## Section 4. The social sphere

### 4.1. The population's finances and the consumer market

**Money incomes.** In 2009, the real money incomes of the population rose by 1.9 % on 2008, while there was a significant differentiation in the dynamics of real wages and real size of pensions (see Fig.1).

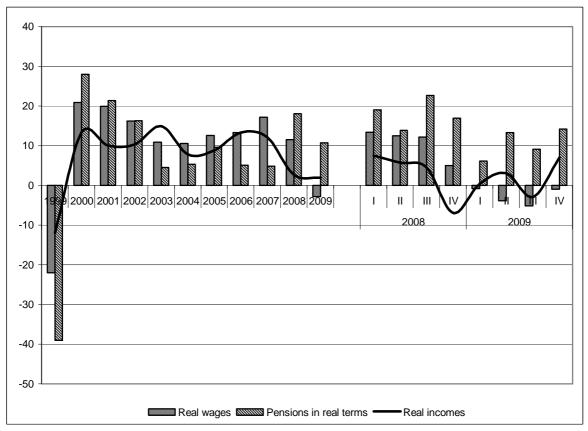
An analysis of the dynamics of the real incomes of the population and the dynamics of real wages indicates that in recent years the intra-year fluctuations of these indices had not changed until September 2008. As a rule, in December, due to increased payments, real incomes and real wages would sharply rise, thus leveling off the negative effect of the slow dynamics observed early in the year that resulted from a leap of inflation in January and a slow-down in economic activity. In 2008, with real wages having declined in October - November at an average monthly rate of 1.2 %, even the traditional December rise in wages could not compensate for the negative trends of the autumn months. As a result, in Q IV 2007, real wages increased on the corresponding period of 2007 by 5.0 %, while their annual growth amounted to approximately 11.5 %.

In 2009, for the first time in the past 10 years, the dynamics of real wages was negative with its deepest fall registered in Q III. Despite some deceleration in the decline of real wages in Q III caused by the deceleration of inflation by the end of the year and a relative stabilization of economic activity, the overall decline in real wages in 2009 amounted to 2.8 % by comparison with the previous year.

In 2009, the average nominal monthly wage amounted to 18,785 Rb, an increase of 8.5 % by comparison with the corresponding figure for 2008. There were no significant changes in the differentiation of wages. In 2009, the highest wages continued to be paid in such sectors of economic activities as pipeline transportation, financial activities and the extraction of fossil fuel resources (2.2 times higher than the Russian average), as well as the production of coke and petroleum products (2 times higher). The lowest average monthly wages continued to be paid in the textile and sewing industries; agriculture; hunting and forestry – 48 %, 53 % and 51 % of the Russian average, respectively.

Among the positive changes in the structure of wages by type of economic activity, we can point to the continuing upward trend of wages in the social sphere – in education, health care and social services provision. In 2009, the average monthly wage of health care and social service workers amounted to 80 % of the Russian average, and that of education workers – to 71 % thereof.

The year 2009 witnessed the emergence of a downward trend in wage arrears. Growth in arrears was first recorded in September 2008; starting from the second half-year 2009, wage arrears were on a constant decline. By the end of 2009, they amounted to 3,565 bn Rb, a significant drop from their maximum level of 8,779 bn Rb registered as of early July 2009.



Source: Rosstat.

Fig. 1. The dynamics of changes in the real incomes of the population, by component, in 1999 - 2009 and by quarter, in 2008 - 2009 (as a percentage of the corresponding period of a previous year)

Wages account for almost 70 % of the incomes of the population and therefore exert a dominant influence on the social parameters of development. In 2009, the factor compensating for the dynamics of wages' negative impact on the real incomes of the population was the share of social payments in the incomes of the population having risen to 14 % against 13.3 % a year earlier (Table 1). In 2008 – 2009, the relative worsening of the financial position of the pensioners by comparison with the working population came to an end. In 2009, the ratio between the average pension and the average monthly wage increased to 27 % against 24.3 % in 2008 and 22.8 % in 2007. In order to improve the financial position of the pensioners, the basic part of the labor pension was increased, from 1 March 2009 onwards, by 8.7 %; and from 1 December 2009 onwards it was set at 2,562 Rb (an increase of 31.38 %). The insured part of the labor pension was indexed from 1 April 2009 and from 1 August 2009 onwards by 17.5 and 7.5 % respectively. Due to the aforesaid measures, the average monthly pension increased, in 2009, to 5,191 Rb (a 23.6 % rise on 2008), thus considerably outstripping the growth rate of consumer prices and the subsistence level of the pensioner. In real terms, pensions increased by 10.7 % in comparison with 2008. In 2009, the most visible changes in the structure of the money incomes of the population were related to the drop in property income, whose share fell by almost one third, to 4.3 %.

 ${\it Table~1}$  The structure of the population's money incomes in 2008 – 2009, as % of total

		2008				2009					
	YOOM		Qua	rter		NOOM.		Quarter			
	year	I	II	III	IV	year	I	II	III	IV	
Money income – total	100	100	100	100	100	100	100	100	100	100	
Income from entrepreneurial activities	10.3	10.2	9.6	10.4	10.7	9.7	10.5	9.3	10.1	9.2	
Remuneration, including hidden wages	68.3	68.7	68.6	66.7	69.3	69.4	69.1	69.6	68.5	70.4	
Social payments	13.2	13.4	12.8	12.8	13.8	14.6	14.7	14.5	15	14.1	
Property income	6.2	5.6	7.1	8.1	4.2	4.3	3.8	4.6	4.4	4.3	
Other types of income	2	2	1.9	2	2	2	1.9	2	2	2	

Source: Rosstat.

In 2009, despite the adopted measures designed to increase payments for labor, pensions, benefits, and social support for individual categories of the population, the number of persons with income below the subsistence level amounted, according to preliminary data, to 19.6 mln, or 13.8 % of Russia's total population, against 13.1 % in 2008. The results of analyzing the budgets of households indicate that in 2009 the basic indices of the income differentiation of the population remained the same as in 2008. The index of income concentration (the Gini Index) remained unchanged at 0.422; the decile dispersion ratio characterizing the extent of social differentiation was 16.7 against 16.8 in 2008. In 2009, the top 10 % of the population accounted for 31.0 % of the aggregate volume of aggregate money income (in 2008 – 31.1 %), while the bottom 10 % of the population accounted for 1.9 % (1.9 %).

**Population expenditures.** In 2009, the total money income of the population rose to 28,388.8 bn Rb, an increase of 12.5 % on 2008). Of that, 19,635.6 bn Rb was spent by the population on the purchase of commodities and services, a 5 % rise on the previous year. The 2009 volume of savings was estimated at 5,602.3 bn Rb, a rise of 1.67 times from the previous year.

In 2009, the dynamics and structure of household expenditures were considerably influenced by inflation. Over-the-year consumer inflation amounted to 108.8 % against 113.3 % in 2008. As a result of the influence of various factors on the dynamics of prices, the structure of inflation underwent considerable changes. The moderate growth in food prices observed since November 2008 can be explained both by the decrease in the effective demand of the population and by the clear interest of trading companies and establishments in restraining the price rise in order to accelerate money turnover in conditions of credit shortage. The dynamics of prices for non-food commodities was influenced by the rising real exchange rate of the ruble and by the drop in imports. The price index of food commodities amounted to 106.1 % against 116.5 % in 2008, while that of non-food commodities - to 109.7 % against 108.0 % in 2008.

The transformation of price ratios brought about a change in consumer behavior (*Table 2*). The share of monetary means spent on purchases of commodities and services remained at a relatively low level; it amounted to 69.2 % against 74.1 % a year earlier, while the share of expenses on the purchase of commodities amounted to 53.6 % against 57.9 % in 2008.

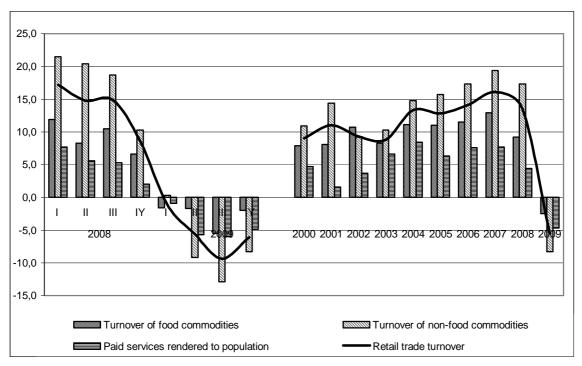
In 2009, the incomes of the population displayed moderate growth, and the largest share of expenditures was accounted for by purchases of food commodities and articles of prime necessity. As a result, in 2009 the proportion of food commodities, including beverages and tobacco products, in the structure of retail trade turnover rose to 48.6 % (or by 1.8 pp). It exceeded the figure for the same period of 2008, while the share of non-food commodities correspondingly decreased.

Table 2 The structure of the expenditure of the money incomes of the population, as %

				0	f that, spent o	n			
				including on		•			Growth
	Money in- comes	purchases of com- modities and ser- vices	purchases of com- modities	purchases of ser- vices	making manda- tory pay- ments and contribu- tions	savings	Of that, kept on deposit and invested in securities	Purchase of foreign currencies	(+), reduc- tion (-) in currency in hands of public
2008					•	•	•		
QI	100	77.1	59.7	17.4	12.1	8.3	+2.7	6.9	-4.4
Q II	100	71.8	55.7	16.1	12.3	7.2	+6.4	4.7	+4.0
Q III	100	74.4	58.1	16.3	12.6	4.6	+1.7	5.7	+2.7
Q IV	100	73.6	58.4	15.2	12.0	2.2	-9.2	13.7	-1.5
Year	100	74.1	57.9	16.2	12.3	5.3	0.0	7.9	+0.4
2009						•			
QI	100	76.3	58.8	17.5	11.3	8.7	-2.7	10.3	-6.6
Q II	100	66.6	51.3	15.3	10.4	17.1	+6.3	3.5	+2.4
Q III	100	70.2	54.2	16.0	11.4	12.9	+2.4	6.0	-0.5
Q IV	100	65.3	51.3	14.0	10.6	16.8	+8.5	3.5	+3.8
Year	100	69.2	53.6	15.6	10.9	14.2	+4.1	5.5	+0.2

Source: Rosstat.

Over 2009, the turnover of the food commodities market dropped by 2.5 %, while that of the non-food commodities market – by 8.3 % (2). There was also one positive trend that should be noted: starting in May, retail trade turnover began to grow month-to-month.



Source: Rosstat.

Fig. 2. The dynamics of the turnover of retail trade and paid services rendered to the population in 2000 - 2009 and by quarter in 2008 - 2009, as a percentage of the corresponding quarter of a previous year

It should be noted that the year 2009 was characterized by an increase in the population's propensity to save money, which can be seen as a precautionary measure in crisis conditions.

People used various instruments for safekeeping their incomes. If in Q I 2009 10.3 % of the money incomes of the population was spent on purchasing of foreign currencies, in Q 4 2009 this figure dropped to 3.5 %, while the proportion of savings kept on deposit and invested in securities rose to 8.5 % of the money incomes of the population, against the lowering of their share to -2.7 % at the beginning of the year. In Q III 2009, expenditures for purchases of foreign currency climbed to 6.0 % of the money incomes of the population, while the share of savings kept on deposit and invested in securities declined to 1.9 %.

Over 2009, the share of savings in the money incomes of the population amounted to 14.2% against 5.3% in the previous year, including those kept on deposit and invested in securities – to 4.1%.

The dynamics of the savings of the population was considerably influenced by the level of inflation, the periodically emerging problems with liquidity, fluctuations of the exchange rate of the ruble and negative phenomena on the real estate market (less housing being put into operation, growth in mortgage interest rates, etc.). By the results of the first three quarters of 2009, the population's investments in share construction dropped to 37.6 bn Rb against 66.6 bn Rb in the same period of the previous year.

