

## Section 5. Social Sphere

### 5.1. The Living Standards of Russia's Population in 2014

Over 2014, the population's real disposable income constituted 99.0% of its 2013 level. However, it posted growth in 2008 recession year. Growth rates of salaries in the budget-funded sphere went down. Over 2014, the level of inequality somewhat declined by comparison with 2013 level. The poverty level over the first 9 months of 2014 remained without change vis-à-vis the corresponding period of 2013. Noticeable reduction of the population's real income and households consumption as well as small-scale of the poverty level is forecasted in 2015.

#### 5.1.1. Population income

The population's average nominal money income went up by 6.9% and constituted on average Rb 27,714 per person in 2014. The Consumer Price Index growth resulted in the fact that the real disposable per capita income<sup>1</sup> over the course of the year dropped to 99.0% versus the same period of 2013, meanwhile in 2013 there was a growth of real disposable per capita income at the amount of 4.0%. Moreover, it should be noted that even in the recession 2008 year real disposable per capita income grew by 2.4% over 2007.

The movement of the real disposable money income in 2013 and 2014 is shown in *Table 1*.

*Table 1*

**Changes in the Real Disposable Money Income, 2013–2014, %**

	As percentage of	
	corresponding period of previous year	previous period
<b>2013</b>		
Q1	105.9	76.5
Q2	103.8	113.3
H1	104.8	
Q3	103.2	99.5
Q4	103.6	120.2
<b>Annual</b>	104.0	
<b>2014</b>		
Q1	96.6	71.3
Q2	100.7	118.1
H1	98.8	
Q3	102.1	100.9
Q4	96.5	113.5
<b>Annual</b>	99.0	

Source: Rosstat.

<sup>1</sup> Income less mandatory payments and contributions and adjusted to the Consumer Price Index.

The average nominal payable monthly salary amounted to Rb 32,600.00 having risen on 2013 by 9.2% in 2014 (*Table 2*). Inflation consumed practically all incremental salary which resulted in the fact that real monthly salary per employee over 2014 went up solely by 1.3% meanwhile in 2013 it went up by 4.8% against 2012.

*Table 2*

**Change in the average payable monthly salary, 2013–2014, %**

	Average payable monthly salary in % to		Real payable monthly salary in % to	
	Corresponding period last year	Corresponding period	Corresponding period last year	Corresponding period
<b>2013</b>				
Q1	111.9	90.4	104.5	88.7
Q2	113.8	110.6	106.2	109.0
H1	112.9		105.4	
Q3	113.2	97.8	106.4	96.4
Q4	110.6	113.2	103.9	111.7
<b>Annual</b>	111.9		104.8	
<b>2014</b>				
Q1	111.1	90.3	104.4	88.6
Q2	110.2	109.7	102.4	107.1
H1	110.6		103.4	
Q3	108.3	96.3	100.6	94.8
Q4	107.4		98.0	
<b>Annual</b>	109.2		101.3	

Source: Rosstat.

Economic crisis resulted in the high rates of salaries paid in the spheres of education, healthcare and social services which were financed in 2013 with the aim of bringing salaries of a number of categories of budget-funded employees to 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" remained in the past.

In 2014 average payable monthly salary (less social contributions) amounted in education Rb 25,855 (79% to the All-Russia level of average monthly salary and 88% to the salary in the manufacturing sectors) and in public healthcare and social services – Rb 27,123 (83% to the all-Russia average monthly salary and 92% to the salary in manufacturing sector).

Over January-September 2014, 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 were as follows:

- In public education: from 78.2% of the average monthly salary for teachers in supplementary educational institutions<sup>1</sup> to 93.3% of the average monthly salary for teachers in pre-school educational institutions<sup>2</sup>, 97.2% of the average monthly salary for teachers in general education institutions and 135.6% of the average monthly salary for the faculty members of higher (vocational) educational establishments ;
- In public healthcare sector: for nurses staff – 49.3% of the average monthly salary index, and for physicians and other healthcare practitioners with higher education diplomas, employed at medical institutions and providing medical care services to the population - 142.5% of the average monthly salary index in a given RF subject.

The RF President's Executive Order of 7 May 2012, No 597 "On Measures Aimed at the Implementation of Government Social Policy" set for the year 2012 that in that year the aver-

<sup>1</sup> Ratio to the average salary of teachers in a given RF subject.

<sup>2</sup> Ratio to the average salary in the sphere of general education in a given RF subject.

age salary level of the secondary school teachers and the tutorial staff of general-education institutions should be brought to match the average salary for a given region. In reality the targeted value was nearly achieved in H1 2014 (the salary level of this category of employees constituted 91% of a given RF subject's average salary) and exceeded it to 107.7% of a given subject's average monthly salary in H1. However, in Q3 the situation was not as good and the average salary of teachers and the tutorial staff of general-education institutions over 9 months 2014 fell to 97.2% of the given region's average salary.

The same Presidential Executive Order envisaged to bring the average monthly salary of the teachers of pre-school educational institutions in line with the level of the average monthly salary in the sphere of general education in a corresponding region in 2013. This target was nearly achieved by the end of 2013: the average monthly salary of tutors employed at pre-school educational institutions in 2013 amounted to 94.9% of the level of the average monthly salary in the sphere of general education of a given region. However, in H1 2014 the situation started to deteriorate: the level of average monthly salary of tutors employed at pre-school educational institutions fell to 90.4% of the average monthly salary in the sphere of general education in a given region. However, in Q3 the situation stabilized and the average monthly salary of tutors employed at the pre-school educational institutions over 9 months 2014 nearly reached 2013 level constituting 93.3% of the average salary in the sphere of general education in a given region.

Nominal average monthly salaries in arrears constituted Rb 2,006m as of 1 January 2015. Real volume of the average monthly salaries in arrears remains still at a low level: as of 1 January 2015, the volume of arrears amounted to less than 1% of companies' total payroll budget. The number of employees whose salaries were in arrears over the year varied between 54 and 82 thousand (49 thousand as of 1 January 2015). Practically all salaries in arrears arose, as a rule, due to lack of companies' own funds: the average monthly share of salaries in arrears arising as a result of delays in money transfers from the budgets of all levels over the entire year varied between 0.1-3.7% of the overall volume of salaries arrears. As of 1 January 2015, the share of arrears in average monthly salaries due as a result of delays in money transfers from the budgets of all levels constituted 0.1%.

Over 2014 the size of pensions were increased this way:

- From 1 February, labour pensions of 37.8m pensioners were indexed by 6.5% due to the consumer price growth in 2013;
- From 1 April, social pensions of 2.9m pensioners went up by 17.1%.

In April 2014, the size of pensions paid under the government pension program went up. Also the monthly federal benefits paid to 16.2m special categories of pensioners were increased by 5.0%.

In August 2014, the size of pensions paid to working pensioners and disability pensioners was adjusted, in accordance with the planned scheduler, by the amount of insurance contributions received in 2013 and/or Q1 2014 from their employers under the mandatory pension insurance program. This adjustment according to the RF Pension Fund data affected almost 14m people or 37% of the labour pensioners. However, according to the Pension Fund assessments, the size of the raise is insignificant.

Also in August 2014, went up pensions of those who receive pension savings in the form of pension payment (by 2.3%) and in the form of savings part of the labour pension (by 2.9%). The system of social payments to the subsistence minimum level is still in force in case the pension is below the subsistence minimum.

As result of all these measures, over the course of 2014 the average size of allotted monthly pension increased by 8.8%, which resulted in the size of the average accrued pension to come to Rb 10,786 in October 2014. Growth of the average real allotted pensions over 10 months 2014 constituted 0.9%.

According to the RF Ministry of Economic Development forecast, real disposable money income of the population over 2015 will fall to 93.7% of their 2014 level.

### 5.1.2. Socioeconomic differentiation

According to preliminary data, in 2014 the inequality in distribution of the population's money incomes slightly dropped against 2013:

- The Gini coefficient was at the level of 0.416, while during the same period of the last year it was 0.419;
- R/P 10% dropped to 16.0 (in 2013 it constituted 16.3).

*Table 3*

**Distribution of the Overall Volume of the Population Income, %**

	<b>2014</b>	<b>2013</b>
Money incomes	<b>100</b>	<b>100</b>
Including 20% groups of population: first (with least incomes)	5.2	5.2
second	9.9	9.8
third	14.9	14.9
fourth	22.6	22.5
fifth (with least incomes)	47.4	47.6

*Source:* Rosstat.

The population distribution by average per capita money income level is shown in *Table 4*.

*Table 4*

**The Population Distribution by the Average Per Capita Money Income Level, %**

	<b>2014</b>	<b>20</b>
<b>Total population</b>	<b>100</b>	<b>100</b>
Including with average per capita money monthly under Rb 7,000.0	8.2	9.8
7,000.1–10,000.0	9.4	10.4
10,000.1–14,000.0	13.4	14.2
14,000.1–19,000.0	15.0	15.2
19,000.1–27,000.0	17.8	17.5
27,000.1–45,000.0	20.7	19.3
45,000.1–60,000.0	7.2	6.5
Over 60,000.0	8.3	7.1

*Source:* Rosstat.

### 5.1.3. Subsistence level and poverty

In Q3 2014, the subsistence level dropped vis-a-vis Q2. The drop is insignificant and amounts to 1.3% on average for total population, 1.2% for working population, 0.9% for pensioners and 2.3% for children (*Table 5*).

The estimates of the subsistence level in the Russian Federation are done by the Ministry of Labour and Social Security on the basis of the consumer basket determined by the Federal Law of 3 December 2012 “On the Consumer Basket Nationwide the Russian Federation” and the data provided by the Federal Service of State Statistics on the level of consumer prices for food products and consumer price index for food products, non-food products and services. By multiplication of normative amount of food products on prices, we get money estimate of

the food share of the subsistence level. Therefore, if composition and number of food products considered in subsistence level calculation did not change then the reduction of the subsistence level amount can be explained solely by the fall of food prices which comprise the subsistence level.

*Table 5*

**Subsistence Level, Rb.**

	<b>Total population</b>	<b>Working population</b>	<b>Pensioners</b>	<b>Children</b>
<b>2013</b>				
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
Q4	7,326	7,896	6,023	7,021
<b>2014</b>				
Q1	7,688	8,283	6,308	7,452
Q2	8,192	8,834	6,717	7,920
Q3	8,086	8,731	6,656	7,738

Source: Rosstat.

*Table 6*

**Price Indices for Three Quarters  
of 2014, Rb**

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>9 months</b>
Consumer price index	101.9	102.4	101.4	105.8
Food price index	103.0	103.5	100.6	107.3
Food price index minus alcoholic drinks	103.7	103.5	100.4	107.8

Source: Rosstat.

*Table 6* demonstrates that we clear consumer price index of prices for goods and services which are not considered for price following comprising the subsistence level (alcohol, for example, does not comprise the subsistence level), the higher the subsistence level becomes for three quarters 2014 and smaller for Q3 2014. Of course, we can mention the seasonal factor and the fact that in summer fruits and vegetables are cheaper than in spring. However, in 2013 seasonal factor was applicable but it did not result in the downward trend in the subsistence level neither on average for the whole population not for certain socio demographic groups of population. Moreover, in Q3 2014 price fall on fruits and vegetables practically did not differ from the price fall in Q3 2013.

Situation on the food market in Q3 2014 differed from the same period of 2013 by the fact that sanctions were imposed on imports of food products from the EU countries. It turns out that imposition of sanctions resulted in the price reduction on food products which comprise the subsistence minimum. However, this supposition causes very big doubts.

According to Rosstat data, over January-September 2014 in comparison with the same period of 2013 purchasing power of the average per capita money income went up including on such basic food products comprising subsistence minimum as beef (minus boneless meat), frozen and chilled chicken (minus chicken quarters), sunflower seed oil, margarine, rye bread, mixed rye-wheat bread, bread and bakery goods, wheat flour, cereals, vermicelli, carrots and apples.

Using the Rosstat data on the average prices on food products which comprise the subsistence minimum we can verify whether there was a price reduction on those food products which are positively linked with the purchasing power of the average per capita money income of the population.

In Q3 2014 prices went up on such products which comprise the subsistence minimum, as:

- beef (less boneless meat) – by 3.6%;
- mutton (less boneless meat) – by 2.1%;
- frozen and chilled chicken (minus chicken quarters) – by 13.0%;
- table salt (including iodized salt) – by 1.6%;
- margarine – by 1.0%;
- vermicelli – by 0.9%;
- rye bread, mixed rye-wheat bread – by 1.7%;
- bread and bakery goods – by 1.3%;
- wheat flour – by 0.7%;
- cereals: rice white rice – by 0.6%, millet – by 2.2%, semolina – by 0.5% (price on other types of cereals did not change over Q3 2014).

Thus, reduction of the subsistence level index in Q3 2014 and increase of the purchasing power of the money income of the population on given types of food products (first of all, on meat products) which comprise the subsistence minimum cause certain doubts.

In Q3 2014, food products expenses (45.8%) constitute the main share in the structure of the subsistence minimum. Expenses on non-food products constitute 23.5% and on services – 23.6%. Mandatory payments and contributions constitute 7.1% of the subsistence minimum index.

The ratios of the main population income indexes to the subsistence level in Q3 2014 were as follows:

- the ratio of per capita money income to the national average subsistence level – 346.7%;
- the ratio of the average monthly charged wage index to the subsistence level of the working population – 363.4%;
- the ratio of the average monthly charged pension index to the subsistence level of pensioners – 174.1%.

The poverty index for the first 9 months 2014 was at the level 18.0m, or 12.6% of the total population, unchanged vis-à-vis the corresponding period of 2013 (*Table 7*).

*Table 7*

**Number of People with Money Incomes Below Subsistence Level, 2013–2014**

	Million people	As % of total population
<b>2013</b>		
Q1	19.7	13.8
Q2	17.3	12.1
H1	18.6	13.0
Q3	17.3	12.1
January-September	18.0	12.6
Q4	12.2	8.5
Year	15.4	10.8
<b>2014</b>		
Q1	19.8	13.8
Q2	17.4	12.1
H1	18.9	13.1
Q3	16.6	11.5
January-September	18.0	12.6

Source: Rosstat.

More than half of the low-income households are households with children. Falling number of the poor in Russia is followed by poverty structural changes: the structure of low-income households comprises fewer households without children and more often households

with children. In 2013 about two thirds of the low-income households were represented by the households with children, and in 2008 only half of the households, which, on the one hand, represents a positive outcome of measures implemented in the sphere of the improvement of the socio economic situation of pensioners and, on the other hand, speaks about insufficient efficiency of the social safety net for households with children in Russia. It should be noted that the structure of low-income households widens at the expense of not only multiple children households but at the expense of households with one or two children (*Table 8*).

*Table 8*

**Distribution of Low-income Households Depending on the Number of Children under 16, 2008-2013, %**

	2008	2009	2010	2011	2012	2013
Low-income households, total	100	100	100	100	100	100
Of which:						
Without children	47.7	45.4	42.5	40.3	37.8	36.0
With children	52.3	54.6	57.5	59.7	62.2	64.0
Of which:						
1 child	30.2	30.3	31.2	32.7	33.4	32.7
2 children	17.3	18.6	20.3	20.6	21.3	22.3
3 and more children	4.9	5.7	6.0	6.5	7.5	9.0

Source: Rosstat.

Households with children are poorer than households without children: the deficit of disposable funds in a low-income household with children is by 1.55 times higher than in the low-income household without children. This fact is both due to higher deficit of disposable funds per member of a household and to the high number of members of a household.

One of the main benefits targeted at the support of the poor families with children are monthly child allowances which are financed by the RF subjects.

The number of households receiving monthly child allowance in 2000s went down due to:

- Population's income growth resulted in the fall of the number of families with the average per capita income below the subsistence level;
  - the number of population with average per capita money income below the subsistence level over 2000-2013 fell by 26.6 m people or by 2.7 times (from 42.3 to 15.7m persons), and the poverty level fell by about 18 p.p. (from 29.1% to 11%).<sup>1</sup>
- Insignificance of the allowance in the income of the families with children led to a reduction of calls for allowances;
  - Allowance's amount grew very slowly: even in the end of 2013 there were regions where basic amount of the allowance does not exceed Rb 100 per month per child (Nizhniy Novgorod oblast, Republic of Altai, Kabardino-Balkar Republic). Only in the single RF region, Moscow oblast, the minimum basic allowance exceeded by the end of 2013 RB 1,000 per month per child;<sup>2</sup>
  - Over 2000–2013 the number of those who received allowance went down from 13.8m to 5.3m, the number of children targeted by allowance went down from 19.2m to 8.4m, the share of children targeted by allowance in a corresponding age category went down from 68.8% to 30.8%.

*Table 9*

<sup>1</sup> Data Released by *Rosstat*.

<sup>2</sup> It should be noted that in several regions the amount of the basic allowance depends on the children's age and the number of children in a family and in some cases can even exceed Rb 1,000.

### Number of recipients of monthly child allowance, 2007–2013

	2007	2008	2009	2010	2011	2012	2013
Number of allowance recipients, thousand persons	8,040	7,445	7,285	6,750	6,440	5,761	5,303
Number of children under 16 targeted by allowance, thousand persons	11,312	10,623	10,524	9,943	9,675	8,886	8,423
Share of children under 16 targeted by allowance in the overall number of children (from 0 to 16), %	44.8	43.0	42.8	40.4	38.7	34.9	30.8 <sup>1</sup>

*Source:* Data released by Rosstat on the basis of the data released by the RF Ministry of Labour

Other types of assistance to low-income people is categorical aid the recipients of which can be both families and single citizens who receive average per capita income below the subsistence level. Provision, size, and types of categorical aid are determined by the subjects of the Russian Federation. They also finance these expenditures. Main forms of such payments can be monthly and quarterly allowance set for small periods (from 2 to 6 months) and lump sum assistance in dire straits (different regions set different criteria for determining dire straits). Data shows that the most widespread, it was received by 4m people, form of this assistance is regular money transfer to low income people. The size of it in 2013 constituted Rb 779 on average (less than 10% of the subsistence level on average per person per month).

*Table 10*

### Provision of Social Assistance within Regional and Municipal Programs in 2013

Categories of citizens	Citizens eligible for social welfare, persons	Citizens regularly receiving money payment, persons	Average size of regular money payment (less social services), Rb per month per a recipient	Number of citizens who received a subsidy, persons	Average size of a subsidy, Rb per a recipient
Citizens in difficult economic situation	686,931	316	742	634,915	15,766
Low-income citizens	3,996,804	1,880,286	779 <sup>2</sup>	1,264,316	3,023 <sup>3</sup>
Of which receiving social assistance on the basis of social contract	181,952	75,412	498	97,312	11,133
Low-income persons	107,424	84,105	1,314	2,160	1,542

*Source:* Rosstat.

According the RF Ministry of Economic Development, the poverty level will go up to 12.4% of the total population in 2015. J.P. Morgan experts note that household consumption in 2015 will fall by 5.8%. Plan of principal measures designed to ensure sustainable economic development and social stability in 2015 includes measures aimed at reducing tension on the labour market, to support pensioners (indexing of non-contributory pensions to the consumer price index growth in 2014) and families eligible for multiple-child allowance (allowance in the amount of Rb 20,000). There are also measures in the sphere of healthcare and medicine procurement. The size of assistance by way of multiple-child allowance constitutes less than 10% of the subsistence level for two child family. Regions are unlikely to increase assistance to the poor families. Moreover, those families with children who have already received multiple-child allowance and those who have one child are not illegible for social assistance measures. Indexing of non-contributory pensions and introduction of stabilizing measures on medicine prices and compensation of expenses due to a fluctuation of the exchange rate at

<sup>1</sup> Data released by Rosstat on children under 16.

<sup>2</sup> Per a member of low-income family.

<sup>3</sup> Per a member of low-income family.



purchasing imported medicine most likely will be insufficient as an assistance for pensioners to purchase medicine, especially those pensioners who do not receive state social benefits and are not treated in hospitals.

#### 5.1.4. Socio economic features and important political values of the middle class in the Russian Federation

In order to obtain the size of the middle class in the Russian Federation, its socio economic and political values both Western and Russian methodologies were applied<sup>1</sup>.

Analysis of foreign and Russian sources dedicated to the estimation of the size of the middle class demonstrated that for the interstate comparison of scale and dynamics of the middle class single criterion analysis is used. They are based on the criteria of income or self-identification of population. At the same time, multiple-criteria analysis is used for the evaluation of main socio economic and political values of the middle class.

Variance of the size of the middle class estimated by single criterion analysis constitutes from 7.3 to 70.1% of the total adult population of the Russian Federation depending on criterion applied. The highest estimation was received on the self-identification criterion and it is comparable with the size of the middle class obtained on the basis of similar analysis in a number of developed countries.

Multi-criteria analysis in the evaluation of the middle class comprises such criteria, as:

- Income and assets level which is a complex criterion and comprises four properties:
  - Average monthly income per family member at the level no less that median income in a given region;
  - Number of durable goods at the median level of durable goods for a given region;
  - Car (not older than five years) ownership of domestic or foreign make;
  - Property ownership bringing significant income.
- Social and occupational status of an individual:
  - Type of work, first of all, its non-manual character;
  - education (middle class educational criterion is the one starting from vocational secondary education and above).
- Self-identification – individual's evaluation of his/her position in society along a scale of ten (estimates from 4 to 6 define a person as a member of the middle class).

The size of the middle class in Russia one can estimate by applying multi-criteria analysis at the level of 14.3-27.9% depending on the applied educational criteria.

Analysis of the socio economic features and political values of the RF middle class demonstrated that:

- In economic sphere:
  - According to the two thirds of the middle class the price rise on the housing and communal services and food products was significant;
  - Members of the middle class more than total population on average are interested in drawing an officially declared salary;
  - Significant share of the middle class savings is kept in rubles on ruble bank accounts.

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<sup>1</sup> Estimates were obtained after processing micro data of the RF representative survey done by 'Evrobarometr' in 2012. The survey is carried out by the Russian Presidential Academy of National Economy and Public Administration and allows to estimate the size of the middle class and describe its features and values including prior unanalyzed. See in detail: <http://www.ranepa.ru/about-the-academy/consulting-services/evrobarometr.html>.

