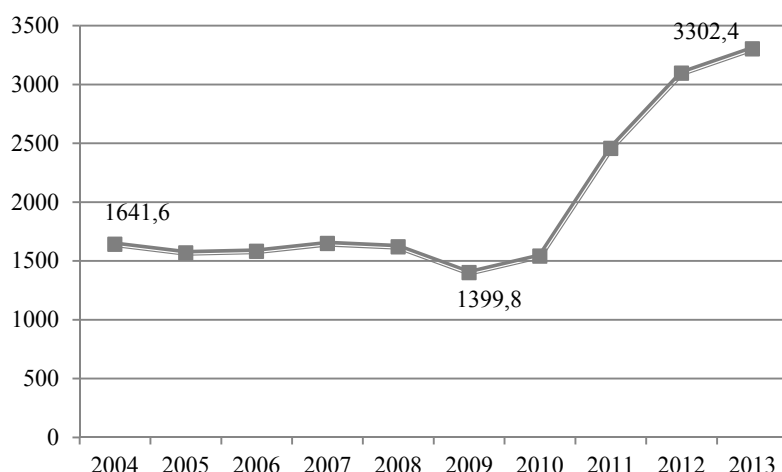
⁴ For more details on that see: The Russian Economy in 2007: Trends and Prospects. Moscow. IEP, 2008, Section 4.2. p.p. 379 – 394.

migrants. Sectorial limitations which were in effect in the 2007–2012 period were related to a few sectors (types of activities); it is to be noted that shares of possible presence of foreigners change almost every year. For example, the quota of utilization of foreign workers in retail trade in the 2008–2011 period was a zero one, while later, in 2012, a 25% quota for workers in the sphere of sale of alcohol, including beer was introduced. The above quota was in effect in 2013, too, but in 2014 it is to be reduced to 15%. According to A. Korochkina, Vice President of the *Pillars of Russia*, “the business climate in Russia suffers a lot from such swings: one year the quota is a zero one, another year – 25%, still another year – 15% and then back a zero one again”¹. In 2013, there was a zero quota on employment of foreigners in retail trade in pharmaceutical goods and retail trade in market outlets and a 25% quota on “other activities” in sport (it includes activities related to organization and holding of various sport events, as well as activities of independent sportsmen and athletes, referees, coaches, instructors and other). Tight quoting in retail trade actually results in suppression of the small business in that sector as large retailers have different options to employ workers “under some schemes” or via outsourcing, while small shops “within a walking distance” do not have such an opportunity.

5.2.4. Migration Inside the Russian Federation

The volumes of migrants inside Russia kept growing (*Fig. 7*). In January– October 2013, the number of migrants who moved inside Russia for a long term (domiciliary) or for an indefinite shorter period (at the place of stay for the term of over 9 months) amounts to 3.3m persons. On the basis of the outputs of the year, for the first time in the post-Soviet period the number of internal migrants came closer or became equal to that of the year 1989 when that index amounted to 4m persons. The statistics data does not permit to determine the number of “long-term” migrants who moved to a new place of domicile in 2013 and that of short-term migrants (at the place of their stay). The last time it was possible to do that on the basis of the statistics of 2011 when the share of migrations with a change in domicile amounted to 68% of all the domestic migration. In any case, at present there is growth in mobility demonstrated by many factors, including those ranging from growth in the interregional social and economic differentiation which gives an impetus to large-scale migration flows and contributes to interregional flows to migrations related to reformatting of administrative borders in connection with establishment of municipal entities which situation has an effect on the extent of the interregional migration.

¹ A. Yevstigneyeva and A. Levinskaya. Migrants are Ousted from Shops //RBK daily. October 09, 2013. <http://rbcdaily.ru/economy/562949989173604> . Date of application 19.02.2014.



Sources: *Social and Economic Situation of Russia*. The 2004-2013 Statistical Bulletins of Rosstat. Rosstat, 2004–2013.

Fig. 7. Domestic migration in Russia (interregional and intraregional), January – October 2004–2013, thousand persons.

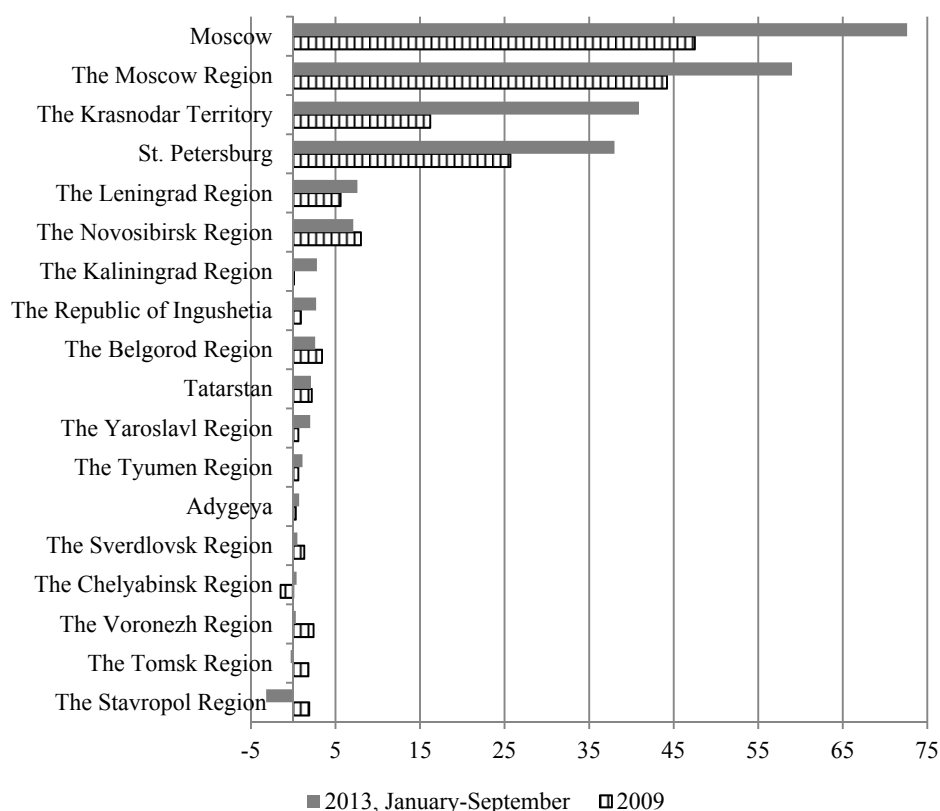
Analyzing different factors behind migration of workforce and capital, Western researchers have come to a conclusion that “internal migration provides opportunities of economic growth and convergence of the welfare level ¹ and that is undoubtedly an advantage.

So, the volumes of domestic migration grew, but the correlation of the interregional migration to the intraregional migration changed insignificantly: 52% to 48% in the total migration volume. In the previous years, it was normally 55% to 45%.

Growth in the domestic migration in Russia is **not** accompanied by the following two expected (though to a different extent) developments: formation of new magnet-regions for domestic migrants and an eastward vector of migration.

Geographically, the domestic migration attractiveness of regions has long become “stagnant”: 16 constituent entities of the Russian Federation had a positive migration growth in interregional migrations in 2013. Five years before that, in 2009, the number of such constituent entities amounted to 17. The lists of attractive regions coincide almost completely (*Fig. 8*): these are capital cities and their regions, the Krasnodar Territory, the Kaliningrad Region, the Belgorod Region and Tatarstan. In the East of the country, stable positive net migration is observed only in the Tyumen Region (without districts) and the Novosibirsk Region.

¹ The Factor of Mobility and Migration of Population //The Report on Global Development -2009: A New View of Economic Geography. Chapter 5. Moscow: Ves Mir, 2009. pp. 146-169.



Source: the Rosstat's data.

Fig. 8. Russia's regions with positive migration growth in the domestic migration, 2009, 2013 (January – September), thousand persons.

The messages of support to internal migrants¹ – which messages are made occasionally by the state and particularly often in 2013 – who are ready to move to the Eastern part of the country actually result in nothing. The statistics still points to the opposite: if the Western vector in migration has not become stronger, it did not disappear. The outflow of migrants was observed from all the regions to the East of the Novosibirsk Region. If in the 1990s and the 2000s there were at least weak, but local magnets, such as the Krasnoyarsk Territory and Khakassia, at present there are none. Not a single worker responded to a proposal made to workers by the closed-down Nadvoitsky Aluminum Plant (Karelia) to move to Boguchany (a new aluminum plant in the Krasnoyarsk Territory within the frameworks of the same Rusal Holding) with paid fares of workers' families and two-week hotel accommodation, provision

¹ At the meeting chaired by Premier D. Medvedev in Tutaevo (the Yaroslavl Region) in November 2013, M. Topilin, Minister of labor and Social Development said that "With taking into account the fact that in mono-cities there was a redundant workforce it would be expedient to apply and organize programs of displacement for such populated areas ..." and proposed to grant to migrants to the Far East Rb 400,000 per worker and another Rb 800,000 for his family. Under the program it is planned to displace 60,000 persons /A. Protsenko. Minister Topilin's Stolypin-Style Call //Trud. No. 161. November 15, 2013. http://www.trud.ru/article/15-11-2013/1303086_stolypinskij_prizyv_ministra_topilina.html . Date of application 19.02.2014.

of housing at a new place, allocation of Rb 15,000 as resettlement benefits and ensuring of day-care centers for workers' children¹.

In addition to the above, it can be stated that the "East" has spread over to Privolzhie which used to be attractive both to external and internal migrants in the 1990s and the 2000s. At present, the outflow of migrants from the Privolshsky Federal District in general and its individual regions in particular is probably the highest one (in terms of the absolute size, but as regards the rate of outflow the situation in the Siberian Federal District and the Far Eastern Federal District is even worse).

Attractiveness of Moscow and the Moscow Region to migrants remain very high: they both accumulate nearly 55% of the positive migration growth of Russia's all the 16 regions. It is to be noted that from 2011 the migration balance between Moscow and the Moscow Region has tilted towards the latter. It is the result of spreading of Moscow over to the Moscow Region where most cities have high rates of commissioning of new housing² and serve as Moscow's dormitory suburbs.

5.3. Key Trends in the Education System Development

The year 2013 in Russia's education system was marked by the following major developments:

- 1) enactment of the new Federal Law 'On Education in the Russian Federation' (of 29 December 2012, No. 273-FZ);
- 2) implementation of the Executive Orders of the President of the Russian Federation: of 7 May 2012, No. 597 'On Measures Aimed at the Implementation of Government Social Policy', and No. 599 'On Measures Aimed at the Implementation of Government Policy in the Field of Education and Science»;
- 3) mounting tension around the issue of the Unified State Examination (USE) and the attempts of the education system supervisory bodies to somewhat soften the attacks aimed at the USE;
- 4) completion of the second round of monitoring the performance level of higher educational establishments and their affiliations;
- 5) development, by the RF Ministry of Education and Science, of financial allocation norms for higher educational establishments, and difficulties involved in the coordination of these norms with the standpoint of the RF Ministry of Finance.

1. New Federal Law 'On Education in the Russian Federation' (No. 273-FZ), was adopted at the very end of 2012. Prior to its adoption, the law had been repeatedly written and rewritten, discussed adjusted. It seems that it was finally adopted just in order to break the interminable *vicious circle*. As a result, the version of the Law that came into force from 1 September 2013, instantly gave rise to several serious contextual and economic problems.

Pre-school education – universal comprehensive education level. Firstly, the new Law establishes that pre-school education should become a component of the universal compulsory education system (Article 63). In the summer of 2013, rather hastily, the Federal State Educational Standard (FSSES) in the field of pre-school education was introduced. Its authors

¹ O. Gerasimenko. The Most Interesting Thing will Happen When People Have Spent Those Six Wages and Salaries: A Report from the Capital of Desolation //Kommersant. January 20, 2014. <http://www.kommersant.ru/doc/2381169> . Date of application 19.02.2014.

² The rate of commissioning of flats in the Moscow Region has been ahead of that in Moscow since 2006 while that with per capita norms taken into account, from 2002.

believe¹ that the FSES must ensure the necessary conditions for any child's pre-school development. However, the following rather tricky and delicate questions have remained unanswered:

- How should the secondary school education system treat those children who did not attend pre-school establishments and, consequently, received no pre-school education in accordance with the Federal State Educational Standard?
- In spite of all the efforts made by the RF Government and regional authorities, over the next few years it will still be impossible to enroll all Russia's children in the existing pre-school establishments, although this is explicitly required by the RF President's Executive Order of 7 May 2012, No. 599. Most probably, some unconventional and unorthodox methods will be applied in order to comply with the Executive Order - for example, private kindergartens will be opened in residential buildings (in private apartments), where several children (5–10) will be entrusted to the mother of one of them (at least, this measure is effectively envisaged in the Roadmap for involving not-for-profit organizations operating in socially important fields, developed by the Agency for Strategic Initiatives). However, it is difficult to say how, under existing conditions, the new Federal State Educational Standard for pre-school education can actually be implemented.
- If the parents, for some reason or another, do not want to enroll their child in a pre-school educational establishment, will they be required to provide their child with tuition designed to ensure the level of 'educational competence' in compliance with the Federal State Educational Standard? How will the child's development level be tested?
- If a child, for health reasons, cannot attend an educational establishment for children (EEC), may the child's parents apply to the education system bodies and request that a tutor, capable of ensuring the appropriate educational development level as established by the Federal State Educational Standard, visit the child at home?
- What will be the required amount of budget funding to cover all these expenditures?

The question concerning the amount of budget resources to be allocated to EECs in order to enable them to operate in the new conditions and to involve more children in the official pre-school education system is by no means an idle one. The new Law separated the expenditures on a child's tuition and upkeep at a state or municipal pre-school educational establishment (these must be shouldered by parents) from the pre-school education costs covered from the state budget. This measure, according to experts' estimations, was to result in an instant three-to-fivefold increase of the amount of fee to be paid by parents to pre-school educational establishments. So, it was no longer to be affordable for children from low-income families to attend EECs; meanwhile, it is the children from this social stratum that are most in need of the services provided by EECs, in order to equalize their educational opportunities prior to the enrollment in a secondary school. Consequently, this gave rise to the issue of compensation of these costs from regional and municipal budgets, which are already overstrained due to the necessity to increase the amount of salaries paid to the various categories of educational staff employed by the state and municipal educational establishments operating under the jurisdiction of and municipal authorities (as required by the RF President's Executive Order of 7 May 2012, No. 597).