It should be noted that, in spite of the crisis, one of the main uses of savings continues to be purchasing of real estate and the improvement of housing conditions. These spending propensities of the population have had a certain effect on the current downward trend in arrears on housing and mortgage credits that has been observed since Q II 2009. This trend is also contributed to by the banks' toughening their credit policy. In 2008, the volume of credits granted by credit institutions to physical persons for the purpose of housing purchases amounted to 655.2 bn Rb and 103.2 bn Rb in foreign currencies, including mortgage credits in the amount of 555.4 bn Rb and 95.1 bn Rb in foreign currencies. The interest rate on housing and mortgage credits In January – November 2009, the volume of housing credits amounted to 140.5 bn Rb and 9.5 bn Rb in foreign currencies. In January – November 2009, the interest rate of housing and mortgage credits rose to 14.8 and 14.6 %, respectively, against 13.0 and 12.9 % in 2008.

The results of the opinion polls carried out by the Russian Statistics Service in Q IV 2009 indicated that consumer expectations had become more optimistic.

### 4.2. The Migratory Situation

Migration continues to play a prominent role in Russia's social and demographic situation. As a result of a significant drop in the natural population decrease (from 362 thousand persons in 2008 to 249.4 thousand persons in 2009) and the relative stability of the migration growth rate (at the level of 250 – 270 thousand persons), in 2009, for the first time in 15 years, Russia had its natural population decrease fully compensated for by its increase through migration. This undoubtedly remarkable fact – which occurred, in addition to everything else, during a crisis period – obviously requires some explanation.

*Firstly*, in accordance with the existing rules that serve as a basis for keeping the current migration records in Russia and the naturalization procedures, migration-driven population

<sup>&</sup>lt;sup>1</sup> First, a temporary residence permit; then residence permit; and then citizenship of the Russian Federation.

increase is now being contributed to by those migrants who have actually arrived in this country (and who have been staying in its territory) a few years ago. Since 2007, the number of persons arrived has included those migrants who obtain registration for a period of one year or more, as well as those who have for the first time obtained a temporary residence permit. In this connection, a certain part of migrants are still entered in the statistics twice; for example, these are migrants from certain countries (Kazakhstan, Kyrgyzstan and Belarus) who can register shortly after their arrival and then, within the same year, register again after having received Russian citizenship three months after their entry in this country<sup>1</sup>.

Secondly, although the total migration-driven population growth, according to official data, not only fully set-off the natural population decrease but even exceeded it by 9.8 % (Fig. 1), it still has failed to compensate for Russia's loss of the able-bodied population, and can hardly compensate for it in the foreseeable future (Fig. 2). In the late 1990s – early 2000s, Russia was experiencing a favorable situation known as the 'demographical dividend'<sup>2</sup>, when the overall population number was declining while the number of able-bodied persons was still high and remained on the rise until 2005. From the year 2006 onwards, there began a rapid natural contraction of the able-bodied population, its rate being comparatively low in 2006 (approx. 170 thousand persons), then doubling in 2007 and reaching the level of almost 1 mln persons in 2009.

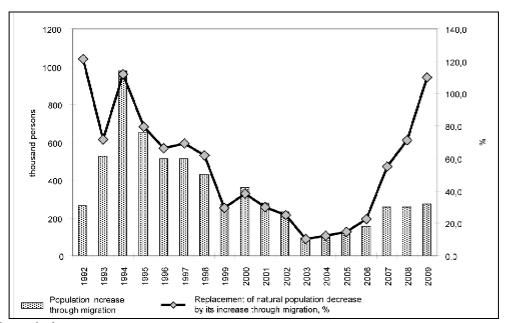
In accordance with the 'medium' variant of the forecast published by *Rosstat*, the aggregate natural decrease rate of the able-bodied population in 2010 – 2020 will amount to 10.3 mln persons, reaching its peak in 2015 (1,152.7 thousand persons)<sup>3</sup>. In view of the existing number of employed in the Russian economy, the average decline per annum will be approximately 1.5%. Neither the Russian not the Soviet economy has ever experienced a similar shrinkage of the able-bodied age groups. The experience of the first half of the 1960s – when the natural growth rate of the able-bodied population dropped dramatically (by half, as compared to the 1950s) but did not become negative – has demonstrated that, in order to liquidate the economic consequences of the impact of demographical structural factors, a package of special measures is required, including reasonable attraction of migrants<sup>4</sup>. The steps that have been taken in recent years in the spheres of migration and investments demonstrate that, so far, society has failed to achieve an adequate understanding of just how acute the situation with regard to providing the national economy with manpower has become. To a certain extent, the crisistriggered unemployment in 2009 was aggravated by a drop in the size of the able-bodied population.

<sup>&</sup>lt;sup>1</sup> For more details concerning this procedures, see Chudinovskikh O. S. Voprosy sovershenstvovaniia statistiki migratsii v ramkakh tekushchego uchiota i Vserossiiskoi perepisi naseleniia 2010 goda. [Issues of improving migration statistics in the framework of current record-keeping and the 2010 All-Russian Census] // http://www.valerytishkov.ru/

<sup>&</sup>lt;sup>2</sup> Vasin S. Proshchanie s demograficheskim dividendom [A farewell to the 'demographical dividend'] // Demoscop Weekly. No 317 – 318. 21 January – 3 February 2008 r. <a href="http://www.demoscope.ru/">http://www.demoscope.ru/</a> weekly/2008/0317/ tema02.php

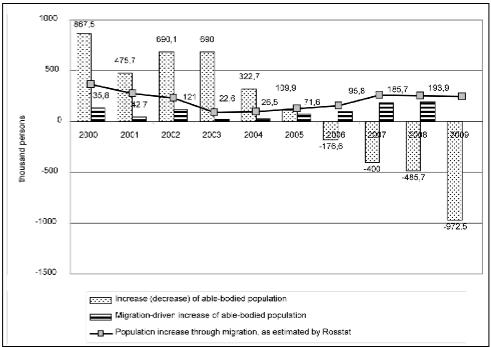
<sup>&</sup>lt;sup>3</sup> Predpolozhitel'naia chislennost' naseleniia Rossiiskoi Federatsii do 2030 g. Statisticheskii bulleten'. [The presumeable population size of the Russian Federation until 2030. Statistical Bulletin. M.: Rosstat, 2009.

For more details concerning this issue, see Zaionchkovskaia Zh. A. Resume doklada. Itogi kruglogo stola 'Migratsiia kak factor ekonomicheskogo razvitiia. 16 dekabria 2009 [An abstract. Summary of the round-table discussion 'Migration as a factor of economic development', 16 December 2009] // Migratsionnyi barometr v Rossiiskoi federatsii [Migration Barometer in the Russian Federation]. http://www.baromig.ru/single/events/reports/20091225153735



Source: Rosstat's data.

Fig. 1. Population increase through migration (thousand persons) and replacement of Russia's natural population decrease by its increase through migration (%), 1992 – 2009.

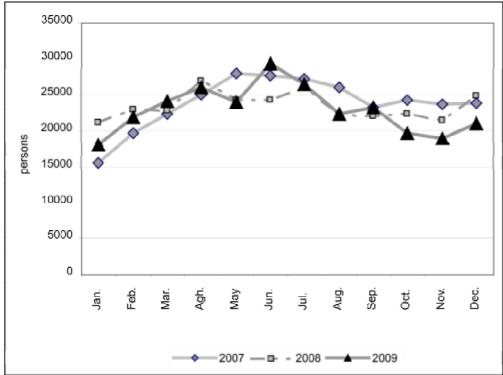


*Note*. For 2009, the estimates of the natural contraction of the able-bodied population are based on the data on the number of population by age group in accordance with the 'medium' variant of Rosstat's forecast as of 1 January 2010 and the published data as of January 2009.

Source: Rosstat's data.

Fig. 2. Increase (decrease) of the size of the able-bodied population and the increase of Russia's population through migration, thousand persons, 2000 - 2009.

Regretfully, due to the limitations of the migration statistics mentioned above, the relationship between the current situation on the labor market and migration flows is poorly reflected in official statistics. For example, the month-by-month arrival statistics of 2009 are almost identical to the trends observed in the previous years that demonstrate the usual winter lows and summer highs (*Fig. 3*). Nothing peculiar was recorded either in late 2008 (the 'official' onset of the crisis) or in the summer season 2009. And the total number of foreign visitor arrivals in Russia as part of international migration in 2009 was by 8 % higher than the same index recoded a year earlier<sup>1</sup>.



Source: Rosstat's data.

Fig. 3. Monthly changes in the number of foreign visitor arrivals in Russia (international migration), 2007 – 2009, persons

Departure statistics demonstrated a continuation of gradual decline – a trend that has been Russia's typical feature for a long time and is totally unrelated to the current crisis. The drop in the number of departures by 18 % must not be regarded as an alarming phenomenon: for example, in one pre-crisis year (2006) this index dropped on the previous year (2005) by nearly a half. The number of departures to the far abroad has declined by 14 % and is rapidly approaching zero, which, however, is by no means an indication of what is actually going on; in fact, it only points to the imperfection of the procedures applied in statistical observations and to a change in the emigration channels.

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<sup>&</sup>lt;sup>1</sup> According to *Rosstat*'s reports for January – December 2009, the number of foreign arrivals amounted to 279.9 thousand. The figure adjusted on the basis of additional estimates (published by *Rosstat*) is 304.9 thousand. Correspondingly, the reported population increase through migration amounted to 247.4 thousand, and the estimated population growth through migration amounted to 271.6 thousand.

As a result, according to the estimates published by *Rosstat* (which have somewhat upwardly adjusted foreign arrival statistics), net migration amounted to 271.6 thousand persons.

On the whole, it can be stated that the current crisis, in contrast to the one that occurred back in 1998, has had almost no impact on migration (or, to be more precise, on migration statistics)<sup>1</sup>. During the first crisis the migration flows responded by a rather explicit increase in the number of departures from Russia to the far abroad and a decline in the number of arrivals in Russia. At present, we are either witnessing an extension over time of the response to the crisis (and so it has not as yet been reflected in the statistics), or statistical data represent only a rather inadequate reflection of the current crisis.

Just like it was in previous years, 93 % of all arrivals are related to the CIS countries. Throughout the 1990s, the repatriation component was unquestionably predominant in crossborder migration into Russia, the migration flows then being mainly represented by ethnic Russians and members of the so-called 'titular ethnic groups' of the Russian Federation (their shares in Russia's population increase through migration over the period 1989 - 2007 amounted to 65 and 12 %, respectively). The return of several millions of persons that shared the ethnic and cultural background of the bulk of Russia's population had a favorable influence on the Russian demographic situation, particularly in rural areas. However, thanks to the effects of many other factors (departures, adjustment to current conditions, the ageing of the remaining population, etc.), the migration potential in recent years has shrunk significantly<sup>2</sup>. In part, this was the reason why the government program adopted in 2006 (and implemented from 2007 onwards) that was designed to assist in the resettlement in Russia of compatriots lining abroad has never really begun to work. Instead of the initially declared target of receiving from abroad 300 thousand persons within 3 years, the numbers of persons actually received are as follows: 682 persons in 2007; 8,857 persons in 2008; 5,549 persons in 2009; so, their total number does not substantially exceed 15 thousand.