- In political sphere:
  - According to the middle class, striking relations with the West European countries, the USA and the CIS countries Russia should stick to the policy of developing:
    - 11.3% of the middle class favour priority relations with Western Europe and the USA;
    - 26.2% of the middle class are more for good relations with Western Europe and the USA with good relations with the countries of near abroad;
    - 19.6% of the middle class are for priority relations with the countries of the former USSR;
    - 31.2% of the middle class favour relations with the countries of the former USSR and good relations with Western Europe and the USA;<sup>1</sup>
    - over two fifth of the middle class consider foreign organizations and foundation interfering in Russia's political affairs and negatively affect the Russian economy; less than one third of the respondents think that foreign organizations and foundations bring assistance to our country.
- Information technologies:
  - The middle class by far more actively uses state of the art information technologies compared to the population lower than the middle class.

## 5.2. Migration Processes

### 5.2.1. The Effect of Migration on the Number of the Country's Population

For 10 months of 2014, Russia's migration growth<sup>2</sup> in the long-term migration<sup>3</sup> amounted to 227,300 people,<sup>4</sup> having decreased by 10 p.p. as compared to the same period of 2014. The decrease took place primarily due to departures from Russia. In 2013, the "contribution" of Crimea into Russia's migration growth amounted to about 7,000 people;<sup>5</sup> it is to be noted that the exchange with Ukraine accounts for 40% of that growth. However, displaced persons from Ukraine who seek refuge in Russia were not included so far in that statistics.<sup>6</sup>

As in the previous years, at least 90% of migration growth in Russia was ensured by means of migration relations with CIS countries. In 2014, the exchange with those countries fell by about 10 p.p., too, however, that decrease should not be unambiguously attributed to the impact of the economic crisis and changes in the international situation. Such surges (both leaps

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<sup>1</sup> 11.5% of the middle class were undecided.

<sup>2</sup> Together with Crimea.

<sup>3</sup> A long-term migration (resettlement) is an international or internal migration for a long period of time (over 1 year) and is accompanied by a change in the permanent place of residence. See: <http://www.fms.gov.ru/documentation/865/details/49505/2/>

<sup>4</sup> From 2011, with a change in the procedure for accounting of the long-term migration the number of migrants includes persons registered at the place of temporary residence for the period of 9 months or more. For more detail, see: L. Karachurina. Migration Policy and Migration Processes // Russian Economy in 2013. Trends and Prospects. (Issue 35) – M.: The Gaidar Institute, 2014. Chapter 5.2. pp. 333–349.

<sup>5</sup> Calculated on the basis of comparison of the data for January-October 2013 with Crimea (The Social and Economic Situation of Russia-2014. Rosstat, 2014) and without Crimea (The Social and Economic Situation of Russia-2013. Rosstat, 2013).

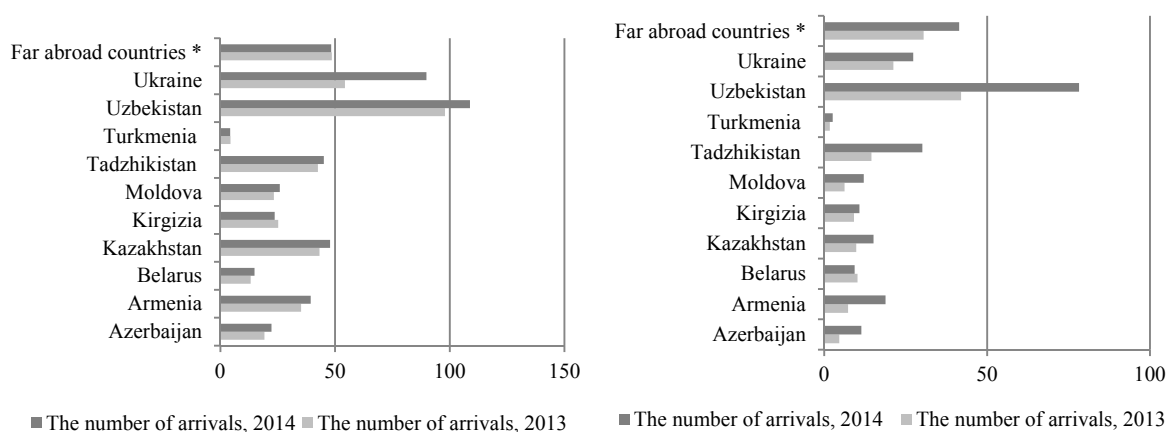
<sup>6</sup> Probably, the Rosstat will add them in calculation of the number of the population in 2014.

and ebbs) were observed earlier, as well. The “lag” between the reaction of migrants who intend to move to another country for permanent residence and current political and economic developments in the recipient country is normally rather high (it is smaller if the migration from the country of origin takes place for reasons which force people to leave). In addition to the above, those migrants who came in 2013 could be included the statistics of the long-term migration in 2014.

Though the Ukrainian crisis had an effect on growth in migration from that country (*Fig. 1*), it affected not only the parameters of the long-term migration, but also other migration institutions: issuing of residence permits and execution of patents and work permits. Apart from Ukraine, growth in arrivals from Uzbekistan and Kazakhstan was observed, too.

However, due to growth in departures from Russia over most directions, migration growth increased only in the exchange with Ukraine (1.9 times over) and Belarus (the same value) and fell dramatically with the major migration donors of the past few years, that is, Middle Asian republics, primarily, Uzbekistan (1.8 times over). It is to be noted that generally growth in the number of departures is related to changes (from 2011) in the procedure for accounting of the long-term migration under which persons registered at the place of stay for the period of 9 months or more were included in the number of migrants. As a result, at present, the number of departures includes migrants whose period of stay (on the basis of the expiry of registration in the form of statistical accounting of arrivals) was over.

In 2015, there is a situation which can figuratively be called a “collapsed financial pyramid scheme”: a decrease in migration growth registered by the Rosstat is largely related to considerable growth in departures which in its turn took place due to the earlier accumulated number of arrivals for the period of less than 3 years, that is, over 30 p.p. in the 2011–2013 period (*Table 11*). The number of persons registered at the place of residence which can be used as a comparable category as regards the former registration procedure rose by 11.1 p.p. and 6.2 p.p. as compared to 2010 and 2011, respectively.



\*FA – far abroad countries, including Georgia and the Baltic states.

Source: The Social and Economic Situation in Russia in January-October 2014. Rosstat, 2014.

*Fig. 1. Russia’s migration relations with CIS countries and far abroad countries in January-April 2013 and 2014, thousand persons*

Table 11

**Distribution of the number of arrivals by the type and period of registration,  
2010–2013, thousand persons**

	2010	2011	2012	2013
Registered at the place of residence	2102.3	2198.4	2367.5	2333.9
Those who arrived to the place of stay	n/a	1205.9	1400.2	1582.7
Including those for the period:				
From 9 months to 1 year	–	215.9	283.5	347.4
1 year	–	387.9	403.8	450.5
2 years	–	209.7	246.9	262.3
3 years	–	192.3	224.2	236.5
4 years	–	83.3	97.2	111.3
5 years and more	–	116.8	144.6	174.7

*Source:* The Number and Migration of the Population in the Russian Federation in 2010, 2011, 2012 and 2013. The Rosstat, 2011, 2012, 2013 and 2014

In individual parts of the country, that process produced paradoxical results in terms of common sense. In particular, more than a double reduction of the net migration as compared to the previous year was registered in Moscow, St. Petersburg, the Nizhny Novgorod Region, the Khanty-Mansisk Autonomous Region and Yugra, while a 40% reduction, in the Krasnodar Territory, the Tyumen Region and the Novosibirsk Region. For the first time in the post-Soviet period, Moscow's migration growth became equal to that of St. Petersburg. It is to be noted that out of 20 most powerful regions in terms of the migration inflow, in 2014 growth in departures was observed in 18 regions as compared to 2013.

### 5.2.2. Legislative Innovations

In 2014, the Russian legislation on migration was supplemented with a few new documents, as well as amendments to the existing ones which were aimed at resolving the situation with refugees from Ukraine, toughening of the procedure for deportation and arrival of migrants who violated the rules of stay and employment in Russia, applying of patents to foreign labor migrants working with legal entities and other.

1. Abolition of quotas on migrant workers was a principal change which was approved in 2014 and became effective from 1 January 2015. In its present form, the practice of setting of quotas existed from 2007 and was one of the most criticized aspects of the migration reform of the same year. It lacked flexibility and transparency and was unable to carry out both the function of on-line regulation of the number of migrants on the Russian labor market and that of protection of the labor market itself; it is to be noted that it was characterized by high potential corruptogenicity at different levels<sup>1</sup>.

In accordance with amendments to the Federal Law on the Legal Status of Foreign Nationals in the Russian Federation,<sup>2</sup> from 2015 migrants (working both with individuals and legal entities and individual entrepreneurs) will be obligated to buy a permit patent with a period of validity from one month to a year<sup>3</sup> for a fee of Rb 1,568.4 a month or at a surcharge regional

<sup>1</sup> For more detail, see: L. Karachurina. Migration Processes //The Russian Economy in 2007: Trends and Prospects. M.: The IEP, 2008. Section 4.2. pp. 379–394; L.B. Karachurina. Migration Processes //The Russian Economy in 2008. Trends and Prospects. (Issue 30) – M.: The IEP, 2009. Section 4.2. pp. 342–359.

<sup>2</sup> Federal Law No.357-FZ of 24 November 2014 on Amendment of the Federal Law on the Legal Status of Foreign nationals in the Russian Federation and Individual Statutory Acts of the Russian Federation.

<sup>3</sup> Before 2015, the maximum period of validity of the patent for employment with individuals amounted to 3 years.

rate set by the Federal Law<sup>1</sup>. So, the minimum annual price of a patent amounts to Rb 18,820.8 a year. The patent will be in effect strictly in the region where it was executed<sup>2</sup>. In a year, the patent can be extended for another year by way of provision of the same package of documents and the agreement with the employer. Upon the expiry of the second permit, a foreign national has to leave Russia. In order to buy a patent, foreign migrant workers from CIS countries have to specify in the migration card that the purpose of their stay in Russia is work, receive the individual taxpayer number, have their fingerprints made, buy the voluntary medical insurance policy,<sup>3</sup> provide certificates on a medical check-up from psychoneurologic and narcological dispensaries, a medical document certifying the fact that the person is not HIV infected and a certificate on the results of the exams on the Russian language, the main principles of the Russian legislation and Russian history.

Examinational tests are divided by the levels of complexity: with a smaller number of correct answers for migrants buying a patent and with higher requirements for applicants who seek a residence permit or a temporary residence permit. A comprehensive exam on history, law and the Russian language will cost a migrant Rb 4,500. It is to be noted that the certificate which is issued to a migrant after he/ she has successfully passed the exams will be valid for 5 years; upon the expiry of that period it is to be secured again. Exams can be avoided only by partially incapacitated persons, disabled persons, teen-agers under 18, men over 65 years old, women over 60 years old, participants in state programs on resettlement of compatriots, high-skilled experts and full-time students. Migrant workers had to pass an exam on the Russian language as early as 2014, however, that requirement was mandatory only for those who were employed in housing and public utilities and public amenities sectors<sup>4</sup>. Generally, “burdening” of a patent acquisition with such a large number of additional documents may create a corruptogenic basis for the new mechanism, too, and turn it into an inflexible and semi-forbidding one. In addition to the above, as employers have to pay contribution for migrant workers to the Pension Fund and the Social Insurance Fund, the cost of a migrant worker for the employer will be higher if the latter is hired officially.

2. A significant amendment (which came into effect from 1 January 2015) to the migration legislation of the Russian Federation is introduction of the requirement that for nationals of the CIS states it is mandatory to have an external passport to enter Russia. An exception is made only for Ukrainian nationals.

3. Legislative acts between Russia and individual CIS states have been passed; the above acts are aimed at orienting the migration policy at the “country personification”. So, in April 2014 Federal Law No.43-FZ of 2 April 2014 on Ratification of the Protocol on Amendment of the Agreement between the Governments of Tajikistan and Russia on Labor Activities and Protection of the Rights of Nationals of the Republic of Tajikistan in the Russian Federation was signed. Under the above law, nationals of Tajikistan are entitled now to receive a work

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<sup>1</sup> For example, in Moscow and the Moscow Region it amounted to Rb 4000, while in the Yamal-Nenets Autonomous Region and the Orel Region to Rb 6629 and Rb 2,038.92, respectively.

<sup>2</sup> In case of moving to another constituent entity of the Russian Federation, all the bureaucratic formalities are to be carried out again.

<sup>3</sup> As applied to Moscow, its cost is estimated by the city hall at Rb 5,500 // A. Voronov. Migrants Became Legal through a Cash Office // Kommersant daily, 27.11. 2014.

<sup>4</sup> According to the data of the Federal Migration Service of Russia, in 2014 38,300 foreign nationals who provided documents certifying their command of Russian were granted a work permit, including 22,000 foreign nationals who were granted a certificate.

permit in Russia for the term of 3 years. In addition to the above, with Armenia (from January) and Kirgizia (from May) joining the Eurasian Union in 2015 – migrant workers from the above two countries will be granted the right to work officially without any permit documents (the same right is now granted to migrant workers from Belarus and Kazakhstan), the number of CIS countries in respect of which the Russian migration legislation is applied to without any limitations and exceptions has shrunk to Uzbekistan, Moldova and Azerbaijan.

4. The migration policy as regards expulsion and deportation of foreign migrants who violated the rules of stay and employment in Russia was toughened further<sup>1</sup>. The draft law under which migrants who violated the period of their stay may be prohibited from entering the territory of the Russian Federation for the period of up to 10 years was approved by the State Duma in October 2014 and became effective from 10 January 2015. According to the data of the Federal Migration Service (FMS) of the Russian Federation, late in 2014 in the territory of Russia there were over 734,000 foreign nationals with a 270–360 day violation of the period of their stay who were subject to a five-year ban on entry to Russia and 1.28m people with over 360 day violation of their stay (a 10 year ban on entry to Russia is envisaged for such violators).<sup>2</sup>

5. The list of foreign nationals and stateless persons who have the right to receive the Russian citizenship in accordance with a simplified procedure (that is without the condition of the period of residence to be complied with)<sup>3</sup> was expanded. According to Federal Law No. 157-FZ, they include:

- individual entrepreneurs who carry out their activities in Russia for at least 3 years and whose annual revenues amount to at least Rb 10m;
- skilled workers (in accordance with the list of trades, lines of profession and job positions) working in the country for at least 3 years;
- co-owners of a 10% interest in the charter capital of a Russian-based company with assets of at least Rb 100m and payment of at least Rb 6m a year to the budget system of the Russian Federation during the past 3 years (that is a company which is something between the small and mid-sized business), that is, a so-called “investment citizenship” (on the model of some European countries). It is to be noted that in the subsequent Resolution of the Government of the Russian Federation<sup>4</sup> it is specified that simplification of the procedure is not applied to foreign nationals who engage in the most common lines of activities: wholesale and retail trade, hotel, restaurant and advertizing business, real-estate operations, legal advice, accounting, HR recruitment and other;
- foreign students who starting from 1 July 2002 received Russian vocational training and by the time of application for the Russian citizenship worked for at least 3 years in Rus-

<sup>1</sup> Relevant federal laws were passed in 2013.

<sup>2</sup> V. Seregin and M.Solopov. Flight of Migrants: in January Their Inflow Fell By 70% //RBK, 9.01.2015. [http://top.rbc.ru/own\\_business/09/01/2015/549b0d579a79472285e29848](http://top.rbc.ru/own_business/09/01/2015/549b0d579a79472285e29848)

<sup>3</sup> Federal Law No. 157-FZ of 23 June 2014 on Amendment of the Federal law on the Citizenship of the Russian Federation.

<sup>4</sup> Resolution No.994 of 30 September 2014 on Determination of the Types of Economic Activities where a Foreign national or a Stateless Person Who are Individual Entrepreneurs, as well as a Foreign National or Stateless Person Who are Investors are Granted the Right to Apply for the Citizenship of the Russian Federation in Accordance with a Simplified Procedure.

sia.<sup>1</sup> Earlier, they could become nationals of Russia in accordance with a simplified procedure only if they were nationals of the former Soviet republics. Also, the issue of granting of the Russian citizenship in accordance with a simplified procedure to foreign nationals who buy real property of a certain value (at least 10% of the share –from \$300,000 – in a condominium<sup>2</sup>) was discussed, but did not receive further development; such a measure is used in a number of European countries.

6. An individual legislative initiative dealt with the internal migration. It is related to development both of the Concept of State Migration Policy in the Russian Federation till 2025 and the idea put forward by the President of the Russian Federation in his Address to the Federal Assembly in December 2013 to establish territories of advanced development (TAD). In 2014, the Government of the Russian Federation submitted to the State Duma a draft law on establishment of TAD in the Far East,<sup>3</sup> in which an effort was made to specify managerial measures aimed at promotion of economic development of those territories. It seems that by analogy with establishment of free economic zones the draft law provides for making the migration regime simpler for those territories (in particular, employers will be able to use foreign workforce without permission of the Federal Migration Service and any quotas<sup>4</sup>). However, the main idea is primarily related to the need to retain Russia's own population, mainly the youth, by means of creation of highly efficient jobs and conditions for self-realization, rather than attract the external labor migration. TADs are to emerge in the Far East in 2015.

### 5.2.3. Forced Migration

In 2014, another aspect of legislative transformations in the sphere of migration was related to developments in Ukraine. One of the first documents after the beginning of those developments was the law on making simpler the procedure for granting citizenship to foreigners who are carriers of the Russian language.<sup>5</sup> According to the above law, the procedure for receipt of the citizenship, entry to the territory of Russia and receipt of the residence permit is made simpler and the period of consideration of applications for the Russian citizenship is reduced from 6 months to 3 months. Foreign nationals and stateless persons can be recognized by a specially established commission as carriers of the Russian language if they use it on a daily basis “in family, household and cultural spheres provided that those persons or their relatives by a direct line ascending live or used to live on a permanent basis in the territory of the Russian Federation or the territories of the Russian empire or the USSR within the limits of the state border of the Russian Federation.”<sup>6</sup> In order to prevent the abuse, a residence

<sup>1</sup> According to the data of the Rosstat, the number of students from CIS countries who took training only in higher vocational education programs at educational establishments in Russia amounted to 133,800 persons as of the beginning of the 2013–2014 academic year. (Russia and CIS countries-2013. The Rosstat, 2014).

<sup>2</sup> G. Tumanov and D. Butrin. What Does Russia Make Profit From // *Kommersant* 12.02.2014.

<sup>3</sup> Federal Law on Territories of Advanced Social and Economic Development and Other Measures of State Support of Regions of the Far East.

<sup>4</sup> It is to be noted that the draft law was introduced in May 2014, that is, prior to amendment of the Federal Law on the Legal Status of Foreign Nationals in the Russian Federation as regards cancellation of quotas. A similar approach was used in preparation to APEC summit in Vladivostok in 2012.

<sup>5</sup> Federal Law No.71-FZ of 20.04.2014 on Amendment of the Federal Law on Citizenship of the Russian Federation and Individual Statutory Acts of the Russian Federation.

<sup>6</sup> See *ibid.*

permit will be canceled if the person who has been granted it fails to apply for the Russian citizenship within two years.

In addition to the above, a condition for the Russian citizenship to be granted is renunciation from the other nationality. According to a number of experts, the above limitation may inhibit those nationals from CIS states who were thinking about getting the Russian citizenship.<sup>1</sup> According to the data of the FMS of the Russian Federation, in 2014 157,800 persons received the Russian citizenship (that is 16 p.p. more than in 2013). Due to developments in Ukraine, much higher growth could have been expected. However, most people who arrive from Ukraine do not seek to receive either the Russian citizenship or a humanitarian status of a refugee in the Russian Federation which impose among other things obligations on them; what matters to them most is an opportunity to have a job in Russia. For Russia, those transformations may be advantageous by virtue of the ethnic and language affinity.

Prior to adoption of a number of decrees as regards displaced persons from Ukraine, those people had a few options to legalize their status. According to Federal Law No.4528 of 19.02.1993 on Refugees, there are two options to secure the status of a refugee (the procedure for receiving it is highly complicated) and that of a person who has a temporary asylum. It is to be noted that the status of a refugee provides certain social guarantees, while that of a temporary asylum only permits a person to work and stay in Russia legally and work without securing special permit documents required from foreigners. Prior to the beginning of 2014 (that is before the developments in Ukraine), the status of a refugee in Russia was granted to less than 1,000 persons, while that of a temporary asylum, to about 3,000 persons. In securing of the status of a refugee or that of a temporary asylum, the obligations imposed, that is, infeasibility to cross the border for a return or temporary return home and other contributed to the fact that after stepping up of hostilities Ukrainian nationals started to apply more actively to offices of the Federal Migration Service of the Russian Federation for other types of the status, primarily, a temporary residence permit, residence permit or Russian citizenship (without taking into account those who receive work permit or a patent).

According to the data of the FMS of the Russian Federation, the pattern of those who applied for various sorts of the status (from April 2014 till January 2015) is as follows: 5,800 nationals of Ukraine sought the status of a refugee, other 277,300 persons applied for the temporary asylum status and 323,500 persons claimed other forms of legalization: 153,700 applied for a temporary residence permit, 63,500 applied for the Russian citizenship and 32,100 for a residence permit. It is to be noted that other 74,200 persons wanted to be participants (together with their family members) in the compatriot resettlement program.<sup>2</sup>

From the end of July 2014, the procedures for securing by Ukrainian nationals of the temporary asylum status have been simplified<sup>3</sup> (the period of consideration of applications for a temporary asylum was reduced from 3 months to 3 days; a temporary asylum is at present granted on the basis of the country principle without examination of the applicant's individual

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<sup>1</sup> I. Nagornykh and Z. Kuzmina. The Government Submitted to the State Duma a Draft Law on Citizenship // Kommersant, 13.03.2014.