¹ The task force that developed the Federal State Educational Standard for pre-school education was headed by Aleksandr Asmolov, full member of the Russian Academy of Education, Director of the Federal Education Development Institute.

Experts¹ have put forth several compensation schemes designed to refund parents' expenditures, in particular the plan envisaging that the relevant budget expenditures should be increased by approximately 23–25%, or budget-neutral plans that do not rely on increased budget expenditure but envisage that the compensations be paid to a very limited number of families that actually need such additional funding. So far, no ultimate solution has been provided to that problem, and the education system bodies are trying to apply some purely administrative measures in order to prevent any further growth of the educational fees. So, the new Law, in this part, has been dysfunctional or, to be more precise, actively sabotaged wherever possible.

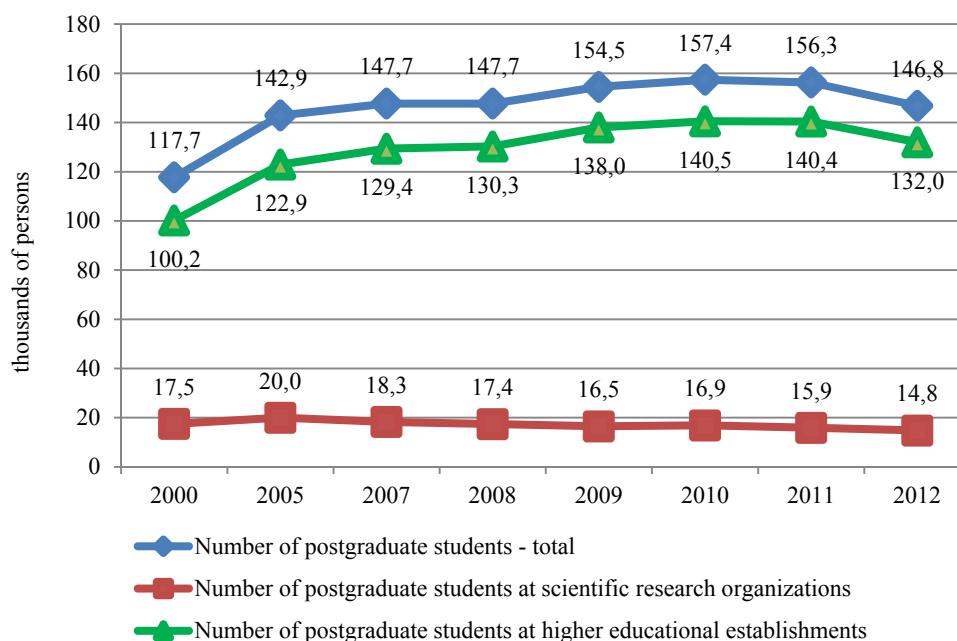
Alterations introduced in the procedure for charging the budget-funded students residing at the dormitories of higher educational establishments for their housing rent. Similarly grave problems arose in connection with the stipulations in Law No. 273-FZ concerning the housing rent to be paid by students for their use of dorms. In Part 3 of Article 39 it is specified that 'the amount of rental to be paid for the housing and utilities services provided for students by the dorms shall be determined by local normative acts adopted with due regard for the opinion of students' councils and students' representative bodies set up at the establishments operating in the field of education (if such bodies do exist)'. In other words, the amount of housing rent is no longer limited to 5% of the amount of scholarship paid to a budget-funded student, as it was established previously. Of course, the old norm needed to be adjusted, because the introduction of the Unified State Examination had drastically changed the existing situation, in that the inflow of students from other localities into higher educational establishment became noticeably higher, especially in major educational centers like Moscow and St. Petersburg, Tomsk and Novosibirsk, Krasnoyarsk and Rostov, Kazan and Samara, and some other big cities. These changes triggered the need for some different mechanism of covering the cost of lodging for budget-funded students, and the new Law represents the attempt to introduce such a mechanism. However, once again, no compensation was envisaged for the students affected by the new rules for their increased dormitory costs, the financial sources for the compensation were not properly defined, especially in view of the switchover of higher educational establishments to the system of financing based on normative costs. As a result, administrative pressure was exerted on the rectors of higher educational establishments to prevent any growth of the dormitory rent, or to allow it to grow only slightly. Thus, the new legal norm - similarly to that on kindergartens - is not being implemented for lack of proper economic backing.

Postgraduate education becomes the third tier of the higher education system. One more innovation introduced by the Federal Law 'On Education in the Russian Federation' is the new status of postgraduate departments, which are to become the third tier of the higher education system. The ultimate consequences of this decision have not yet been fully understood, though.

Prior to the adoption of Federal Law No. 273-FZ, postgraduate departments were for those individuals who have already completed their studies and graduated from a higher educational establishment, and so scientific research organizations could set up their own postgraduate departments and carry out thesis defenses, although higher educational establishments were still the core base for such activities. In this connection, the total share of postgraduate

¹ I. V. Abankina and L. N. Ovchariva (National Research University - Higher School of Economics) submitted to the RF Ministry of Finance the proposals for elaborating compensation mechanisms for refunding to parents the cost of child care services and meals provided to their children by the educational establishments for children.

students studying at scientific research organizations over the period between 2000 and 2012¹ dropped from 14.9 to 10.1% (Fig. 9).



Source: Statistical Yearbook of Russia. 2013. Statistics of Russia, M., Rosstat, 2013.

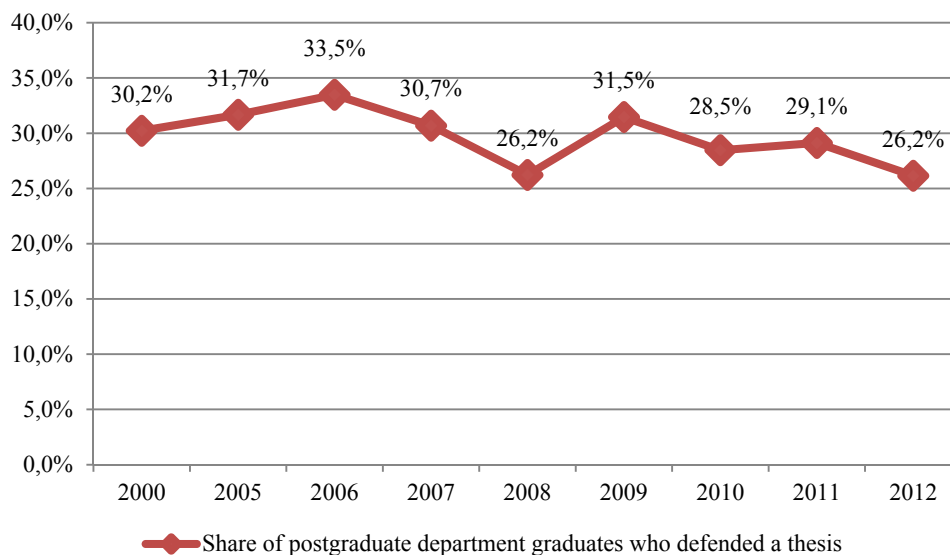
Fig. 9. Number of postgraduate students studying at the scientific research organizations of Russian Academies (the Russian Academy of Sciences, the Russian Academy of Medical Sciences, and the Russian Academy of Agricultural Sciences) and higher educational establishments in 2000–2012, thousands of persons

The new status of postgraduate departments as the third tier of the higher education system requires the issuance of a special decision to the effect that scientific research organizations may also set up and implement such programs.

If, in this connection, we draw a parallel with master's programs, it should be said that until recently those higher educational establishments that had no baccalaureate programs, were not allowed to implement master's programs, either. Consequently, there may arise a situation where scientific research organizations will have to either develop and implement comprehensive programs up from the baccalaureate level, or to apply for a special permission to implement only postgraduate education programs (given the current viewpoint of the RF Ministry of Education and Science, the latter approach is likely to gain the upper hand). Besides, it will also become necessary to make a choice as to where and how the relevant theses will be defended, because now these will effectively be treated as the qualification papers of the graduates of postgraduate departments (for example, can the student graduating from the postgraduate department of one higher educational establishment be allowed to defend a thesis at another higher educational establishment or at a scientific research

¹ Latest official data.

organizations, or *vice versa*)¹. In this connection it must be borne in mind that, over the last decade, the share of those who actually defended a thesis at the moment of graduation from a postgraduate department was between 26.2% and 1/3 of the total number of postgraduate students (*Fig. 10*).



Source: Statistical Yearbook of Russia. 2013. Statistics of Russia, M., *Rosstat*, 2013.

Fig. 10. The Share of Postgraduate Students Graduating from Postgraduate Departments with the Defense of a Thesis, in the Total Number of Postgraduate Students, in 2000-2013, as %

In 2012, the share of those postgraduate department students who have actually defended a thesis at the moment of graduation dropped to its 2008 level, and it quite possible that this downward trend will continue over the next few years. This means that the defense of a thesis as a qualification paper confirming the completion of the third tier of the higher education system will, most probably, be replaced by some other form (this is actually what happens, at present, in the West - although for somewhat different reasons). In Russia, young men quite often choose to enroll in a postgraduate department in order to avoid conscription into the army. The bulk of postgraduate students (even full-time students) hold jobs, and frequently - in organizations or companies that have nothing to do with scientific research. Very often, the involvement of such postgraduate students in the scientific research projects of a higher educational establishment or scientific research organization is only perfunctory or symbolic. Besides, even in those cases when postgraduate students during the period of their study at a postgraduate department actually work as tutors at their higher educational establishment or participate in scientific research, after graduation (especially if they have defended a thesis), having gained a higher social status, they usually leave the higher educational establishment or scientific research organizations where they have studied and get a job elsewhere (although of course, there are some exceptions to this 'rule').

¹ It is really difficult to imagine that the students completing their baccalaureate or master's programs will (on a massive scale) defend their qualification papers at other higher educational establishment or scientific research organizations.

So, the new Law has introduced the third tier of the higher education system too early, in conditions when even the transition to the two-tier higher education system (baccalaureate - master's program) has not yet been completed: what really should have become the focus of attention at the current stage is the improvement of quality of the master's program and the elaboration of stricter rules for their licensing and accreditation. That is why there is a strong risk that, once they have been turned into the third tier of the higher education system, postgraduate departments will do nothing to actually alter the organization of their current activity, thus making senseless all the innovations stipulated in the new Law.

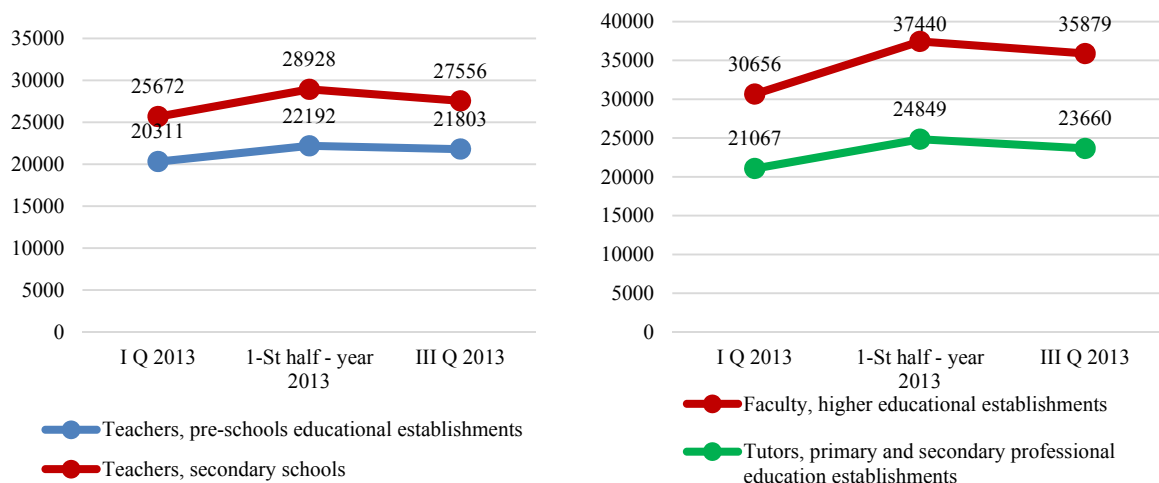
2. Implementation of the RF President's Executive Orders of 7 May 2012, No. 597 and No. 599. The May 2012 Executive Orders of the President of the Russian Federation envisaged, first of all, increased salaries for those employed in the social services sector and the introduction of 'effective contracts' in the education, public healthcare and scientific research systems.

Effective contracts. An effective contract concluded with a secondary school teacher of a faculty member of a higher educational establishment is understood as a contract setting such a salary level that will enable them to work only in one place (a secondary school or higher educational establishment) instead of seeking several places of employment, and spend a full workday there teaching students (during or in addition to classroom hours) or providing consultations to them. In the course of surveys conducted in the framework of *Monitoring of Education Markets and Organizations (MEMO)*¹ it was found out that the appropriate level for secondary school teachers is the average salary for a given region's economy, and for the professors and tutors of higher educational establishments – double that amount. There is one noteworthy point, however: in Presidential Executive Order No. 597 it is stipulated that it is the *average* salary of a secondary school teacher that should be equal to the amount of average salary for a given region's economy, just as it is the *average* salary of a professor or tutors employed at a higher educational establishment that should amount to 200% of that average. But if we deal with averages, the actual spread of salary levels between such employees can be very wide, and so this measure does not really represent an adequate solution to the problem of 'holding in their places' those real salaries are below the region's average salary level.

So, the consequences may be paradoxical – good teachers and professors will no longer have several employments, while the vacancies that will appear as a result of such shift will be filled by those who cannot secure a good salary at their principal place of employment. Besides, it should be noted that what used to be the ultimate dream at the time when the amount of actual earnings was only 60–70% of a region's average salary – 200% of that amount - may well no longer be satisfactory once that level is secured, because the principle of income elasticity of demand (rising demand in response to a change in consumer incomes) will still remain a relevant factor. Therefore it will be necessary either to introduce legislative measures preventing people from holding multiple jobs, or to invent some non-standard ways of securing the principle of 'effective contract' - among other things, by increasing the workload of secondary school teachers and the faculty members of higher educational establishments (a practice that can already be observed at schools), so as to deprive them of any spare time that can be used elsewhere.