The initial hopes have proved to be futile – that is, that the small amounts of money offered as financial aid³ would actually serve as incentives for those people who remained in the CIS republics because they had failed to act on their desire to emigrate during the years when their more active compatriots were doing so, and that they would resettle in those RF subjects that were assigned for such resettlement by responsible government agencies (as a rule, these were some 'problematic' Russian regions). On the one hand, the offered 'social adaptation' package and relocation allowance do little in terms of promoting social and economic integration, while on the other, the potential broadening of these financial support measures is fraught with the

<sup>&</sup>lt;sup>1</sup> If the figures of 1.5-times growth of emigration to Israel reported by some experts (M. Tolts, Jerusalem University) are not taken in consideration.

<sup>&</sup>lt;sup>2</sup> Zaionchkovskaia Zh. A., Tiuriukanova Ye. V. Immigratsiia; put' k spaseniiu ili Troianskii kon'? [Immigration: a way to salvation or a Trojan horse]? Doklad o razvitii chelovecheskogo potentsiala v Rossiiskoi federatsii 2008: Rossiia pered litsom demograficheskikh vyzovov. [Report on human potential development in the Russian Federation 2008: The economic challenges faced by Russia. M.: PROON [UN Development Program, UNDP], 2009. P. 100.

<sup>&</sup>lt;sup>3</sup> For more details on this subject, see *Karachurina L. B.* Migratsionnye protsessy [Migratory ptocesses] // Rossiiskaia ekonomika v 2006 godu: tendentsii i perspektivy. [Russian Economy in 2006: Trends and Outlooks. M.: IET, 2007. Section 4.3. P. 492 – 513.

danger of stirring discontent among the local population<sup>1</sup> and intensifying 'paternalistic attitudes' among the resettlers<sup>2</sup>.

No real interest in this project was demonstrated by either the migrants or the regions that were expected to receive them. The Program envisaged that the federal center should assume a few minimal obligations: to pay the transportation costs, the state duty for the preparation of the necessary documents, the relocation allowance, and the monthly unemployment benefit in an event of absence of appropriate vacancies. The rest – as, by the way, also all the practical matters associated with relocation – was to be taken care of by regional and municipal authorities. However, the necessity to deal with many other tactical issues coupled with regional budget deficits (a typical feature of some 20 – 30 Russian regions even during 'fat' years) devalued the strategic usefulness of the Program in the eyes of even those regions that were constantly complaining of chronic manpower deficit, despite all the efforts of the center to impose the Program on them<sup>3</sup>. There have even emerged several schemes of sabotaging the implementation of the regional 'compatriot repatriation' programs: refusal to provide financing for it from their own sources; allocation only of minimum financing; or preparedness to finance the programs only at the expense of employers or the repatriates themselves<sup>4</sup>. Some regions altogether refused to develop their regional programs.

As a result, at present the State Program actually serves as a kind of 'camouflage'. This was also noted by President D. A. Medvedev in his speech at the III World Congress of Russian Compatriots: 'The total number [of participants in the Program] is important, but still more important is the confidence of all those who are outside of Russia that they can indeed return to their Fatherland'<sup>5</sup>.

The problems encountered in course of the State Program's implementation – or, to be more precise, its collapse – have revealed the unpreparedness of public institutions to work diligently and methodically when performing the task of receiving and integrating migrants; however, in view of the looming demographic 'gap' with its threat of shortage of able-bodied age groups, such work may become necessary in the nearest future.

Another key area of migration policy since the late 1990s has become regulation of the the processes of temporary labor migration. During that time – even according to official statistics – the inflow of labor migrants into Russia, especially from her post-Soviet neighbors,

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<sup>&</sup>lt;sup>1</sup> From the speech delivered by Governor of Khabarovsk Krai V. Ishaev: 'What moral right do we have to provide the newcomers, at the very outset, with comfortable apartments what in the city of Khabarovsk alone there are more that seven thousand families who still live in houses that look ready to collapse?' (Ishaev V.. Proekty integratsii my obsudim na forume [We shall discuss the integration projects at a forum] // Rossia v ATR [Russia in the Asia Pacific Region]. 2006. No 3. P. 19).

<sup>&</sup>lt;sup>2</sup> Mukomel' V. I. Migratsionnaia politika i politika integratsii: sotsial'noe izmerenie [Mmigration policy and the policy of integration: the social dimension] // Rossia reformiruiushchaiasia.[Russia Reforming] Iezhegodnik [Yearbook] / Ed. by M. K. Gorshkov. Issue 7. M.: Institut sotsiologii RAN [Institute of Sociology of the Russian Academy of Sciences], 2008. P. 268.

<sup>&</sup>lt;sup>3</sup> Beloglazova G. Kordon dlia profi [The state frontier as a barrier to keep professionals out] // Rossiiskaia Gazeta [The Russian Gazette]. 25 November 2009.

<sup>&</sup>lt;sup>4</sup> Mukomel' V. I. Migratsionnaia politika i politika integratsii: sotsial'noe izmerenie [Mmigration policy and the policy of integration: the social dimension] // Rossia reformiruiushchaiasia.[Russia Reforming] Yezhegodnik [Yearbook] / Ed. by M. K. Gorshkov. Issue 7. M.: Institut sotsiologii RAN [Institute of Sociology of the Russian Academy of Sciences], 2008. P. 267.

<sup>&</sup>lt;sup>5</sup> Biriukova L., Sargin A., Novikova A. Sootechestvenniki pereshli granitsu. [Compatriots have crossed the border.] // Gazeta. 2 December 2009.

has increased manifold. In 2000, the number of labor migrants obtaining work permits in Russia amounted to 213 thousand; 6 years later, in 2006, this figure became as high as 1,023 thousand. It impossible to determine reliably just how dramatically the actual indices – as opposed to official statistics – have altered over that period. Zh. A. Zaionchkovskaia and Ye. V. Tiuriukanova  $^1$  - as well as some other researchers $^2$  - on the basis of their studies stressed the fact that 'the overall number of migrants present in Russia as of the end of 2006 was no more than 7 mln', including 5 – 6 mln persons arriving as part of labor migration. Selective surveys that were conducted in Russia in 2003 – 2006 revealed that up to 80 % of migrants had no written agreement with their employer, 75 % of migrants received their wages – in part or in full - 'under the counter' ('in an envelope'), and 50 % had no residence registration<sup>3</sup>.

The increasing flows of labor migrants who were registered fully or in part (for example, prior to 2006 they had registration but worked under a contract with an employer who had no permission issued by the migration service; or, they had registration but worked without any contract) or were unregistered, as well as the growing share of illegal migrants had necessitated the introduction in legislation of some urgent alterations, which was then actually done from 15 January 2007 onwards<sup>4</sup> (an advising procedure for those arriving under a visa-waiver regime; the possibility to register at the legal address of their employers; a new procedure for obtaining a work permit, etc.). As it usually happens, the new legislative initiatives needed first to be somewhat adjusted on the basis of unhurried and methodical efforts to coordinate practical work with law-making and law enforcement practices. However, on the whole the new 'migration package' was perceived as a liberal innovation that was designed to achieve a maximum degree of legalization – to the extent that such legalization can actually be possible in face of Russia's existing economic realities (when 1/5 of Russia's own population are work-

<sup>&</sup>lt;sup>1</sup> Zaionchkovskaia Zh. A., Tiuriukanova Ye. V. Immigratsiia; put' k spaseniiu ili Troianskii kon'? [Immigration: a way to salvation or a Trojan horse?] Doklad o razvitii chelovecheskogo potentsiala v Rossiiskoi federatsii 2008: Rossiia pered litsom demograficheskikh vyzovov. [Report on human potential development in the Russian Federation 2008: The demographic challenges faced by Russia. M.: PROON [UN Development Program, UNDP], 2009. P. 223 – 225.

Mukomel' V. I.. Migratsionnaia politika Rossii: Postsovetskie konteksty [Russia's migration policy: Post-Soviet contexts. M.: Dipol'-T, 2005. P. 194 – 198.

<sup>&</sup>lt;sup>3</sup> Tiuriukanova Ye. V. Prinuditel'nyi trud v sovremennoi Rossii: nereguliruemaia migratsiia i toprgovlia liud'mi. [Forced labor in modern Russia: unregulated migration and the trade in humans]. 2nd ed.. ILO, Geneva, 2006; Karachurina L. B. Osobennosti zaniatosti migrantov v Rossii (po dannym sotsiologicheskogo obsledovaniia) [The specific features of migrant employment in Russia (by the results of sociological surveys)] // Gornye strany: rasselenie, etnodemographicheskie i geopoliticheskie protsessy, geoinformatsionnyi monitoring. [Mountainous countries: population distribution, ethno-demographical and geopolitical processes, geoinformational moniroting.] Materials of an international conference. Stavropol – Dombai, 25–30 September 2005 – M.– Stavropol, 2005. – pp. 156 – 165; Problemy nezakonnoi migratsii v Rossii: realii i poisk reshenii (po itigam sotsiologicheskogo obsledovaniia). [The problems of illegal migration in Russia: the realities and the search for solutions (by the results of a sociological survey conducted by the International Organization for Migration (IOM), IOM Bureau in Russia (Ed. By G. S. Vitkovskaia). M.: Gendalf', 2006, pp. 490 — 498; Mukomel' V. I. Ekonomika nelegal'noi migratsii v Rossii. [The economics of illegal migration in Russia.] //Demoskop Weekly. No 207 – 208. http://demoscope.ru/weekly/2005/0207/tema01.php

<sup>&</sup>lt;sup>4</sup> For more details, see *Karachurina L. B.* Migratsionnye protsessy [Migratory ptocesses] // Rossiiskaia ekonomika v 2007 godu: tendentsii i perspektivy. [Russian Economy in 2007: Trends and Outlooks. M.: IET, 2007. Section 4.2. P. 379 – 394.

ing not quite legally<sup>1</sup>, and the coefficients applied in order to additionally estimate illegal activities are abnormally high).

The results of the first year of applying the altered legislation demonstrated that the number of migrants obtaining work permits had doubled. Evidently, there occurred some positive redistribution resulting in part of the unregistered migration being channeled into the registered segment – that is, legalization of part of the illegal component. However, every 'step forward' in migration policy is usually followed by (at least) a 'half-step backwards'. Thus, the events in autumn 2006 in Kondopoga (Karelia) resulted in a ban being imposed on employing foreign citizens in retail trade throughout the whole country.

The passive attitude of employers to the campaign aimed at establishing the quotas for attracting foreign workers on the basis of employer applications – the first one to be based on the newly introduced rules (according to the new law, the applications for employing foreign workers in a next year have to be submitted by 1 May of a current year<sup>2</sup>) – resulted in the quota for 'visa-waiver' foreign workers being reduced from 6,000 thousand in 2007 to 1,156 thousand in 2008. The world financial crisis that 'officially' hit Russia precisely at the moment when the quota for a next year was being assigned necessitated its sequestration in order to protect the labor market for the benefit of domestic workers – thus disregarding the requests of employers<sup>3</sup>. The initially established figure for attracting foreign workforce was 3,976.7 thousand persons (including 1,250.8 thousand persons from the 'visa-waiver' countries)<sup>4</sup>; later on, 50 % of this number of workers was marked as 'reserve', and so the final figures are as follows: 625,4 thousand from the 'visa' countries and 1,363 thousand from the 'visa-waiver' countries'.

Another anti-crisis measure was the alteration introduced in the procedure for issuing work permits to foreign citizens. The innovations introduced in this sphere are as follows: a foreign worker who has arrived in Russia from one of the 'visa-waiver' countries and undergone the migration registration procedure can now receive a work permit only for a period of 90 days (instead of the previously available (maximum) period of 1 year) during which he or she must

<sup>1</sup> The share of those employed in the 'informal' sector in September 2009 was 21.7 % // *Rosstat*: Obsledovanie naselenia po problemam zaniatosti. [A population survey with regard to employment problems]. *Rosstat*. September 2009.