<sup>2</sup> The FMS of the Russian Federation [http://www.fms.gov.ru/about/statistics/info\\_o\\_situatsii\\_v\\_otnoshenii\\_grazhdan\\_ukrainy/](http://www.fms.gov.ru/about/statistics/info_o_situatsii_v_otnoshenii_grazhdan_ukrainy/)

<sup>3</sup> Resolution No.690 of 22.07.2014 of the Government of the Russian Federation on Provision of Temporary Asylum to Ukrainian Nationals in the Territory of the Russian Federation in Accordance with the Simplified Procedure.



data<sup>1</sup>); for refugees the stay in the Russian Federation will be automatically extended up to 270 days – it is to be noted that before that Ukrainian nationals could stay in Russia without relevant documents maximum for 90 days. Furthermore, additional quotas for receipt of a temporary residence permit, as well as substantial financial and material resources for provision of necessary facilities to people were allocated.<sup>2</sup>

Regional distribution of displaced persons is an important issue. Migrants' requests often disagree with the guidelines of the state which actually imposed a ban on provision of a temporary asylum status in Crimea, Sevastopol, Moscow, the Moscow Region, St. Petersburg, the Rostov Region and Chechnya,<sup>3</sup> thus stimulating resettlement to less attractive regions of Russia and less attractive parts within those regions. It is a serious blow both at displaced persons who are forced to move to problem regional centers of depressed Russian regions and local authorities of those municipal entities which even in conditions of recent economic prosperity did not have sufficient financial resources for exit from the transformation crisis of the 1990s and still experience problems on the local labor market. Also, there is experience of the 1990s which showed that true forced migrants are those refugees who moved to big cities, got employment all alone (notionally – a “for work” model), relied mostly on themselves, rather than the state and eventually happened to be in a more advantageous position as compared to those who preferred a “more affordable housing” model (that is residence in rural areas and small towns) and/or trusteeship of the state.<sup>4</sup> At the same time, distribution of quotas on refugees by Russian regions shows that in a situation of labor shortages and demographic problems some regional leaders welcome a greater number of displaced persons than offered them by the federal authorities, that is, they give preference to the strategy (availability of sufficient workforce) over the tactics (difficulties related to the current admission of displaced persons). Those regions include the Kaluga Region, the Kaliningrad Region, the Nizhny Novgorod Region, the Samara Region, the Saratov Region, the Sverdlov Region, the Novosibirsk Region and Bashkortostan.

#### 5.2.4. External Labor Migration

According to the data of the central database of the FMS of the Russian Federation on accounting of foreign nationals and stateless persons (CDB AFN) who reside on a temporary or permanent basis in the Russian Federation - which data is received by way of registration of departures and arrivals of migrants to/from Russia - in 2014 there were 11.1m foreign nationals and stateless persons in Russia<sup>5</sup>. In accordance with its purpose, the CDB AFN registers

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<sup>1</sup> The status of refugees and forced migrants was granted in a similar way early in the 1990s.

<sup>2</sup> Funds allocated from the federal budget amounted to Rb 6bn which was 3 times over the amount allocated on the annual basis during the past few years on implementation of the *Compatriots* program // E. Domcheva and T. Panina House and the Hut // *The Rossiiskaya Gazeta*, 23.09.2014.

<sup>3</sup> Resolution No.691 of 22 .07.2014 of the Government of the Russian Federation on Approval of Distribution by Constituent Entities of the Russian Federation of Ukrainian Nationals and Stateless Persons who Live on a Permanent Basis in the Territory of Ukraine and Came Emergently on a Mass-Scale to the Russian Federation.

<sup>4</sup> For more detail on that, see: G.S. Vitkovskaya. *Forced Migration to Russia: Results of the Decade / Migration Situation in the CIS Countries and Baltic States*// Under the editorship of Zh.A. Zaionchkovskoy. M.: Kompleks-Progress, 1999. pp. 159–194.

<sup>5</sup> The official site of the FMS of the Russian Federation. <http://www.fms.gov.ru/about/statistics/data/details/9482/>

all the “external migrants” regardless of the period of their stay in Russia<sup>1</sup> and the purpose of their visit (work, tourism, medical treatment, business trips, visits to relatives and other). Proceeding from the above data and possible correlations between the purpose and the period of a stay, experts estimate the average annual number of labor migrants in Russia at 6m people.<sup>2</sup> The share of legalized labor migrants varied in the 2000–2010 period and at present according to the data of K. Romodanovsky, Head of the FMS of the Russian Federation amounts to 50%: 2.7m people is gainfully employed, while 2.9 m people work illegally according to the estimates of the Federal Migration Service”.<sup>3</sup>

The legalized component was made up of migrants working on the basis of the so-called “ordinary” work permits (within quotas and beyond the lists of skilled specialists of individual profession); a work permit for high-skilled workers (HSW) and skilled specialists and a patent for employment with individuals. In addition to the above, the official right to work in Russia without additional documents is granted to nationals of member-states of the Eurasian Union (in 2014 – Belarus and Kazakhstan), foreigners staying in Russia on the basis of the temporary residence permit (TRP)<sup>4</sup> or residence permit.

The dynamics of the number of the executed documents for legalization of the status of a labor migrant is shown in *Table 12*.<sup>5</sup> In 2014, the number of the issued work permits did not virtually change as compared to 2013. It is to be noted that substantial growth (over 2m) in the number of patents for employment with individuals was registered. Consequently, budget revenues from sale of patents more than doubled. Growth rates of the flow of skilled specialists and HSW decreased substantially: if in 2013 that category of migrants increased by nearly three times over against 2012, in 2014 it grew by less than 25%. It seems that due to serious limitations, that is, “work experience, skills or achievements in specific lines of activities”<sup>6</sup> and, most importantly, the size of a pay of those workers, it can be asserted that a certain “ceiling” of attraction of such migrants has been achieved.

The monthly data on the issued permit documents (*Fig. 2*) in the 2012–2014 period shows nearly identical pattern with two peaks: for work permits it is December and April-May. For purchasing of patents, the other peak is a more extended one and lasts till July. Due to a lack of special research, it can be suggested that an additional summer “shed” is formed by those migrants who come to do seasonal work with individuals, while the baseline inter-peak level is largely created by migrants who use a patent as a “cover-up” and work for legal entities, rather than households as it should be in accordance with the legislation which was in effect before 2014.

<sup>1</sup> On the basis of the data of K. Romodanovsky, Head of the FMS of Russia, one-third of foreigners who enter Russia do not stay more than 7 days // RIA Novosti, 02.02.2012.

<sup>2</sup> Such estimates are the outputs of assessment calculations shown in the following papers: O.S. Chudinovsky, M.B. Denisenko and N.B. Mkrtchyan. Temporary labor Migrants in Russia // Demoskop Weekly, 2013. № 579–580. <http://demoscope.ru/weekly/2013/0579/tema01.php>, as well as Yu.F. Florinskaya, N.B. Mkrtchyan, T.M. Maleva and M.K. Kirillova. Migration and Labor market. The Institute of Social Analysis and Forecasting. M.: Delo Publishing House, the RANEPА, 2015. (Scientific Papers: The Social Policy). pp. 58–59.

<sup>3</sup> M. Gritsyuk. Entering the New Year // The Rossiiskaya Gazeta, 28.12.2014.

<sup>4</sup> From 2013.

<sup>5</sup> It is to be noted that the statistics of the executed patents like any other migration statistics is rather complicated as it reflects the number of the executed patents which can be bought, for example, by one migrant several times during a year, rather than the number of persons working on the basis of a patent.

<sup>6</sup> Article 13.2 of the Federal law No.115-FZ of 25.07.2002 on the Legal Status of Foreign Nationals in the Russian Federation.

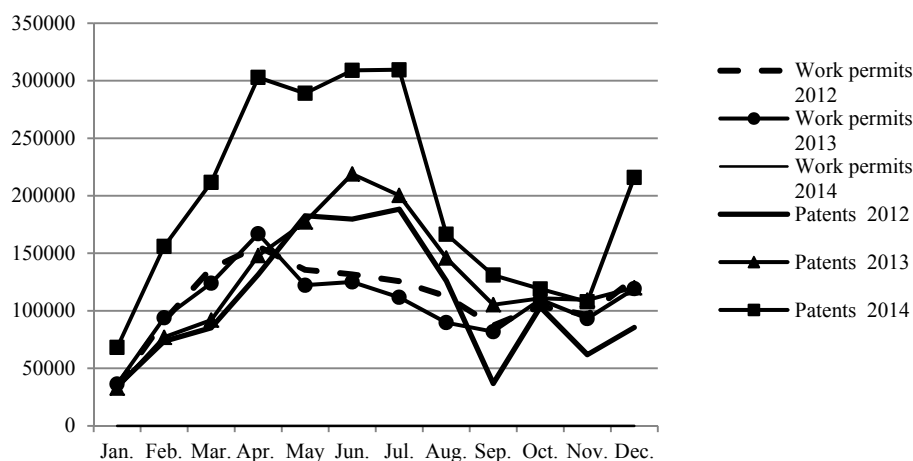
Table 12

**The number of documents executed to labor migrants in Russia  
and budget revenues from the sale of patents, 2011–2014**

	2011	2012	2013	2014
Issued work permits, units	1 195 169	1 340 056	1 273 984	1 303 258
Execution of patents, units	865 728	1 289 204	1 537 832	2 386 641
Budget revenues from sale of patents, thousand Rb	3 558 532.4	6 674 916.7	8 395 775.5	18 311 659.7
Execution of work permits for HSW and skilled specialists	54 861	55 848	156 655	194 925

Source: The FMS of the Russian Federation.

In surveying labor migrants by the Levada-Center for the NRU HSE (2011), it was found out that “over «3/5 of patent-holders neither worked with individuals, nor had any such work experience at all”<sup>1</sup> and, consequently, had no legal grounds for carrying out labor activities in Russia. On the contrary, those who work for individuals are not particularly interested at present in buying patents as they feel fairly secured working for households: according to the research carried out by the Migration Research Center (2013), only 20% of migrants who work as domestic servants has got a patent.<sup>2</sup> Substantial growth in the number of the sold patents which was observed in January-July 2014 as compared to the same period of 2014 and a virtually complete lack of growth in subsequent months could have marked an economic crisis, if not two-fold growth in December (as compared to November and December 2013). Such explosive growth is sooner a reaction to reports both on setting of a patent price differentiated by regions and substantial appreciation of that price from 1 January 2015. It is to be noted that a patent bought in December 2014 for the period of three months (the maximum period) on the basis of the previous price is valid till March 2015.



Source: The FMS of the Russian Federation.

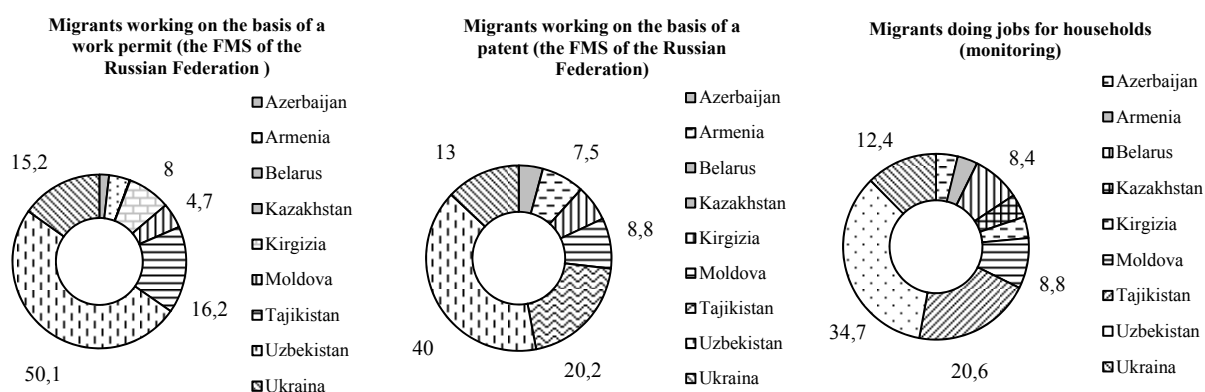
Fig. 2. Execution of work permits and purchasing of patents by foreign workers in Russia, January-December 2012-2014, units

<sup>1</sup> V.I. Mukomel. Transformation of Migration Flows: Rotational Migrations //Migration Law. 2012. No 3. pp. 28–32.

<sup>2</sup> L.B. Karachurina, D.V. Poletaev, Yu.F. Florinskaya, E.S. Vatlina. Household Employees in Russia and Kazakhstan: Assessment of the Situation of Household Employees on Labor Markets of Russia and Kazakhstan / under the editorship of Zh.A. Zaionchkovskaya. UN-Women. Almaty, 2014.

In 2014 (July, August and September), for the first time in Russia the federal statistics monitoring (sample survey)<sup>1</sup> of utilization of migrants' labor by households and individual entrepreneurs was carried out<sup>2</sup>. The outputs of the monitoring permit to assess the extent of the external and domestic labor migration, quantitative distribution of labor migrants by the type of jobs, countries of origin and other. It is to be noted that the data on labor migrants was collected regardless of the legal status of their stay in Russia.

According to the received data, in Q 3 2014 households employed 1,663,400 persons, including 1,340,300 foreign workers. It is 1m (or 1.8 times) more than the number of the executed patents (according to the data of the FMS of the Russian Federation). However, if discrepancies in the number of people working on the basis of a patent are great, the differences regarding countries of origin of workers are insignificant (*Fig. 3*). Migrants from Uzbekistan and Tajikistan account for over 60% of the sold patents<sup>3</sup> or over 55% according to the data of the monitoring. There are virtually no differences between the data on other key donor countries of labor migrants, that is, Ukraine and Moldova.



\* for those working on the basis of a work permit or patent – January-September 2014.  
Source: Russia and CIS countries 2014. The Rosstat, 2014.

\*\* For those working for households – Q3 2014.

Source: The federal statistics monitoring of utilization of migrants' labor by households and individual entrepreneurs – 2014. The Rosstat, 2015.

*Fig. 3.* Distribution of labor migrants by CIS countries which they are nationals of, %

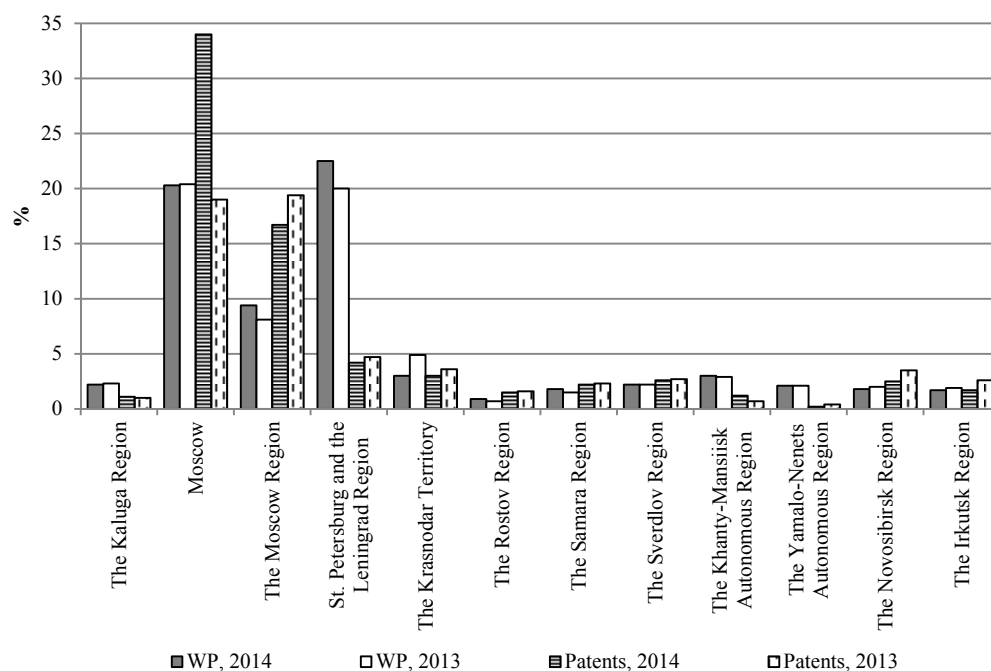
According to the regional data of the monitoring, Moscow and the Moscow Region prevail less than it can be seen from the data of the FMS of the Russian Federation: according to the data of the monitoring 40.6% of foreign workers employed by households worked in Moscow and the Moscow Region. According to the data of the FMS of Russia, 50.7% of foreigners who bought a patent worked in the Moscow Region. At the same time, according to the data of the monitoring (10.2%) the role of St. Petersburg and the Leningrad Region is much higher than that according to the data of the FMS of the Russian Federation (4.2%). In analyzing the regional distribution, the attention should be paid to the following few facts (*Fig. 4*):

<sup>1</sup> The survey was carried out by the Rosstat. [http://www.gks.ru/free\\_doc/new\\_site/imigr/index.html](http://www.gks.ru/free_doc/new_site/imigr/index.html)

<sup>2</sup> Within the frameworks of the sample survey carried out in all the constituent entities of the Russian Federation, over 90,000 households with people at the age of 15-72 were surveyed.

<sup>3</sup> On the basis of the data for January-September 2014 //Russia and CIS Countries 2014. The Rosstat, 2015.

- high concentration of migrants (those working both on the basis of a work permit and a patent) in the ten most attractive regions in 2013 became even higher in 2014, that is, 67% and 69% of those working on the basis of a work permit and a patent, respectively, while a year ago it amounted to 65% and 59%, respectively. Even in regions led by cities with a million-plus population the share of patent-holders rarely exceeds 2%. It appears that the above fact is evidence of narrowness of the labor market and low solvent demand in large cities;
- there are only a few cases of leaders’ discrepancies as regards the share of executed work permits and bought patents: Russia’s oil and gas producing regions (Khanty-Mansiisk Autonomous Region – Yugra and the Yamalo-Nenets Autonomous Region) and the Kaluga Region are among the leaders as regards the number of work permits, but the number of those who bought patents is much smaller there; quite the opposite situation is registered in the Rostov Region and, partially, in the Samara Region. It seems that in regions where the big industrial business is situated the importance of the unofficial sector is lower and the extent of actual documentation of migrants’ labor (not a formal one) is higher.

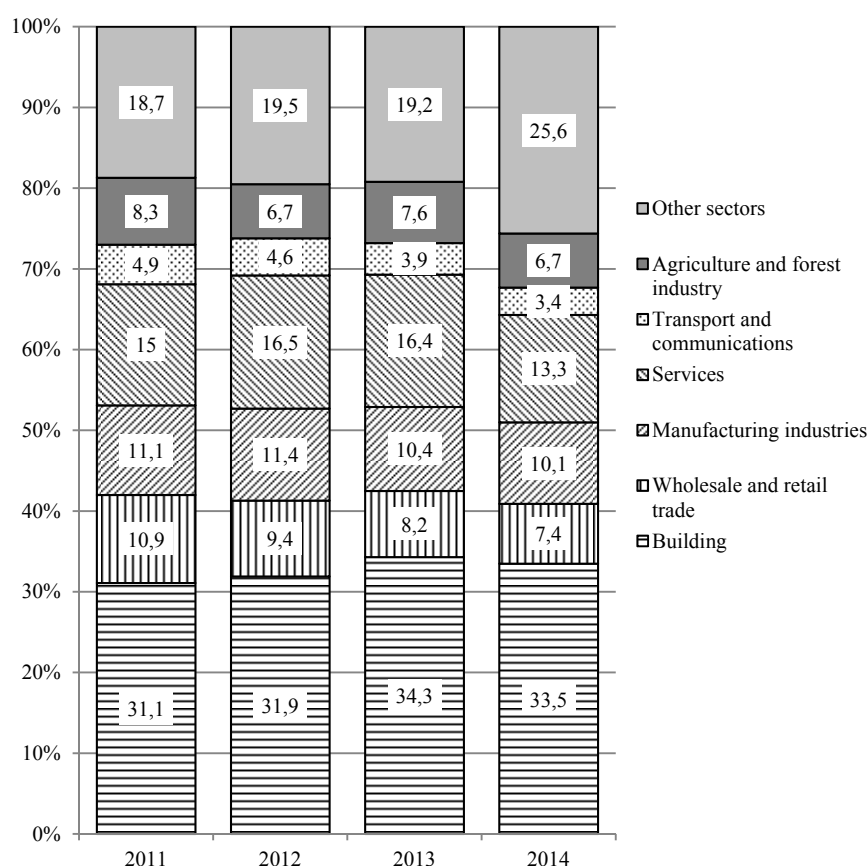


Source: The FMS of the Russian Federation.

*Fig. 4. Distribution of the number of the issued work permits (WP) by the region of Russia, % of the respective value of the Russian Federation as a whole, 2013–2014*

Sectorial distribution of visa-free workers in respect of whom employers fill in notifications on entering into labor or civil-law contracts (about 70% of the number of work permits in the past few years) shows a trend of gradual growth in differentiation of fields of application of migrant labor (*Fig. 5*). Employment in “other sectors” is growing, while in other in-

dustries changes are insignificant.<sup>1</sup> The share of those employed in the building industry fell slightly as compared to the previous year. One in three gainfully employed migrants from the CIS countries still works in the building industry. A lack of correlation between a decrease in the volume of jobs in the building industry which was registered throughout 2014 (at least by 5 p.p. on the basis of the January-October data) and the portfolio of orders in the industry<sup>2</sup> points probably to a significant share of those who are informally engaged in that industry.



Source: The FMS of the Russian Federation (the 1-RD statistical form).

Fig. 5. Sectorial pattern of employment of foreign visa-free workers in Russia (on the basis of notification on entering into labor or civil law contracts), 2011–2014, %

Sectorial limitations which were in effect in the 2007–2013 period were specific to a few industries (types of activities); it is to be noted that the shares of possible presence of foreign workers in them varied from year to year. The idea of regulation of the presence of foreigners in certain sectorial niches remained in 2014 and consolidated even further in plans for 2015. For example, in the 2008–2011 period the quota on utilization of foreign workers in retail

<sup>1</sup> Unfortunately, the set of industries listed in the 1-RD form of the FMS of the Russian Federation does not comply with the OKVED, nor permits to compare the sectorial pattern of employment of Russian workers and migrants.

<sup>2</sup> The social and economic situation of Russia in January-October 2014 // The Rosstat, 2014.

trade was zero, in the 2012–2013 period a 25% quota on workers in the field of alcohol sales, including beer was introduced, while in 2014 it was reduced to 15%.<sup>1</sup>

Setting of tough quotas in retail trade virtually results in a fight against the small business in that sector, as large retailers know well for long which “schemes” of hiring of workers are more effective for them, while small corner shops do not have such opportunities. In the 2013–2014 period, a zero quota was in effect on hiring of foreigners in retail trade in pharmaceuticals and retail trade at kiosks, markets and outside shops; also there was a 25% quota on hiring of foreigners for “other activities” in sport.<sup>2</sup> In 2015, the list of sectors in which the share of foreign workers is subject to regulation is expanding<sup>3</sup>: a 50% quota has been introduced on vegetable farming, a 15% quota on retail trade in tobacco and a 50% quota on activities in “other land transport”.<sup>4</sup> The above parameters, on the one side, are meant to create a situation where preference is given to local workers especially in a situation of the forthcoming economic crisis on the labor market and contribute to reduction of the rate of unemployment among Russian workers, particularly, graduates who lack work experience. On the other side, the new quotas are unlikely to have an effect on the labor market as they only preserve the existing situation there.