¹ The National Research University - Higher School of Economics' Project 'Monitoring of Education Markets and Organizations (MEMO)' has been underway since 2002. See <http://memo.hse.ru/>

Regular monitoring, by *Rosstat*, of the salary rate dynamics of some categories of education system personnel (including teachers at pre-school educational establishments, secondary school teachers, tutors at primary and secondary professional education establishments, and faculty members at higher educational establishments) has revealed that this index in Q3 2013 dropped on the first half-year of 2013 (*Fig. 11*).



Source: *Rosstat*, http://www.gks.ru/free_doc/new_site/PublishOTKR/index.html

Fig. 11. The Average Salary Rate Dynamics Registered in the RF Education System in Q1 - Q3 2013

It can be expected that, when the results of Q4 are released, it will become obvious that the amount of average salary for all categories of educational system personnel has been increased once again, because the government continually demands that the regions should comply with the two May 2012 Presidential Executive Orders, and the shrinkage of the salary indexes in Q3 only has made these demands more urgent.

At the same time, it is already evident that RF subjects will hardly be capable of maintaining the high level salaries in the education system any further – regional budgets are staggering under the burden of increased expenditures (especially in view of the necessity to simultaneously increase the salaries in healthcare, the welfare system, and in the spheres of culture and science), and so it can be expected that in 2014, tension will be on the rise in the social sphere, including the education system.

The monitoring of the secondary education system's performance indexes in response to the increased teachers' salaries, conducted by the Center for Continuing Education Economics, RANEPA¹, demonstrates that teachers on the whole estimate the actual growth of their salaries over the past year to be negligible, while at the same, in the majority of cases, time pointing to their drastically increasing workload.

Entry of no less than 5 higher educational establishments in the top hundred of World University Rankings. Among the other goals set for the education system in the May 2012 Presidential Executive Orders, there was the entry, before 2020, of at least five 5 Russian

¹ The Project 'Concept Development, Approbation and First Round of Monitoring of the Performance Level in the General Education System in the Context of Increased Remuneration of the Education System Personnel'.

higher educational establishments in the top 100 universities in the world, as ranked by Quacquarelli Symonds Limited. Towards the implementation of this goal, 15 higher educational establishments have already been selected, on a competitive basis, from among Russia's federal universities (FU) and national research universities (NRU)¹, and became favorites in this contest, being allocated an additional subsidy for development in the amount of Rb 9bn (or Rb 600m each) in 2013 alone. For 2014 the allocation of a further subsidy to these higher educational establishments is planned, in the amount of Rb 10.5bn (or Rb 700m each). Later on, as can be seen from the Government Program 'Education System Development in 2013–2020', the expenditures earmarked for the achievement of that goal will be increased even further. This substantial amount of budget funds is allocated on the basis of 'roadmaps' prepared by the 'favorite' universities and outlining their movement towards the established goal². Similarly to the previously adopted Priority National Project Education, this is another attempt to follow the strategy 'money in exchange for obligations' (or, more precisely, 'money in exchange for the promise to secure the necessary results'). However, it is unlikely that such a goal can really be achieved, even by means of this heavy budget money inflow in a number of specially selected higher educational establishments.

At the same time, these measures have created unequal conditions for the other federal and national research universities and the selected 15 'favorites' - not mentioning the bulk of 'rank-and-file' higher educational establishments. Thus, it can be seen that, in Russia, the following multi-tier state higher education system has gradually begun to emerge:

- 1) 15 universities selected for the entry in *World University Rankings*, Moscow State University and St. Petersburg State University: 1st level of financial and administrative support;
- 2) 18 federal universities and 6 national research universities (not included in the list of 'Top 15' universities), as well as those higher educational establishments which, in accordance with the RF President's Executive Order, are granted the right to establish their own standards: 2nd level of financial and administrative support;
- 3) leading regional and branch higher educational establishments – 3rd level of financial and administrative support;
- 4) other higher educational establishments – 4th level of financial and administrative support.

Simultaneously, budget reform is being implemented (as established by Federal Law 83-FZ)³. In its framework, higher education is treated as a type of government service delivered to the population, with the unification of the norms whereby financing is to be allocated to each higher education program, depending on the specialty and area of professional training.

As a result, at present the higher education system is developing along two opposite vectors - differentiation on the one hand, and unification on the other. Such an approach

¹ 3 federal universities (FU), 11 national research universities (NRU), and 1 university – Saint Petersburg Electrotechnical University (LETI), which is neither a federal university nor a NRU.

² At the same time, it was pointed out to three higher educational establishments that they need to further elaborate their 'roadmaps'.

³ Federal Law of the Russian Federation of 8 May 2010, No. 83-FZ 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation in Connection with the Upgrading of the Legal Status of State (or Municipal) institutions'

seems to be fraught with some very serious problems, because many of the adopted administrative and economic decisions are blatantly and distinctly contradict one another.

Thus, in particular, the structure of state higher education system, as it is currently emerging in Russia, is in many ways contrary to the logic of per capita financing norms that have been practiced so far (we are going to deal with this issue in more detail later in the text). Now, the principles of budget financing of higher educational establishments are increasingly relying on the estimates of education quality and the individual ranking of each higher educational establishment, instead of the 'pure quantity' of this type of government service delivered to the population - the traditional foundation of the per capita financing norms applied in the sphere of higher education.

3. The situation around the issue of the Unified State Examination (USE). From 2008, the USE has been becoming the center of a battlefield, because its introduction, on the one hand, is a sign of entry of Russia's education system into the global higher education market, while on the other hand it has resulted in the destruction of old privileges and the emergence of some new ones.

Besides, the USE - which until recently has been regarded as the main epitome of reform implemented in the sphere of education - is now being used as a weapon in the struggle against any further attempts to reform it, and also in the campaign against the reformers, among whom the main one has been considered to be (whether justly or not) the RF Minister of Education and Science. Thus, those who are opposed to the USE view the task of its debasement as the debasement of educational reform as a whole, and personally the Minister.

In 2013, for the first time since the onset of scandals around the USE (including the postings of the USE content on the Internet, the facts of help provided to the students taking the USE by their teachers and specially selected tutors from higher educational establishments, transfer of many of eleven-graders to rural schools where the control over the USE procedure is less strict), Head of the Federal Service for Supervision in the Sphere of Education and Science (*Rosobrnadzor*) Ivan Muraviev was dismissed from his post, together with several heads of regional bodies.

At the same time, against the backdrop of these scandals, the pressure to alter the format of the USE has escalated, together with criticism as to its ability to adequately test the level of knowledge in the field of humanities. As a result, the format of written composition was once again introduced for testing the proficiency in the Russian language, alongside the previously existing form of examination. This will evidently give rise to more corruption and create opportunities for deliberate underestimation of the test's results, with the age-old verdict that 'the theme of the composition has not been properly explored'. However, this is the agenda for the forthcoming scandals of 2014.

In addition to the composition format, preparations are underway for the introduction of procedure whereby secondary school graduates will be granted the right of choice between taking either the USE or the traditional graduation examinations at schools and entrance examinations at higher educational establishments. In this connection, no explanations are offered as to how the USE results will be coordinated with the results of examinations taken in the traditional format.

The entire situation around the USE is the upshot of the collision of interests of different social groups. The survey conducted by the Center for Continuing Education Economics of the RANEPA among the parents of students of ninth and eleventh grades in secondary schools has shown that more than 2/3 of them believe it necessary to hire private tutors in

order to enable their child pass the State Final Attestation (SFA) or the USE. It is noteworthy that, as a rule, the private tutoring for the State Final Attestation has always been the prerogative of secondary school teachers, while the introduction of the USE resulted in the replacement of tutors from higher educational establishments (who formerly were traditionally employed in preparing secondary school graduates for taking entrance examinations at higher educational establishment) by secondary school teachers employed in the same capacity. The USE issue has become excessively politicized due to the attempts to apply its results as an estimate of the level of performance of secondary schools and their staff, as well as (to a certain extent) the performance of governors. If prior to the introduction of the USE it was higher educational establishments that were blamed for creating fertile ground for corruption at the entrance examinations, now they are no longer 'the target for attack' (with very few exceptions), because the general public now pins the blame for corruption on secondary schools. In conditions when a higher education diploma has become a social norm, any obstacles to achieving this much-desired goal trigger an extremely negative reaction on the part of the parents. Now, the parents have begun to jealously follow the developments around the USE not only in their own region, but also in other RF subjects, because the higher scores gained by the school graduates in 'other' regions lower that chances of 'their own' alumni to enter the most prestigious higher educational establishments. In this connection, the areas of highest tension are Moscow and St. Petersburg: if the entry to Moscow and St. Petersburg higher educational establishments signifies an elevated status for the students and their families, for their counterparts residing in Moscow and St. Petersburg the fact of studying in, say, Tver or Belgorod means a downgraded social status.

One more factor that will further increase the opposition to the USE in the nearest future is the shrinkage, for demographic reasons, of the number of students at higher educational establishments. And the outflow of potential students to other cities and regions is already perceived as the reason for questioning the feasibility of existence of a local higher educational establishment, and consequently, the performance of its faculty. Besides, prior to the introduction of the USE the mobility of young people in search of higher educational was low, now it is on the rise, while the probability that young people will return home after their graduation from a higher educational establishment is also questionable, and so the USE displeases the regional authorities and the potential employers alike.

So, resistance to the Unified State Examination is not so much an issue associated with the education system's functioning - rather, it is a socioeconomic issue, and thus no adequate solution can be provided by the education system alone because scandals will not cease, and tension will only become higher.

4. Monitoring of the performance level of higher educational establishments and their affiliations. In 2013, the second round of monitoring the performance level of higher educational establishments was completed. The results of the 2012 monitoring had caused sharp criticism, because the list of inefficiently performing establishments was found to contain such well-known names as the Moscow Institute of Architecture (State Academy) and Russian State University for the Humanities. In this connection, the 2013 monitoring was geared for the individual specificities of higher educational establishments. As a result, only those state-funded higher educational establishments that were well-known only in their own localities and some, a affiliations of state-funded higher educational establishments were recognized as 'inefficiently performing'. However, the main blow was delivered to non-state higher educational establishments and their affiliations. Thus, 23 state-funded higher

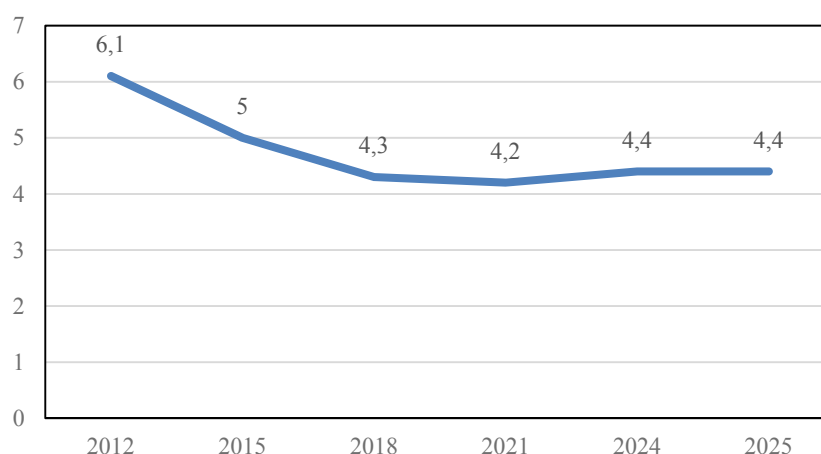
educational establishments, 7 non-state higher educational establishments and 15 affiliations of state-funded higher educational establishments were recognized 'to be in need of optimization of their activity', while 125 non-state higher educational establishments and 184 affiliations, and 7 state-funded higher educational establishments and 57 affiliations were defined as needing 'reorganization'.

In principle, the need for a kind of 'purge' in the higher education system has been felt for a long time: many non-state higher educational establishments have traditionally become 'factories' for the issuance of high education diplomas, and not highly qualified professionals. This practice is largely shared by some state-funded higher educational establishments, especially with regard to their part-time students. It is no secret that the non-state sector offers low-standard higher education to its students. Thus, while the law on the distribution of the government assignment for human resources between state-funded and non-state higher educational establishments was being elaborated,¹ it was pointed out that only 40 non-state higher educational establishments (out of 450) can truly aspire to achieve the control enrollment targets set for them, and so to actually receive budget subsidies to cover the tuition of budget-funded students.

The necessity for the optimization of the system of higher educational establishments is obvious (especially given the substantial recent drop in the number of students) (*Fig. 12*); however, questions arise as to why 'optimization' is undertaken on the basis of monitoring, and not in the framework of licensing and accreditation of higher educational establishments.

In this connection, it is the accredited higher educational establishments and their affiliations that are being 'optimized' and reorganized (by means of their liquidation), not mentioning the fact that they have been issued proper State licenses for the conduct of activities in the sphere of education (and the performance efficiency criteria include, in particular, indicators like total floor area of premises used for studies, per student, and faculty qualifications). Does this really mean that the procedure of monitoring is designed to replace (or reduce to a pure formality), or in the short-term perspective will actually replace the procedure of accreditation of higher educational establishments, and that the quality of education is going to be assessed specifically in this framework?

¹ See the Explanatory Note to the Federal Law of the Russian Federation of 16 November 2011, No. 318-FZ 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation in the Part of Setting, for Secondary Professional Educational Establishments and Higher Professional Educational Establishments with State Accreditation, the Control Numbers of Citizens to be Enrolled at the Expense of the Corresponding Budgets within the Budget System of the Russian Federation'.



Source: the author's calculations.