<sup>&</sup>lt;sup>2</sup> For more details on this subject, see *Karachurina L. B.* Migratsionnye protsessy [Migratory ptocesses] // Rossiiskaia ekonomika v 2006 godu: tendentsii i perspektivy. [Russian Economy in 2006: Trends and Outlooks. M.: IET, 2007. Section 4.3. P. 492 – 513.

<sup>&</sup>lt;sup>3</sup> In late 2008, the Government of Russia decided that in 2009 the quota for permits granting the right to employ foreigners should be 3 mln 977 thousand persons, but that 50 % of this quota should be reserved, that is, not extended to regions.

<sup>&</sup>lt;sup>4</sup> The RF Government's Decree 'On determining, for the year 2009, the need for attracting foreign workers to the Russian Federation' of 7 November 2008, No 834.

<sup>&</sup>lt;sup>5</sup> Order of the Ministry of Health Care and Social Development of the Russian Federation 'On the distribution among subjects of the Russian Federation of the quota for the issuance of work permits to foreign citizens approved by the Government of the Russian Federation for the year 2009' of 26 December 2008, No 777n.

<sup>&</sup>lt;sup>6</sup> Simultaneously with toughening the rules, the government also adopted some documents aimed at attracting foreign workers by means of 'bypassing' the consolidated rules; consider Order of the Federal Migration Service (FMS) of 23 November 2009, No 329, 'On the procedure for granting to the juridical and physical persons that have concluded civil legal contracts for the construction projects needed for holding meetings of the heads of states and governments of the countries – participants in the Asia-Pacific Economic Cooperation forum in 2012...' // See the FMS' website <a href="http://www.fms.gov.ru/upload/iblock/e60/pfms16041.pdf">http://www.fms.gov.ru/upload/iblock/e60/pfms16041.pdf</a>

find a job and to conclude with their employer a labor contract for a period of 1 year, after which the work permit can be prolongated (by once again applying to the FMS) for the period remaining until the expiry of the one-year period. From a formal point of view, the '90-days rule' has been introduced in order to reduce the number of those labor migrants who have entered this country under the conditions of visa-waiver exchange and who cannot find employment here due to the crisis. Actually, as this anti-crisis innovation is far from being impeccable from the point of view of law, the employers - who frequently avoided the legalization of their foreign workers even before the introduction of the new procedure – now are even more reluctant to conclude such contracts, thus increasing the segment of illegal migration and informal employment. Moreover, the new procedure has given rise to an absolutely vague situation with regard to foreign workforce statistics, because now it frequently happens so that one and the same migrant in entered in official statistical records of the issuance of work permits as several different individuals: first, when he is issued a three-month work permit, and then every time he applied for a prolongation of his stay.

Evidently, the law enforcement procedures relating to migration registration have also changed. It should be reminded that, from 15 January 2007, the Federal Law 'On migration registration of foreign citizens and persons without citizenship in the Russian Federation' (of 18 July 2006, No 109-FZ) came into force in this country, whereby all the foreign citizens arriving for a temporary stay are required to register at the place of their residence within three days of their arrival, while their 'place of dwelling' may be 'residential premises that are not a place of residence' or 'another premises, institution or organization in which the foreign citizen or the person without citizenship are situated'<sup>1</sup>. The surveys conducted by the International Organization for Migration (IOM) (2007 – 2008) have demonstrated that nearly all the labor migrants learned very soon of the simplification of the registration procedure and of the necessity to obtain a migration registration, and so tried to comply with the established rules (some – by actually undergoing the procedures, while others simply bought the necessary documents). By mid-2009, the new procedure had already been in force for nearly 2.5 years, and so in a situation of crisis and lowering quotas for the employment of foreign workers the authorities began a furtive struggle against those employers who were allowing their workers to register at non-residential premises, as it was allowed by the law<sup>2</sup>. The data yielded by the two 'waves' of surveys conducted by the Center for Migration Studies<sup>3</sup> in August – September 2008 and May 2009 demonstrated that the share of migrants who had undergone the migration registration procedure changed very little. The legalization level in Russia of temporary labor migrants re-

<sup>&</sup>lt;sup>1</sup> Article 2 of the Federal Law 'On migration registration of foreign citizens and persons without citizenship in the Russian federation" (of 18 July 2006, No 109-FZ) //http://demoscope.ru/weekly/knigi/zakon/zakon056.html <sup>2</sup> Yu. F. Florinskaia. Sochi – rai dlia migrantov i bezrabornykh? [Is Sochi a paradise for migrants and the umemployed?] // Rossiiskaia migratsiia [The Russian Migration]. 2009. No 5 – 6 (36 – 37). P. 27 – 28.

<sup>&</sup>lt;sup>3</sup> The study was conducted by the Center for Migration Studies (Director – Ye. V. Tiuriukanova) as part of the projects 'Migration management in conditions of a demographic crisis' (The McArthur Foundation) and 'Assessment of Russia's new migration policy in the sphere of labor migration from the CIS countries' (supported by a grant of the Civic Chamber of the Russian Federation). The survey patterns were similar, and so it is possible to compare the labor flows 'before' and 'during' the financial crisis. The pre-crisis survey took place in August – September 2008 and involved 774 migrants from the CIS countries, who were questioned in Moscow, Kazan, Voronezh, Krasnodar, and Astrakhan. The 'crisis' survey was conducted in May 2009 in Moscow, in St. Petersburg, and Krasnodar, and involved 801 migrants.

mains high, 80 % of migrants register in this country. However, the share of those registered at their place of work dropped nearly by half – from 43 to 22 %.

There are some other indications pointing to further proliferation of the informal shadowy practices in the sphere of migration that have long become habitual in this country. To a various extent, their increasing significance could be contributed to by the three interested parties as follows.

1. The State, in the person of its control bodies, is interested in curbing unemployment and preserving jobs for the country's own population<sup>1</sup>. However, it should be understood that the existing interrelations between migration and labor markets are very complex, and so cannot be reduced to this simple formula: crisis – aggravation of the unemployment problem – redistribution in favor of the local population of the jobs previously held by migrants – departure / homecoming of 'redundant' migrants. In Russia, just as in many developed countries, migrants and the local population occupy different niches in terms of labor conditions, professional qualification, or even sectors of the economy<sup>2</sup>. Labor migrants can easily find jobs that hold no attraction for the local population because of unsatisfactory or hard working conditions, seasonability and low wages. In some localities, though, the crisis could conduce to a slight rise in the popularity of some previously undesired jobs and to a respective increase in competition on the low-skilled segment of the labor market. However, that was not the case in most Russian regions. The sectoral preferences of labor migrants (construction, wholesale and retail trade, processing industries, communal and personal services, public transport, agriculture) which have remained unchanged for a number of years do not match the sectoral structure of employment of the local population<sup>3</sup> (Figure 4). Approximately the same sectoral-qualificational dichotomy between the local population and migrants (which effectively ensures the completeness and integrity of the labor pyramid) also exists in the developed countries of the world. So, when the State resorts to direct measures (such as quota reduction<sup>4</sup>) and attempts to

<sup>&</sup>lt;sup>1</sup> Various statements with regard to this subject were plentiful throughout 2009 and early 2010. The latest of them was made by Chairman of the RF Government Vladimir Putin in the course of his meeting with the head of the Federal Migration Service, Konstantin Romodanovskii, on 17 February 2010: 'Like all European countries, Russia should try to attract foreign workers with the qualifications our economy needs, and attract them to the sectors where they are most needed. Also, this should be done in a way that does not create unnecessary competition on the labor market between foreign workers and Russian citizens, at least during the continuing economic downturn' // the website of Chairman of the RF Government Vladimir Putin http://premier.gov.ru/events/news/9427/

<sup>&</sup>lt;sup>2</sup> According to a staffer of one of the employment agencies, migrants are needed '...where some form of physical labor is required... Take, for example, the plants that also frequently apply for the services of employment agencies – motor vehicle plants or plants producing dairy or confectionary goods ... It is clear that native Muscovites would be unlikely to take a job as a loader ... Nowadays, Muscovites reject any jobs involving physical labor, they do not take such vacancies'. // Mukomel' V. I., Kuznetsov I. M., Livshin A. Ia, Polunov A. Iu, Batovrina E. V. Sotsiologicheskii analiz problem trudoustroistva migrantov: tochka zreniia recrutingovykh agentstv [A sociological analysis of the issues of placing migrants into jobs: the point of view of recruitment agencies]. M.: Center for Student Initiatives, Department of State and Municipal Administration, Lomonosov Moscow State University; Institute of Sociology, Russian Academy of Sciences, 2008.

<sup>&</sup>lt;sup>3</sup> In this connection, it is not easy to understand why it has been declared that our policy's priority should be the attraction of highly qualified specialists from abroad.

<sup>&</sup>lt;sup>4</sup> Chairman of the Federal Migration Service Konstantin Romodanovskii said in this regard: 'Toughening up the procedure for work permit issuance has made it possible for us to issue 30 % fewer permits to foreign citi-364

'shield' the labor market from migrants, by doing so it does not really create preferential conditions for the majority of the local population – instead, it promotes the latent presence of migrants on the labor markets. Moreover, the dynamism of the functioning of local labor markets and the ability of the State to control such extremely complex processes as migration have been greatly overestimated. Such illusions are, in fact, the consequence of a 'technocratic' attitude to people and the Soviet experience of implementing major state projects of any kind and magnitude (from construction of a chemical plant in the town of Uvarovo to the Baikal-Amur Railway to the 'Virgin Lands' campaign).

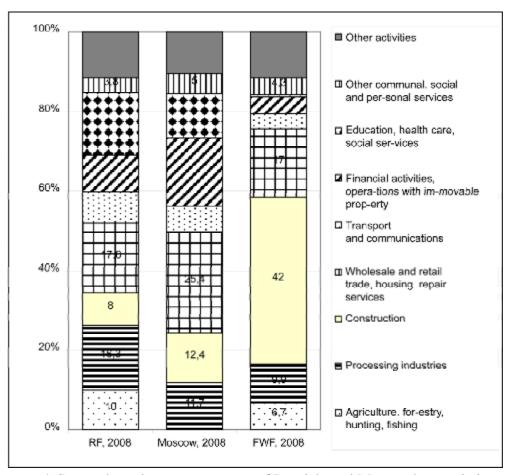


Fig. 4. Sectoral employment structure of Russia's and Moscow's population and of foreign workforce (2008, %)

2. *Employers* have their own reasons for employing semi-legal workers. The toughening of Russian labor legislation<sup>1</sup> and the predominance of the 'market employer' over the 'market worker' resulted, among other things, in a rise in the proportion of informally employed labor: employment surveys indicate that in September 2009 the share of such labor in Russia's total employment was as high as 21.7 %, whereas one year prior to the onset of the

zens and thus to protect the Russian worker' // The website of Chairman of the RF Government Vladimir Putin http://premier.gov.ru/events/news/9427/

<sup>&</sup>lt;sup>1</sup> For more details, see Kapeliushnikov R. I. Konets rossiiskoi modeli rynka truda? [An end of the Russian model of the labor market?] M., 2009.

crisis, in November 2007, it was 17.1 % <sup>1</sup>. Migrants – who by definition enjoy fewer rights than 'the natives' - began to fall into the 'trap' of illegal employment because employers became even more reluctant to legalize their employment status. The crisis has in no way shattered the existing system of incentives for employers to attract migrants from other countries (lack of Russian workers with the necessary specialties, the predictable quality of migrants' work, and their submissiveness to their employer). Moreover, some of these motives (for example, the desire to save on wages – because migrants usually agree to work overtime and to skip their weekends and holidays for the same pay) have even become more prominent as a result of the crisis.