According to the data of the Central Bank of the Russian Federation on money transfers by individuals from the Russian Federation to other countries, in Q1-Q3 2014 the volume of money transfers to far abroad countries still exceeded by more than 100% the total volume of individuals’ money transfers to CIS countries. However, for the first time in the long period the volume of money transfers in each quarter of 2014 was lower than that in respective quarters of 2013. Starting from 2006, such a situation was observed for the second time in 2014 - the first time was in 2009 as compared to the previous year and was a marker of the crisis (*Fig. 6*). Simultaneously, the average amount of a transaction became the lowest one in the entire period of the monitoring. The factors behind that may be higher affordability for migrants of money transfers from Russia to CIS countries (reduction of the price of money transfers and saturation of the relevant infrastructure), lack of the need for migrants to cooperate with one another in order to make a money transfer, as well as a reduction for migrants of the difference between the amount of their wages and expenditures in Russia (on rent, food and transport) which increased due to the growth in the rate of inflation. Reduction of the volume of money transfers to countries which largely depend on migrants’ money transfers from Russia (primarily, the economies of Tajikistan, Moldova, Kirgizia and Uzbekistan) make governments of those countries look for other channels of support of their economies, primarily, by means of China.<sup>5</sup>

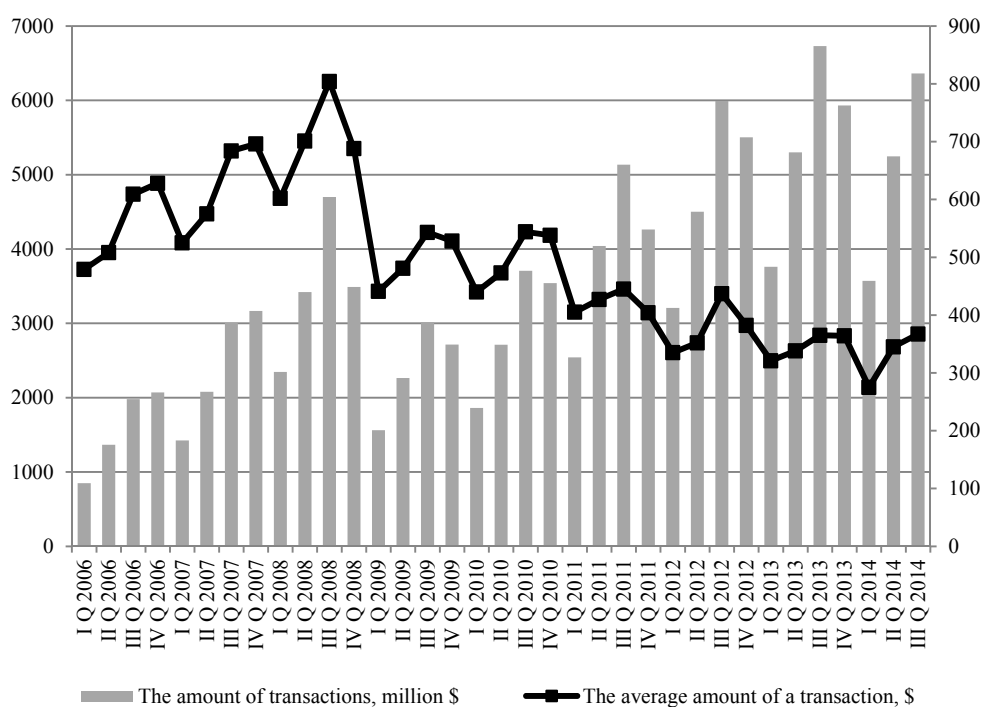
<sup>1</sup> Resolution No.1191 of the Government of the Russian Federation of 19.12.2013 on Setting in 2014 of the Admissible Share of Foreign Workers Used by Economic Entities in Retail Trade and Sport in the Territory of the Russian Federation.

<sup>2</sup> It includes activities on organization and carrying out of various sport events, as well as activities of independent sportsmen and athletes, judges, coaches, instructors and other.

<sup>3</sup> Resolution No.1420 of the Government of the Russian Federation of 19.12.2014 on Setting in 2014 of the Admissible Share of Foreign Workers Used by Economic Entities in Individual Types of Economic Activities in the Territory of the Russian Federation.

<sup>4</sup> However, the proposal on setting quotas on foreign workers in the building industry (50%) put forward by the Ministry of Labor was not supported by the Government / A. Manuilova. Migrants will be Allocated a Share to // *The Kommersant daily*, 3.12.2014.

<sup>5</sup> D. Farchi. The Flow of Money Transfers from Russia Has Exhausted, Tajikistan Sets Hopes on China // *Financial Times*. 23.10.2014. Published on the InoPressa.Ru.



Source: the data of the Central Bank of the Russian Federation  
[http://www.cbr.ru/statistics/print.aspx?file=CrossBorder/C-b\\_trans\\_13.htm&pid=svs&sid=TGO\\_fiz](http://www.cbr.ru/statistics/print.aspx?file=CrossBorder/C-b_trans_13.htm&pid=svs&sid=TGO_fiz)

Fig. 6. Funds transferred from Russia to CIS countries according to the data on trans-border transactions by individuals, Q1 2006 – Q3 2014

\* \* \*

So, a disturbing socio-political and economic situation has not affected greatly migration processes in Russia yet (at least, it is not unambiguously seen from that statistical data which is available for the analysis). Large-scale amendments to the legislation developed throughout 2014 will come into force only in 2015, so, they had no effect on the migration situation in 2014, either, which was generally in the stage of “suspense”.

### 5.3. The Higher Education in 2014: Inconsistency of Reform Measures

In 2014, organizational and economic restructuring of the vocational training system continued along the following main lines:

- restructuring of the system of higher educational establishments on the basis of the monitoring of their condition, identification of educational establishments with evidence of inefficiency and taking of the following three types of decisions in respect of those establishments: liquidation, affiliation with other educational establishment and putting them under control so that to eliminate shortcomings (violations) in their activities. It is to be noted that the following is considered as violations in activities of higher education establishments: enrollment of students with a low grade in the Unified State Exam (USE), lack



of academic and laboratory premises (license index), or low HR potential of the higher education establishment (license index). What is actually meant here is restructuring of the system of higher education establishments by means of administrative methods;

- partial modification of the procedure for and toughening of the control of the USE as a kind of a pass to higher education;
- gradual introduction of unified (single) norms of budget financing (the same set of norms is applied to all the educational establishments, but it is to be noted that the norms are differentiated by 9 groups of lines of training (lines of profession), levels of education and modes of training);
- control over prices on paid education services and prevention of cross-subsidy (however only on the part of budget subsidizing of fee-paying students, while on the part of fee-paying students such subsidizing is admissible);
- raising of wages of educational personnel of vocational education establishments (academic staff (AS) of higher education establishments and teachers and foremen of industrial training at secondary vocational training establishments (SVT)).

All the above reforms have been carried out for a few years. So, as a result of the monitoring of efficiency of higher education establishments - which monitoring has been carried out from 2012 - many nongovernment higher education establishments and branches of nongovernment higher education establishments, as well as branches of state higher education establishments were closed down. In addition to the above, mergers of higher education establishments took place. As a result, in the past few years the total number of higher education establishments has rapidly decreased (*Table 13*).

*Table 13*

**The number of Russian higher education establishment and the number of their students in 2000/01 – 2013/14 academic years**

Years	Number of educational establishments	Number of students, total, thousand people
2000/01	965	4,741.4
2005/06	1068	7,064.6
2006/07	1090	7,309.8
2007/08	1108	7,461.3
2008/09	1134	7,513.1
2009/10	1114	7,418.8
2010/11	1115	7,049.8
2011/12	1080	6,490.0
2012/13	1046	6,073.9
2013/14	969	5,646.7

Source: Rosstat, [http://www.gks.ru/free\\_doc/new\\_site/population/obraz/vp-obr1.htm](http://www.gks.ru/free_doc/new_site/population/obraz/vp-obr1.htm).

So, after growth in the number of higher education establishments till the 2010/11 academic year, their number started to decrease (before the introduction of the monitoring due to a decrease in the number of students). The highest number of higher education establishments and their students was registered in 2008 (1134 higher education establishments and 7.5m students). Since then, the total number of higher education establishments fell by 14.6%, while the total number of students, by 24.8%. As the rates of decrease in the number of students are higher than those in the number of higher education establishments, further restructuring of the system of higher education establishments is urgently needed.

According to the State Program of Development of Education in 2013–2020, by 2020 the number of state higher education establishments is to fall at least to 500 (at present their num-

ber amounts to 578, while in 2009 it was equal to 662). It does not mean that state higher education establishments were liquidated; the main measure in the public sector was affiliation of weaker higher education establishments with stronger ones. At the same time, there were often instances when the affiliated weaker institution was larger as regards the number of students than the institution it was affiliated with (an explicit example of that may be the affiliation of the Russian University of Trade and Economics with the G.V. Plekhanov Russian University of Economics). As a result, there is a risk that the integrated higher education establishment will be less efficient and, at the same time, too big to fail.

However, it is early to speak about the outputs of the current restructuring: its effect is not quite clear yet. The more so, such factors as introduction of new norms of funding, raising of wages to the academic staff and regulation of an education fee for fee-paying students (see below) will have a great impact in the short-term prospect on the efficiency of higher education establishments.

As regards toughening of control over the USE, the average grade has decreased on all those subjects on which the exam was held. The above situation was discussed earlier.<sup>1</sup> The same material includes the analysis of consequences related to modification of the procedure for passing of the USE, primarily, introduction of an essay as a pass to the USE. It appears that the above measure will not bring about any significant changes, but the public at large and the academic community will be satisfied as their requirement has been met.

At the same time, as regards the following three reform positions - raising of wages to the academic staff of higher education establishments, adoption of the scheme of per capita funding of higher education establishments and regulation of prices (cost) on paid education services on the basis of the norms – the situation is getting more and more controversial which factor has a negative effect on development of the entire system of higher education. For the above reason, the situation in question is discussed in detail.

The above inconsistency is more explicitly seen in comparison of budget funding of a study group of 25 students<sup>2</sup> on the basis of the approved per capita norms and the need in budget funds for remuneration of labor of the academic staff engaged in training of the study group.

In 2014, for lines of training (lines of profession) which do not require utilization of lab equipment the norm of per capita funding was set in the amount of Rb 63,370. It is perfectly clear that it is infeasible to train a student for the above sum of money. But according to calculations, the above sum is insufficient to organize a standard training of a study group of 25 persons, either. Prior to 2014, the guideline number of students per one lecturer amounted to 10:1. In 2014, the Ministry of Finance proposed to increase it to 12:1. In *Table 14*, a calculation of the need in budget funds per a study group carried out on the basis of the guideline value of 12 students per a lecturer is presented.

With expenditures on remuneration of the academic staff at 88.7% of the allocated volume of budget funds, a higher education establishment will not be able to develop properly, nor upgrade the quality of education services, that is, to meet the goal of the reforms.

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<sup>1</sup> T. Klyachko. USE-2014: The Main Outputs// Economic Development of Russia. 2014. No.8. pp. 36–37.

<sup>2</sup> 25 students is a guideline number of a study group.

**Calculation of the need in budget funds for remuneration  
of lecturers in training of a study group of 25 state-financed students  
by lines of training (lines of profession)  
which do not require utilization of a lab equipment  
(bachelor's and specialist's degree programs)**

Norm of per capita financing (NPCF) – <b>63370</b>
Group of 25 persons, the number of lecturers with a ratio of 1:12 is equal to 2.1 lecturers
The volume of budget funds allocated to that group a year: $63370 \cdot 25 = \text{Rb } 1,584,250$
According to the Rosstat's data, the average annual pay of the academic staff for 9 months of 2014 amounted to Rb 42822. (135.6% nationwide)
Consequently, the annual average pay of 2.1 lecturers with accruals amounts to: $42822 \cdot 2.1 \cdot 12 \cdot 1,302 = \text{Rb } 1,405,006.9$ or <b>88.7%</b> of the volume of the budget funds meant for that study group.

Source: calculated on the basis of the data of the Rosstat and the Ministry of Education and Science ([http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/wages/](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/wages/)) (<http://минобрнауки.рф/документы/3927>).

It means that in setting of norms of per capita funding higher education establishments of social science, economics and the humanities (as they do not need a lab equipment) will manage to survive if they succeed in attracting fee-paying students and charging a much higher education fee than the amount of the funds provided for by the norms. But it is feasible only if there is sufficient solvent demand on those lines of training in the region. However, for example, as regards training in mathematics which line is also financed on the basis of the norm which is equal to Rb 63370 as it does not require utilization of special equipment such demand is completely nonexistent (*Table 15*).

As seen from *Table 15*, in 2014 a more or less considerable enrollment of state-financed students by the lines of training (lines of profession) at that higher education establishment was only observed in the Fundamental Informatics and Information Technologies line of training (bachelor's degree program) and amounted to 15 persons out of 35 persons enrolled. It is to be noted that such a situation normally prevailed everywhere with Moscow and St. Petersburg being an exception to some extent.

As regards lines of training which require utilization of lab equipment, in 2014 the norm of per capita financing in the amount of Rb 67,060 was set. Naturally, it is believed that the difference between the two norms of per capita financing is justified by expenses on maintenance and service of the lab equipment, that is, for those purposes the amounts of Rb 3,690 and Rb 92,250 are to be spent per student or a study group of 25 students, respectively. But here is the same situation with remuneration of lecturers of the study group which remuneration is equal to 83.7% of budget funds allocated for the above group; it is to be noted that a financial maneuver is feasible only by means of reduction of costs related to maintenance and service of the lab equipment.<sup>1</sup>

<sup>1</sup> It is to be noted that there is no clear justification of expenditures related to maintenance and service of lab equipment. So, for example, at one higher education establishment there are 3 groups of students using the lab equipment (accordingly, expenses on maintenance and service of the equipment amount to Rb 276,750), while at another higher education establishment there 5 groups (the expenses will amount to Rb 461,250). Most probably, the former higher education establishment will lack funds on maintenance and service of that equipment, while the latter one has a surplus of funds; it is to be noted that the optimal number of groups utilizing that equipment for training is 4.

Table 15

**The number of state-financed and fee-paying students by some lines of training of first-year students of a state university (National Research University) in a large city in 2014**

National Research University in a large city – enrollment for the 2014/15 academic year					
Mode of training	Line of training (line of profession) by the Federal State Educational Standard	The number of applications submitted	The number of enrolled first-year students, persons		Qualification
			total	Including those with the expenses compensated	
Full time education	010100 - Math	0	0	0	Bachelor
Full time education	010100 - Math	21	20 (20)	0	Master
Full time education	010200 - Math and computer science	437	64 (60)	4	Bachelor
Full time education	010300 – Fundamental informatics and information technologies	370	35 (20)	15	Bachelor
Full time education	010300 - Fundamental informatics and information technologies	25	15 (15)	0	Master
Full time education	010400 – Applied mathematics and informatics	363	50 (15)	5	Bachelor
Full time education	010400 - Applied mathematics and informatics	26	21 (21)	0	Master
Full time education	010500 – Mathematical support and administration of information systems	307	13 (10)	3	Bachelor
Full time education	010800 – Mechanical Science and math modelling	317	25 (20)	5	Bachelor
Full time education	010800 - Mechanical Science and math modelling	11	10 (10)	0	Master

**Note:** enrollment of state-financed students is specified in brackets.

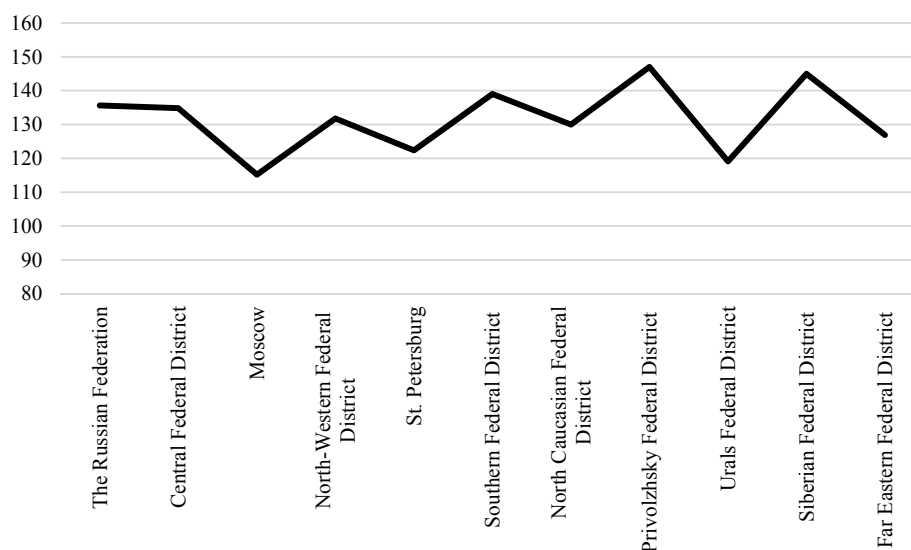
Source: www.edu.ru

In training of personnel by lines (lines of profession) which require utilization of complex lab equipment, the share of wages in the total volume of budget funds allocated on training of a study group of 25 persons will decrease to 80.7%, but still at a very high level. It will fall to 50.2% only as regards priority lines of training where the norm of per capita financing was set in the amount of Rb 112,000 a year in 2014.

So, it seems higher education establishments are motivated to reorient training of students to priority lines. Such a situation may have an effect to a certain extent on the pattern of training and result in enrollment of a higher number of students for training, for example, in certain engineering professions. But such a policy will become successful only in case those graduates succeed in getting a well-paid job. At present, they generally graduate by the above priority lines from higher education establishments of technology and seek a job not in accordance with their vocation, but at premium sectors of the Russian economy: the information and communication technologies sector, financial sector, oil and gas sector and some segments of the services sector, including business services. Due to the above, the index of employment of graduates which is used in monitoring of efficiency of activities of higher education establishments should be regarded only in general terms without being linked to a line of training (line of profession) of a student. It is to be noted that among graduates of prestigious western universities nearly 40% of graduates do not work within their profession, particularly,

those with a bachelor’s degree. It is related to the fact that the higher education at its first stage is becoming more and more a general higher education with some profile training components included.

With preservation of the introduced approach to per capita financing of higher education establishments in accordance with the norms, public higher education establishments of Moscow and St. Petersburg happen to be in a particularly complicated situation as the level of the average labor remuneration in the above cities is much higher than in most Russian regions (*Fig. 7*).



Source: The Rosstat. [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/wages/](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/wages/)

*Fig. 7.* The average pay of the academic staff as compared to the average one in the economy of federal regions, Moscow and St. Petersburg in Q3 2014, %

For 9 months 2014, in Moscow the average pay of the academic staff ( the data on the year 2014 was not available as of the date of preparation of the review) amounted to Rb 67,859 or 115.2% of the average one in the economy of the capital city (in St. Petersburg it amounted to Rb 47,845 or 122.4%, respectively). A rather low index is registered in the Urals Federal District which situation can be explained by the fact that in the Yamalo-Nenets Autonomous Region with an average pay of Rb 74514 in that region the average pay of the academic staff of higher education establishments amounted to Rb 73520 or 98.7% of the average level. It is to be noted that in the Sverdlov Region (the Urals Federal District) the average pay of the academic staff of higher education establishments amounted to 155.8% of the average pay in the economy of that constituent entity of the Russian Federation (Rb 45,200 against Rb 29,000). Similarly, in the Vladimir Region (the Central Federal District) the index of the ratio between the average pay of the academic staff of higher education establishments and the average pay in the region was equal to 173.8%; it is to be noted that in absolute terms the average pay of the academic staff of higher education establishments in the Vladimir Region was 1.8 times lower than in Moscow.

At the same time, proper functioning of many Moscow- and St. Petersburg-based higher education establishments of the humanities, economics and management -- which are not in-

cluded in the number of national research universities, but provide high quality of education services that are in demand with students -- is feasible only in case of dramatic expansion of paid education services and setting of a higher fee for education services as the shortage of funds for remuneration of the academic staff is getting more acute there. So, for Moscow the calculation which is similar to the nationwide one (*Table 14*) is presented on the basis of the *Economics* profession line (*Table 16*).

*Table 16*

**The deficit of budget financing of higher education establishments of social sciences, economics and the humanities in Moscow (*Economics* profession line) in 2014 with utilization of the approved model of per capita financing in accordance with the norm (per a study group)**

Norm of per capita financing (NPCF) – <b>63,370</b>
Group of 25 students, the number of lecturers with a ratio of 1:12 is equal to 2.1 lecturers
The volume of budget funds allocated to that group a year: $63370 \cdot 25 = \text{Rb } 1,584,250$
According to the Rosstat's data, in 2014 the average annual pay of the academic staff in Moscow amounted to Rb 67,859 (115.2% of the average pay in Moscow)
Consequently, the annual average pay of 2.1 lecturers with accruals amounts to: $67859 \cdot 2.1 \cdot 12 \cdot 1.302 = \text{Rb } 2,226,481$ or <b>88.7%</b> of the volume of budget funds meant for that study group
So, the deficit of budget funds per a study group at Moscow-based higher education establishments of economics and management amounts on average to Rb 642,231.

Let us consider what fee for education services at higher education establishments of social sciences, economics and/or the humanities in Moscow should be in order to cover at least the deficit of remuneration to the academic staff. Let us assume for the sake of simplicity that in a study group 50% of students are financed out of the state budget, while fee-paying students account for the remaining 50%.

On the basis of our assumptions, the volume of the allocated budget funds per a study group will amount to Rb 792,125 while the need in funds for labor remuneration of the academic staff within a year is equal to Rb 2,226,481. Consequently, the education fee of fee-paying students should cover at least the difference of Rb 1,434,356 or in calculation per one fee-paying student it should amount minimum to Rb 114,748.5, that is, exceed by more than 100% the norm set for the students whose education is financed out of the state budget.