Fig. 12. Forecast of the Number of Students at Higher Educational Establishments in 2015–2025 (Basic Scenario), millions of persons

It should also be noted that, in 2013, one of the main criteria applied in assessing the performance level of higher educational establishments was the successful employment of their alumni. Thus, an attempt was made to link the performance of higher educational establishments to their ability to satisfy the demand on the labor market. However, in the situation of a slowdown of the economic growth rate and rising unemployment figures it is unlikely that an alumnus's ability to find a job can serve as a realistic indicator of his or her professional qualification obtained at a given higher educational establishment. It should be remembered in this connection that the curriculum structure was set up four or five years ago, while companies plan their recruitment policies for a year ahead - or, at best, for the next three years. Besides, higher educational establishments provide education to both budget-funded and self-paying students, but on their entry into the labor market these two flows merge into one, while the customers responsible for the emergence of the two flows are different (the State for the one, and households for the other), and their decision-making is based on different considerations. So, something that is not effective for one customer may turn out to be effective for the other (for example, when a former self-paying student takes over, on the labor market, the place of the former budget-funded student).

It also seems that those who estimate the performance level of higher educational establishments - among other things, in the framework of monitoring - have a very-narrow-minded view of the issue, understanding it simply as the cost effectiveness of budget expenditure. Meanwhile, it is no less important - or perhaps even more important - to obtain an answer to the following question: what is better for contemporary Russian society – an individual who has received a higher education, even if not of the best quality, or somebody who has failed to receive it, and so believes himself to be a social outsider (because, as noted earlier, higher education has become a social norm)?

Besides, another fact should be taken into consideration - that the progress of society is now vectored away from production of goods (the industrial era) towards production of human resources (the post-industrial era).

5. Per capita financing norms for higher educational establishments. In 2013, the approach to the estimation of normative costs of the delivery of government services in the form of higher education was somewhat altered, as compared to the situation in 2012 when

the RF Ministry of Education and Science for the first time introduced the per capita financing norms (normative costs per students) for baccalaureate, specialization and master's programs, depending on specialty and field of studies.

In 2013, when it became necessary to raise the average salary level of the faculty members of higher educational establishments to 200% of the average salary of each corresponding region, the RF Ministry of Education and Science suggested that adjustment coefficients should be introduced for each RF subject and applied to all the higher educational establishments situated in its territory. Besides, for those higher educational establishments that had been granted the right to set their own education standards, it was suggested that their per capita financing norms should be raised above the level of norms established for all the other higher educational establishments specializing in the same fields (or specialties)¹.

The RF Ministry of Finance, however, objected to the idea of establishing higher expenditure norms for this category of higher educational establishments, presenting its argumentation along the following lines: that the government services delivered by higher educational establishments – tuition under baccalaureate, specialization and master's programs – are based on universal standards (Federal State Educational Standards), and so the allocation of budget funding should be geared specifically to this standard set of services, similar throughout the entire territory of the Russian Federation, on the basis of single norms. As for any higher standards deviating from the Federal State Educational Standards set by the higher educational establishment by its specially granted right for its specific educational programs, the RF Ministry of Finance Russia believes that the related excess costs should be funded from that higher educational establishment's own resources. However, for a higher educational establishment to have its 'own resources' is a purely abstract notion, because all the monies received and spent by a higher educational establishment represent targeted funding. The income derived by a higher educational establishment from its 'commercial activity' represents, in the main, the off-budget resources received from self-paying students. But these monies should be spent strictly on the tuition of those students under the contracts that the higher educational establishment has concluded with them. The funding allocated to a higher educational establishment in accordance with a government assignment for scientific research, or the funding received under a government order for a research and development project must be spent strictly on the fulfillment of that assignment or order, and so on.

Consequently, if the government refuses to provide funding for the tuition of budget-funded students at higher educational establishments on the basis of increased norms, those students would then be obliged to pay out of their own pocket for any extra services delivered in excess of the Federal State Educational Standard. However, in the event of an additional service being offered, the student has the option of refusing to receive it, or a special contract for the delivery of such a service should be signed at the moment of enrollment in a higher educational establishment, and if a budget-funded student (or their parents, or their lawful representatives) fail to sign it, the student will not be enrolled. And this may become possible only on condition that some very significant alterations be introduced in Russian legislation on education because, under Article 43 of the Constitution of the Russian Federation, any student who has passed the entrance contest to a higher educational establishment is granted the right to study there free of charge (and now the entrance contest is effectively the USE

¹ See Decree of the Government of the Russian Federation of 3 June 2013, No. 437 'On Measures Designed to Ensure the Switchover to Per Capita Financing Norms of the Higher Professional Education Programs With State Accreditation'.

score, and not the student's consent to receive an additional paid-for service). In absence of relevant legislative acts - that is, without the introduction of increased per capita financing norms - federal universities and national research universities, as well as higher educational establishments with the right to set their own education standards as stipulated in the RF President's Executive Order¹, will not be able to enjoy that right, or it will be exercised with very severe limitations. Consequently, either the goal of increasing Russia's competitive capacity on the world higher education market will not be achieved, or the relevant higher educational establishments will be trying to achieve it at the expense of subsidies earmarked for other targets - which, in effect, will also mean a change in their per capita norms.

It should be noted that this practice has already become visible, for example, in the secondary school system in Moscow after the unification of per capita financing norms for gymnasiums, lyceums, advanced learning schools specializing in certain subjects, and ordinary schools. Now the best of them (as estimated by their rating scores) receive special grants, which effectively raises their per capita funding norms, while the special status of a school is determined in the framework of the rating procedure. Such a policy results in a situation where the establishments with highest rating scores begin to get rid of their inadequately progressing students, or force the parents of such students to hire private tutors, so that these students would not bring down the school's average score.

At higher educational establishments this process takes a more intricate form, but the selection of leaders in the 'race' for getting in *World University Rankings* and the allocation of substantial subsidies to the implementation of their roadmaps effectively pushes up their per capita norms and disrupts the entire logic of per capita funding allocation, which was initially presented as an attempt to introduce a competition mechanism in Russia's system of higher education.

The year 2013 has demonstrated that our assumptions (made in 2012) that the unification of financing norms will weaken the position of 'strong' higher educational establishments (those that are not entered in the special lists) and improve the position of 'weak' ones are becoming to fully materialize. In this connection, there is a threat that the overall level of higher education going to decline, not improve. One evident example is the Faculty of Mechanics and Mathematics of Moscow State University, which has been evolving for centuries to finally gain such a status. So, it cannot really be expected that if equal funding is allocated to the 'maths' specialty on a nationwide basis, a faculty of mathematics of, say, a regional pedagogic institute will be able to provide tuition at the same level as the famous MSU faculty. More likely, it will result in degradation of the latter².

¹ Lomonosov Moscow State University, St. Petersburg State University, higher educational establishments belonging to the category of "federal university" or "national research university", and federal state higher educational establishments entered in the list approve by the RF President's Executive Order are granted the right to independently approve their own educational standards for all higher education tiers. The requirements to the conditions for implementing the higher education curricula included in their standards, and the requirements to the results achieved by students after the completion of such programs, cannot be below the level of the corresponding requirements established by the existing federal state education standards (the Law 'On Education in the Russian Federation', Article 11, Part 10).

² It is clear that MSU's Faculty of Mechanics and Mathematics will have nothing to fear in connection with the switchover to the unified financing norms, because Moscow State University, with its status of 'national asset', will be allocated financing at a much higher level; however, this is just one example, in our opinion, of how the principle of 'unified approach to financing', which takes no account of existing historical traditions, fails when applied to the sphere of higher education. Moreover, it can even destroy the achievements of the past.

The introduction of unified per capita financing norms for each specialty or field may deliver an especially painful blow to the medium-sized higher educational establishment implementing their own unique programs. These higher educational establishments usually do not specialize in many fields (a factor which prevents them from attracting a very large number of students), their strength is their specialized advanced learning programs (for example, learning of several foreign languages). However, it is these establishments that are indicative of the vector of development that has emerged in the last few decades: the massive-scale availability of higher education launches the process of differentiation among higher educational establishments, which begin to offer higher education programs customized to individual needs. That is why, in the developed countries, per capita financing norms are never applied in their pure form - in addition to the number of students, consideration is also given to the quality of each implemented program. The experiences of 2013 demonstrate that this is the approach that Russia must practice when allocating budget funding to higher educational establishments, otherwise they may be deprived of their development potential - and what then will become of the competitive potential of Russia's higher education system in the world education market?

5.4. Situation in Russian science and innovation sector

The situation in the Russian science sector in 2013 differed largely from that in the innovation sector. The Russian Government launched a radical reorganization of the science sector. The so-called “academic” sector in science ceased to exist, the Russian Academy of Sciences was reorganized into an export entity, a new Federal Agency for Scientific Organizations was established to become the parent agency of the research organizations previously affiliated with the three Russian academies of sciences. A new scientific foundation with a substantial budget was established, thereby changing drastically the mechanisms of funding basic research and exploratory scientific studies.

The innovation sector saw a presumably temporal increase in activity of venture investors including business angels. This took place against the backdrop of aggravating general economic situation in the Russian industry as the principal consumer of technology innovation. No drastic changes to the national innovation policy took place, nor any significant innovation emerged.

5.4.1. R&D expenditures and results

Macroindicators of the situation in the Russian science sector remained stable in 2013 – the contribution of R&D expenditures to the gross domestic product remained unchanged and is predicted to remain the same in 2014 (*Table 8*).

In 2013, the United States remained the global leader with \$450bn of R&D funding in absolute terms. China took 2nd place (\$258bn), Japan (\$163bn), Germany (\$92bn), South Korea (\$61bn). Russia took 9th place (\$38bn).

R&D budget allocations have recently been growing in Russia. This is why the steadily maintained share of expenditures on science (as percentage of GDP) testifies that other sources of funding such as Russian private funding and foreign funding have been contracting. This is an essential characteristic of the science and innovation sectors. The developed countries showed an opposite trend in outstripping growth in R&D extrabudgetary funding with a bigger than in Russia contribution to funding from private sources. For instance, the US federal budget expenditures in 2013 increased 1.5% year-over-year against a

4% growth in private sector funding, given the fact that companies' contribution to total R&D funding was already more than twofold (71%) against budget allocations¹.

Table 8

Total R&D expenditures: Russia and the world, as % of GDP

| Country | 2012 | 2013 | 2014 |
|---------------|------------|------------|------------|
| Israel | 4.3 | 4.3 | 4.2 |
| Japan | 3.4 | 3.4 | 3.4 |
| U.S.A. | 2.8 | 2.8 | 2.8 |
| Germany | 2.8 | 2.8 | 2.9 |
| France | 2.3 | 2.3 | 2.3 |
| China | 1.8 | 1.9 | 2.0 |
| Great Britain | 1.8 | 1.8 | 1.8 |
| Russia | 1.5 | 1.5 | 1.5 |
| Brazil | 1.3 | 1.3 | 1.3 |

Source: 2014 Global R&D Funding Forecast. Battelle, R&D Magazine, International Monetary Fund, World Bank, CIA Fact Book. December 2013. P.7.

The results of bibliometrically measured research performance of Russian scientists keep falling. Even in the case of gaining in absolute terms (e.g., the number of articles of Russian authors indexed in the Web of Science (hereinafter – the WoS) and Scopus) database, Russia's relative score has been declining because of faster growth rate in scientific productivity in other countries, especially China, India, South Korea, Canada, Spain, Italy².

The 2012 data show that Russia accounts for less than 2% of the global flow of research publications³. Furthermore, citing metrics were even lower for Russia: Russia took 14th place in the world on the number of articles, whereas 23rd place on citing of these articles⁴. An average citation ratio of Russian articles in the period of 2008 thru 2012 was 2.8, the lowest among the BRIC countries (3.3 in Brazil, 3.5 in India, 4.2 in China), and far below the average global flow of publications (4.8). Additionally, RAS institutions contributed most to scientific productivity while publication activity of the leading universities has recently increased mostly owing to joint publications with RAS institutions' researchers⁵.

5.4.2. Principal changes to the national science and innovation policy

The year of 2013 became a turning point in institutional reforming of science in Russia, when the three public academies – the Russian Academy of Sciences (RAS), the Russian

¹ 2014 Global R&D Funding Forecast. Battelle, R&D Magazine, International Monetary Fund, World Bank, CIA Fact Book. December 2013. P.8.

² In the mirror of Web of Science. 1998-2012. Ivan Sterligov's Blog. 21.06.2013. <http://sterligov.blogspot.ru/2013/06/web-of-science-1998-2012.html>

³ V. Markusova, A. Libkind. How much is to publish? Research cooperation of higher education institutions with the Russian Academy of Sciences in figures // Poisk No. 18, 03.05.2013. <http://www.poisknews.ru/theme/science-politic/5988/>

⁴ V. Markusova's report on "RAS and higher education institutions: Competition or Cooperation?" at the Moscow seminar on science studies M.: INION RAN, 30.10.2013. http://www.inion.ru/index.php?page_id=436&id=589&ret=435

⁵ For instance, in the Novosibirsk State University 90% of the published articles were co-authored with the RAS, 65% with the Moscow Institute of Physics and Technology, 60% with the National Research Irkutsk State Technical University, 40% with the National Research University - Higher School of Economics. Source: V. Markusova, A. Libkind. How much is to publish? Research cooperation of higher education institutions with the Russian Academy of Sciences in figures // Poisk, No. 18, 03.05.2013. <http://www.poisknews.ru/theme/science-politic/5988/>

Academy of Medical Sciences (RAMS), and the Russian Academy of Agricultural Sciences RAAS¹ – were reorganized, a new public agency – the Federal Agency for Scientific Organizations (FASO) and a new scientific foundation – Russian Scientific Foundation (RSF) – were established.

The principles and the criteria for the performance measurement of scientific organizations, reforming the system of conferment of academic degrees were actively developed at the same time.

However, a series of scheduled initiatives were never implemented, e.g., a project on establishing 1000 laboratories of a new type in this country, summarizing the results of the second stage of projects on establishing laboratories directed by leading scientists (mega-grants).

The situation with the innovation policy was less troubled. The legal and regulatory framework concerning exclusive rights to the results of intellectual activity was refined, development institutions kept working, they developed new strategies of their activity.