The survey conducted by the Center for Migration Studies demonstrated that even in the pre-crisis period the average workday of a migrant was 9 hours. By May 2009 (the second 'wave' of the survey) it had increased to 10 hours. The duration of a working week remained practically unchanged, but even during the first phase of the survey it was 5.9 days<sup>2</sup>. At the same time, both in 2008 and in 2009 the average workday of a migrant without a work permit was longer than that of those with work permits (*Table 1*). Thus, the average working week in May 2009 was 59 hours, which is indicative of an increased workload both by comparison with the pre-crisis period and with the results of other pre-crisis surveys conducted by G. S. Vitkovskaia (in 2006 – 53 hours)<sup>3</sup>.

The stronger trend towards illegal employment of migrants can be demonstrated by the changes in the index describing the form of payment of wages. Among those who had work permits, in 2008 the wages were paid in accordance with payment records (fully or in part, when part of the wages was recorded in the accounting documentation, and part was paid off-record ('in an envelope')) to 78 % of migrants, and in 2009 – to 71 % of migrants (which means that the illegal segment increased among those who had opportunities for legal employment). Besides, the size of wages – for those with and without work permits alike – could no more be applied even as a 'weak' index of the 'normality' of work, when the wages of illegal workers were lower than those of the legal ones. In this connection, the amount of wages did not decline – instead, it even increased<sup>4</sup>. On the whole, it is close to the average nominal level of wages across Russia (in April 2009 – 18,287 rubles). Similar proportions of the wages paid to Russians and to migrants were observed in the pre-crisis surveys: thus, for example, in the

<sup>&</sup>lt;sup>1</sup> Rosstat: Obsledovanie naseleniia po problemem яапіаtosti [Employment Survey]. Rosstat. November 2007; September 2009.

 $<sup>^2</sup>$  We should like to cite here an employer's opinion recorded as part of Yu. F. Florinskaia's survey during a focus group meeting with employers: 'With us, they work not 8 but 14 hours, and without any Saturday or Sundays off. And we pay them for speed and quality. There exist certain time limits for them to complete the project. And that is why they work without Saturday or Sundays off, and without leaves.' // Materials of Yu. F. Florinskaia's presentation 'The practices of migrant employment during the period of crisis' at the regional experts' meeting 'Partnership of the CIS countries in the sphere of migration: a search for coordinated decisions' (Moscow: The Institute for Economic Forecasts of the RAS – the Center for Migration Studies, 24-25 September 2009).

<sup>&</sup>lt;sup>3</sup> Problemy nezakonnoi migratsii v Rossii: realii i poisk reshenii (po itigam sotsiologicheskogo obsledovaniia). [The problems of illegal migration in Russia: the realities and the search for solutions (by the results of a sociological survey conducted by the International Organization for Migration (IOM), the IOM Bureau in Russia (Ed. By G. S. Vitkovskaia). M.: Gendalf', 2006, p. 122.

<sup>&</sup>lt;sup>4</sup> The average size of earnings depends on the sector of employment, the quality of the labor force., the territory of preferential employment and other factors the comparison with which without no correct description of migrant earnings can be possible.

study conducted by Ye. V. Tiuriukanova (June 2003) the average wage of illegal migrants was 5,338 rubles (approx. 176 USD), while the country's average wage was 5,591 rubles (or 184 USD)<sup>1</sup>. In G. S. Vitkovskaia's survey conducted in 2006, 50 % of migrants believed that their pay was the same as that of the locals.<sup>2</sup>

 ${\it Table~1} \\ {\bf Influence~of~Work~Permit~on~Some~Features~of~Migrant~Employment}$ 

Index	Phase of survey	Work	permit
Index	Thuse of survey	Yes	No
Washing days the state of the same and the same	2008	9.2	9.5
Workday duration (hours per day)	2009	9.7	10.2
Entry of wages in payment records (in full or	2008	78.0	30.7
n part), %	2009	71.0	31.1
	2008	15.8	14.9
Amount of wages, thousand rubles	2009	18.2	20.0

Source: Obsledovanie TsMI [The Center for Migration Studies' Survey], 2008, 2009.

3. *Migrants*: their desire to find work at any cost and to be able to help their families in the poor countries of the CIS could also increase the level of informal migrant employment. The differences in payment for labor and in the levels of unemployment, boosted by the increased labor supply on the part of the major donor countries whose population is rapidly increasing and becoming more mobile, has made Russia extremely attractive in the eyes of labor migrants in the past few years (*Table 2*).

 $Table\ 2$  Selected Socioeconomic Indicators for CIS Countries, 2008 and 2009

Country	Average number of unemployed per- sons according to ILO standards, 2009	GDP at purchasing power parity, USD, 2008	Average nominal wage, USD, Aug 2009	Average wage of migrant worker in Russia according to Center for Migration Studies' surveys, Rb, Aug – Sept 2008 г. / May 2009 г.
Azerbaijan	6.0	7,770	317	17,090 / 26,031
Armenia	16.4	6,310	293	18,491 / 17,221
Belarus	0.9*	12,150	396	
Kazakhstan	6.3	9,690	485	15,716 / 17,000
Kyrgyzstan	8.2	2,130	137	14,092 / 16,667
Moldova	5.7	3,210	230	14,745 / 17,303
RF	8.2	15,630	718	
Tajikistan	7,4	1,860	63	15,808 / 15,744
Uzbekistan		2,660		14,769 / 15,555
Ukraine	9,1	7,210	356	18,206 / 18,947
Turkmenistan		6,210	626	

<sup>\*</sup> According to registration records as of the end of the year.

*Note*. Migrants from Belarus and Turkmenistan were not questioned in the survey.

*Source*: data of the CIS Statistics Committee <a href="http://www.cisstat.com/rus/">http://demoscope</a>. Pul/weekly/ app/world2009\_3.php, Obsledovanie TsMI [The Center for Migration Studies' Survey], 2008, 2009.

<sup>1</sup> Tiuriukanova Ye. V. Pronuditel'nyi trud v sovremennoi Rossii: nereguliruemaia migratsiia i toprgovlia liud'mi. [Forced labor in modern Russia: unregulated migration and the trade in humans]. 2nd ed.. ILO, Geneva, 2006, p. 59.

<sup>&</sup>lt;sup>2</sup> Problemy nezakonnoi migratsii v Rossii: realii i poisk reshenii (po itigam sotsiologicheskogo obsledovaniia). [The problems of illegal migration in Russia: the realities and the search for solutions (by the results of a sociological survey conducted by the International Organization for Migration (IOM), the IOM Bureau in Russia in Russia (Ed. by G. S. Vitkovskaia). M.: Gendalf', 2006, p. 122

The CIS countries have been hit by the crisis at least as severely as Russia. As a result, the economies of the Central Asian countries – which had been weak and dependent even before the crisis – were then faced with 'export' of unemployment, a problem that they cannot not adequately cope with. The surveys carried out in Tajikistan and Moldova have revealed that the number of arrivals of labor migrants in 2009 was 15 - 25 % lower than that recorded in the summer season of 2008.

The survey conducted by the Public Opinion Department of the Shark Research Center (Tajikistan)<sup>1</sup> indicated that the seasonal winter outflow (2008/2009) of migrants from Russia into Tajikistan was one-third less than normal because part of the migrants stayed on in Russia in order to 'see how the situation would develop'. Therefore the arrival curve in Tajikistan was 'less steep' than usual, while the spring departure in search of foreign earnings, on the contrary, was more 'protracted'. Some of the migrants elected to wait in Tajikistan for the crisis to subside, while at the same time making no strategic plans for reintegrating in Tajikistan and still relying, in a longer term, on their future seasonal earnings in Russia<sup>2</sup>. As a result, the overall number of migrants dropped by 20 %. The data collected during the survey demonstrated that 'migration is influenced not so much by the crisis (its comprehensive impact having been noted by 13.7 % of the respondents) as by the tougher attitude of the Russian law enforcement agencies to migrants, the desire of employers to compensate for their losses resulting from the crisis at the expense of migrants, and the increasing amount of formal and informal payments'

The survey in Moldova<sup>4</sup> also demonstrated that the number of labor migrants declined by almost 20 %; however, there was no large-scale return to their native country<sup>5</sup>. The surveys conducted by CASE-Moldova (Q III 2008 – Q I 2009) and MOM-SBS-AXA (July – August 2008 – March 2009) revealed that, in face of the aggravating problems on Moldova's labor market, migrants cannot come back home, but at the same time they are prepared to ultimately reduce their spending on their own needs, while as far as possible to maintain the amount of their money transfers to their families in Moldova at their former level.

The size of cross-border money transfers by physical persons in 2009 amounted to 25,362 mln USD, of which 9,555 mln USD (37,7%) was accounted to by transfers to the CIS countries. The drop in the volume of transfers to the CIS on last year was 31.5 %, while the average amount of one operation was slightly above 500 USD. In 2008 and then again in 2009 the

<sup>1</sup> S. Olimova. Kogda rabota stanovitsia neeffektivnoi, oni vozvrashchiautsia domoi. [When work becomes ineffective, they return home.] // Rossiiskaia migratsiia. No 5 - 6 (36 - 37) August – September 2009. P. 35-38.

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 $<sup>^2</sup>$  Russia is the principal 'recipient' country for Tajikistan, being a target for 97 % of all Tajik migrants. The total number of emigrants from Tajikistan in 2008 was estimated to be at the level of between 800 thousand and 1 million persons. For Russia, labor migrants from Tajikistan constituted 14 - 16 % of all registered foreign workforce in 2007 - 2008.

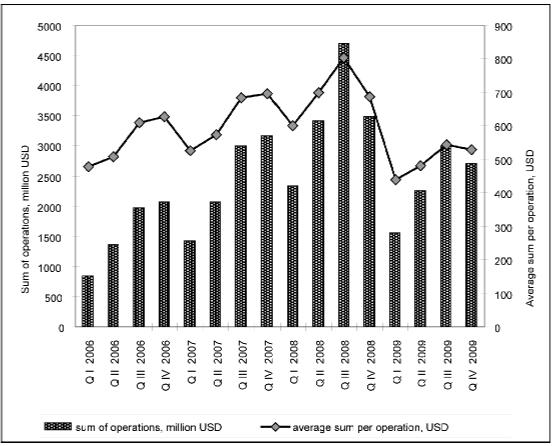
<sup>&</sup>lt;sup>3</sup> S. Olimova. Kogda rabota stanovitsia neeffektivnoi, oni vozvrashchiautsia domoi. [When work becomes ineffective, they return home.] // Rossiiskaia migratsiia. No 5 - 6 (36 - 37) August – September 2009. P. 38.

<sup>&</sup>lt;sup>4</sup> The report by V. Moshniaga delivered at the regional experts' meeting 'Partnership of the CIS countries in the sphere of migration: a search for coordinated decisions' (Moscow: The Institute for Economic Forecasts of the RAS – the Center for Migration Studies, 24 – 25 September 2009)

<sup>&</sup>lt;sup>5</sup> The number of labor migrants from Moldova, according to the 2004 census and the results of sociological surveys conducted in 2004 - 2008 is estimated to be at the level of 600 thousand, Russia's share being 58 - 63%. For Russia, labor migrants from Moldova account for 4.5 - 5.5% of the foreign workforce registered in Russia per annum.

atypical trends observed in Q IV (which is usually the most 'prosperous' quarter) serve as markers of the crisis and its 'retranslation' onto the CIS countries, where both human and money flows are closely linked to Russia  $(Fig. 5)^1$ .

The 31 % drop in the volume of transfers in 2009 by comparison with the previous year can be viewed as an indirect source of information concerning the number of labor migrants in Russia: considering the general decline in the size of real wages across Russia by 7.4  $\%^2$ , one can speak of a drop in the number of labor migrants in Russia by 20 %, but no means by 30 % as it follows from the official statistics published by the FMS: the number of work permits was 1,473.4 thousand, including those issued to foreign citizens arriving under the visa-waiver regime – 1,181.3 thousand (80 % of the total number of work permits).