If one proceeds from the fact that labor remuneration of the academic staff should not amount to over 50% of a higher education establishment's expenditures related to fulfillment of education activities,<sup>1</sup> the education fee of fee-paying students is to be increased on average to Rb 292,867 which exceeds 4.6 times over the norm. It is believed that even Moscow-based higher education establishments will be unable to charge such a high *average* fee for education services from all the fee-paying students who study by those lines (lines of profession) which do not require utilization of the lab equipment (training in Bachelor's or specialist's degree programs of economists, managers, lawyers, psychologists, mathematicians and other). In addition to the above, in preservation of the introduced model of per capita financing of higher education establishments for the middle class of Moscow and St. Petersburg – those people are particularly hit by the economic crisis – the extent of availability of quality higher education in social sciences, economics, humanities and other lines may decrease dramatical-

<sup>1</sup> According to the norms of the Soviet period, the fund of labor remuneration of the academic staff with accruals was not to exceed 40% of budgets funds allocated on education activities.

ly. It is to be noted that availability of a quality higher education for that particular social stratum is an important social value that ensures reproduction of that strata.

It is to be noted that as regards lines of training (lines of profession) which require utilization of lab equipment and particularly complex lab equipment the fee for education services at Moscow- and St. Petersburg-based higher education establishments of technology should amount to a higher value than at higher education establishments of social sciences, economics and the humanities of both the capital cities. It is related to the fact that at higher education establishments of technology the share of fee-paying students is normally much lower than at higher education establishments of social sciences, economics and the humanities.

At the same time, in Russia's state-subsidized regions the price (cost) of paid education services which is at the level of the lowest norms of budget financing is often too high for most people. The above results in a situation where by decision of their scientific councils higher education establishments reduce a fee for education services by providing numerous discounts to fee-paying students and, thus bypassing the established requirements. Higher education establishments in those regions take advantage of the fact that in the above regions the average amount of wages and salaries is lower than in Moscow and St. Petersburg, though in that case, too, the low value of the norms will eventually result in degradation of the material and technical base of higher education establishments (*Table 17*).

*Table 17*

**The share of labor remuneration in budget financing of public higher education establishments of social sciences, economics and the humanities in the Tambov Region, %**

Norm of per capita financing (NPCF) –Rb 63,370
Group of 25 persons, the number of lecturers with a ratio of 1:12 is equal to 2.1 lecturers
The volume of budget funds allocated to that group a year: Rb 63,370 * 25 = Rb 1,584,250.
In 2014, the average annual pay of the academic staff in the Tambov Region amounted to Rb 27,100. (136.4% of the Region's average pay)
Consequently, the annual average pay of 2.1 lecturers with accruals amounts to: Rb 27100 * 2.1 * 12 = Rb 889,162 or 56.1% of the volume of budget funds meant for that study group
So, in 2014 the share of labor remuneration in budget financing of a study group amounted to <b>56.1%</b>

In state-subsidized constituent entities of the Russian Federation with a low level of an average labor remuneration in the region, the fee for paid education at a higher education establishment may be set both as equal to the norm and that which is several times lower than that norm; it is to be noted that the main strategy of higher education establishments consists in economizing on the extent with simultaneous growth in the burden on the academic staff. So, in 2014 with reduction of the number of state-financed students at public higher education establishments to 1,731,800 people the number of lecturers who train them should have amounted with the ratio of 1:10 to 173,200 people, while with the ratio of 1:12, to 144,300 people, that is a decrease of nearly 17%.<sup>1</sup>

In principle, a decrease in the number of the academic staff takes place at universities of other countries; it is an important measure aimed at reduction of costs which have increased rapidly of late.<sup>2</sup> However, in other countries such a decrease in the number of the academic staff is accompanied by a transfer to new educational technologies, including on-line training,

<sup>1</sup> The calculation is made on the average basis and not on the basis of the number of people specified; in the latter case the reduction of the academic teaching staff would have been even higher.

<sup>2</sup> On that matter, see, for example: The Future of Universities. The Digital Degree. The Staid Higher-Education Business is about to Experience a Welcome Earthquake// The Economics. 2014. Jun 28<sup>th</sup>.

while in Russia there is no such transformation so far. It is to be noted that a transfer to new technologies of training requires substantial initial inputs for maintaining (supporting) the quality of education services on the same level, including development of university libraries on a principally new basis and only after that cost saving is possible.

As regards higher education establishments of technology, with the approved new model of guideline per capita financing the economic situation, as was stated above, is more complicated than at higher education establishments of social sciences, economics and the humanities as the share of labor remuneration in their budgets is a bit lower than that at higher education establishments of social sciences, economics and the humanities, while the unit weight of fee-paying students is much lower. So, they seek to attract as many state-financed students as possible in order to utilize budget financing completely even if the level of knowledge of applicants – judging by the grade of the USE – is not very high. In other words, those higher education establishments “fight” for budget funds: the higher the amount, the greater the financial maneuver a higher education establishment can ensure for itself.

As seen from the calculation shown in *Table 17*, further growth in labor remuneration of the academic staff is feasible either by means of a dramatic increase in the norm or by way of cutting of all other expenditures on education activities or attracting of the maximum number of fee-paying students (even with reduction of the fee for education services in some regions below the norm of per capita financing, which practice is officially forbidden). At present, due to the fact that the norm of per capita financing is set to higher education establishments from the outside they use a combination of the second and third options. Without development of the effective system of student loans which has nothing to do with that which existed until recently in the Russian Federation, for most students it will be feasible to achieve in the near future the cost of education services which exceeds the norm set for full-time students of higher education establishments only in donor regions, but even there due to worsening of the economic situation it will be quite a problem to ensure that. A small number of fee-paying students will largely concentrate in a limited number of prestigious higher education establishments, while in others it is going to be either reduced or concentrated at correspondence departments of higher education establishments as the per capita norm of financing and, consequently, the fee for education services are in that case much lower than in case of full-time education. So, with the per capita norm of financing set at Rb 63,370 (full-time education), the norm as regards the correspondence mode of education will amount to Rb 12,674 which situation permits a higher education establishment to set the fee for paid education services in the amount of, for example, from Rb 15,000 to Rb 30,000 and gain a tangible economic advantage with a simultaneous decrease in the quality of education. Unfortunately, as regards higher education establishments of technology, such a solution is possible primarily in non-profile lines of training.

So, low (financial) norms of budget financing motivate most higher education establishments to enroll a larger number of fee-paying students for such lines of training as economics, law, management and other because there is explicit demand on them on the part of the population. In the above segment of higher education, there is a trend towards reduction of the quality of training due to adoption of the inefficient model of per capita financing. However, with a reduction of the number of state-financed students in such lines of training as economics, management and law even students with a high USE grade will have to pay in many cases for their higher education, while students with a much lower USE grade who were enrolled



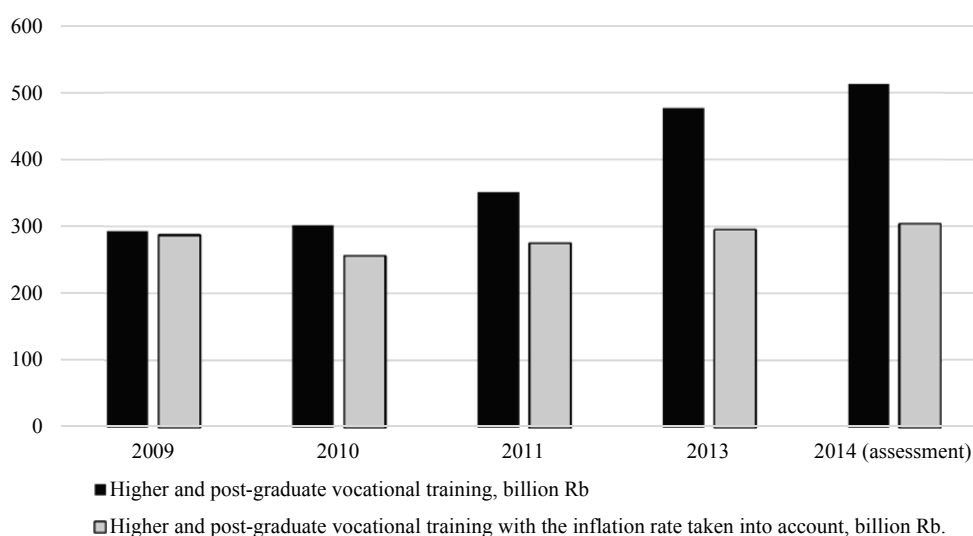
with lines of training (lines of profession) in technology and natural sciences are financed by means of state budget funds.

The situation with many natural science and math lines of training (lines of profession) - where at present there is a drop in demand on educational services on the part of the population, too - is much similar to that in state-subsidized regions: higher education establishments are seeking to reduce prices on paid education services in order to attract the maximum number of students.

As a result, in the system of higher education there is a highly negative motivation which may result in a drop in the quality of the higher education, while introduction of guideline per capita financing was meant to enhance it. In addition to the above, the fight against cross-subsidizing is a phantom: on the one side, fee-paying students subsidize those financed from the state budget, while on the other side many higher education establishments reduce the education fee below the norm fearing loss of hard cash and, thus, wishing it or not, subsidize education of fee-paying students.<sup>1</sup>

Another problem related to introduction of the norm of per capita financing consists both in the approach to formation of the norms and financial replenishment thereof and ensuring of transparency of distribution of budget funds among education establishments on the basis of those norms.

Budget financing of state and municipal higher education establishments has been steadily growing in the past few years (*Fig. 8*).

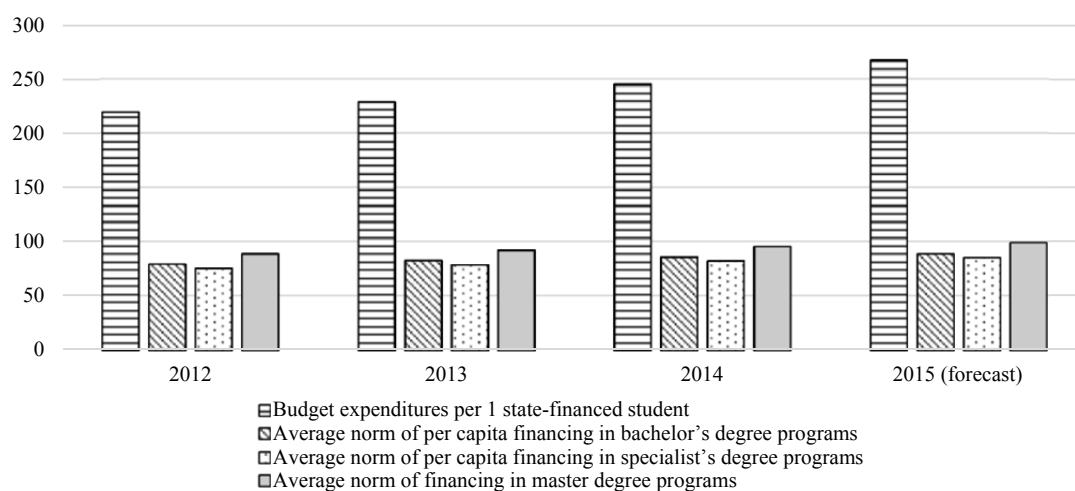


*Source:* The Ministry of Finance of the Russian Federation, the Federal Treasury and the Rosstat.

*Fig. 8.* Budget expenditures on higher education in the 2008–2015 period in nominal terms and with the rate of inflation taken into account, billion Rb

<sup>1</sup> Subsidizing by higher education establishments of fee-paying students can also be viewed as follows: state-financed students receive a subsidy which covers completely their expenditures on education, while a reduction of the education fee below the norm is a partial subsidizing by the state of those students who failed to be enrolled to budget-funded places.

Accordingly, budget expenditures per one state-financed student have been growing. At the same time, norms of per capita financing were set at the level which was much lower than unit expenditures. (Fig. 9).



Source: The Ministry of Finance of the Russian Federation, the Federal Treasury and the Ministry of Education and Science of the Russian Federation

Fig. 9. Budget expenditures per 1 state-financed student and average norms of financing in bachelor's, specialist's and master degree programs in the 2012–2015 period, thousand Rb (2015 – forecast)

If in 2012 and 2013 the difference between unit expenditures and the norms was explained by existence of adjustment ratios, in 2014 those ratios were set mainly equal to 1. An exception was only regional wages and salaries ratios.

Due to such a gap between the amount of unit expenditures and the values of the average norm of per capita financing, there is a question how they were calculated and what purposes the difference between those values was spent on. At the same time, introduction of the norm of per capita financing was largely justified by the need to enhance transparency of distribution of budget funds between public higher education establishments. But if the norms of financing are much lower than unit expenditures it means that after higher education establishments have received funds as per the norms distribution of budget funds by other criteria and rules begins (or continues). Such rules may be, for example, as follows:

- Allocation of budget financing for support of higher education establishments which participate in the race to win a place in global ratings of universities;
- Ensuring of academic programs of development;
- Provision of subsidies for other purposes and other.

It is to be noted that the ratio between the volumes of budget funds allocated in accordance with the norms and those on the basis of other grounds may vary greatly from one higher education establishment to another which situation results in a loss of the declared transparency and preservation of the “administrative bargaining”.

The situation in question is largely related to the fact that at present there are two main differently directed trends in the Russian system of higher education. On the one side, there is

explicit differentiation of higher education establishments and singling out of leader universities or those which are to become leaders (formation of the pool of status higher education establishments). The trend in question emerged in the beginning of the 2000s when an effort was made to determine the leading higher education establishments, while from 2006 after the start-up of the *Education* priority national project it became an important one as within the frameworks of the project two tenders were organized to identify *innovation* universities. Then, from 2008 in each federal district federal universities were established as points of growth in quality of the higher education in regional profile. In addition to that, they started on a tender basis to single out national research universities (NRU) so that those universities could play a key role in development of Russian science, attract foreign students and compete with leading international universities. All those NRU stated to receive higher volume of funding for solution of those tasks.

At the same time, from 2010 with approval of Federal Law No.83-FZ,<sup>1</sup> harmonization of budget financing of higher education establishments on the basis of norms of per capita financing, as was stated above, began. That approach is based on the fact that higher education is regarded as a public *standardized* service which is to be of the same quality at any Russian higher education establishment and, consequently, financed in the same volume. So, the norms are set for 9 groups of training (professions) regardless of the fact at which higher education establishment the training is carried out.

So, differentiation of higher education establishments is carried out on the basis of quality of their education services, while the mechanism of funding is aimed entirely at accounting of the number of students who go to each higher education establishment.

The logic of guideline per capita financing consists in the fact that students seek to get enrolled with higher education establishments which provide high quality education services and, as a result of that, the latter receive a higher volume of budget funding and motivation and potential for development, while inferior ones leave the market. But in practice the above scheme does not work well in Russia. In a situation where higher education has become a social norm, inferior higher education establishments are in a more advantageous position as a larger number of students goes there to receive a diploma with little effort. It is to be noted that an inferior higher education establishment could have received good financing from the budget. So, the principle of guideline per capita financing was combined with a state assignment which is to be distributed on a tender basis with the quality of education services provided by a higher education establishment taken into account. In other words, a tender committee distributes the state assignment between higher education establishments with taking into account the quality of education in each of them. It permits institutions where the quality of education services is higher to have more budget-funded places (that is, to admit a larger number of students) as compared to those with substandard quality of education services. However, there may be a situation where despite the same number of budget-funded places a moderate higher education establishment of technology receives much more budget funds as compared to a well-established university of economics because the norms are calculated with taking into account the need in (special) lab equipment, while a university of economics does not, supposedly, need it.

That problem is well known in the economics. In Chile, they introduced a similar scheme of financing in the 80s. As a result, universities of the humanities started to establish depart-

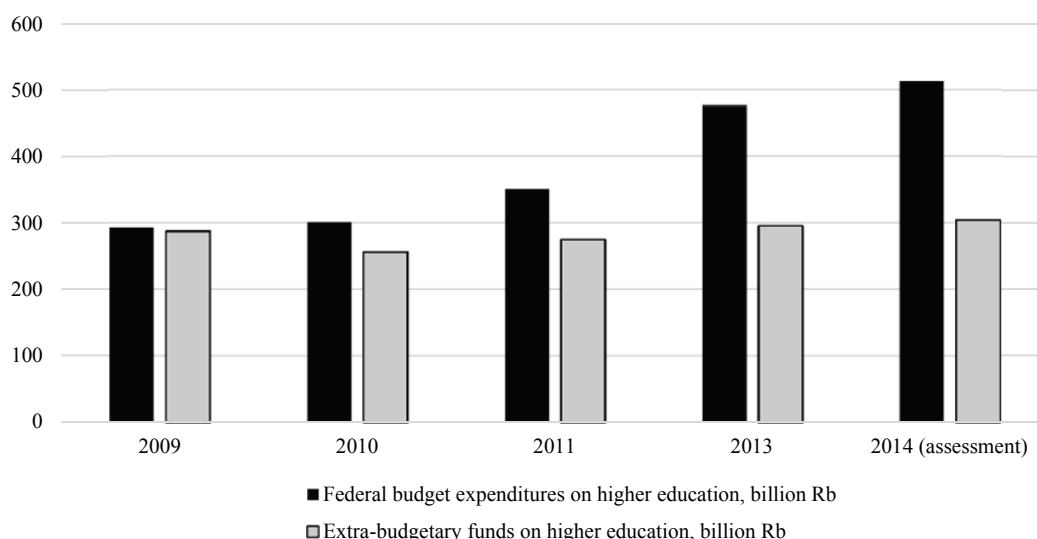
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<sup>1</sup>Federal Law No.83-FZ of 8 May 2010 on Amendment of Individual Legislative Acts of the Russian Federation in Connection with Upgrading of the Legal Status of State (Municipal) Entities.

ment of economics and imitated in every possible way universities of technology. In the long run, they had to give up that model of per capita financing because the system of higher education became oriented solely at the value of the norms, and not the requirements of the labor market and people.

So, introduction of guideline per capita funding in the adopted format does not contribute to higher transparency of distribution of budget funds, nor stimulate competition among them for winning over high-grade students. On the contrary, a procedure for distribution of target enrollment figures between higher education establishments (that is, setting to higher education establishments of a state assignment which procedure is followed by allocation of budget funds) takes place first – it is to be noted that the above procedure is not quite a clear one though it is carried out on a tender basis – while after that a distribution of other budget funds is carried out on the basis of various grounds. One may suggest that the actual process of allocation of budget funds may take place in a reverse order: non-normative lines of spending of budget funds are determined first and, then, the norms of per capita financing are calculated on the basis of the remaining volume of budget funds and the state assignment is distributed.

As the main trends for public higher education establishments as regards the influx of funds for paid higher education are concerned, it can be stated that households start to “lag” much behind the state in that respect (*Fig. 10*).



Source: The Rosstat and the Federal Treasury

*Fig. 10.* Budget and extra-budgetary funds (against the fee for education) in the system of higher education in the 2009–2014 period (2014 – estimate), billion Rb.

In the 2013/14 academic year, the number of fee-paying students of Russian higher education establishments (public and private) amounted to 3.4m people. Consequently, the average fee for higher education of fee-paying students was equal to Rb 85,800 a year. If those expenditures are compared with unit budget expenditures per 1 state-financed student in 2013 (Rb 228,800), the latter was 2.67 times higher. If the average fee for education is compared with the average norms of budget expenditures in bachelor’s, specialist’s and master degree

programs in 2013 (full time education), it becomes clear that for a fee-paying student it is the maximum fee he/she can afford to pay for full-time education in bachelor's and specialist's degree programs, but he/she already lacks funds to pay for education in master degree programs. As was stated above, it is mainly part-time and correspondence forms of education that are affordable for fee-paying students at nongovernment higher education establishments because prices at those institutions are so far 20%-25% lower than at public higher education establishments.

In final analysis, it can be stated that a small number of fee-paying students study full-time at prestigious higher education establishments where the amount of the fee is 2-3 times higher than the average one in the system of higher education, 26% of students study at private higher education establishments with 80% of them studying by correspondence there, while the rest of fee-paying students study mainly part-time and by correspondence at moderate and low-grade public (municipal) higher education establishments (and their branches).

With increasing of norms of budget financing and preservation of the requirement that a fee for education cannot be lower than the norm, the trend in question will only be getting worse: quality higher education will be far less affordable for those who pay for their education. Consequently, children from worse off families and the lower middle class will be increasingly ousted to the segment of part-time education. Thus, at present the mechanism which prevents the use of higher education as an instrument of vertical social mobility has been established.

So, in 2014 it became clear that the *adopted* model of guideline per capita financing of higher education establishments prevents bringing the pay of the academic staff to 200% as compared to the average pay in the region, motivates higher education establishments to expand in every possible way the number of fee-paying students or – in case of lack of solvent demand – to enroll applicants with the lowest feasible USE grade to budget-funded places.

It became clear long ago (minimum 20 years ago) that simple models of guideline per capita financing do not permit to ensure higher efficiency of budget expenditures. So, a transfer to more complex models of financing which explicitly take into account the quality of educational programs carried out by higher education establishments, as well as growth potential of a university has taken place in different countries. In addition to the above, the general rule consists in harmonization of reform moves and not in a conflict between them. Unfortunately, though there is much talk in Russia about comprehensiveness of the pursued policy it is actually made up of a set of quite rational measures which do not harmonize with one another very well.

#### **5.4. The State of Science and Innovation**

In 2014, key events in the field of science were unfolding around the continuing reform of the Russian Academy of Sciences (RAS) and the associated assessment and restructuring of academic institutions, together with the first competitive tenders run by the Russian Science Foundation (RSF) and the creation of a new list of priorities for scientific and technological development in Russia. Thus, last year could be considered transitional, when the new departments responsible for science development were being structured and their activities were adapting to the new system of management. Innovation went into a decline, the rate of which had increased by the end of the year. No new instruments of innovation policy were introduced and the state of innovation was being significantly affected by the general conditions of

economic activity, the business climate and some regulatory measures that were not even directly related to public support for innovation.

#### 5.4.1. Federal budget: change of priorities

The structure of R&D expenditure began to change, such changes being aimed at enhancing support for applied research. The State Programme ‘Development of Science and Technology for 2013-2020’ envisages a continuous growth in funding for the Federal Target Programme ‘Research and Development in the Priority Areas of Development of the Scientific-Technological Complex of Russia for 2014-2020’, which was fully re-focused on applied research in the interests of industry. Most of its measures provide for non-budgetary co-funding. Such changes correspond substantially to policies aimed at import substitution. However, in the long run they could have the opposite effect - a dilution of the base for the development of innovative technologies.