The focus was placed on the reform in the Russian Academy of Sciences thanks in no small part to its unexpected announcement and unpredictable logics of the subsequent steps of its implementation. At the same time, measures of establishing a new scientific foundation, performance measurement of scientific organizations, creating a new public agency, reforming the system of conferment of academic degrees were worked up in a backdoor manner. The results of the government's decisions more often than not was a total surprise, and, moreover, an atmosphere of chaos was mounting because of their frequent adjustments. This is why the past year reminds of the popular quotation "*First, get into a serious fight, then let chance decide*"...² by Vladimir Lenin.

5.4.3. Institutional changes

Reforming the academic sector of science

June 2013 saw maybe the most large-scale reforming process in the Russian science sector since the beginning of 1990s which began with the merger of the three public academies of sciences (RAS, RAMS, and RAAS) which at the same time ceased to be the parent company of their affiliated research institutions, the establishment of a new Federal Agency for Scientific Organizations, the development of new criteria and mechanism of performance measurement of research institutions.

The appearance of the draft law N305828-6 *On the Russian Academy of Sciences, Reorganizing State Academies of Science and Making Amendments to Certain Legislative Acts of the Russian Federation* came as surprise even to the administration of the Russian Academy of Sciences and therefore was not praised by the academic community. Not only did the draft law's contents, but also the method selected for reforming provoked indignation. The draft law was instantly submitted directly to the State Duma in violation of the applicable laws and regulations under which it should have been subject to a social discussion first. The line Ministry of Education and Science of the Russian Federation (MES) denied its participation in the development of the law, which seems to be absurd per se. Careful analysis

¹ RAS stands for the Russian Academy of Sciences, RAMS for the Russian Academy of Medical Sciences, and RAAS for the Russian Academy of Agricultural Sciences.

² V. I. Lenin "On our Revolution". 1923. Complete set of works, Vol. 45, p.381. <http://revarchiv.narod.ru/vladimilitch/lenin45/suhanov.html>

of the logics of the developments shows clearly that the MES was at least one of the ideologists rather than the driving force of the proposed version of reforming the RAS. For instance, Minister of Science D. Livanov stated in March 2013 that the academic organization of science has no prospects in the 21st century, it should be changed, and he will use his best endeavors to do that¹. However, President Putin didn't seem to be in favor of supporting drastic measures towards the RAS. He confirmed the need to further develop such "essential for us entity as the Academy of Sciences of the Russian Federation" at his meeting with RAS President Y. Osipov which was held as early as April 2013². However, a headlong process of changes was already launched, and neither protests from official entities, the academic community, nor international appeals could stop it.

It is characteristic that the draft law remained ill-defined and inconsistent even upon two readings in the State Duma. The RAS management submitted five essential amendments to the draft law after it passed two readings, being indicative of very drastic changes provided for by the draft law:

- 1) Instead of abolishing, reorganize the RAS through merging with the RAMS and the RAAS;
- 2) Formulate basic and applied research as the principal objective of the RAS;
- 3) Share powers among the RAS and the Agency (later called the Federal Agency for Scientific Organizations) so that the FASO only be in charge of managing the RAS's assets;
- 4) Recover the legal entity status of the RAS's regional branches.
- 5) Retain the two-stage system of the title of correspondent member and academicians, and keep the RAS being entitled to decide how and when new RAS members should be elected.

After the draft law passed three readings, the RAS management managed to uphold most of the five proposals including reorganization by merging the three academies of sciences, retaining the RAS functions of conducting basic and applied research, as well as coordinating research at higher education institutions, restoring the regional branches as stand-alone legal entities, retaining the Academy's status of chief controller of budget funds, including the manager of regional branches. Finally, the title of RAS correspondent member was retained. However, the RAS ceased to own the federal assets which were assigned to the research organizations previously affiliated with the RAS. Finally, it is the provision on research institutions that was left most inexplicit.

The Federal Law was adopted on September 27, 2013³, and the Presidential Decree *On the Federal Agency for Scientific Organizations* was issued on the same date⁴. It was not until then that the development of a provision on the FASO's principles of operation and vested powers was started. In fact, a new ministry of sciences emerged and became in charge of the institutions affiliated with the merged public academies. The FASO became in charge of both the assets of the former academies of science and management of the research institutions, including areas of research to be covered. Since such an organization inevitably results in changes to a substantial part of the science sector, a Commission for Social Supervision over the reform of the Russian Academy of Sciences was established. The situation acted as a

¹ Dmitry Livanov believes that the RAS has no prospects // *Rosyiskaya Gazeta*, 24.03.2013. <http://www.rg.ru/2013/03/24/livanov-site-anons.html>

² A meeting with President of the Russian Academy of Sciences Y. Osipov. Novo-Ogarevo, 16.04.2013. <http://kremlin.ru/news/17908>

³ No. 253 of 27.09.2013 <http://graph.document.kremlin.ru/page.aspx?1;3586986>

⁴ No. 735 of 27.09.2013 <http://graph.document.kremlin.ru/page.aspx?1;3587023>

catalyst for uniting civil society powers in science – the Commission embraced 10 non-governmental organizations of science and education¹. Such a union can be regarded as one of a few positive, indirect effects of the commenced reforms.

The Commission focused on making amendments to the developed provision on the FASO, because the Agency's role changed from a soft-line regulator to a hard-line centralized manager, according to the document which was prepared by the Government. In particular, such RAS's functions as coordination of institutions, expert evaluation, and methodological support were retained in the initial version of the draft law, but then removed from it². A special emphasis was paid to a scientific and steering board which should be established as mediator, a FASO's structural unit, to ensure interaction with the Agency, the RAS, and institutions. The principles of selecting candidates to the steering board and principal parameters of its operation were discussed.

The Russian Government's Regulation *On the Federal Agency for Scientific Organizations* was signed on October 25, 2013 (No. 950), and it derives from the approved provision that neither FASO's goals nor objectives were formulated, however all the key issues associated with funding, institutions' assets, social sector, procurement of equipment and chemical agents are its prerogative. The RAS proposals are only "considered" for the two types of activity, namely planning of basic research and exploratory scientific studies, as well as approving development programs of research organizations affiliated with the Agency, public assignments for basic research and exploratory scientific studies. Therefore, although planning of scientific activities wasn't totally assigned to the FASO, the RAS became to play a minor role. Furthermore, although the Academy of Sciences conducted negotiations on retaining affiliation of certain comprehensive institutions³ including a few museums and archives, a final list of the 1007 affiliates with the FASO included all organizations of public academies, from research institutions to in-house clinics and kindergartens⁴.

The Regulation only specifies that the scientific and steering board shall consist of scientists "conducting universally recognized scientific research". Perhaps, a special regulation on the steering board's formation principles and objectives would be issued, so far the FASO has been developing without a steering unit.

The FASO didn't hesitate too long before getting to work, RAS institutions' budget was approved in time, and they could keep working after January 1, 2014⁵. This result is much better than what the academic community predicted, anticipating that from now on the science in Russia would be administered by "dummies"⁶ and expert boards would be staffed with "punks"⁷. It appeared that the FASO was going to hire former RAS's managers, although

¹ Scientists establish a Commission for Social Supervision over the reform of the Russian Academy of Sciences, 08.10.2013 http://www.polit.ru/news/2013/10/08/public_control_in_science/ 08.10.2013 г.

² S. Samokhina, N. Gorodetskaya, A. Chernykh, Kh. Aminov. A complex situation// Kommersant, No. 184, 09.10.2013. <http://www.kommersant.ru/doc/2315297>

³ V. Vlasov. Premature rumors of science collapse // Polit.ru, 24.12.2013.] <http://polit.ru/article/2013/12/24/vlasov/>

⁴ The Prime Minister's Executive Order N2591-r of December 30, 2013 "On the Approval of the List of Organizations Affiliated with the FASO of Russia <http://government.ru/media/files/41d4b2ee4aa4fdc62ccb.pdf>

⁵ A financial approach towards the academicians has been found // Kommersant, 25.12.2013. <http://www.kommersant.ru/doc/2376244>

⁶ Waiting for dummies to come. Who is going to rule the science // Poisk, 12.07.2013. <http://www.poisknews.ru/theme/science-politic/6549/>

⁷ Experts will be replaced by punks. An interview with M. Gelfund // Nauka i Tekhnologii RF. 01.07.2013 http://www.strf.ru/material.aspx?CatalogId=221&d_no=57508#.Ur11bLSBY3k

scientific and research experience is not mandatory¹. The Agency instantly offered at least one incentive enhancing efficient performance, i.e. the FASO issued its first administrative order on a monthly salary supplement for various categories of its personnel².

It should be noted that the introduced changes indeed resolve the conflict of interests which was in place at the RAS, where allocation and spending functions were combined. The practice of dividing administration of assets and research activity is quite common worldwide. Furthermore, the “government owned, contractor operated” model³, when public entities (e.g., national laboratories) are administered by private companies, has proved efficient. However, the cost of the RAS⁴ reform wasn’t defined. More than that, none of the country’s long-term forecasts included assessment of the effect of the reform⁵. The situation remains uncertain, in particular there is no knowing what would be the Charter of the merged RAS which should be approved at a General Meeting of the merged Academy⁶.

The hit-or-miss quality of the reform became evident as early as October 31, 2013. President Putin imposed a 1-year moratorium on transactions with academic assets and staff changes, as subsequently specified in the list of his orders⁷. The term is realistic for developing measures to ensure further operation of the institutions which previously were affiliated with the RAS, the RAMS and the RAAS. Additionally, no criteria for measuring the performance of research organizations which were developed during a year have not yet been approved. The Government’s executive order on making adjustments to the system of performance measurement for research organizations was adopted on November 1, 2013⁸, but it took much longer to discuss the criteria and indicators. Selection of reliable measures has

¹ S. Krymova. To be taken under advisement. What kind of knowledge and skills do the FASO’s personnel need // Poisk, No. 51, 20.12.2013. <http://www.poisknews.ru/theme/science-politic/8631/>

² The Federal Agency for Scientific Organizations’ (FASO Russia) Administrative Order of December 18, 2013 No. In On the Approval of the Provisions on the Payment Procedure of Monthly Salary Supplements for Special Conditions of the State Civil Service to the State Civil Servants of the Personnel of the Central Administrative Office of the Federal Agency for Scientific Organizations and the Managers, Deputy Managers of the Regional Offices of the Federal Agency for Scientific Organizations, on the Bonus Payment Procedure for the State Civil Servants of the Personnel of the Central Administrative Office of the Federal Agency for Scientific Organizations and the Managers, Deputy Managers of the Regional Offices of the Federal Agency for Scientific Organizations, on the Procedure for Financial Aid, Lump Sum Financial Inducement for Honorable and Efficient State Civil Service and Lump Sum Payment in Granting Annual Paid Leave to the State Civil Servants of the Personnel of the Central Administrative Office of the Federal Agency for Scientific Organizations and the Managers, Deputy Managers of the Regional Offices of the Federal Agency for Scientific Organizations. <http://www.rg.ru/2013/12/27/fano1-dok.html>

³ Used extensively in the United States, the so-called GOCO (government owned, contractor operated) model. In this case, the government establishes the mission and research areas for the organization, and the private sector implements the mission, using best business practices. See, e.g., <http://www.sandia.gov/about/history/goco.html>

⁴ RAS President V. Fortov estimates that the RAS reform will cost Rb 60-70bn, which is close to the Academy’s 2013 budget. Source: The state will pay Rb 70bn for the RAS reform // Gazeta.ru. 01.10.2013. http://www.gazeta.ru/science/news/2013/10/01/n_3222769.shtml

⁵ N. Volchkova. The space of orders. The President orders a new science and technology policy // Poisk, No. 3, 24.01.2014 <http://www.poisknews.ru/theme/science-politic/8796/>

⁶ The Charter is to be adopted in March 2014.

⁷ Putin urges not to squander the assets and human resources// RVC daily, 31.10.2013. <http://rbcdaily.ru/politics/562949989414296>; The list of instructions issued at a meeting of the Board of Science and Education. 15.01.2014. Instruction 1, p. g). <http://www.kremlin.ru/assignments/20065>

⁸ *On Making Amendments to the Russian Government’s Executive Order of November 1, 2013 No. 312*. The Russian Government’s Executive Order of November 1, 2013, No. 979. <http://www.ras.ru/news/shownews.aspx?id=613a30f8-1475-4d9a-a6a3-75df1501be7a>

recently been become even more important, because such measures should be relied upon in auditing academic institutions to be affiliated with the FASO. The adopted executive order specifies the following principal approaches towards performance measurement:

- non-departmental nature, establishing a interdepartmental commission;
- merging scientific organizations into reference groups regardless of their departmental affiliation, factoring in scientific knowledge areas and types of scientific research;
- using the measures which the developed countries use to measure the performance of research organizations.

Non-departmental nature is expected to be ensured through establishing an Interdepartmental Commission for the Performance Measurement of Research Organizations. The Commission has a lot of assigned tasks to perform, inclusive of measuring lowest values, which is very important and predetermines largely the results of the performance measurement.

The second aspect is reference groups and general principles of performance measurement. This aspect needs further consideration, because the assessment is most likely to be exclusively quantitative. A combination of 6–7 measures of specific weight will be determined for every reference group, depending on institutions' academic profile. Deviation on final results will automatically classify an institution as stable or lost its scientific potential. The provision under which the number of winners may not exceed one third of the total number of participants of a respective reference group is potentially insecure. Consequently, if a reference group has many strong institutions, a part of them will have to be recognized as weak in any case¹.

The results are also rough because it is organizations that are subject to performance measurement, not scientific laboratories. Quantitative data must be supplemented with qualitative data, and expert evaluation is expected to be performed at the departmental level, but only to analyze institutions facing the threat of liquidation. No assessment of credibility of selecting “winners” on the basis of quantitative parameters is expected to be performed², although the previous experience of quantitative assessments shows that they may provide incorrect results³.

Forming reference groups also requires a serious expert approach, because it is not easy to make areas of knowledge comparable, especially factoring in the nature of performed works. Therefore, criteria for selecting experts also should have been specified in the Executive Order.