Source: data published by the RF Central Bank.

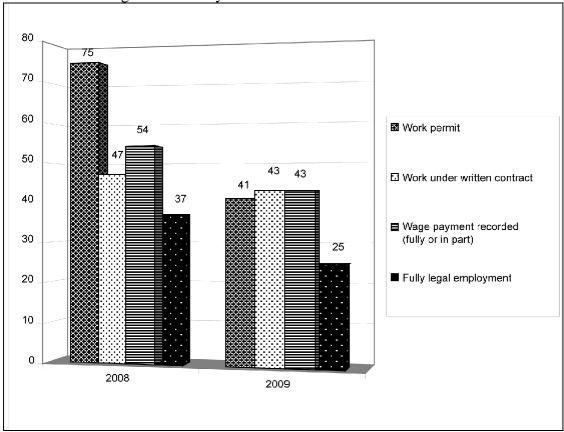
Fig. 5. Money transfers from Russia to the CIS countries, based on the statistical data on cross-border operations carried on by physical persons, Q I 2006 – Q II 2009

The strengthening of the informal labor market is aptly illustrated by data on Moscow - the only subject of the Federation that was examined in the course of both 'waves' of surveys car-

<sup>&</sup>lt;sup>1</sup> However, the drop in the volume of money transfers could be partly caused by the fact that more people are now preferring to bring home cash instead of sending it via bank transfers.

<sup>&</sup>lt;sup>2</sup> March 2009 to October 2008, with a seasonal adjustment. Kapeliushnikov R. I. Konets rossiiskoi modeli rynka truda? [An end of the Russian model of the labor market?] M., 2009. P. 44.

ried out by the Center for Migration Studies. In less than one year, the share of legally employed migrants (properly registered with the migration authorities and working under written labor contracts) has dropped in Moscow from 37 to 25 % (*Fig. 6*), while the percentage of migrants with work permits has decreased by more than 1.8 times. As a result, only one quarter of Moscow migrants have full legal status, which roughly corresponds to the state of affairs that had existed before the 2006 reform of migration legislation which was intended to increase the lawfulness of foreign citizens' stay in Russia.



Source: Obsledovanie TsMI [The Study for Migration Studies' Survey], 2008, 2009.

Fig. 6. Levels of legal employment in Moscow, 2008 (N = 150), 2009 (N = 300), as %

It must be acknowledged that the presence of migrants in the labor market, including in time of crisis, is profitable not only for the migrants alone. Therefore the restrictive measures being introduced with regard to the labor migration of CIS citizens are creating an illusion of a significant drop in the number of labor migrants. In reality, however – given the general vagueness of socio-economic targets – the disconnection and the poorly definable configuration of labor markets, as well as the widespread informal practices, the toughening of migratory regulation which stifles the desire to improve existing legislation has already resulted in the spread of illegal migration and shadowy practices and will undoubtedly conduce to their further proliferation.

According to *Rosstat* data that are based on migrant registration at the place of residence, the level of internal labor mobility in Russia remains low. As no aggregate information on tem-

porary migration and *de-facto* long-term migration without registration at the place of residence or with a stay for a period in excess of one year is published in Russia, the dynamics of such migration cannot be assessed properly. In the crisis year 2009, several differently vectored trends could be at work in Russia, simultaneously reducing and increasing spatial mobility therein.

A drop in mobility could result in a reduction of labor supply in big cities, especially in such sectors as construction and retail trade where traditionally a lot of migrant workers are employed. With the advent of crisis, this situation contributed to 'export' of unemployment when people who had lost their jobs usually returned to their native places thus aggravating the situation in the local labor markets. At the same time, the tense situation in the labor markets of small towns, including mono-industry towns, represents a serious factor that induces people to seek employment in other towns and regions of the country.

In order to cope with this situation, the RF Government has taken a number of measures aimed at bringing down tensions in the labor market of subjects of the Russian Federation. These measures involve the provision of targeted assistance to citizens – for example, by organizing their resettlement in another locality for the purpose of filling the existing job vacancies, including those created within the framework of federal target programs and investment projects. Initially the government planned to assist the resettlement of 100 thousand persons<sup>1</sup>; however, at the final stages of signing resettlement agreements with the regions, this figure was reduced to 15.9 thousand persons. Resettlement assistance was actually rendered to 11 thousand persons; the corresponding allocations accounted for 70 % of the funds earmarked for resettlement purposes<sup>2</sup>. The failure of that government initiative was predicted by experts from the very beginning: an analysis of the vacancies (approximately 900 thousand vacancies in all Russian regions) that is posted to the much-advertised Work in Russia portal has indicated that these vacancies (as well as all the other options offered by the Federal Employment Service) have a rather low attractiveness in the eyes of employment seekers even in time of crisis. As of mid-February 2009, 6.5 % of the posted vacancies offered the minimum wage of 4,330 Rb, and another 9 % of them – wages ranging from the minimum wage to 5 thousand Rb<sup>3</sup>. Only 12 % of the vacancies offered wages in excess of 20 thousand Rb (most of these vacancies were situated in Moscow Capital Region and the northern regions of Russia which differ significantly from the rest of the country in terms of purchasing power parity), and only 5.3 % of the vacancies offered the provision of a dwelling (usually it was employer-provided lodging or a room at a hostel))<sup>4</sup>. This situation has not changed since then: as of the beginning of 2010, only 5 % of the vacancies posted to the Federal Employment Service Portal implied the provision of a specified dwelling, and 8.1 % of the vacancies offered subsistence wages.

<sup>&</sup>lt;sup>1</sup> Doekhat' do raboty. [To travel to work] // SmartMoney. 18 May 2009.

<sup>&</sup>lt;sup>2</sup> Monitoring realizatsii regional'nykh programm, predusmatrivaiushchikh dopolnitel'nye meropriiatiia, napravlennye na snizhenie napriazhennosti na rynke truda (ianvar' – dekabr' 2009) [Monitoring of the implementation of the regional programs envisaging additional measures designed to reduce tensions on the labor market (January - December 2009)]. M.: Rostrud [RF Federal Labor and Employment Service], 2010. P. 11. Under the sub-program, the State undertook to cover the transportation costs connected with resettlement and the cost of renting a dwelling (550 Rb per day, for three months on average) and to pay per diems for the time of travel

<sup>&</sup>lt;sup>3</sup> At the same time, the increased maximum unemployment benefit amounts to 4.9 thousand Rb.

<sup>&</sup>lt;sup>4</sup> Mkrtchian N. V. Gotovy li bezrabotnye ekhat' za rabotoi [Are jobless people ready to seek work elsewhere? // Rossiiskaia migratsiia [Russian migration]. 2009. No 1.

The resettlement of 'mono-towns' (one-industry towns) is an even more questionable measure. The resettlement model plan is based on a very untypical town – Togliatti. The program of resettling the inhabitants of mono-towns in other regions of the country has been developed by the Agency for Mortgage Loan Restructuring (ARIZhK). In particular, the program envisages that part of the newly laid-off workers from Togliatti should be resettled in Tikhvin, Leningrad Oblast, where a railcar building plant has recently been launched<sup>1</sup>. The results of this program's implementation are yet to be seen, but it is unlikely that it will become popular – for at least one reason: these people are asked to move from a big city to a small town.

Thus, even if the migratory processes did respond to the crisis phenomena in the economy, the existing statistical instruments have made it impossible to adequately assess the changes. The measures taken by the authorities with regard to the migration sphere were predictably populist. Perhaps, the only result of those measures was a change in the ratio between the legal and latent components of temporary labor migration into Russia.

## 4.3. Socio-cultural Sphere

# 4.3.1. Development of the Educational System in 2009

# Characteristics of the State of Affairs in the Field of Education

The global economic crisis which broke out in autumn 2008 has brought the educational system before the new challenges: on the one hand, the need to ensure advance of reforms in this field, and on the other, direct it to the training of new specialists needed for the post-crisis development. At the same time, different levels of educational system face new tasks in the new circumstances. Simultaneously, we should bear in mind the demographic factor, which affects all educational subsystems to the highest extent.

# Preschool Upbringing and Education

Statistics on the situation in preschool education system provide information on its development solely prior to 2007 inclusive.

Prolonged decline in the number of children attending preschool educational facilities has stopped. At present, we observe an upward trend which marks a growing number of children attending preschool education facilities. (*Table 1*).

According to the Rosstat data, at the onset of 2008<sup>2</sup> 2,232 thousand children required places in preschool education facilities.

As registered from 2005 a growing number of pupils in preschool education system were caused by two reasons.

<sup>&</sup>lt;sup>1</sup> Sokrashchennykh rabotnikov 'AvtoVAZa pereseliat iz Tol'iatti v Leningradskuiu oblast' [The dismissed workers of AvtoVAZ will be resettled from Togliatti to Leningrad Oblast] // NEWSru.com, 28 January 2010.

<sup>&</sup>lt;sup>2</sup> Latest available data.

Table 1 Preschool Education Facilities (by year end)

				-				
	1993	1995	2000	2003	2004	2005	2006	2007
Number of preschool education facilities, thousands	78.3	68.6	51.3	47.8	47.2	46.5	46.2	45.7
Number of children at preschool education facilities, thousands	6763	5584	4263	4321	4423	4530	4713	4906
Number of preschool education facilities, which have amenities for short-run stay of children	-	-		3241	3912	4172	4423	6355
Of which:								
Number of groups of short-run stay of children	_	_	_	4879	6150	7008	7852	8784
Number of children in groups of short-run stay, thousands	_	_	_	48.3	60.9	70.7	80.9	92.4
Number of children per 100 places in preschool education facilities, persons.	90	83	81	88	92	95	99	105
Coverage of children by preschool education facilities, % of	57.4	54.3	55.0	57.6	57.7	57.3	58.3	59.2

Source: the Rosstat, Russia in numbers.

the number of children aged one to six

First, the number of birth has marked an upward trend since the beginning of 2000s (*Table 2*).

Table 2 Number of Births (minus still-born), Russian Federation, thousand.

2001	2002	2003	2004	2005	2006	2007	2008
1311.6	1397.0	1477.3	1502.5	1457.4	1479.7	1610.1	1714.0

Second, the number of preschool age children attending preschool facilities has been growing: from 55% in 2000 to 59.2% in 2007. This upward trend to a great extent was due to an economic boom, when labor demand went up and mothers were anxious to send their children to kindergartens in order to turn up to work. However, economic crisis may change the trend, because for low-income households access to preschool education facilities, first of all, depends on the charge rate and availability of benefits.

On the whole, to date attendance of 5-6 year children of the preschool education facilities remains low. This resulted in raising a question in 2004 regarding introduction of preschool education mostly for the children from low income households in order to prepare them for a comprehensive school. This measure would have allowed leveling starting conditions for pupils from different income groups, increasing the quality of instruction in basic schools. In the wake of the global economic crisis this issue has become even more acute.

#### Comprehensive Education

The number of pupils in comprehensive schools continued falling in 2007-2008 (*Table* 3).

Table 3 Number of Pupils and Teachers in State and Municipal Comprehensive Schools (as of the beginning of the school year, thousands)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Number of pupils in comprehensive schools	20493	19843	18850	17729	16561	15559	14727	14103
Of which:								
In cities and urban-type settlements	14389	13848	13159	12385	11591	10845	10271	9871
In rural areas	6104	5995	5691	5344	4970	4714	4456	4232
Of which number of pupils:								
Day time comprehensive schools	20013	19363	18372	17254	16098	15113	14291	13695
Of which:								
In cities and urban-type settlements	13998	13471	12784	12017	11232	10497	9929	9557

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
In rural areas	6015	5892	5588	5237	4866	4616	4362	4138
Evening (shift-type) comprehensive schools, including trained by correspondence	480	480	478	475	463	446	425	408
Of which: In cities and urban-type settlements	391	377	375	368	359	348	331	314
In rural areas	89	103	103	107	104	98	94	94
Number of teachers	1751	1718	1701	1666	1614	1575	1517	1467

Source: the Rosstat, Russia in numbers.