Changes have been outlined in the priorities of the programmes which were key recipients of budgetary funds for R&D. By 2017 it is planned to have reduced considerably the funding of the space and aviation programmes that have been the leaders in terms of budgetary spending on R&D for many years. However, it is quite probable that support for them will continue through other budgetary items, including closed ones.

At the same time, the allocation of funds for development of the medical and pharmaceutical sector (which is certainly a positive trend), and for shipbuilding, grew substantially. By 2017 the top five sectors in terms of budgetary allocations for applied research under the heading ‘National Economy’ will be as follows (in descending order of the funding volumes):

- 1) the aviation industry;
- 2) the medical and pharmaceutical sector;
- 3) the space industry;
- 4) the electronics industry and radio-frequency engineering;
- 5) shipbuilding.

Finally, with the creation of the Russian Science Foundation, the grant funding of science has grown significantly, however, after 2016 it is planned to fix this at a predetermined level (*Table 18*). Given inflation, the scales of this are difficult to forecast as yet, but effectively it means a reduction in the grant funding of science, and this corresponds to the tendency towards a reduction in the budget allocations for basic research. If we assume that 1% of the budget allocations for civil science will be, as previously, provided to the Russian Humanitarian Science Foundation (RHSF) and 6% to the Russian Foundation for Basic Research (RFBR), then the share of funding of basic research from the federal budget for civil science will decrease from 54.5% in 2015 to 47.8% in 2017.

*Table 18*

#### **Dynamics of budget appropriations for scientific foundations, billion rubles**

Foundation	2015	2016	2017
Russian Science Foundation	17.2	18.8	18.8
RFBR	12.2	14.0	14.0
Foundation for Assistance to Small Innovative Enterprises in Science and Technology	3.9	3.8	3.5
RHSF	2.0	2.3	2.3
Total for foundations	35.3	38.9	38.6
Total for civil science (estimated)	200.0	230.0	230.0

*Source:* Federal Law of 1 December 2014 No.384-FZ ‘On the Federal Budget for 2015 and the Planned Period of 2016 and 2017’ [http://minfin.ru/common/upload/library/2014/12/main/FZ384-FZ\\_ot\\_011214.pdf](http://minfin.ru/common/upload/library/2014/12/main/FZ384-FZ_ot_011214.pdf)

It should also be noted that the range of possible sources for research and development funding is narrowing due to a reduction in the number of foreign sources and the low probability of an increase in R&D funding by the business sector (*Table 19*).

*Table 19*

**Sources of R&D funding: types, volumes and conditions of support**

Source	2014 budget	Type (conditions) of financial support	Planned budget for 2015-2017
Federal Target Programme 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia'	Rb 14bn	Contracts, competitive tenders. Large groups of participants are required; is possible in the case of well-developed research infrastructure	Rb 23.7bn for 2015, increase by 5% in 2016, same level in 2017
Russian Science Foundation	Rb 11.4bn	Competitive grants of various types: to scientific groups, existing and new labs, international teams. Ideology: supports the priorities (thematic and organisational); support of global-level projects	Rb 17.2bn in 2015, Rb 18.8bn in 2016-2017
RFBR	Rb 9.2bn in 2014	Competitive grants. Main competition (50% of funding) - for pilot projects, about Rb 500,000 per year. Ideology: wide support of pilot research of small (up to 10 people) scientific groups	Rb 12.2bn in 2015, Rb 14bn - in 2016-2017
Foreign grants: EU programme Horizon 2020	The available funding for Russian participants is about Rb 5bn	Competitive grants, thematic and for certain categories of participants	Russia is included in the third category: of countries which can participate in Horizon 2020 projects but are not eligible for automatic support from the EU budget
Foreign grants: CRDF Global	Grants for the conduct of joint research by Russian and American universities (generally up to \$110,000 for 2 years, per project)	Competitive grants in three areas: 1) nanotechnologies; 2) energy saving and energy efficient technologies; 3) rational use of natural resources. Small number of grants. Modest amount of total funding	Unknown
Funding of Russian industry	Rb 400bn in 2012, increasing to Rb 500bn (estimated) by 2020	Contracts for the conduct of R&D	The Government forecasts an increase in companies' spending, but there are no serious grounds for this yet. In practice the opposite trend can be observed
Russian subdivisions of international companies	As estimated, about Rb 3bn	Contracts for the conduct of R&D	R&D spending is decreasing. Key themes are in the ICT industry

*Source:* prepared by the author on the basis of data from the Foundations, the Ministry of Education and Science of Russia, the Horizon 2020 programme and CRDF Global.

Thus, the state budget remains the key source of R&D funding and its impact will increase in the future. At the same time, the structure of budgetary outlays for R&D will be significantly adjusted compared with previous years as a result of the following two main factors:

1) restructuring of the scientific sector, including eliminating the RAS, the Russian Academy of Medical Science (RAMS) and the Russian Academy of Agricultural Sciences (RAAS) as spending units, the establishment of a new department - the Federal Agency for Scientific Organisations (FASO), inventory inspections and the possible reshaping of scientific organisations that were formerly under the supervision of state academies;

2) a change in the priorities of applied research and development, which is supposed to ensure a transition to new technologies and products, including for expansion and import substitution.

At the same time as the focus on applied research is being increased the types and volumes of possible funding sources for basic research are being reduced. By contrast, at the end of the year, the U.S. published a report ('Restoring the Foundation: The Vital Role of Research in Preserving the American Dream'<sup>1</sup>) prepared by the Academy of Arts and Science. This stated that America had lost its lead in science and the development of new technologies and therefore proposed increases in federal investment in basic research by 4% annually.

#### 5.4.2. Debates around assessments of the performance of scientific organisations

Throughout 2014 the Government continued to work on determining the principles and developing regulations on assessing the effectiveness of the activities of scientific organisations. The justification of the need for this, as well as the basic rules for assessment, are documented in Resolution of the Government of the Russian Federation No. 979 of 1 November 2013 'On Making Amendments to the Resolution of the Government of the Russian Federation of 8 April 2009 No. 312.'<sup>2</sup> In accordance with the Resolution, the principles of assessment are as follows:

- the independent nature of assessment;
- combining scientific organisations into reference groups regardless of their affiliation with particular fields of scientific knowledge or the type of scientific research conducted;
- the use of indicators of the type applied by economically developed countries for assessing the effectiveness of the activities of scientific organisations.<sup>3</sup>

The regulations on the conduct of assessment were clarified and adjusted with regard to the opinion of the scientific community, in particular, the directors of the RAS institutes. However, in the middle of the year the FASO returned to the basic questions of the conduct of such assessment and requested commentaries from scientific organisations on such procedural aspects as:

- the frequency of assessment;
- the types of parameters to be used in the assessment - whether it should only consist of quantitative indicators, or of these in combination with expert evaluation;
- the feasibility of also assessing the effectiveness of the scientific teams rather than just the scientific organisations;
- the principles for forming expert commissions.<sup>4</sup>

According to the Government's initial plan, the development of assessment procedures should have been completed by 1 July 2014,<sup>5</sup> but it was not even finished by the end of the year.

The approaches to the assessment of institutes proposed by the FASO were criticised by the scientific community. The main complaints were about the conduct of assessment being at

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<sup>1</sup> Restoring the Foundation: 'The Vital Role of Research in Preserving the American Dream', American Academy of Arts and Sciences. Cambridge, MA, 2014. P.16. <https://www.aau.edu/WorkArea/DownloadAsset.aspx?id=15491>

<sup>2</sup> <http://pravo.gov.ru:8080/page.aspx?67047>

<sup>3</sup> For more information on these parameters see 'The Condition of Science and Innovation'//Russian Economy in 2013. Trends and Prospects. (Issue 35) - Moscow: Gaidar Institute, 2014. p. 367-369.

<sup>4</sup> Letter to directors of scientific organisations from the FASO of Russia No. 007-181-07, 10 April 2014.

<sup>5</sup> Second letter of the Academician Aleksey Parshin on expert examination of scientific organisations FASO, 27 April 2014 <http://www.saveras.ru/archives/9059>



the level of organisations rather than individual laboratories, the use of the principle of division into reference groups, and in the reliance on bibliometric indicators, the limitations of which are quite well known. Scientists were almost unanimous in their opinion that assessment at the level of institutes would provide distorted results, particularly because there are many multi-disciplinary institutes in the country in addition to institutes with unique specialisations, which it would be almost impossible to assess correctly using the chosen method. The procedures for conducting the assessment and selecting the experts involved were widely discussed, including the idea of inviting international experts. Opinions were divided, but with a slight bias towards those against the involvement of foreign experts.

The arguments against the extensive use of bibliometric indicators were supported by reference to foreign experience. An especially popular alternative is the UK practice, where the Government has recently introduced new methods for the assessment of scientific achievements (the Research Excellence Framework).<sup>1</sup> Indeed, it took several years to develop this initiative, which is very well-thought-out, with different result measures and assessment regulations being introduced for different fields of science. The key elements of such assessment are its conduct at the level of departments and laboratories, and the recognition of the secondary nature of bibliometric data. Moreover, the impact factors<sup>2</sup> of journals are not taken into account, and neither is the total number of publications of scientific teams being assessed. Bibliometrics may only be used for substantiation and clarification of the expert evaluations. Experts, in turn, assess the publications of scientific laboratories (groups) on the basis of the 4 best publications of the team over the previous 5 years. With the exception of economics and econometrics, citation data and other types of bibliometric analysis are not used at all for assessing the results of research in social sciences and humanities. For economics and econometrics, available data on the citation of publications are taken into account, where necessary, as additional information, but the absence of citation data for a particular piece of research does not affect its assessment. Finally, it is the purpose of this framework which is especially important: the assessment results are used for the redistribution of funding among administrative structures and for determining the number of additional rates to be allocated to certain subdivisions.

The British experience does look convincing, as is confirmed by its pilot testing. Moreover, the experience accumulated in Russia shows that the demand for bibliometrics breeds their supply, leading to a serious skewing. In particular, it provides incentives not only to pay for the publication of a paper in a third-rate journal included in the Scopus database, but also to buy a position as the co-author of an article published in a decent journal.<sup>3</sup> Hence, a reliance on bibliometrics for the short-term assessment of performance could distract from an understanding of the real state of affairs.

The consolidated opinion of the active scientific community was reflected in a letter from the Council of the Society of Scientists to the Chairman of the Government of the Russian Federation 'On Assessing the Effectiveness of Scientific Organisations',<sup>4</sup> which states that

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<sup>1</sup> Research Excellence Framework 2014. Panel Criteria and Working Methods. [http://www.ref.ac.uk/media/ref/content/pub/panelcriteriaandworkingmethods/01\\_12.pdf](http://www.ref.ac.uk/media/ref/content/pub/panelcriteriaandworkingmethods/01_12.pdf)

<sup>2</sup> Numerical indicator of the importance of a scientific journal (IF).

<sup>3</sup> Sterligov I. Simulation of Science as a Response to Management Primitivism//Slon.ru, 27 August 2014. [http://slon.ru/economics/simulyatsiya\\_nauki\\_kak\\_otvet\\_na\\_upravlencheskiy\\_primitivizm-1148735.xhtml](http://slon.ru/economics/simulyatsiya_nauki_kak_otvet_na_upravlencheskiy_primitivizm-1148735.xhtml)

<sup>4</sup> Letter of the Council of the Society of Scientists to the Chairman of the Government of the Russian Federation 'On Assessing the Effectiveness of Scientific Organisations', 28 April 2014 <http://www.saveras.ru/archives/9102>

‘the key object of assessment should not be an institute as a whole, but its laboratories and scientific groups. In essence, assessment should be expert-based and should not focus on numerical performance indicators. The division of scientific organisations into three categories (leading, stable, and those which have lost their prospects for development) on the basis of numerical indicators may not be considered valid.’

By the year end, the preliminary composition of the FASO Commission for Assessing the Performance of Scientific Organisations<sup>1</sup> had been determined, based on the results of internet-voting. This caused a new wave of admonitions, because even before the completion of its selection, the Agency had announced the preliminary results, with certain names being emphasised, and this affected the final structure of distribution of votes. Such a pseudo-populist choice indicated a seeming transparency of the commission formation, but probably damaged its quality.

#### 5.4.3. Approaches to the restructuring of former academic institutions

Throughout the year another important process continued - the development of approaches to the restructuring of the system of former academic institutions that were now under the supervision of the FASO. With the creation of the FASO Scientific Coordination Council,<sup>2</sup> the development of regulations on the participation of the RAS in expert work and the performance of the other functions assigned to it, were expected.

However, the relevant decision-making process dragged on, not least because of difficulties in bringing such decisions in line with the new administrative structure. When the FASO appeared, relationships between departments became more tense and were manifested in publicly-made counter claims. For instance, academics were discontent with the fact that the FASO had seriously delayed the creation of the Scientific Coordination Committee. Moreover, in their opinion, the Agency had increased the bureaucratic burden on institutions, was non-transparent in its activities, and did not know enough about the essence of scientific work.<sup>3</sup> The FASO management accused the RAS of being passive and of not submitting its proposals for reorganisation of the network of scientific institutions,<sup>4</sup> with the RAS management having taken a number of ill-conceived steps. For example, without any consultation with the directors of the relevant institutes, the RAS had given its consent to the transfer of 42 breeding centres, formerly belonging to the RAAS, to the Ministry of Agriculture, and a number of clinics to the Ministry of Healthcare.<sup>5</sup> According to experts, these institutes were

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<sup>1</sup> The FASO of Russia announced interim results of the elections to the Commission for Assessment of Performance [http://faso.gov.ru/ru/official/news/index.php?id\\_4=23641](http://faso.gov.ru/ru/official/news/index.php?id_4=23641)

<sup>2</sup> Established on 25 November 2014. Order ‘On Scientific Coordination Committee at the Federal Agency of Scientific Organisations’, No.1087 of 25 November 2014 <http://faso.gov.ru/common/upload/library/2014/11/main/prikaz1087.pdf>

<sup>3</sup> Russian Academy of Sciences. Minutes of the Resolution of the Bureau of the Board of Directors of Institutes No. 5 of 17 September 2014; Year of Troubles. What did the reform of the Russian Academy of Sciences bring?//Search. No. 27-28. 11 July 2014 <http://www.poisknews.ru/theme/ran/11060/>

<sup>4</sup> Medvedev Yu. RAS institutes can be united with HEIs and ‘industrial organisations’//Russian Gazette, 14 October 2014 <http://www.rg.ru/2014/10/14/ran-site-anons.html>

<sup>5</sup> Volchkova N. The Blitz is Over. Another Stage of the RAS Reform Starts//Search. No. 42. 17 October 2014 <http://www.poisknews.ru/theme/ran/12131/>

the best candidates for re-specialisation after the transfer, and that breeding science would be destroyed.<sup>1</sup>

In turn, the management of the Ministry of Education and Science was discontent with the fact that the Academy was not taking any actions or developing new regulations on expert examination, the coordination of basic research in the country and a number of other regulations.<sup>2</sup> Furthermore, the RAS union had accused the RAS management of avoiding making important decisions for science.<sup>3</sup> The scientific community, including public organisations, had also voiced complaints in respect of what had been happening.

All this took place against the backdrop of the expected completion on 15 January 2015 of the Moratorium on property transactions and the resolution of personnel issues in respect of academic institutions. It is evident that the year allocated for carrying out preparatory work on the implementation of the reform was not used in the most rational manner. The evidence for this is the extension of the Moratorium for a further year, which was announced in December 2014 at the meeting of the Presidential Council for Science and Education.<sup>4</sup>

This situation occurred can be explained by a number of objective reasons: the RAS has never been an operational structure, the FASO lacks experience in the field of science, and there are also certain difficulties in the development of an agreed position between the Ministry of Education and Science and the FASO. At the same time, the very idea of extra top-loading the management structure, as demonstrated by the first year of work, has not yet proved productive. However, in the field of management of Russian science, interdepartmental coordination has never yet been efficient.

The biggest concern is that the development of approaches for assessing the performance of scientific organisations does not correspond, in essence, with the procedures for the restructuring of the former academic institutes. Moreover, while the start of performance assessment is planned for the second half of 2015,<sup>5</sup> the restructuring had already started in December 2014, with the approval of the first pilot projects.<sup>6</sup> This is at variance with the normal logic of management actions: first assessing the situation and then attempting to change it.

Indeed, the lengthy development of the assessment procedures contrasts with the speed with which the FASO provided the public with its options for restructuring the scientific organisations under its supervision, proposing four new forms, distinguished by the objectives and nature their work.<sup>7</sup>

<sup>1</sup> Network Form of Life of Scientific Institutes//Independent Gazette - Science, 22 October 2014 [http://www.ng.ru/science/2014-10-22/10\\_faso.html](http://www.ng.ru/science/2014-10-22/10_faso.html)

<sup>2</sup> Science is the risk zone. Deputy Minister of Education and Science Lyudmila Ogorodova about the RAS Reform, Dissertation Councils, Changes in the Work of Scientists, Etc.//Lenta.ru, 27 October 2014 <http://lenta.ru/articles/2014/10/27/ogorodova/>

<sup>3</sup> Volchkova N. The Blitz is Over. Another Stage of the RAS Reform Starts//Search. No. 42. 17 October 2014 <http://www.poisknews.ru/theme/ran/12131/>

<sup>4</sup> Meeting of the Council for Science and Education, 8 December 2014 <http://state.kremlin.ru/council/6/news/47196>

<sup>5</sup> Sobolevsky A. FASO of Russia and the RAS Siberian Subdivision Find 'the Happy Medium' in Their Interaction// RIA Siberia, 15 December 2014 <http://ria-sibir.ru/viewnews/57366.html>

<sup>6</sup> Meeting of the Presidential Council for Science and Education, 8 December 2014 <http://state.kremlin.ru/council/6/news/47196>

<sup>7</sup> Proposal for structuring the network of scientific organisations under the supervision of the FASO of Russia, 14 August 2014 <https://www.ras.ru/news/shownews.aspx?id=80e8ca07-f737-4699-a91a-8ffe6a3e80df>

- 1) federal research centres (FRC) - to be established by consolidating several institutions, to carry out break-through research and practical developments in the areas of strategic importance for the country; the FRCs being responsible for achieving concrete results in the realisation of national priorities;
- 2) national research institutes (NRI) - intended to conduct basic research; created on the basis of current academic institutions which are leaders in particular disciplines;
- 3) federal scientific centres (FSC) - focused mainly on innovation, and almost analogous to technology platforms; the key goal of their activities is the development and scientific support for the implementation of critical technologies for the modernisation of production facilities;
- 4) regional scientific centres (RSC) - aimed at ensuring the integrated development of the regions, including their various industrial sectors; created by the consolidation of individual scientific institutes located in each region.

As can be seen from the above list, the key area of transformation is the consolidation of organisations and a reduction in the proportion of those conducting mainly basic research. The idea of such a re-orientation of existing organisations for applied research is not indisputable. Given the situation in respect of the personnel available, the creation of new institutes with a focus on applied research is likely to be more effective than re-training those who are unable to perform applied work for a particular customer.

Almost simultaneously fears were dispelled that academic institutions would be amalgamated with higher education institutions (HEIs). This was confirmed by Andrei Fursenko, Assistant to the President of the Russian Federation, who stated that ‘for the next 15-20 years there is no alternative to the RAS institutes, and to scatter them between ministries, corporations and universities would mean to destroy and disintegrate Russian science.’<sup>1</sup>

In early 2015, the FASO plans to define the key parameters of the potential FRSs, FSCs, NRCs and RSCs and to prepare pilot integration projects. The FASO had determined the priority areas for these pilot projects in 2014. They are: *medicine, life sciences, agricultural technology and food products*.

It is remarkable that the RAS management quickly ‘adapted’ to the consolidation idea being implemented prior to the assessment of the institutes. Various organisations, together with subdivisions of the RAS, began proposing specific options for the creation of new structures on the basis of former academic institutions<sup>2</sup>, but not always agreeing them with the directors of the institutes which would be included in the composition of the new organisations<sup>3</sup>. In fact, these events could be characterised as attempts by those who had the relevant administrative resources to save ‘their own’ institutes.

Andrei Fursenko, in his turn, proposed an alternative set of four pilot projects,<sup>4</sup> the themes of which were different from those chosen by the FASO, namely - *molecular genetics and*

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<sup>1</sup> On the Prospects of Russian Science: Look from the Old Square. Andrei Fursenko about Reforming the Academy of Sciences and the State’s Attitude Towards Scientists//Izvestiya, 25 December 2014 <http://izvestia.ru/news/581254>

<sup>2</sup> By the end of the year about 100 integration projects were proposed. Source: Meeting of the Council for Science and Education, 8 December 2014 <http://state.kremlin.ru/council/6/news/47196>

<sup>3</sup> Gelfand M. The First One is Out//Troitsky Variant - Science, No. 162, 9 September 2014 <http://trv-science.ru/2014/09/09/pervyj-j-poshel/>

<sup>4</sup> Letter of Andrei Fursenko to the President of Russia V.V. Putin, Pr-2349 of 01 October 2014 Source: Troitsky Variant - Science, No. 166, 4 November 2014 <http://trv-science.ru/2014/11/04/shef-vsjo-propalo-2/>

*cellular biology, industrial biotechnology, crop farming and plant genetic resources, and information technology and software.* It is these projects that have been supported by the Russian President and the concepts of the development programmes for each relevant pilot organisation have already been prepared.<sup>1</sup>

The existence of different lists of priorities evidences the lack of an agreed government position on which areas should be supported initially. Indeed, the list of priority areas for the development of science, technology and engineering in the Russian Federation which was to be approved by the President had yet to be established by the end of the year.<sup>2</sup> At that time, in his Address to the Federal Assembly, the President of the Russian Federation offered to start developing a national technological initiative which would help to determine the development priorities and objectives for the next 10-15-years.<sup>3</sup> Thus, an effectively new task was set, to create a mechanism to ensure the conjunction of global tasks, the technological priorities mandated by these tasks, and the mechanisms for implementing such priorities.

So far, the system of state-level priorities has become more complicated – together with the traditional list of priority areas for the development of science, technology and engineering, several additional lists have appeared.