The Ministry of Education and Science presented by the end of 2013 a list of 25 performance measurement criteria for organizations broken up into four basic groups. The effectiveness of and demand for scientific research will be measured mostly on the basis of bibliometric data, as well as patent statistics, the number of established small enterprises, and

¹ The RAS Trade Union appeals to V.V. Putin on the need to make amendments to the performance measurement procedure for scientific organizations. 11.01.2014 <http://www.ras.ru/news/shownews.aspx?id=fa8cc4f7-0177-47f3-813e-74bcc9857751#content>

² P. Chebotarev. Expert evaluation: outside and inside // Troitsky variant – Nauka, No. 45, 14.01.2014. <http://trv-science.ru/2014/01/14/ehkspertiza-ikh-i-nasha/>

³ In particular, when the SPI (Scientific Performance Indicator) was in force, which was measured for every researcher at academic organizations, quantitative data was often than not less efficient employees received better scores, e.g., for giving a single course of lectures in several higher education institutions or frequent reports at conferences. For more details on the SPI see Russian economy in 2007. Trends and Outlooks. M. IET, 2008, P. 422.

fundraising amounts. The HR development is considered narrowly as trained (in terms of quantity) postgraduates and Ph.D. students, as well as the number of those who have completed their internship. Integration into the global scientific community is bibliometrics again, but in this case it should be international co-authorship metrics.

This system of measuring is distinguished by its heavy reliance upon bibliometric data whose limits are well known. Moreover, adverse effects of using bibliometrics for the purpose of performance measurement have recently become more apparent in the global science¹. In particular, the practice shows that papers which are not necessarily important but covering a trendy subject matter show growth in citations. There is a wide practice of journals driving up the number of citations of published articles in order to improve their impact factors². There is a discussion on that bibliometrics is useless for measuring organizations and teams and only can be used to solve local objectives such as recruitment, career enhancement, allocation of grant, as well as selection of winners, and only in combination with expert evaluation³.

The system of performance measurement of Russian organizations proposed the MES still remains to be improved. It remains to be defined which metrics are mandatory for all, how specific metrics are to be calculated, where to find the required number of experts on narrow areas of research, having no conflict of interest.

Overall, it should be emphasized that there is no ideal set of metrics especially quantitative ones, and most objective assessment can be achieved in combination with expert evaluations. Such a work can hardly be performed frequently, because it takes a lot of time and financial resources. This makes the role of research institutions even more important, as they can measure the performance (effectiveness and quality) of their personnel. Although such an approach faces the threat of biased assessment, it can be mitigated through advancing completion- and grant-based forms of research funding.

In the meantime, the Russian system of measurement has begun to follow the way towards centralization, as evidenced by “The Russian Science Map”, another project of the Ministry of Education and Science of Russia which has received a controversial response.

Developing the Russian Science Map

The Russian Science Map (hereinafter – the Map) project was launched in the middle of 2012⁴. The Map was initially designed to be used for identify “research teams operating at high international level, as well as promising areas of science”. However, the ill formulated objective caused concerns and speculations in the scientific community⁵. The concerns increased when PricewaterhouseCoopers Russia B.V., which has neither experience in such work, nor adequate knowledge, won the contract. Regrettably, all the concerns proved true by the end of 2013, when a pilot version of the Map, which was made available to the public on November 12, 2013, showed that there are technical and methodological problems, and the

¹ B. Alberts. Impact Factor Distortions // Science, vol.30, May 17, 2013. P.787.

² S. Belyaev. An impact isn't a fact? Scientific journals are suspected of impurity? // Poisk, No. 26, 28.06.2013. <http://www.poisknews.ru/theme/science/6447/>

³ On the proper use of bibliometrics to evaluate individual researchers. Report presented on 17 January 2011 to the Ministry of Higher Education and Research. Institute de France. Academie des sciences.P.6.

⁴ Dmitry Livanov promises to compile a Russian Science Map // Nauka i Tekhnologii RF. 18.06.2012. http://www.strf.ru/material.aspx?CatalogId=221&d_no=47268#.UufTTftrIU

⁵ Russian scientists will be measured on performance // Nauka i Tekhnologii RF. 29.11.2012. http://www.strf.ru/material.aspx?CatalogId=221&d_no=50459#.Ur6p9LSBY3k

Map can't be used, even if technical errors would gradually be corrected, because it provides a wrong picture in general.

Moreover, it is still unclear what exactly the Map was designed for. It was written in the text of the bid offer that such maps "can be used for measuring the performance and competitiveness of the Russian science, for making administrative and financial decisions on scientific organizations and research teams, as well as developing measures aimed at further developing scientific activities"¹. It is the fact that the Map can be used for measuring the performance of organizations and making administrative decisions on them that caused most of the resentment. At the same time, MES's representatives stated late in the year that the Map will not be used for performance measurement, this is a useful database for scientists, the state, and businesses,² so that anyone can obtain information about who, where, what kind of research area, and how efficient he/she is engaged in.

However, none of the above listed objectives can be resolved with the Map. The main challenge is the use of a research area classification which is not in place in the Russian science³. The Map provides for entries which link incorrectly research areas with certain areas of knowledge, and, moreover, the classification lacks a few important areas. This problem can't be solved even if every scientist, having access to the Map, corrected his/her data which still contain many technical errors (incompleteness, issues with authors having similar names and initials, numerical data mismatch with what is available in other databases, etc).

A less important issue is how often scientists will have to manually correct their data entered in the Map. Additionally, it is not understood whether the future RAS assessment of institutions is linked with the Government's decision to accelerate the development of academic research at universities, which includes allocating considerable financial resources to 15 higher education institutions, of which at least five should be ranked among the top-100 world universities by 2020⁴. Perhaps, it is financial injections and various types of training events that were regarded as serious tools to help the higher education institutions catch up with the international level.

It is characteristic that the existing university rankings use different groups of metrics, and it seems to be up to the universities to decide which rankings they want to be ranked. However, the level of scientific research plays an important role in all of the rankings, whereas Russian universities show a weak research component. The performance measurement of National Research Universities (NRUs) conducted by the Ministry of Education and Science of Russia in 2013 showed that they, first of all, are behind foreign universities on such metrics as scientific and technological activities – publication activity, and, above all, citation, as well as patenting⁵. At the same time, 11 NRUs and two federal

¹ M. Feigelman. The improper Russian Science Map and its supporters // Troitsky Variant, No. 144, 2013, P.4. <http://trv-science.ru/2013/12/24/krn-im-i-susanina-i-ee-zashhitniki/#more-34032>

² Navigating in the world of scientific knowledge// Nauka i Tekhnologii RF. 19.12.2013. http://www.strf.ru/material.aspx?CatalogId=221&d_no=72618#.Ur7Rm7SBY3k

³ Key comments on the Russian Science Map. The Commission for Social Supervision over the reform in the science sector. <http://www.rascommission.ru/index.php/documents/statements/57-zamechaniya-k-karte-rossiyskoy-nauk>

⁴ In 2012 the Russian Government set an objective to help a few of Russian universities become world's leaders by 2020, through allocating substantial budget funding to 10-15 higher education institutions selected on a competitive basis.

⁵ T. Kondakova. All other things being unequal. NRUs have been measured at no discount of the difference in potentials // Poisk, No. 41, 11.10.2013, P.6.

universities made up the 15 winners which were announced in July 2013¹. These higher education institutions received substantial budget funds, which were also allocated for the development of the research framework, during the preceding years, and were supposed to increase their volumes of extrabudgetary funding. However, their dependence on budget funding remains high, and therefore the new governmental initiative keeps them operating with privileged funding. In October 2013, all of the selected institutions presented their road maps of development until 2020, of which 12 were approved. The quality of these programs allowed the institutions to receive Rb 1,1bn to Rb 1,5bn until the end of 2013 and for 2014.² Indeed, these institutions have a golden opportunity to engage scientists from the former RAS institutions facing a tough period of reforms and streamlining. This is quite a pragmatic approach against the backdrop of weakening RAS and low research results even in leading institutions.

The ongoing institutional changes cause pessimism. Experts have predicted a heavier outflow of young scientists to other countries, but most of them are anticipated to seek employment at research units of domestic companies, especially those engaged in such areas as biotechnology, biomedicine. And it is quite possible, indeed. All in all, emigrational moods have increased especially in the community of young scientists, and the need to choose between an occupation and a country has become more evident than ever. However, the external outflow is limited, at least for now, by the capacity of the external labor market, especially in the United States. At the same time, seeking employment in the domestic private sector can be regarded as positive change, although there are constraints there too. Russia is running short of high-tech companies with a serious approach to the development of in-house R&D units. Speaking of the sciences which refer to basic ones, the ongoing reforms can hardly be useful to enhance effectiveness in this segment. From now forward, a lot will depend on the type of practical steps that will be taken towards performance measurement and administration of the former academic institutions.

5.4.4. Establishing Russian Scientific Foundation

The institutional changes include the establishment of the Russian Scientific Foundation last year, which has considerably changed the composition of institutions supporting scientific research. The Foundation will manage much more budget funds than the two other scientific foundations – the Russian Foundation for Basic Research (RFBR) and the Russian Foundation for Humanities (RFH) – do (*Table 9*). Furthermore, the establishment of RSF has stopped, pursuant to the Presidential Order, financing of basic research and exploratory scientific studies through federal targeted programs (FTPs)³ and, therefore, changed the structure and mechanisms of research funding in this country. According to RSF's Director General A. Khlunov, the budget of the Foundation can further be increased, because the Presidential Order covers about one third of the existing FTPs⁴.

¹ Fifteen higher education institutions win a competition for subsidies to enter the global rankings of universities 08.07.2013. <http://минобрнауки.рф/новости/3503>

² N. Shatalova. The battle of ambitions. A dozen of Russian higher education institutions are allowed to become world's leaders // *Poisk*, No. 44, 01.11.2013. <http://www.poisknews.ru/theme/science-politic/7985/>

³ The list of instructions issued at a meeting of the Board of Science and Education. 15.01.2014. Instruction 1, pp. <http://www.kremlin.ru/assignments/20065>

⁴ A. Chernykh. Science will shine with grants. The President make changes to the research funding framework // *Kommersant.ru*, 17.01.2014. <http://www.kommersant.ru/doc/2385314>

Table 9

Budget funding in scientific foundations in Russia, billions of rubles.

| Organization | 2014 | 2015 | 2016 |
|--|------|-------|------|
| Russia's asset contribution to the RSF | 11,4 | 17,2 | 19,1 |
| RFBR | 9,2 | 10,93 | 14,3 |
| RFH | 1,54 | 1,82 | 2,37 |

Source: The Federal Law *On the Federal Budget for 2014 and the Planning Period of 2015 and 2016*, No. 349-FZ of December 2, 2013 <http://pravo.gov.ru:8080/page.aspx?70792>

The need to expand grant financing of science and provide a variety of foundations has long been spoken of. However, the new Foundation plays a unique role among other scientific foundations. Under the Federal Law *On the Russian Scientific Foundation and Making Amendments to Certain Legislative Acts of the Russian Federation* (of November 2, 2013, No. 291-FZ), “The Foundation is intended to support basic research and exploratory scientific studies, the development of research teams leading in certain areas of science”, which has much in common with what the RFBR and the RFH normally do. Additionally, the Foundation will provide support to scientific and research organizations and higher education institutions through creating world-class laboratories and departments, developing their experimental capabilities for scientific research.

At the same time the Foundation may be engaged in business activity, set up business companies. However, the Foundation may not be declared bankrupt, although federal funds account for major part of its budget. It therefore is an amazing hybrid of all that can and can't be combined in other scientific foundations holding the legal status of budget-funded agencies, although a possibility of reorganizing scientific foundations into the form of foundation was considered as early as 2001. Moreover, the MES prepared a draft project of the government regulation *On Investing Idle Resources of the Russian Scientific Foundation (RSF)*¹. The draft project established a list of permitted assets, the procedure and terms of investment of RSF's temporarily idle resources and the procedure for investment transactions. ROSNANO and Russian Venture Company (RVC) make such investment, which is reasonable because of difficulty of selecting quickly promising innovation projects. In the case of RSF, the argument is that investment income may be used for day-to-day operations of the Foundation, thereby increasing the volume of funds allocated to support science².

Therefore, the Russian Government tends to provide the RSF with most favorable treatment, similar to the special terms and conditions offered for Solkovo Foundation. Furthermore, the need to establish a new foundation was explained by the need for more efficient funding of research and technological activities. However, the same objective could have been achieved through the existing scientific foundations, because there was nothing that could interfere with granting them the “foundation” status with the powers that are currently vested with the RSF. Since economic feasibility of establishing a new unit – including respective costs on organization, setting up new expert councils and the development of a series of regulations – is questionable, the emergence of a new unit may be regarded as, above all, realizing political interests. Theoretically, however, the establishment of a parallel donor organization in science has a positive aspect, because it may promote competition and facilitate more efficient performance of foundations. However, the fact that the RSF and other

¹ Temporarily idle funds in the Russian Scientific Foundation to invest in various securities. 21.01.2014. <http://www.finmarket.ru/shares/news/3609662>

² Akexandr Khlunov told reporters about grants in the Russian Scientific Foundation. http://polit.ru/news/2014/01/29/khlunov_about_rscf/ 29.01.2014.

foundations were originally offered different terms and conditions makes the new foundation beyond competition.

5.4.5. Personnel issues in science and ways to a solution

Dissergate and “Dissernet”

The issue of fraudulent dissertation papers, plagiarism, forged scientific publications which should contain the results of a research, and overall deterioration in the quality of dissertations came to the forefront during the year. A growing wave of disclosures of fraudulent dissertations was called “Dissergate”. Although since the beginning of the 2000s the quality of dissertation papers has dropped in all areas of sciences, here is a stand-alone problem in social disciplines, i.e. government officials and politicians prefer to hold a degree in economics, politics, sociology, law. Over the past decade, according to statistics, the number of approved Ph.D. dissertations in social and technical sciences has insignificantly declined (save for chemistry, a growth of 15.5%), whereas it has increased in social science. Political sciences (the number of approved dissertations doubled in the period of 2000 thru 2011) and economic sciences (a gain of almost 1.5 times)¹ should be outlined against others.