Reduction in the Number of Pupils Has Led to a Fall in the Number of Schools (*Table 4*).

Table 4
Number of State and Municipal Comprehensive Schools (as of the beginning of the school year, thousands)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Number of comprehensive schools	68.1	68.0	66.8	65.5	64.2	62.5	60.3	57.3
Of which:								
In cities and urban-type settlements	22.7	22.8	22.6	22.4	22.2	21.8	21.4	21.0
In rural areas	45.4	45.2	44.2	43.1	42.0	40.7	38.9	36.3
Out of the total number of schools:								
Daytime comprehensive schools	66.4	66.2	65.0	63.8	62.5	60.8	58.7	55.7
Of which:								
In cities and urban-type settlements	21.3	21.3	21.2	21.1	20.9	20.4	20.1	19.7
In rural areas	45.1	44.9	43.8	42.7	41.6	40.4	38.6	36.0
Evening (shift-type) comprehensive schools	1.7	1.8	1.8	1.7	1.7	1.7	1.6	1.6
Of which:								
In cities and urban-type settlements	1.4	1.5	1.4	1.3	1.3	1.4	1.3	1.3
In rural areas	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3

Source: the Rosstat, Russia in numbers

In spite of different measures aimed at restructuring school network and stopping the number of schools from falling (from 2000/01 through 2007/08 academic year this amount slumped by about 10.8 thousand), number of pupils per a teacher continues falling: by 2007/08 academic year it has already fallen to 9.5:1 (*Fig. 1*).

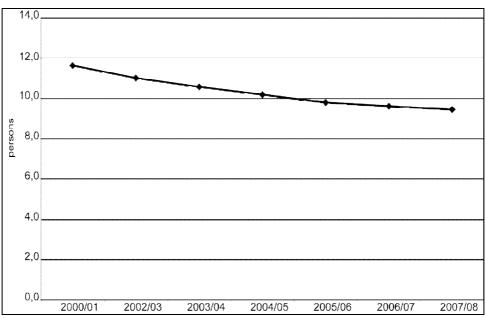
Thus, the system of school education remains practically uneconomical by world standards.<sup>1</sup> At the same time, it should be noted that this situation to a great extent is attributed to demographic situation which was going from bat to worse all these years, and to the existing settling system, large distances and low density of roads which are essential for taking pupils to comprehensive schools.

For the period 2000-2008 the number of pupils in state and municipal comprehensive schools went down by about one third. As a result, the number of state and municipal schools significantly decreased together with the number of teachers. At the same time, it should be noted that although the number of pupils for this period went down by 31.7%, the number of state and municipal schools decreased only by 11.8%, and the number of teachers – by 16.1%. In addition to space factor which impedes a faster reduction of school network, we should bear in mind the social factor: in many Russian regions education belongs to a sector with low salaries and high employment level, thereby preventing unemployment growth. With the onset of

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<sup>&</sup>lt;sup>1</sup> See, for example, Education in the Countries with Transition Economies: Development Tasks. World Bank Report. Moscow, 2002.

the global economic crisis this fact has become more evident. For example, social sectors including the field of education actively exercise this function especially in single-industry cities.



Source: Calculated on the Rosstat data.

Fig. 1. Ratio Pupil: Teacher in Comprehensive Schools (number of pupils per a teacher)

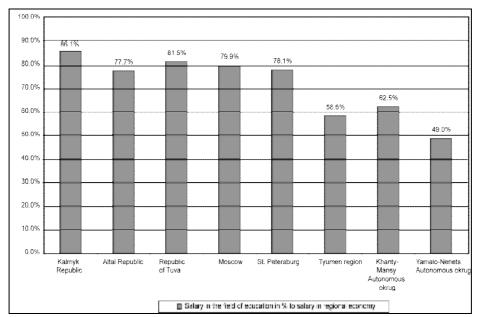
Age pattern of teaching staff remains unfavorable. It cannot but give rise to concern because, for example, 36.6% of teachers of 5-11 grades have worked in school for over 20 years. In basic schools this age group constitutes about 38.4%. Where in 1995, only 54.2% of teachers in basic schools had work record exceeding 10 years, then in 2006 – already 84.3%. Thus, inflow of young teacher to schools does not develop, teaching personnel is getting older which to a large extent hampers the new pedagogical technologies expansion, as well as promotion of institutional changes in the field of general education. In principle, this alone becomes a certain deterrent in Russia's school modernization. It should be noted that in highly subsidized regions the level of teachers' salaries in comparison with the average salaries and wages across the economy is often greater than in donor regions (Fig. 2).

On the whole, teachers' salary differentiation across Russian subjects of Federation in 2007 constituted 5.3 fold. At that, it went up somewhat in comparison with 2006 when similar indicator constituted 5.0. At the same time, it should be born in mind that cited salary volume is nominal and not adjusted to a coefficient of price rise in the budgetary services across Russian regions.

<sup>&</sup>lt;sup>1</sup> 2006 – last year, which has information.

<sup>&</sup>lt;sup>2</sup> At the same time, there is a point of view that old teachers can teach something and the young teachers do not master teacher's profession. One thing is paramount: in any case school continues wasting its staff potential. Its staff renewal does not take place.

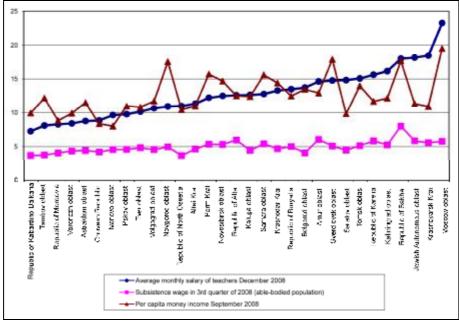
<sup>&</sup>lt;sup>3</sup> PNPO has changed this situation for the better. However, the global economic crisis most likely will lead to resumption of the trend.



Source: Education in the Russian Federation. M., SU-HSE, 2007.

Fig. 2. Salary in the Field of Education in Comparison with Salary in the Economy of Some Regions in 2006, in %

A complex project of education modernization has been implemented in the regions starting with 2007. There the new system of labor remuneration has been introduced and the salaries of teachers went up significantly (*Fig. 3*).



Source: Data of IRO SU-HSE.

Fig. 3. Correlation Between the Average Monthly Salary of Teachers and the Subsistence Wage of Able-Bodied Persons and Per Capita Money Income, Thousand Rbles

At the same time, the global economic crisis has put a question mark over the achievements in this field due to the fact that the regional budgets revenues have significantly dropped which led to a reduction in budget allocations including on education in a number of subjects of the Russian Federation which has been implementing a complex project of education modernization.

According to the Rosstat data, in January-September 2009 the level of average payable monthly salary in the field of education constituted 79% of its level in processing industry (January-September 2008-68%).

#### **Basic Vocational Education**

Table 5
Institutions of Basic Vocational Education

	Number of institu- tions (as of the end of the school year)	umber of students*, thousands	Students entered*, thousands	Graduates, skilled labor*, thousands
All institutions of basic vocational education				
(BVE)				
2000	3893	1679	845	763
2001	3872	1649	837	759
2002	3843	1651	842	745
2003	3798	1649	823	722
2004	3686	1604	783	708
2005	3392	1509	688	703
2006	3207	1413	630	680
2007	3169	1253	586	656
Of which:				
Daytime education	2743	1169	480	548
Of which:				
Departments on the basis of main general education	2515	906	294	353
Departments on the basis of secondary (senior) general education	1909	157	124	124
Groups where young people do not get secondary (senior) general education diploma	1483	106	62	71
Evening (shift-type) and other institutions	426	84	106	108

<sup>\*</sup> In educational institutions of basic, secondary and higher vocational education which implement a program of basic vocational education

Source: the Rosstat.

In 2000–2007 the number of students in educational institutions of basic vocational education (BVE) went down (*Table* 6).

 ${\it Table~6}$  Number of Students in Educational Institutions of Basic Vocational Education

	2000	2002	2003	2004	2005	2006	2007
Number of student in basic vocational education system*, thousands	1679	1651	1649	1604	1509	1413	1256
Number of student in basic vocational education system * per 10,000 persons	115	114	114	112	106	99	89

 $<sup>\</sup>ast$  Since 2005 including students of educational institutions of secondary and higher vocational education which implement programs of basic vocational education.

Source: the Rosstat.

The basic vocational education has been recently viewed as one of the most problem-ridden fields of the national education system. Meanwhile, prior to the onset of the global economic crisis, demand for skilled labor grew consistently despite the fact that in the employment structure the share of skilled labor went up. Correspondingly the share of jobless BVE graduates of the daytime form of education in the overall number of graduates decreased. At the same time, against the background of the falling share of unemployed BVE graduates, on the whole, in the Russian Federation even prior to the onset of the crisis, this indicator marker an upward trend in a number of RF Subjects. First of all, it was linked with the difficult economic situation in such region as: the Republic of Dagestan, Kabardino-Balkaria, the Kalmyk Republic, North Ossetia, the Tuva Republic, and the Altai Republic.

Prior to the onset of the global economic crisis, large businesses gradually began to incorporate BVE educational institutions into their structures, invest large sums of money into skilled labor training. However, this type of policy could not be implemented by medium- and small-size business, which did not dispose of sufficient resources allocated for that purpose. At the same time, in the pre-crisis period the share of education in the consolidated budget allocated on the BVE system development was falling.

### Secondary Vocational Education

In 2008 according to the Rosstat data, the number of independent, state and municipal institutions of secondary vocational education was going down (Table 7). At the same time, the number of branches of the institutions of secondary vocational education went up by 25 points (by 5.9%) and constituted 449.

Table 7
Institutions of Secondary Vocational Education
(as of the beginning of the school year)

	Number of edu-	Number of stu-		Of which attended	departments	•		
Years	cational institu- tions	dents – total, thousands	Daytime	Daytimeby correspondence (evening)	By correspondence	External studies	Number of students per 10,000	
		1	All Institutions	of Secondary Vocati	onal Education	on		
2000/01	2703	2360.8	1721.5	93.4	540.1	5.8	162	
2001/02	2684	2470.2	1788.6	93.4	581.7	6.5	169	
2002/03	2816	2585.5	1855.1	95.7	625.9	8.8	179	
2003/04	2809	2612.1	1903.0	86.9	614.0	8.2	182	
2004/05	2805	2599.6	1933.3	81.1	575.8	9.4	181	
2005/06	2905	2590.7	1960.3	70.7	549.4	10.3	181	
2006/07	2847	2514.0	1911.0	64.4	527.3	11.4	177	
2007/08	2799	2408.2	1822.7	59.4	511.4	14.7	170	
		State and	l Municipal Ins	stitutions of Secondar	y Vocational	Education		
2000/01	2589	2308.6	1697.6	86.9	519.2	4.9	158	
2001/02	2595	2409.8	1757.1	88.2	559.1	5.4	165	
2002/03	2626	2488.5	1807.5	84.6	589.4	7.0	172	
2003/04	2627	2501.6	1842.5	81.4	570.7	7.0	174	
2004/05	2637	2503.6	1878.4	75.8	541.4	8.0	174	
2005/06	2688	2473.0	1887.5	66.8	510.3	8.4	173	
2006/07	2631	2388.9	1836.0	60.4	482.8	9.7	168	
2007/08	2566	2288.5	1749.2	55.1	472.4	11.8	161	
		Non	-State Instituti	ions of Secondary Vo	cational Educ	cation		
2000/01	114	52.2	23.9	6.5	20.9	0.9	4	
2001/02	89	60.4	31.5	5.2	22.6	1.1	4	
2002/03	190	97.0	47.6	11.1	36.5	1.8	7	
270								

	Number of edu-	Number of stu-	Of which attended departments							
Years	cational institu- tions	dents – total, thousands	Daviime correspondence		By correspondence	External studies	Number of students per 10,000			
2003/04	182	110.5	60.5	5.5	43.3	1.2	8			
2004/05	168	96.0	54.9	5.3	34.4	1.4	7			
2005/06	217	117.7	72.8	3.9	39.1	1.9	8			
2006/07	216	125.2	75.0	4.0	44.5	1.7	9			
2007/08	233	119.7	73.5	4.3	39.0	2.9	8			

Source: the Rosstat.