Firstly, there are the so called ‘scientific and technological initiatives’ determined as priorities for a number of departments, including the Ministry of Education, the Ministry of Industry and Trade and even the RSF. At present there are three of them – advanced manufacturing technologies, neurotechnologies, together with quantum technologies and photonics. For two of these, manufacturing technologies and photonics, the Chairman of the Government of the Russian Federation assigned elaborate methods of accelerated development. The outlining of these priorities was driven, on the one hand, by global trends in both science and technology and, on the other, because such priorities in manufacturing technologies are important in a transition to new methods of organising production, not just of establishing a different technological base. It should be noted that the classifications of priority areas vary by country: for example, in Russia, manufacturing technologies, photonics and nanotechnologies are three separate areas, while in the US photonics and nanotechnologies are a part of a new initiative the ‘Advanced Manufacturing Partnership’ representing sub-areas of technology in advanced manufacturing.

Secondly, as was noted above, new thematic priorities have appeared in connection with the restructuring of the former academic complex and approval of the four pilot projects. The priorities of the FASO and Presidential Administration are different, with the exception of agricultural science.

Thirdly, defence research has become a new priority – considerable budgetary funds will be allocated towards supporting it. Moreover, the RAS President noted that the Academy had considerably extended research on defence and had even introduced the position of Vice-President for defence projects.<sup>4</sup>

The hierarchy and compatibility of the different groups of priorities is not yet quite clear, however, the main problem is in the absence of explicit criteria regarding the basis on which

<sup>1</sup> Meeting of the Presidential Council for Science and Education, 8 December 2014 <http://state.kremlin.ru/council/6/news/47196>

<sup>2</sup> The last (currently effective) list was approved in 2011, and in 2014 it was reworked.

<sup>3</sup> Address of the President to the Federal Assembly, 4 December 2014 <http://www.kremlin.ru/news/47173>

<sup>4</sup> Speech of the RAS President V.E. Fortov at the meeting of the Council for Science and Education, 8 December 2014 <http://state.kremlin.ru/council/6/news/47196>

each has been chosen. This is an important question because new lists of priorities require a reconfiguration of the distribution of the financial resources allocated for R&D. Under the general reduction of budgetary expenditure, the focus on particular priorities is justified, but their choice should be well thought through, including assessments of the impact of the chosen areas on adjacent fields of science and other sectors of the economy.

Finally, a separate topic of discussion which arose in the course of the development of measures for restructuring the academic complex was the age restrictions imposed on the heads of scientific organisations and their deputies. The changes were based on the currently effective standards for principals of HEIs, providing for a maximum age of 65 with a possibility to extend the term of office on the basis of a special contract until the age of 70. Estimates for the academic sector showed that, out of more than 800 directors of scientific institutes of the Academy of Sciences, half were over 65. Additionally, between 2,000 and 2,500 of their deputies were older than the maximum permissible age.<sup>1</sup> By the end of the year supplements were made to the Law on science, according to which age restrictions were introduced for the heads of institutes and their deputies, with the possibility to transfer to the position of Scientific Supervisor (but without the rights to dispose of financial funds).<sup>2</sup> The age restriction will be introduced gradually: principals older than 65 will be able to occupy their positions until the expiry of their contracts (but for no longer than three years). Thus, about half of the heads of the former academic NRIs will be likely to change, even though, not long ago, few had even thought of preparing their successors. Such a change in leadership is complicated by a serious 'gap' in the availability of middle-aged personnel, which is why, in a number of cases the effective leaders will be replaced by younger staff lacking appropriate administrative and scientific experience, at least in terms of their age.

It should also be noted that, at the last meeting of the Council for Science and Innovation, Academicians were offered financial compensation for losses incurred by them as a result of changes in the status and role of the RAS. Based on the results of the meeting, the President ordered the preparation, by June 2015, of a legislative act on doubling the bonuses for the title of 'Academician' (up to Rb 100,000 per month) and of a 'Corresponding Member' (up to Rb 50,000 per month).<sup>3</sup> Arguably, this places an increased burden on the Academy. However, the justification for this appears strange, for at least two reasons. The first is that, across the globe, expert review is generally considered an honourable duty of leading scientists. Expert opinions and reports prepared by national academies of sciences (for example, the U.S. National Academy of Sciences) do not involve payments to the academic experts. The second reason is that it is not only Academicians and Corresponding Members who currently do, and will, take part in expert reviews, but it is only they who will be provided with this permanent bonus, while such payments to Doctors and Candidates of Science will be ended. This decision reminds us of the liquidation of the Kazakh Academy of Sciences when academicians

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<sup>1</sup> Chukov A.. The Government Has Dismissed the Scientific Elite of the Country//Arguments of the Week, No. 21, 10 June 2014 <http://argumenti.ru/politics/n441/344580>

<sup>2</sup> Gorbatova A. Competitive Science. 11 December 2014 [http://www.strf.ru/material.aspx?CatalogId=358&d\\_no=91368](http://www.strf.ru/material.aspx?CatalogId=358&d_no=91368)

<sup>3</sup> List of assignments made, based on the results of the meeting of the Presidential Council for Science and Education. Pr-3011, cl. 2k, 27 December 2014 <http://www.kremlin.ru/assignments/47367>

were actually provided with life-long benefits for their titles, in exchange for their consent to turning the national academy into a 'club for scientists.'<sup>1</sup>

#### 5.4.4. Science in HEIs: successes of the leading institutions

Last year the state and society paid close attention to the activities of elite HEIs that had received particular status or additional budgetary funds under special development programmes. In terms of the scientific component, the HEIs were assessed on the basis of data on the dynamics of the publication activities of their teaching staff and research assistants, and the frequency of their citations. The available data, which have been collected and analysed by experts from Thomson Reuters during the year, record improvements, but these improvements occur very slowly. This evidences the difficulty of increasing the scientific quality of publications in areas where research activity has not been a priority for a long time.<sup>2</sup> In particular, this can be illustrated using the data for the group of universities which received the most generous funding from the Government - the 15 universities under the '5-100' project. The project assumes that at least 5 out of the 15 supported universities will enter the top 100 leading global university rankings by 2020.

Quarterly assessments showed that all leading universities were increasing their number of publications and, what is more important, that by the year end, for 13 of the 15 universities their share of cited articles exceeded the average for Russian HEIs.<sup>3</sup> There are three consistent leaders on almost all the bibliometric indicators - these are the Novosibirsk State University (NSU), the National Research Nuclear University (NRNU), the Moscow Engineering Physics Institute (MEPhI) and the Moscow Institute of Physics and Technology (MIPT). The National Research University Higher School of Economics (NRI-HSE) may be named as a fourth leader because the level of citation in social sciences is generally lower and builds up more slowly than in the natural and technical sciences. From 2009 to 2013 the NRI-HSE increased its scientific productivity by a factor of seven<sup>4</sup>, meaning that it developed at the highest rate among the leading HEIs.

The stable composition of the group of leaders is confirmed, to a certain extent, by the December rating of universities QS ranking for 18 countries of Eastern Europe and Central Asia.<sup>5</sup> In terms of the publication activities of its teachers<sup>6</sup> the NSU occupies 14<sup>th</sup> position out of 100

<sup>1</sup> Interview-conversation of the grandson of the first Kazakh Academician Kanysh Imantaevich Satpaev, with the senior research assistant of the K.I. Satpaev Museum (House of Scientists of the former Academy of Sciences of Kazakh SSR) Nurlan Zharmagambetov, 21 July 2008 [http://www.meierhold-poesie.narod.ru/interview\\_satpaevs\\_ansi.htm](http://www.meierhold-poesie.narod.ru/interview_satpaevs_ansi.htm)

<sup>2</sup> Until recently, for HEIs, in contrast to NRIs, the data on publication activities and, more so, in foreign editions have not been included in the list of key indicators for the assessment of the performance of scientific and academic staff. There was a formal requirement to publish 1-2 papers, preferably in journals from the list of the State Commission for Academic Degrees and Titles, and it was sufficient to use an annual report on work performed.

<sup>3</sup> Kasiyanov P. The Ratio of Cited and Non-Cited Works of the Leading Russian Universities, 8 December 2014 <http://pavel-kasiyanov.blogspot.ru/2014/12/iv.html>

<sup>4</sup> Arefiev P. International Publication Activities of the Leading Russian Universities in 2013. Part 1. 26 October 2014 <http://www.unkniga.ru/vishee/3588-mezhdunarodnaya-publikatsionnaya-aktivnost-veduschih-rossiyskih-universitetov-v-2013.html>

<sup>5</sup> QS University rankings: Emerging Europe and Central Asia 2014/15. 17 December 2014 <http://ria.ru/abitura/20141217/1032737392.html>

<sup>6</sup> Number of published papers per teacher calculated based on the data of Scopus/Elsevier.

(and is in the first place among the Russian HEIs), while the MSU follows it – but only in 25<sup>th</sup> position. At the level of citation of its scientific publications the absolute leader is the MEPhI, followed by the NSU.

At the same time, an analysis of the causes of the increase in the number of publications and citations shows that it is partially the result of a particular set of external circumstances. At the request of the management, employees of both the MIPT and NSU working in academic institutions started referencing their university affiliation in articles, which ensured an increase in the number of publications and citations. The MEPhI also demonstrates extremely high indicators due to the participation of its employees in large international joint projects and programmes, such as ATLAS, BELLE and ALICE. Only the NSU publishes more than one paper per employee per year. In general, no more than 10% of the scientific and academic personnel of the 15 leading HEIs publish their papers in international editions, while in foreign HEIs of similar specialisation (in a reference group which includes the HEIs of both Western Europe and Asia) this indicator is three times higher.<sup>1</sup>

Indicators of the citation of works of the leading Russian HEIs remain the lowest – on average for this group, they are 20 times lower than the average for the foreign reference HEIs per scientific and academic employee (for the NSU, MEPhI and MIPT – 13 times lower).<sup>2</sup> This is, in part, due to the fact that the major proportion of the foreign-language publications of Russian HEIs are simply translated domestic editions which, as a rule, have low impact.

Thus, despite the improving quantitative indicators of the publication activities of the leading Russian HEIs, the qualitative results of scientific activity are still far from occupying leading positions. Not many teachers undertake scientific research and they prefer to publish their papers in more accessible journals (with lower ratings). The most cited papers are those that are published with international co-authorship.

#### 5.4.5. First results of the activities of the Russian Science Foundation

Last year saw active work on the part of the country's largest scientific foundation - the Russian Science Foundation. Several funding tenders were held, aimed at supporting both small research groups, including international ones, and existing and newly created laboratories.

The main types of competitive tender and the level of participation in them are shown in *Table 20*. One can particularly notice the very high level of competition among the applicants, especially from international scientific groups. In two other scientific foundations - the RFBR and the RHSF - the typical level of competition is 3–4 applications per grant. Experts believe that impartial selection is possible only if the level of competition does not exceed 8–10 applications per grant. Otherwise, the selection of projects for funding is complicated because the quality of applications is greater than the amount of funding available for supporting them. Then, other selection factors begin to operate in addition to the key criteria - including geographical location and the sex and age of the project managers. Moreover, the risk of arbitrary

<sup>1</sup> Arefiev P. International Publication Activities of the Leading Russian Universities in 2013. Part 1. 26 October 2014 <http://www.unkniga.ru/vishee/3588-mezhdunarodnaya-publikatsionnaya-aktivnost-veduschih-rossiyskih-universitetov-v-2013.html>

<sup>2</sup> Arefiev P. International Publication Activities of the Leading Russian Universities in 2013. Part 1. 26 October 2014 <http://www.unkniga.ru/vishee/3743-mezhdunarodnaya-publikatsionnaya-aktivnost-veduschih-rossiyskih-universitetov-v-2013-okonchanie.html>



decisions increases because of intensified lobbying, which can only be kept in check by the smooth-running of expert assessment councils.

Table 20

**Types of competitive tender run by the RSF and the activities of applicants  
in applying for grants**

Type of tender	Funding volume, per year	Number of applications	Number of grants	Number of applications per grant
Projects of individual scientific groups	Up to Rb 5m	11,775	876	14:1
Projects of existing scientific labs	Rb 5-20m	1,760	161	11:1
Newly created labs	Rb 10-25m	467	38	12:1
International scientific groups	Rb 5-10m	487	30	16:1

Source: <http://www.rscf.ru/>

The activities of the new foundation in which, on the one hand, considerable funding is concentrated and which, on the other hand, has initiated mostly large-scale projects with a relatively small number of grants (compared with the levels typical of Russia) aroused the close attention of the scientific community and caused much active discussion within it. Almost every winning project found itself a centre of attention. An analysis of the composition of grant recipients showed that a number of projects lacked impartiality in their support, including several grants received by career-oriented directors. Nevertheless, the overall list of problems and complaints<sup>1</sup> against the Foundation did not contain any which were unique. Almost all of these complaints could be levelled at the tenders run by other scientific foundations: that the work of the experts and expert councils was not always thorough and impartial; that there were some cases of conflicts of interests; of less than optimal expert questionnaires which complicated the project assessments; poor science classificatory. Furthermore, the Foundation initially found itself in the position of being set against others: claims that the funds received by the RSF were not actually additional budgetary investments in science but were simply redistributed from other programmes, including those of the Federal Target Programme ‘Scientific and Academic Staff of Innovative Russia’, within the framework of which many more researchers had received funding. As a result, the RSF activities were, from the very beginning, compared with this programme which, all in all, was approved by the wider scientific community.

The response of the RSF to such criticism was twofold - on the one hand, the Foundation promptly responded to a number of the observations. In particular, as early as September changes were made to the procedure for the selection of experts, in order to ensure minimisation of any conflicts of interest.<sup>2</sup> On the other hand, the Foundation was sufficiently tough in defending its principal approaches, including its choice in favour of variety of tenders with a limited number of grant recipients. For now the Foundation policy is aimed at continuously initiating new tenders, including those with specific conditions - the support of young scientists, particular regions, selected themes, etc. This means that, unlike the RFBR and RHSF, where almost identical sets of tenders are announced every year, there is no cyclical support from the RSF as yet. Hence, scientific teams which have not received funds for establishing laboratories or support for groups or institutes in a particular year will not simply be able to

<sup>1</sup> Fradkov A. Ideal Expert Review//Troitsky Variant – Science, No. 159, 29 July 2014 <http://trv-science.ru/2014/07/29/idealnaya-ehkspertiza/>

<sup>2</sup> Ponarina E. Three Plus Two. The New Form of Expert Review Organisation Accelerates the Application Review Process//Search, No. 37, 12 September 2014 <http://www.poisknews.ru/theme/science/11775/>

repeat the attempt the following year. This contributes to a strengthening of the stratification of scientific teams, which has both positive and negative sides.

Despite the short period of its activity, the data from RSF tenders are already sufficient to allow several meaningful conclusions to be drawn on the current condition of scientific research in Russia.

1) Despite the Foundation's fairly strict formal requirements for the project managers applying to the RSF for funding (in terms of the number of publications, previous grants and other characteristics of scientific merit) it turns out that many scientists actually do meet these criteria. Thus, it appears that at least in a number of areas, Russian science is viable and competitive.

2) The structure of applicants and grant recipients in terms of the place of project execution (scientific organisations, primarily under the supervision of the FASO, or HEIs) evidences that the most active among the applicants for grants were the HEIs - in substantially all the tenders they accounted for more than half of the applications. At the same time, among grant recipients, teams from the FASO institutes are the leaders (*Table 21*), with the exception of competition for the creation of new laboratories. This result can be interpreted both positively and negatively. It evidences either that basic and exploratory research, which the RSF supports in accordance with its mandate, is being performed at a higher level in institutes that formerly belonged to the State Academy of Sciences, or, that the Expert Council of the Foundation, consisting mainly of representatives of academic science, has made the choice on the basis of its own interests.

*Table 21*

**Participation of FASO institutes and HEIs in RSF tenders, as a percentage of the total number of applications and grants**

Type of tender	Share of FASO institutes, %		Share of HEIs, %	
	Applications	Grants	Applications	Grants
Projects of individual scientific groups	35.0	59.0	57.0	32.0
Projects of existing scientific labs	41.0	58.0	49.0	34.0
Newly created labs	26.0	34.2	62.0	55.3
International scientific groups	38.0	50.0	55.0	47.0

Source: <http://www.rscf.ru/>

The level of grant support for basic and exploratory research through the system of scientific funds could increase compared with the current budgetary projects because the Russian President's assignments, based on the results of the December meeting of the Council for Science and Education, include the requirement for removing such types of research from the federal target programmes by the end of April 2015, and to support them instead in the form of grants.<sup>1</sup> It will be important to distribute the released funds among the three state science foundations so that none of them has a monopoly.

#### 5.4.6. Development of a new draft bill on science

Another area of reform, along with the restructuring and introduction of the new research funding programmes was in legislative activity, namely the development of fundamental laws regulating key relations in the science field. Last year it was decided to redraft the Law on Science and Public Scientific and Technical Policy (No. 127-FZ) effective since 1996 and to

<sup>1</sup> List of assignments made based on the results of the meeting of the Presidential Council for Science and Education. Pr-3011, cl. 2z. 27 December 2014 <http://www.kremlin.ru/assignments/47367>

unite all types of policy in the new version – scientific, technological and innovative.<sup>1</sup> The very formulation of this goal seems inappropriate due to the differences between the subjects being regulated, but the Ministry of Education and Science argued that, in Russia, with the significant role which the state plays, such unification is justified, while a corresponding orientation towards similar regulation abroad, is not.<sup>2</sup> In other words, the proposals are not aimed at overcoming the problem faced by Russian science – of the excessive involvement of the state, but, quite the opposite, it is planned to consolidate this position in the new law.

The ‘structure’ of the law announced at the year-end does not stand up to scrutiny. Currently it does not have the structure of a draft law, but is an unprofessional guide containing all the currently used terms and definitions without room for any which may appear in the future. A number of key concepts and, more importantly, the scope of the state’s functions are not defined. This conflicts with the key intent of the initiators of the new law – not to ‘fix’ the current situation but to ‘design for the future’.<sup>3</sup> For example, the classification of the organisational structure of science is laid out, highlighting areas with special status, but without mentioning the organisations which the FASO plans to create, – the FRCs, RRSs, etc. The list is closed, although such a law should present only a framework, if it is not to require annual updates.

The draft bill has more serious flaws. In the section devoted to planning, the planning tools are mixed up with those of plan implementation (state programmes and even the stimulation of creative scientific work by young people). The same applies to its treatment of funding - grants and agreements are outlined. However, agreements represent the form in which the conditions of a grant or contract should be laid out, but contracts are not even mentioned.

Thus, even at the level of its table of contents, the new draft bill is considerably inferior to the current one, both in terms of the logic of its construction and the professional level of its description of the scope of regulation.

#### 5.4.7. Mobility and the exodus of scientific personnel

The illogical and not fully transparent process of reforming the scientific complex could not but affect the mood in the scientific community, whose active representatives being members of various public organisations and councils tried to participate in the adjustment of managerial decisions. They started to revive the ideas of the strategy realised in the early 1990s, during the biggest and fastest collapse of national science. Repeating this strategy would involve enhancing the independence of scientific subdivision and laboratories within institutions.<sup>4</sup> When everything is unravelling, it is easier for individual groups to survive. By contrast, the more passive portion of the scientific community began to favour the approach widely practised in the early 1990s – to go work abroad.<sup>5</sup> The outflow of personnel from the coun-

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<sup>1</sup> <https://www.ras.ru/news/shownews.aspx?id=2183e50e-14f1-4fcf-b08a-5b89cac34a64#content>

<sup>2</sup> Volchkova N. No patch! The Concept of a New Law on Science is Introduced/Search, No. 48, 28 November 2014 <http://www.poisknews.ru/theme/science-politic/12509/>

<sup>3</sup> Volchkova N. No patch! The Concept of a New Law on Science is Introduced/Search, No. 48, 28 November 2014 <http://www.poisknews.ru/theme/science-politic/12509/>

<sup>4</sup> Council for Science: No Positive Changes in FASO Institutes Are Yet Observed, 22 October 2014 <http://sovet-po-nauke.ru/info/22102014-decision>

<sup>5</sup> It Is Not about Mega-grants. RAS Vice-Presidents about the New Generation of Scientists//Lenta.ru, 30 October 2014 <http://age.lenta.ru/generation/articles/2014/10/29/kozlov/>

try recorded in just 8 months of 2014 was larger than for any full year in the last 15 years. Those who left were mostly scientific staff and businessmen.<sup>1</sup>

Indeed, as shown by the latest (April 2014) survey conducted by the Russian Venture Company (RVC), Russia does not offer the most favourable conditions for scientific research. Only 6% of respondents thought that the conditions offered in Russia were good enough to encourage scientists to come back.<sup>2</sup> The overwhelming majority – 67% – believes that there are many more opportunities for researchers to realise their aspirations abroad.

Nevertheless, in the last year there has been no discussion of measures for preventing such a ‘brain drain’. Some attention was paid to developing measures that could contribute to the enhancement of geographic mobility within the country. Russia is one of the countries with the least mobile scientific and technical staffing infrastructure, inferior even to the ‘conservative’ countries Japan and China. There are practically no direct measures for stimulating internal mobility, while measures of indirect stimulation that have been widely used in foreign countries for many years are only at the stage of planning - for example, the introduction of post-doctoral positions to encourage young Candidates of Science to seek work in an organisation other than the one where they defended their dissertation. The implementation of this and other measures were postponed due to the reorganisation of the scientific complex of the country, related, among other things, to significant changes in the mechanisms of the budgetary funding of research and development, including the closing of a number of personnel-related programmes. Increased attention to internal mobility can be expected in 2015 when the implementation of a number of new programmes initiated by the Russian Science Foundation will begin. In accordance with the plans of the RSF, two of its new invitations to tender will be aimed at stimulating the internal circulation of personnel. The emphasis will be on geographic mobility.

The first tender envisages the funding of projects led by Russian or foreign scientists, the latter having to come to work in Russia for at least 183 days per year (in order to be considered residents for tax purposes). Russian scientists will also be able to lead laboratories in the regions (Moscow and St. Petersburg are not participating in this tender). The idea is to stimulate the development of science in the regions through an influx of qualified personnel from the largest cities and foreign countries. It is planned to provide grants for 3-5 years and the initiative will be considered a success if between 50 and 100 worthy projects can be identified. The second tender will be for post-doctoral research fellows. The requirement will be, not just to change their place of work (to work in a place other than where their dissertation was defended), but to move to a completely different region. Given the current infrastructure of the country the focus on geographical mobility is not fully justified, taking into account the limited number of advanced scientific centres outside Moscow and St. Petersburg.