Spontaneous disclosures gradually transformed into a social movement (a networking community), “Dissernet”, which launched its website in September 2013. It embraces scientists of various disciplines participating in the scrutiny of Ph.D. and doctoral dissertations defended in Russia since the end of the 1990s. The results of the scrutiny were published to reveal plagiarism by some high-ranking persons in the field of education and science², as well as some politicians³. “Dissernet” shows the existence of mafia networks involved in writing and defending dissertations, covering both academic and educational institutions and experts employed at the State Commission for Academic Degrees and Titles (SCADT). It should be noted that it is mostly education employees – from professors to rectors of higher education institutions – that are involved in the networks⁴.

“Dissernet” has received mixed reviews. For instance, the MES which at the initial stage of a dissertation-fraud muckraking campaign set up 10 workgroups on various areas of sciences to develop recommendations on how to set up dissertation councils, conduct proficiency evaluation of their members, as well as define the criteria for organizations seeking to open postgraduate schools and doctoral schools, believes that the SCADT is the only reputable expert organization⁵.

After all, “Dissernet” has facilitated some changes including an extension from 3 to 10 years of the statute of limitations on plagiarism in dissertations⁶. However, the new rule only covers the dissertations which were defended three years ago or earlier, whereas other science

¹ Science metrics: 2013. Statistical Book. M.: HSE NRU, 2013. p.63.

² P. Kotlyar. Let'em decide by themselves who steals from whom. Dissernet accuses six former officials of the Ministry of Education and Science of being the authors of fraudulent dissertations 14.11.2013 http://www.gazeta.ru/science/2013/11/14_a_5752705.shtml

³ <http://ru.wikipedia.org/wiki/Диссернет>

⁴ A. Rostovtsev. Three fountains of scientific crap // Gazeta.RU. 27.12.2013. http://www.gazeta.ru/science/2013/12/27_a_5821533.shtml

⁵ P. Kotlyar. Let'em decide by themselves who steals from whom. Dissernet accuses six former officials of the Ministry of Education and Science of being the authors of fraudulent dissertations. 14.11.2013. http://www.gazeta.ru/science/2013/11/14_a_5752705.shtml

⁶ The results of the Council of Science’s performance have been summed up. 25.12.2013. <http://минобрнауки.рф/новости/3854>

degree holders have virtually been amnestied. Overall, however, the SCADT continues its operation despite “Dissernet’s” activity, ignoring frequently reported cases of dissertation fraud and plagiarism, which is indicative of lack of interconnection between the government’s activity and the social movement for “clear” scientific degrees.

Increasing the level of research by engaging foreign scientists

Last year the program on mega-grants¹ continued, second priority projects which were financed in 2011² were appraised, the 4th contest’s results were summarized, 42 winners which will set up new laboratories were announced. Despite criticism of the program for various reasons, its provisional results deserve a good score. One hundred and nineteen laboratories operating as part of the program have, since their inception, published their results in 800 top-rated journals. Productivity has been found to be seven articles per laboratory against the formal requirement of at least one article per year. More than one third of the heads of laboratories belong to the “middle-age generation” of scientists at the age of 45 to 60, which is quite a good figure³. A positive effect comes from not only growth in publications and favorable age composition of heads, but also from the fact that these laboratories became centers of diffusion of new knowledge outside their home organizations. They organize seminars and conferences, and even, to a certain extent, facilitate the development of interdisciplinary research. There is an adverse effect which comes from personnel moving to other countries, especially young employees, from the laboratories, because such laboratories have uncertain prospects in Russia, on the one hand, and their well-trained personnel are in demand in the labor market, on the other hand. It therefore is important to develop other laboratories along with this program, in particular, provide support to new and existing laboratories. The MES planned to announce such a contest in November 2013, and now similar projects will be launched in 2014 in the Russian Scientific Foundation⁴.

The results of the projects implemented since 2009 and managed by Russian-speaking scientists were summarized last year.⁵ The idea of this measure was to draw on the experience and knowledge of the Russian scientific community, engaging them “to take charge of the research of Russian scientific teams, as well as arrange scientific seminars in Russia so that Russian researchers can enrich their knowledge, master new scientific methods”⁶. Project managers were supposed to spend in Russia at least two months annually within two years. The data collected over five years allows conclusions to be made on the results of collective work on the selected projects. However, the information requested and collected by the MES isn’t yet sufficient for assessing sustainability of the established partnerships in prospect.

¹ For more details on the program on mega-grants see: Science and Innovation // Russian economy in 2012. Trends and Outlooks. Gaidar Institute Publishing House. 2013. pp. 410-412.

² Results of the assessment should have been presented in September 2013 and the projects extended at the same time, but it didn’t happen.

³ M. Muravyova. Mega-grants: the program proves successful // Nauka i Tekhnologii RF. 19.06.2013. http://www.strf.ru/material.aspx?CatalogId=221&d_no=57230#.Ur7xRrSBY3k

⁴ Alexander Khlunov briefed the journalists about the grants of the Russian Scientific Foundation. http://polit.ru/news/2014/01/29/khlunov_about_rscf/ 29.01.2014 г.

⁵ The projects were supported as part of the *Scientific and Scientific-Pedagogical Human Resources for Innovative Russia* in 2009-201 Federal Targeted Program (hereinafter – “Human Resources”) (event 1.5. Conducting scientific research by teams headed by external researchers). Rb 1,6bn were allocated from the federal budget to the projects.

⁶ <http://he.ntf.ru/p6aa1.html>

Two thirds of the external researchers are employed in the United States (31%) and Western Europe. This in general corresponds to the composition of emigration of scientific personnel which has been shaped since the disintegration of the Soviet Union. Most (76%) of them are employed at universities while 17% in scientific institutions (affiliated with the academies of science in the CIS countries, as well as public and private or major international research centers) and 7% in other organizations (this group is made up of all private research organizations)¹. Almost half of the external researchers (44%) are employed as professors while 26% as researchers.

The data on the results of the projects shows that the quality of publications of the participants was higher than the average in the Human Resources Federal Targeted Program (Table 10).

Table 10

Publication activity as part of the Human Resources Federal Targeted Program and the projects headed by external researchers, 2009 – 2012

| | Total number of articles indexed in WoS | Total number of references available in WoS | Articles average citation ratio in 2009–2012 | Number of most cited articles |
|---|---|---|--|-------------------------------|
| The entire Program | 4502 | 5554 | 1,23 | 16 |
| Projects headed by external researchers | 878 | 1580 | 7,7 | 5 |

Source: The data published by the National Training Foundation.

Table 10 shows that the publications made within cooperation with external researchers are cited seven times the total number of the publications made as part of the program. The assessment of the external researcher's contribution, which was performed in the annotated reports of those who participated in the projects, gives a certain description of the effects of this measure. Although this section of the report was completed in no particular format and their data can't be structured into a single structure, a few qualitative conclusions may be made.

In most cases, the role of external scientists was reduced to the following functions:

- General management and control over the project;
- Transfer of knowledge, experience, and research methods;
- Collective publications;
- Conducting seminars. All external scientists participated were involved in holding the seminars in the organizations covered by the project. Some arranged seminars abroad, engaging Russian colleagues.

In some instances the participation of an external scientist made it possible to obtain an access to a unique equipment at foreign laboratories and scientific centers. They also played an important role in helping master a respective western model of organization of research activity, which appears to be a very important result amid relative autarchy in the Russian science sector. Foreign scientists helped get in contacts with other foreign organizations, promoting network interaction.

Many participants plan to continue cooperation. Preparation of publications, as well as collective training of postgraduates is the key forms of cooperation for both external researchers and Russian teams. However, there is a few evidences of establishing more serious scientific relations, e.g. collective applications for Russian and foreign grants and

¹ The data published by the National Training Foundation.

tenders. Perhaps, there are constraining factors such as the level of research conducted in Russia, on the one hand, and unwillingness of representatives of the scientific community to make regular visits to Russia, on the other hand.

Researches' internal labor mobility

Internal (domestic) labor mobility of researchers is an important factor enhancing the performance of science. Labor mobility facilitates growth in the quality of scientific results through transfer of knowledge, allows best practices to be adapted, improves the situation in the labor market, promotes growth in productivity and innovative capacity through growth in social capital of academic researchers. Most effective is cross-sectoral labor mobility including labor mobility from public scientific organizations and institutions to the corporate sector and vice versa. Research shows that such labor mobility promotes growth in scientific productivity in the form of publications and patents.

The figures of internal labor mobility in Russia and globally have since quite recently been collected, although the need to scrutinize trends in internal labor mobility of researchers was stated in the EU countries as early as 2006, and the first papers covering this topic emerged late in the 1990s. Russia has two distinctive features:

1) An extremely low level of internal labor mobility, even to compare with countries having much smaller research sectors. The remarkable fact is that Russia shows the slowest labor mobility among the BRIC countries (*Table 11*).

Table 11

Researchers cross-sectoral labor mobility in the BRIC countries, 1996-2010

| Country | Labor mobility to corporations, persons. | Labor mobility from corporations, persons. |
|---------|--|--|
| China | 8732 | 8280 |
| India | 1628 | 1415 |
| Brazil | 1208 | 935 |
| Russia | 718 | 592 |

Data source: International Comparative Performance of the UK Research Base – 2011. A report prepared for the Department of Business, Innovation and Skills. Elsevier, 2011. P.77.

2) Labor mobility is mostly driven from scientific-research institutes. The same institutions receive the principal flow of labor force from the corporative sector. This might be explained by persisting relations between the sector-specific scientific-research institutes and companies (enterprises) which existed in the U.S.S.R.. It is researches at universities that show the highest mobility in other countries. Additionally, universities are principal recipients of labor force from corporations.

It was not until recently, 3-4 years ago, that a few labor mobility incentive measures were announced in Russia, although they are non-systemic and in a test mode. They are mostly aimed at developing cooperation between academic and higher education personnel, as well as researchers from the public sector of science and industrial sector. Technology platforms can be considered as incentive for internal labor mobility. However, a research work the author conducted in three technology platforms¹ shows that only one of these platforms gave consideration to labor mobility and how it can be promoted within such platforms.

In addition to the foregoing, platforms' representatives share the opinion on the state of internal labor mobility and constraining factors. They consider it very low because of the

¹ I. Dezhina. Developing mechanisms of knowledge transfer through occupational mobility with the participation of technology platforms. Report on scientific research assigned by the Ministry of Education and Science of Russia. M.: Russian Technology Development Foundation, 2013.

quality of human resources, making certain traditional types of labor mobility incentives (e.g., professors' consulting in companies) ineffective and therefore useless. Staff training and onsite training measures were regarded as essential. Tougher measures, according to platforms' representatives, are needed related to some kind of "forced mobility" – through introducing a labor mobility indicator into the reporting indicators for scientific-research institutes and higher education institutions.

The platforms constitute a tool which can help address the HR problems, although the platforms have sector-specific features and different missions which impose some restrictions on mobility incentives. Moreover, a reluctant labor mobility is unreasonable in some areas, because it may lead to potential disclosure of confidential information, rather than transfer of knowledge.

Labor mobility may be increased with the help of Centers for Collective Use of Equipment (CCUE) which provides a sound basis for the development of closer cooperation between higher education institutions (scientific-research institutes) and companies. Russia has currently a broad CCUEs network embracing about 390 Centers¹. The focus on CCUEs will be much stronger in the short run. In particular, the MES is to execute the Presidential orders on defining priorities with a view to ensuring more efficient use of the federal centers for collective use of equipment network (Pr-2426 of October 18, 2013)².

5.4.6. Relations within the innovation system: technology platforms and clusters

The technology platforms tool designed to strengthen relationships within the innovation framework developed in 2013 too, and the government began to increasingly use technology platforms as experts on specific sector-specific and cross-sectoral issues. The total number of technology platforms increased to 34. The MES and the Ministry of Economic Development (MED) suggested that the platforms should be engaged in formulating the contents of federal targeted programs, because they represent the consolidated stand of various stakeholders including businesses, not just the point of view of stand-alone organizations. About 10 of the proposals made by 25 platforms engaged in formulating the contents of the Federal Targeted Program *Research and Development on the Priority Development Areas of Science and Technology Sectors in Russia in 2014–2020* were recognized as high quality ones³. The result shows that the platforms are still weak. This in part can be explained by that the government provided no financial support at the initial stages of the development of this tool.

Nevertheless, there are some reasons for cautious optimism. The MED plans to provide the platforms with larger grants as part of federal targeted programs so that they can conduct competitions for contracts under the terms and conditions of their post-sharing funding by the platforms⁴. The platforms' performances was measured by the end of the year, and support will be provided to those platforms which tend to be communication platforms. A few of the

¹ A meeting of the Board for Science and Education. Moscow, Kremlin, 20.12.2013. <http://news.kremlin.ru/news/19865>

² An information report on the collection of proposals on top-priority scientific tasks. November 22, 2013. <http://минобрнауки.рф/новости/3770>

³ A. Gorbatova. A selective support. 31.05. 2013 http://strf.ru/material.aspx?CatalogId=221&d_no=56890

⁴ A report made by Director of the Department of Innovative Development at the Ministry of Economic Development of Russia A.E. Shadrin at The Triple Helix, government, and innovation policy plenary session, The Triple Helix XI International Conference, London, July 8, 2013. <http://tha2013.org/tha/index.php/tha/index/pages/view/programme#Workshops>

platforms managed to create evaluation systems, while about one third of the platforms can conduct a comprehensive scientific and technological and economic evaluation, which also includes the evaluation requested by development institutions¹. Furthermore, 2/3 of the platforms stated that their proposals and evaluation reports were referred to in various documents of the executive power bodies, being a good result.

In addition to the foregoing, most successful in terms of best practices, according to the estimates made by the Interdepartmental Analytical Center,² are those platforms which are closer to the market demand, where companies account for at least 50% of the participants. Ideologically, they resemble their European analogues.

The platforms may draw much more attention in the year to come, because the annual Presidential Address to the Federal Assembly³ places a special emphasis on technology platforms as a tool to enhance innovation capacity, which also means that the platforms should rely on “reaching specific results, obtaining patents and licenses, getting developments into actual practical use”. At the same time, it is important to retain what the platforms are originally designed for, as interconnection tool. This is not a team of developers who patent their inventions, although technology platforms’ success may indeed facilitate creation of alliances, thereby leading to the emergence of patents and know-how.