Such an approach is different from the practice typical of other countries. In countries with developed scientific infrastructure the focus on mobility is mostly displayed in the context of measures for stimulating connections between universities (scientific organisations) and busi-

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<sup>1</sup> Mereminskaya E. Emigrants of a New Wave. More People Have Started Leaving Russia//Gazeta.ru, 01 November 2014 <http://www.gazeta.ru/business/2014/10/30/6282685.shtml>

<sup>2</sup> 174 respondents took part in the survey, out of which 19% were teachers and researchers, 16% - representatives of government authorities and development institutes, 37% - businessmen and representatives of industry. Source: Russia: Focus on Innovation. Issue II. Moscow: RVC, 2014. p. 44.

ness to accelerate the transfer of knowledge.<sup>1</sup> Moreover, it involves a gradual transition from direct measures (when, for example, target grants are provided, or other tools with a direct influence on mobility are used) to indirect measures relating to regulating the conduct of the consulting and business activities of professors, different types of joint initiatives, the training of personnel, etc.

The level of mobility of scientific personnel, which is vividly evidenced by the examples of the US, France and Japan, is significantly affected by the general economic regulation and associated characteristics of the established systems of innovation. For instance, in the US policy measures for stimulating mobility appeared as a result of an analysis of the effectiveness of governmental tools for supporting partnerships between science and business. This resulted in the implementation of the direct measures that had been most actively used in the 1980s. They have proved to be effective in the context of the current economic conditions that generally encourage workforce movement. However, a major part was played by indirect stimulation of inter-sector mobility. One of the most common tools is built into the programmes of support for small innovative enterprises. In this case, the transfer of professors from universities to companies, and the opportunity for them to open their own small businesses where they then work on a part-time basis, is encouraged.

#### 5.4.8. The impact of sanctions

2014 was marked by a new situation, that of economic sanctions, which have already had some impact on the conditions for scientific research in Russia. Formally, the science sector is excluded from sanctions and, moreover, the goals and objectives of the reform and development of the scientific infrastructure involve an expansion of international cooperation and a reliance on international partnerships. This applied both to the development of science in HEIs and the realisation of priority scientific and technological areas. However, the situation has turned out to be asymmetric - with the Russian scientific sector suffering from the worsening political relations with scientifically and technologically developed countries, both in explicit ways, and other implicit ones which have yet to be fully assessed.

The first reaction appeared in April 2014 on the part of the US that limited, in some cases on a temporary basis, contacts between Russian and American scientists cooperating within the framework of projects implemented in national laboratories of such American departments as NASA and the Department of Energy. It was officially declared that this related only to inter-state interactions but not directly to the cooperating scientists. In practice, the situation turned out to be more complicated, and, on a number of occasions, work under the projects was suspended, the employees of Russian scientific organisations were banned from national laboratories and American scientists were prohibited from even holding teleconferences and electronic correspondence with their Russian colleagues.<sup>2</sup>

Later, in the autumn, the impact of sanctions became more implicit in nature, which made them more painful from a medium-term perspective. For example, problems arose with con-

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<sup>1</sup> Dezhina I. Inter-Sector Mobility of Scientific Personnel - World Trends and Peculiarities of Russia//Issues of State and Municipal Administration. 2014. No. 3, pp. 30-48.

<sup>2</sup> Kotlyar P. Bring Our Astronauts Back on Whatever You Want// Gazeta.ru, 04 April 2014 [http://www.gazeta.ru/science/2014/04/04\\_a\\_5980353.shtml](http://www.gazeta.ru/science/2014/04/04_a_5980353.shtml); Chernykh A., Belyaninov K. Sanctions Left Their Trace in Science. Russian Physicists Banned from the U.S.//Kommersant.ru, 11 April 2014 <http://www.kommersant.ru/doc/2449664>

tracts with Western firms supplying scientific devices and equipment,<sup>1</sup> important foreign companies which could have launched production of component parts in Russia started leaving the technoparks.<sup>2</sup> By November information had appeared on the prohibition of the supply of a number of components required, among other things, for purely academic activities.<sup>3</sup> Thus, the sanctions started affecting not only possible dual-use technologies but also international basic research projects. In prospect, the implications of sanctions will affect the possibilities and speed of development of new technologies in Russia. Virtually all the high technology sectors in Russia depend considerably on imports - from chemical reagents to components of sophisticated machinery.

The development of universities, the realisation of top-priority scientific projects, resolving allied scientific and technological tasks - all these goals have been based on the absorption of foreign experience and encouraging the development of international cooperation. The situation in the field of international cooperation will most probably worsen as the negative impact of sanctions is aggravated by the devaluation of the ruble.

#### 5.4.9. The state of innovation

In the last year innovation activity decreased, not so much because the measures for supporting innovation were insufficient or principally incorrect, but because the new measures were not implemented, while the old ones were still applied by rote. This is why the decline in innovation activity can be primarily related to the worsening overall economic climate in the country, affecting the conditions in which large, small and medium companies operate.

The current situation was accurately and concisely described by the Deputy Minister of Economic Development of Russia, Oleg Fomichev: 'There is a feeling that the innovation economy was built a long time ago, but that Russia still has no innovations.'<sup>4</sup>

In large Russian companies one could note the expansion of the 'welfare mentality', a certain Soviet nostalgia. In addition to a supply of sufficient budgetary funds for R&D, such companies seem to be requesting more and more often that the state ensures a demand for their products or becomes their long-term customer. In particular, this was confirmed in a recent survey by the Russian Venture Company.<sup>5</sup> However, a state order which guarantees demand, at the same time sets specific requirements for the results of the work. This can slow down the rate at which companies enter global markets because a total state order decreases the competitiveness of its contractors.

For small companies, in turn, business conditions have worsened substantially in all regions, mainly due to the more complicated conditions of registration of companies (long

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<sup>1</sup> Shatalova A. Attendance is Obligatory! Helmholtz followers settle in Russia//Search. No. 41. 11 October 2014 <http://www.poisknews.ru/theme/international/12067/>

<sup>2</sup> Bolokhova K. House of High Technologies//STRF. Science and Technologies of RF. 14 January 2015 [http://www.strf.ru/material.aspx?CatalogId=223&d\\_no=92801#.VMOP1C4yTGw](http://www.strf.ru/material.aspx?CatalogId=223&d_no=92801#.VMOP1C4yTGw)

<sup>3</sup> Cheberko I. The U.S. Prohibits the Supply to Russia of Devices for Scientific Satellite//Izvestia, 27 November 2014 <http://izvestia.ru/news/579970>

<sup>4</sup> Expert and analytical report 'Russia: Focus on Innovation' presented on the forum 'Open Innovations', 16 October 2014. <http://www.mskit.ru/news/n173581/>

<sup>5</sup> Russia: Focus on Innovation. Issue II. Moscow: RVC, 2014, p. 76.

terms, the difficult and multiple stages involved in obtaining permits, licensing, etc.)<sup>1</sup> The high rates of taxation, and predicted further increases, were another factor slowing down the development of small innovative business. At the same time, the mechanisms forcing large companies to cooperate with small ones, through the outsourcing of a proportion of the tasks involved in developing technologies, and through the purchase of products from small companies, have not yet started working. According to the Government's plans, state-owned companies should increase their purchasing from small business, however, the state-owned companies (primarily those engaged in the extraction of natural resources) are resistant to any government quotas in respect of such purchases, justifying this position mostly by claiming that their orders for products are large, and that small businesses are unable to fulfil them.<sup>2</sup> At the same time, while a number of large state-owned companies do cooperate with small firms, they are also against hard-quota purchasing volumes from small companies. Thus, in the current situation, the domination of self-procurement by large companies and their limited interest in cooperation persists.

Furthermore, as shown by surveys of companies and scientific organisations, most Russian entities do not use Russian developments (R&D and technologies), because, on average, 70% of them purchase ready-made technology from outside of Russia (in certain sectors, for example, in machine building, imports account for 95%).<sup>3</sup> Domestically generated innovations are used by only 24% of manufacturing companies, of which 58% note the low level of scientific and technical originality offered by national scientific organisations and HEIs (and the small companies created by them).<sup>4</sup> With the devaluation of the ruble this has become an almost dead-end situation: it is impossible to start quickly creating new technologies from a weak science base.

Thus, the absence of demand on the part of large companies for cooperation with small business can also be explained by the low level of novelty and quality of the products offered by those small companies. There is also a personnel-related aspect: the lack of skills. Despite the various training and retraining programmes that have been implemented over the space of more than 20 years, experts are continuing to name this factor among key obstacles to developing innovation-creating activities in the country. It is remarkable that here we can also observe an alarming trend: the demand for educational programmes related to technological innovations is actually declining both from individual entrepreneurs and from large companies.<sup>5</sup> It is possible that the reason is not that market participants consider themselves sufficiently educated, but rather, the dearth of relevant programmes being proposed. The question of who

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<sup>1</sup> Grigorieva E. Little Ones Have Been Cornered. The Conditions for the Conduct of Small and Medium Business in Many Russian Regions Has Worsened Considerably//Novie Izvestiya, 30 July 2014 <http://www.newizv.ru/economics/2014-07-30/205499-malyshej-zagnali-v-ugol.html>

<sup>2</sup> Titov S., Chepanova M. The Market Is Not for Small Ones. State-owned Companies Fight Against Quotas Obliging Them to Give 18% of Orders to Small and Medium Business//Vedomosti, 11 November 2014 <http://www.vedomosti.ru/newspaper/article/789101/rynok-ne-dlya-melkih>

<sup>3</sup> Data of the Ministry of Industry and Trade of the Russian Federation. Dependence of the Industry of Russia on Import Will Decrease 1.5 Times by 2020//RBC, 11 July 2014 <http://www.rbc.ru/fnews.open/20140711091003.shtml>

<sup>4</sup> Survey conducted by the NRU HSE among 2,000 companies and more than 1,000 scientific organisations. Source: Volkov M. HSE: Russian Enterprises Ignore Innovations. 24 July 2014 [http://i.rbc.ru/anons/item/vshe\\_rossijskie\\_predpriyatiya\\_ignoriruyut\\_innovatsii](http://i.rbc.ru/anons/item/vshe_rossijskie_predpriyatiya_ignoriruyut_innovatsii)

<sup>5</sup> Ponomarev I. Stanislav Rozmirovich: the Innovation System in Russia is Being Rebooted//Trade and Industrial News, 1 December 2014 [http://www.tpp-inform.ru/analytic\\_journal/5236.html](http://www.tpp-inform.ru/analytic_journal/5236.html)

teaches and what is being taught becomes more and more topical with the accumulation of experience in the business community and the aging of scientific and educational staff.

Overall, there are varied and ambiguous factors which negatively impact on the formation of added value chains, with not all of the players being ready to cooperate. At the moment companies of all sizes are oriented not towards mutual cooperation but towards support from the state, both financial and in other ways.

Finally, foreign policy and the associated capital outflow also negatively affect the innovation sector. Investment volumes and the likelihood of the owners of foreign capital participating in Russian foundations have both decreased. The volume of private funds in the venture market has decreased by more than a half - from the beginning of the year corporate funds have cut their support for projects by 61%.<sup>1</sup> The importance of broadening the sources of funding for venture investments by permitting the use of pension funds has already been under discussion for several years.<sup>2</sup> However, in the current economic climate the appearance of this source is unlikely radically to change the overall negative trend.

By late November 2014 the exodus of Russian investors from the country to international markets became apparent. The main reason for this was the absence of demand for innovation in Russia, following the failure of both the stimulation of innovation development programmes aimed at state-owned companies and other measures of 'forcing innovation'. Another reason was the increasing problem of innovative business exiting the market (i.e. selling-out to large high-tech companies) as foreign companies left or reduced their presence in the Russian market.<sup>3</sup>

However, despite the generally insignificant number of global-level achievements, one area has continued developing relatively successfully - innovations in the field of information technology.<sup>4</sup> In this field the imposition of sanctions has become an additional incentive for development, due to the sharp rise in prices for imported engineering software.

The economic conditions which have been generally unfavourable for innovation and the necessity for import substitution were the reasons behind the Government's decision to review its basic goal-setting document - the 'Strategy for Innovation-Driven Development of the Russian Federation for the Period until 2020.'<sup>5</sup> The available data indicates that, as of the end of 2014, about one third of its 45 target indicators had not been achieved, while for sections of the Strategy such as 'innovative business', 'effective science' and the 'innovative state', two thirds of the indicators had not been achieved. The best results were achieved in the 'financial support' sector, and the worst - in 'participation in the world system of innova-

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<sup>1</sup> RVC Assessment. Source: Edovina T. The Market Model in Real Size. Venture Capitalism is Now Waiting for Orders and Investments from State-Owned Companies//Kommersant, 8 December 2014 <http://www.kommersant.ru/doc/2628437>

<sup>2</sup> Soloviev A. Why Medvedev is Giving Pension Money to Start-ups. 13 August 2014 <http://top.rbc.ru/economics/13/08/2014/942690.shtml>

<sup>3</sup> Turkot A. Why Venture Funds are Leaving Russia, 25 November 2014 <http://daily.rbc.ru/opinions/business/25/11/2014/5473190acbb20f2a143fe496>

<sup>4</sup> Igor Agamirzyan: One Has to Run Fast to Stay in the Same Place, 18 December 2014 [http://russiancouncil.ru/inner/?id\\_4=4992#top](http://russiancouncil.ru/inner/?id_4=4992#top)

<sup>5</sup> Welcoming speech of Dmitry Medvedev at the meeting of the Presidium of the Presidential Council of the Russian Federation for Economy Modernisation and Innovation-Driven Development of Russia 'On the Progress of Implementation of the Strategy of Innovation-Driven Development of Russia for the Period until 2020', 19 December 2014 <http://government.ru/news/16196/>



tion' (failure against 75% of the indicators).<sup>1</sup> New decisions were announced on 30 December 2014 as a result of the meeting of the Presidium of the Presidential Council of the Russian Federation for Economy Modernisation and the Innovation-Driven Development of Russia, at which issues of adjustment of the Innovation Development Strategy had been considered. By mid-November 2015, an updated draft strategy should have been developed,<sup>2</sup> with the further assurance of annual monitoring of its implementation.

#### 5.4.10. Infrastructure development: technology platforms and innovation clusters

In 2014 the state continued working on forming connections within the system for innovation, including by its support for innovation clusters and increasing the importance of the expert function imposed on technology platforms. Infrastructure projects remain among the most successful support measures for technological information. For instance, in innovation clusters the R&D expenditure of cluster participants increased from Rb 72.9bn in 2012 to Rb 85.4bn in 2014 (expressed at 2012 prices).<sup>3</sup>

Technology platforms and clusters therefore received a new impetus for development but it has not been fully realised as yet. As a result of new industrialisation, the importance of localisation (ensured by clusters) and network interactions (the function of technology platforms) have increased. In late 2014 clusters received additional funds for their development from the federal budget - the amount of distributed funds was increased to Rb 2.5bn (against Rb 1.3bn in 2013), and all 25 clusters supported by the Government could apply for it. However, the budgetary funds can only be spent on a limited number of activities (maintenance of the specialised cluster organisations, personnel training and retraining, exhibitions and trade fairs, support of the work of engineering centres and other infrastructure objects). Typically, most requests were received for the support of engineering centres and specialised cluster organisations,<sup>4</sup> which indicates a better understanding of the purpose of clusters as systemic entities rather than just a set of facilities located in the same area. It should be noted that, in 2014, the activities of engineering centres were evaluated by the Government as 'absolutely effective' because each of the supported centres earned revenues that were greater than the amount of their state subsidy.<sup>5</sup>

It should also be noted that, in terms of funding priorities, Russian clusters are supported by the Government in a different manner from that in other countries. In Europe much more attention is paid to the funding of joint research and development projects, which contributes

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<sup>1</sup> On Implementation of the Strategy for the Innovation-Driven Development of the Russian Federation for the Period until 2020. Presentation. by the Ministry of Economic Development of the Russian Federation. Moscow, 19 December 2014 <http://government.ru/media/files/A6DTgyvkUo8.pdf>

<sup>2</sup> Decisions made based on the results of at the meeting of the Presidium of the Presidential Council of the Russian Federation for Economy Modernisation and Innovation-Driven Development of Russia, 30 December 2014 <http://government.ru/orders/16381/>

<sup>3</sup> According to data from the constituent entities of the Russian Federation as of September 2014. Source: On Implementation of the Strategy for Innovation-Driven Development of the Russian Federation for the Period until 2020. Presentation by the Ministry of Economic Development of the Russian Federation. Moscow, 19 December 2014 <http://government.ru/media/files/A6DTgyvkUo8.pdf>

<sup>4</sup> Ministry of Economic Development Distributed 2014 Subsidies for Support of Pilot Clusters//Russian Cluster Observatory, 19 November 2014 <http://cluster.hse.ru/news/1574/>

<sup>5</sup> Ministers discussed the development of engineering centres in Polytechnic University, 23 January 2015 [https://www.spbstu.ru/news/2015\\_01\\_23/2015\\_01\\_23.asp](https://www.spbstu.ru/news/2015_01_23/2015_01_23.asp)

to the technological development and expansion of added value chains. In Russia this aspect is, as yet, missing, with clusters being interpreted simply as infrastructure projects.

What also stands out is that the development of clusters reflects many of the systemic problems of the Russian innovation sector that are difficult to resolve at a local level. For instance, experts at the Russian Cluster Observatory note that Russian clusters include only a small proportion of private organisations, small and medium enterprises, and exhibit weak competition within the cluster.<sup>1</sup> Thus, experience of cluster development suggests that the primary task of innovation policy should be to change the business climate and to create favourable conditions for the development of small and medium enterprises, and connections within the innovation system. Clusters may have a small effect on adjusting and accelerating technological development, but as tools, they are secondary and can hardly change the innovation environment as a whole.

Technology platforms, as opposed to clusters, have never received targeted budgetary funding for their development and preparation of strategic documents. However, their access to budgetary funds from federal target programmes was facilitated because the platforms, de facto, began to play the part of collectives of experts for conducting the preliminary selection and assessment of relevance of particular projects within individual FTPs. For example, in some of the competitive tenders for the Federal Target Programme 'Research and Development in Priority Areas for the Development of the Scientific-Technological Complex of Russia for 2014-2020' applications have only been accepted where documentation is available confirming that they are supported by technology platforms. This means that the subject of the application has to be within the strategic programme of research of a particular platform.<sup>2</sup> On the one hand, such pre-selection is important and links the interests of different stakeholders. On the other hand, as with any formal requirement, it distorts the demand for funding. For example, organisations which had not previously participated in platforms have sought to become members, not for the purposes of enhancing their interactions and clarifying development strategies, but simply to facilitate the process of obtaining the documents that are important for successful participation in tenders for budgetary funds.

The aspect of the quality of expert review should also be noted. Since the platforms have developed without state support, they have yet to become serious collectives of experts and, hence, their evaluations of particular areas of technology should be looked at critically. In particular, at a meeting of the Foresight Session in the NRU-HSE it was noted that the platforms do not yet represent the consolidated opinion of science and business in the field of technological development.<sup>3</sup> Out of 35 technology platforms, no more than 20% can justify their proposals on areas of strategic development. Platforms still contribute very little to changing the educational environment, namely to creating training courses, laboratories or departments for developing fields of new technology.

In part, the weakness of the platforms' potential is confirmed by their insignificant involvement in international networks and partnerships (*Table 22*). The extent of the international connections of platforms can be assessed on the basis of two parameters: a) their degree

<sup>1</sup> Kutsenko E. Areas for Increasing the Effectiveness of Cluster Policy in Russia. Presentation during Russian Cluster Week. Moscow, 27-28 November 2014 <http://www.slideshare.net/evgenykutsenko/kutsenko-27112014>

<sup>2</sup> Shatalova N. Pluses of the New Formats. Changes in FTP Did It Good//Search. No. 29-30. 25 July 2014 <http://www.poisknews.ru/theme/science-politic/11182/>

<sup>3</sup> Foresight as a platform for resolving development problems, 2 April 2014 <http://conf.hse.ru/2014/news/120086267.html>

of activity in developing partner relationships and of participation in international conferences and exhibitions, and b) the presence of foreign organisations in the composition of platform participants. The first indicator is the more objective because foreign members in the composition of platforms may perform only a nominal representative function and do not necessarily contribute to internationalisation.

*Table 22*

**Technology platforms: degree of international involvement connections**

<b>Platform</b>	<b>Active in development of international connections</b>	<b>Foreign organisations in the composition of platform members</b>
Medical Science of the Future	+	+
Bioindustry and Bioresources - Biotech 2030	+	-
Bioenergy	+	+
Innovative laser, optical and optoelectronic technologies - photonics	+	-
Radiation technology	+	-
Ocean exploration	+	-
Textile and consumer goods industry	+	+
3 platforms in the field of extraction and processing of hydrocarbons	-	+
Environmentally friendly transport 'Green Car'	-	+
Construction and architecture	-	+

*Source:* prepared by the author on the basis of data from: 'Russian Technology Platforms'; the Moscow International Forum 'Open Innovations'; the Ministry of Education and Science of Russia and the Ministry of Economic Development of Russia, RFTD, Moscow, 2014.

As can be seen from *Table 22*, only three platforms successfully combine both the parameters of international activity, and in two of them the coordinating organisations had developed such international connections before they became members of the platforms.

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Thus, 2014 was characterised by a slow implementation of scientific and innovation policy under increasingly complicated external conditions and economic problems. The development of further steps for reforming scientific infrastructure was not adequately coordinated, and resulted in poor coupling and insufficient development of key measures, as well as a year's extension of the moratorium for dealing with the issues of property and personnel changes in the institutes that had previously been included in the RAS, RAMS and RAAS. The emergence of a new management structure - the FASO - did not optimise, but rather complicated, and muddied the waters for the distribution of functions between the key departments responsible for the development of science in Russia. By the year-end, signs of an increased exodus of scientists to other countries started to become more and more apparent.

Budgetary projects evidence that the state funding of R&D will not be growing in the way that it used to do, and from 2016 it is planned to fix the amount of allocations. Taking into account inflation, this effectively means a reduction in budgetary expenditure. At the same time, foreign policy problems have started to affect international scientific and technological cooperation, forcing a transition to a mobilisation-oriented model of science. However, this is

difficult to realise due to the weakness of the scientific infrastructure in a whole range of otherwise promising scientific and technological areas.

The innovation sector has seen an outflow of Russian and foreign capital, especially visible in the field of venture capital investment in innovation, due to the reduction in the number of possible options to exit high-tech businesses. At the same time, the state's focus on policy measures aimed at strengthening relationships between key players in the innovation system has increased noticeably.