Innovation clusters developed along with technology platforms. Budget funds (subsidies) were allocated late in 2013 to innovation clusters for implementing educational programs (onsite training, short-term advanced training programs), purchasing technology equipment, conducting exhibition and trade fair activities. In addition to the foregoing, the funds had to be spent as soon as possible, because it was not until the middle of November 2013 that an executive order on the allocation of subsidies to 11 clusters was issued⁴. It is the development of innovation and education infrastructure facilities that attracted the highest demand⁵, which is absolutely reasonable, because clusters are facing such issues as staff shortage in all areas, from cluster managers to specialists sought by resident companies⁶.

Clusters are expected to see system-wide development in 2014. In particular, this measure is planned to be synchronized with other government’s initiatives, such as innovation development programs of public companies. An “involuntary” approach has been selected once again, i.e. companies will be obliged to cooperate with clusters as part of their development programs. This is unlikely to facilitate skyrocketing growth in innovation activity amid adverse business environment. What raises hackles is that none of the post-Soviet countries has yet managed to implement the cluster theory in practice.

¹ The data of a survey conducted by the Russian Technology Development Foundation at a visiting meeting of technology platform held in Puschino on July 2-3, 2013. The survey covered 22 coordinating organizations of technology platform.

² V.I. Dovgy. Technology platforms and cross-platform relations in implementing major cross-sectoral programs and projects. Presentation at the Technoprom-2013 International Technological Development Forum in Novosibirsk, 14.11.2013]

³ The annual Presidential Address to the Federal Assembly of the Russian Federation. Moscow, 12.12.2013. <http://www.kremlin.ru/news/19825>

⁴ Russian Government’s Executive Order of November 18, 2013, No. 2128-r.

⁵ Clusters to receive money in December // Russyiskaya klasternaya laboratoria. 04.12.2013. <http://cluster.hse.ru/news/1298/>

⁶ N. Ulyanov. All hands to quarters! // Biznes Zhurnal. 21.10.2013. <http://www.computerra.ru/business/57860/vse-po-mestam/>

5.4.7. Innovation activity incentives

Analyzing the results of innovation development, one should factor in a few macro-trends which do have an effect the current innovation activity and its prospects. First, the MED announced that the innovation scenario will be replaced with a conservative one in the long-term forecast (until 2030). It is the innovation scenario that was based on accelerated development of science and innovation sector. Second, persisting capital outflow from the country. Third, the deepest over the last four years decline in output in the manufacturing industry. There was some local success in certain segments of venture capital financing. However, the venture capital market, according to the RVC, will be developing without direct correlation to general economic indicators¹. Perhaps, there is a hope on that innovation activity might increase amid a crisis.

Business angels were indeed more active last year. They mentioned the following factors that have a positive effect on their activity²:

- Developing new market segments;
- Cooperating actively with seed funds;
- Increasing projects' transparency, lowering entry barriers;
- Showing optimism about industry's future development.

At the same time, another study of the early-stage venture capital market³ shows a series of serious barriers to business angels. Following listed are the key barriers:

- 1) Public development institutions have an adverse effect on this segment in the venture capital market, because public organizations basically allot R&D grants. Knowledge intensity of established businesses becomes too high, an inherently risk-averse "grant" ideology develops.
- 2) Large corporations lack culture of purchasing small firms as a way of acquiring new technologies.
- 3) Administration of applicable laws and regulations remains complex, Russian courts' rulings cannot be predictable because of violent interpretation of definitions or actions in the innovation sector.
- 4) Lack of well-defined procedures for exiting from start-ups.
- 5) Finally, there is weak confidence among all participants of venture relations.

Neither is optimistic the overall situation with small-sized innovation entrepreneurship, because small companies have begun to shutdown in response to doubled insurance premiums since the beginning of 2013⁴. In addition to the foregoing, just 14% of small innovation enterprises are private, according to the European Bank for Reconstruction and Development (EBRD)⁵. Manufacturers are in minority among innovation companies, which can be explained by that Russia has no large companies whose business results in manufacturing

¹ D. Butrin. RVC announces the creation of a venture capital market // Kommersant, No. 214, 21.11.2013, p. 6. <http://www.kommersant.ru/doc/2348804>

² The annual study of the angel investment market. Results, dynamics and new challenges. 2013. The Business-Angels National Association (Russia), Atom&Partners, RVC.

³ Early-stage venture capital market: key trends. WCIOM, RVC. M., 2013. pp.36-43. http://www.rusventure.ru/ru/programm/analytics/docs/201302_vciom.pdf

⁴ M. Papchenkova. A Heaven that remains to be seen // Vedomosti, No. 150, 20.08.2013. <http://www.vedomosti.ru/newspaper/article/512591/raj-pod-voprosom>

⁵ E. Noskova. Banks seek innovations // Rossiiskaya biznes gazeta – biznes i vlast. 03.09.2013. <http://www.rg.ru/2013/09/03/securitizaciya.html>

technology products. Therefore, businesses are overregulated and operate in a non-competitive environment.

At the same time, there were a few positive changes which can facilitate innovation activity. For instance, President Putin signed on January 2, 2013 a federal law under which representatives and employees in large foreign companies investing within Russia, as well as those who engaged in the Skolkovo Foundation's projects, may be entitled to a 5-year visa instead of one year.

Nonetheless, there are few optimistic figures. The number of transaction in Russian early-stage venture capital market increased 65% year-over-year in 2013; the volume of business-angels' transactions increased 70%. The amount of investment in early-stage projects with the participation of Russian business angels totaled \$116,5m through the first 11 months of 2013, almost 4.5 times the value recorded in 2012¹. However, the seed stage accounts for less than 5% of the investment available in the investment market. It is late stages that are basically financed. Internet-projects account for more than 70% of the investment, most of which is e-commerce, rather than long-term or emerging developments². Experts explain this by undeveloped applied sciences³. However, regrettably, Thomson Reuters's review shows that Russia is not ranked in the top-100 promising areas of science⁴ and, therefore, behind in the applied research, basic research and exploratory scientific studies which have always been ranked the strongest in this country. This is another reason why there is no point to wait for the appearance of emerging projects attractive for venture capital financing.

The situation can be mitigated by development institutions, although their effectiveness remain in abeyance despite that some of them have been operating for about seven years.

Although development institutions have key performance indicators (KPIs), their effectiveness can hardly be assessed. It is well-known that through its foundations the RVC financed 135 projects including nine foreign projects. In addition to the foregoing, the projects in Moscow accounted for the most of investment (58.03%), projects in the United States (15.35%), and St. Petersburg (6.37%)⁵. The initial wave of RVC-created foundations' exist from portfolio companies is not expected until 2014⁶.

ROSNANO has put into operation a progressive total of 35 plants⁷, production output increased, although a target of Rb 300bn volume of sales of products manufactured with the participation of ROSNANO can hardly be reached by 2015, because production output was merely Rb 23,5bn at the end of 2012 (the latest data available)⁸. In fact, ROSNANO will

¹ The data of the Report on *Money Tree TM: Venture Capital Market Navigator and the Results of the Business-Angels National Association (Russia) Research*. Source: The Russian venture capital market development in Russia in 2013: RVC contribution <http://www.rusventure.ru/ru/press-service/news/detail.php?ID=25893>

² M. Kozlov. A sowing season is suffering. Start-up investors still in shortage. // Poisk, No. 26, 28.06.2013 <http://www.poisknews.ru/theme/innovation/6433>

³ Opinion of the Managing Partner of Almaz Capital Partners A. Galitskiy. Source: I. Tsukanov, Y. Nekhaichuk. RVC opens a sowing season // *Vedomosti*, No. 215, 20.11.2013. <http://www.vedomosti.ru/newspaper/article/572711/rvk-otkryvaet-posevnyuyu>

⁴ C. King, D. Pendlebury. ResearchFronts 2013. 100 top-ranked specialties in the sciences and social sciences. Thomson Reuters. April 2013. <http://img.en25.com/Web/ThomsonReutersScience/1002571.pdf>

⁵ Based on the data as of December 29, 2013. http://www.rusventure.ru/ru/innovative_projects/

⁶ I. Tsukanov, Y. Nekhaichuk. RVC opens a sowing season // *Vedomosti*, No. 215, 20.11.2013. <http://www.vedomosti.ru/newspaper/article/572711/rvk-otkryvaet-posevnyuyu>

⁷ Based on the data as of December 29, 2013. <http://www.rusnano.com/projects/portfolio>

⁸ I. Tsukanov. Chubais takes charge of Rosnano to be privatized till 2020 // *Vedomosti*, 18.12.2013. <http://www.vedomosti.ru/companies/news/20378071/upravlyayuschaya-kompaniya-rosnano-stanet-polnostyu-chastnoj>

obtain off-the-shelf technical solutions for manufacturing innovation products, i.e. supporting import substitution. To be more specific, this cannot be regarded as true innovation activity.

It is characteristic that the RVC and ROSNANO plan to follow new, similar development strategies designed to divide between asset management and asset holding functions. Asset managers (AMs) will be established to exercise the asset management function. ROSNANO will hold a 80% interest in AMs and then sell it stagewise within 2016–2020¹. Having created MCs, the RVC plans to reserve the right to strategic and financial control over the companies owned by the holding company². In addition to the foregoing, the RVC plans to focus on seed and even preseed stages and establish 4 to 6 foundations with a total of Rb 3bn to Rb 4bn. This is almost equal to the annual budget of the Foundation for Assistance to Small Innovative Enterprises in Science and Technology. Therefore, there is ongoing process of interexchange of initiatives in development institutions³. Theoretically, it may make them compete for best projects and provision of services of higher quality.

5.4.8. Changes to the regulation of rights to the results of intellectual activity

Intellectual property rights is an aspect related to promoting innovation activity, which has an impact on commercialization of projects developed in scientific-research institutes and higher education institutions. Some improvements were achieved in this area last year.

The Russian Government Executive Order (No. 458 of May 30, 2013) *On Making Amendments to the Rules of Exercising by Public Sector Customers of the Russian Federation's Rights to the Results of Civil, Military, and Dual Purpose Intellectual Activity* was adopted, which triggered further changes. Prior to the adoption of the Executive Order there were rules in effect which secured the results of intellectual activity and allowed public sector customers to unreasonably retain the rights to the results, thereby constraining seriously to commercialization of intellectual property created as part of public contracts. The Executive Order No. 458 raised *de facto* barriers to this practice, because from now on every public sector customer must annually revise and publish on its website a list of unused results of intellectual activity and notify the developer of such results of that the Russian Federation's right may be alienated in his favor. In other words, this measure discourages public entities to reserve the rights "just in case", by tradition, as well as based on their wrong impression of the fact that the state should retain the budget-funded results obtained through funding from the federal budget.

Furthermore, updates to rules and terms of securing rights to the results of intellectual activity (the draft government executive order *On Making Amendments to the Executive Order of the Government of the Russian Federation of April 22, 2009, No. 342 On Certain Issues of Regulation of Securing the Right to the Results of Scientific and Technological Activities*) were considered during the year, but they haven't yet been adopted. It was suggested to change the terms of securing exclusive rights to the results of intellectual activity to the Russian Federation. The grounds for securing the rights to the state have been

¹ Chubais calls off the sale of Rosnano's share. 13.06.2013. <http://lenta.ru/news/2013/06/13/rosnano/>

² OJSC RVC plans to establish an RVC holding company to set up business entities. 20.11.2013. http://ria.ru/nano_news/20131120/978724145.html

³ For instance, RVC has started debt financing of projects (see, e.g. information on the Fund Civil Technologies, Ltd http://www.rusventure.ru/ru/investments/opk/index.php?sphrase_id=26291), and plans to further establish a venture shared financing foundation, thereby duplicating the activity of the Russian Technological Development Fund.

narrowing to create conditions for securing them to those who create intellectual products. This is an overall positive development of public regulation. It would be important, however, to specify the terms, because the draft executive order's provisions seems to be more of a concept than guidelines for those who will in practice be securing and executing the rights to new intellectual products.

Another aspect of the draft executive order is that a free nonexclusive license to the results obtained through funding from the federal budget is secured to the state. This measure well corresponds to the US experience originated from The Bayh–Dole Act (1980). It is characteristic that the government of the United States hasn't yet exercised the right to use a license, which can easily be explained by the fact that the Government is far from being most efficient entrepreneur.

Does it mean that the introduced changes will promote more of registered intellectual property? Patent statistics is likely to improve. It doesn't mean, however, that commercialization of ideas will increase, because the demand for patents and licenses will not increase until certain conditions are created. The internal demand for such results of intellectual activity has been weak so far. Although changes to the legal and regulatory framework do create more favorable conditions for commercialization of intellectual property, they per se cannot provide new incentives for growth in commercialization.

* * *

Hence, 2013 can be described as having seen serious changes to the organizational structure of science. This is, first of all, related to the fact that the academic sector of science ceased to exist, the RAS was reorganized into an expert organization without affiliates. It is hard to estimate what kind of effect it may have on the performance of scientists, the development of new areas of science, further integration of the Russian science into the global science. A lot depends on the new entity's (FASO) performance, soundness of the policy towards scientific organizations, methods of performance measurement. These tasks are not easy to accomplish: any attempts to conduct an "unbiased" performance measurement of both scientific-research institutes (by the RAS) and higher education institutions (by the MES) haven't yet been successful.

The establishment of the Russian Scientific Foundation, whose budget overtakes the total amount of funding of the existing scientific foundations, became a significant event. The grant form of supporting scientific research will be expanded after the establishment of the RSF. Still obscure is economic feasibility of the framework having several foundations which are financed with the federal budget funds, assigned with similar tasks but subject to radically different basic terms and conditions for operation.

Innovation activity developed in several segments last year, which also included growth in private venture capital investment. Development institutions' growing interest in supporting early-stage projects, for all the efficiency of such a solution, might not help achieve the expected results, because Russia has no large companies manufacturing high-tech products but has adverse conditions which don't allow small firms to grow and develop. Innovation activity can hardly increase in the medium-term perspective against the backdrop of worsening business environment and moving away from the innovation-based development scenario.