In 2008 admission in the state and municipal institutions of secondary vocational education (SVE) decreased by 60.3 thousands or by 8.3% in comparison with 2007. As many as 190.4 thousand first year students admitted in vocational technical schools under the condition of complete compensation for tuition costs or 28.4% of the total number of admitted (in 2007 there were 238.1 thousand or 32.6%, in 2006ther were 260.8 thousand or 34.5%)

It should be noted that at present the secondary school (11 years) leavers have found it rather difficult to make their choice in favor of BE or SVE institutions regardless of the region they reside in (*Table 8*).

 ${\it Table~8} \\ {\it Educational~Preferences~of~Senior~Students~and~their~Parents~Depending} \\ {\it on~the~Region~of~Residence} \\$ 

Region of residence	Educational priorities (number of respondents in %)										
	Luck	General educa- tion	BVE	SPE	PSVE	Scientific degree	Total				
Moscow	6,8	0,0	0,4	10,0	80,0	2,8	100				
Nizhniy Novgorod	16,0	0,8	1,2	10,4	70,8	0,8	100				
Vologda	12,8	0,5	0,5	11,2	72,9	2,1	100				
Ivanovo	3,2	0,8	0,4	8,0	86,7	0,8	100				
Overall on sampling	9,5	0,5	0,6	9,8	78,0	1,6	100				

Source: WISEPN research (author – E.M. Avramova).

As can be seen from the Table, for those who finish 11 years of school education and for their relatives the choice in favor of BVE is around 1%, for educational institutions of SVE – around 10%. The fact that in the city of Ivanovo which is the center of highly subsidized region more school leavers choose higher education as a priority then even the Moscow school leavers draws much attention. One may assume that it is connected with the families' aspiration to provide their children with a possibility to get out of a negative economic situation by means of obtaining higher education.

Right up to 2009 the number of unemployed graduates of the daytime form of SVE was decreasing in Russia. At the same time, we can name okrugs where thee was an upward trend:

Sothern, Urals and Far Eastern okrugs. Simultaneously, sociological surveys demonstrated that in 2005-2008 secondary vocational education was increasingly growing into a "transit" level of vocational training: the vast majority of its graduates aspired to enter the higher educational institutions. For example, out of 76% of graduates from SVE institutions who would like to continue education, with 91% of them, or nearly 70% of the overall number of school leavers were opting for university degree.

### **Higher Vocational Education**

In 2000/01–2007/08 academic years the system of higher vocational education was growing rapidly both in number of institutions (state and non-state) and in the number of students (*Table* 9)

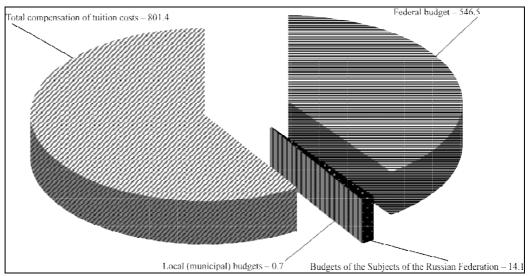
Table 9
Higher Educational Institutions
(as of the beginning of the school year)

		Number of stu-		Of which studied a			
Years	Number of institu- tions	dents – total, thou- sands	daytime	Daytime-by corre- spondence (evening)	By corre- spondence	External studies	Number of students per 10,000 persons
	All Higher Educat	ional Institutions					
2000/01	965	4741.4	2625.2	302.2	1761.8	52.2	324
2002/03	1039	5947.5	3104.0	346.0	2399.9	97.6	410
2003/04	1044	6455.7	3276.6	351.3	2703.7	124.1	448
2004/05	1071	6884.2	3433.5	361.8	2942.5	146.4	480
2005/06	1068	7064.6	3508.0	371.2	3032.0	153.4	495
2006/07	1090	7309.8	3582.1	372.3	3195.9	159.6	514
2007/08	1108	7461.3	3571.	352.9	3367.9	169.2	525
	State and Municip	al Higher Education	nal Institutions				
2000/01	607	4270.8	2441.9	258.6	1518.8	51.5	292
2002/03	655	5228.7	2861.6	298.8	1973.4	94.9	361
2003/04	652	5596.2	3009.9	301.8	2164.9	119.6	388
2004/05	662	5860.1	3143.6	300.3	2279.4	136.8	408
2005/06	655	5985.3	3195.2	299.9	2348.3	141.9	419
2006/07	660	6133.1	3251.2	291.3	2443.2	147.4	431
2007/08	658	6208.4	3240.7	280.4	2532.4	154.8	437
	Non-state Higher	Educational Institut	tions				
2000/01	358	470.6	183.3	43.6	243.0	0.7	32
2002/03	384	718.8	242.4	47.2	426.5	2.7	50
2003/04	392	859.5	266.7	49.5	538.8	4.5	60
2004/05	409	1024.1	289.9	61.5	663.1	9.6	71
2005/06	413	1079.3	312.8	71.3	683.7	11.5	76
2006/07	430	1176.8	330.9	81.0	752.7	12.2	83
2007/08	450	1252.9	330.6	72.4	835.5	14.4	88

Source: the Rosstat.

In 2008 enrollment in the state and municipal higher educational institutions decreased by 21.3 thousand persons (by 1.5%) mainly at the expense of students who entered the daytime form of education. The number of entrants at the correspondence departments went up by 29.8 thousand persons or by 5.1%.

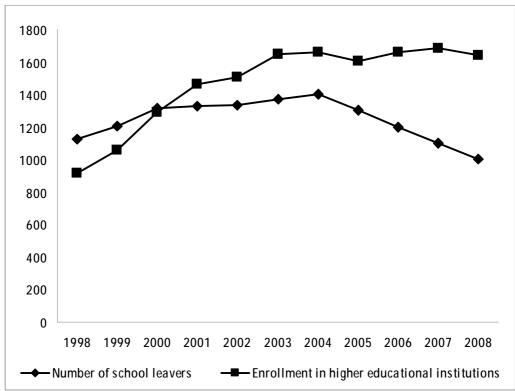
Distribution of 2008 enrollment in budgetary and paid places is presented in (Fig. 4).



Source: the Rosstat.

Fig. 4. 2008 Enrollment in State and Municipal Educational Institutions of Secondary Vocational Education at Budgetary Places with Complete compensation of Costs, thousand

It should be noted that starting with 2000 enrollment in higher educational institutions consistently exceeded the number of secondary school leavers (*Fig. 5*).



Source: the Rosstat.

Fig. 5. Enrollment in Higher Educational Institutions and the Number of Secondary School Leavers, thousand.

By the number of students per 10,000 of population which constitutes 525 individuals, Russia has taken second place in the world behind the USA. However, if we take into consideration the students of secondary vocational education, in that case Russia will be an absolute world leader by having 695 students per 10,000 of population.

In 2006/2007 academic year the share of students studied on a paid basis in the overall number of students in state and non-government higher educational institutions reached 66%. Thus, at present over 2/3 of the students of the Russian Federation study on a paid basis.

Recent data has exposed a one more important change taking place regarding admission in higher educational institutions: enrollment in daytime form of education is plummeting (*Table 10*).

Table 10

Dynamics of Enrollment in Daytime Form of Education in Higher Educational
Institutions in 2000–2007

	Enrollment, thousand						
	Total	Of which daytime education					
2000/01	1 292.5	687.4					
2001/02	1 461.6	745.8					
2002/03	1 503.9	774.7					
2003/04	1 643.4	803.8					
2004/05	1 659.1	841.3					
2005/06	1 640.48	830.65					
2006/07	1657.6	826.3					
2007/08	1681.6	789.5					

Source: the Federal Agency of Education

As it follows from *Table 10*, under constant growth of general enrollment numbers, enrollment in the daytime form of education was increasing only till 2004/05 academic year, and then started to fall. At the same time, if in 2005/06 academic year this reduction constituted only 1.3% in contrast from a year before, then in 2007/08 academic year it already constituted 4.5%. Thus, this trend tends to accelerate. Students opt for entering in the correspondence form of education.

It should be noted that this trend is mostly pronounced in the state and municipal higher educational institutions (*Table 11*).

Table 11

Dynamics of Enrollment in the Daytime Form of Education in State and Non-state Higher Educational Institutions in 2000–2007

	Enrollment, thousand										
	Ov	erall	Of which daytime form of education								
	In state	In non-state	In state	In non-state							
2000/01	1 140.3	152.2	621.9	65.6							
2001/02	1 263.4	198.2	669.3	76.4							
2002/03	1 299.9	204.0	698.3	76.4							
2003/04	1 411.7	231.7	724.8	79.0							
2004/05	1 384.5	274.6	758.2	83.1							
2005/06	1 372.46	268.02	746.38	84.27							
2006/07	1376.7	208.9	740.4	85.9							
2007/08	1384.0	297.6	715.2	83.3							

Source: The Federal Agency of Education.

Increased enrollment in correspondence form of education is connected both with the shortage of educational amenities and teaching personnel (their involvement is not so intense in case of correspondence form of education) and the growing cost of tuition which was recently increasing due to the growth of the budget expenses per a government subsidized student (at the correspondence form of education budgetary expenses are considerably lower; that is why, the cost of education for paid students is also significantly lower which allows students from low-income households to get a higher education, at the same time, obtaining not only a state diploma but also a diploma from a prestigious university).

General trend for enrollment in the full-time form of education in the state higher educational institutions reflects a general trend of enrollment in full-time form of education (Table 10). Prior to 2004/05 academic year there was growth of enrollment in the full-time form of education. Then the trend made a U-turn and there was a steeples slump. In 2007/2008 academic year decrease in the enrollment in the full-time form of education constituted 3.4% in comparison with the previous year. In the non-state higher educational institutions enrollment in the full-time form of education comes to far less than half: in 2006/07 academic year it fell down to 28.0% (in state higher educational institutions, on the contrary, enrollment in the fulltime form of education during the period under review was over fifty percent). This trend is explained by the fact that non-state higher educational institutions have recently been focused to the implementation of inexpensive higher vocational education programs on so called "soft" specialties. Additional gains are achieved due to additional enrollment in the extra-mural form of education. Moreover, those who pay for their own education study in the non-state higher educational institutions. In state higher educational institutions the full-time form of education dominates due to public contract. Increase in budget expenditure on higher education results in the fact that full-time budgetary students become more profitable for the higher educational institutions.

Along with BVE and SVE, the higher vocational education right up to 2009 posted decrease in the share of unemployed graduates from the full-time form of education in the state and municipal higher educational institutions. However, in two Federal Okrugs, Sothern and Far-Eastern, the trend was opposite even prior to the onset of the global crisis. In the Far East, one should specially single out Jewish autonomous oblast and Sakhalin oblast where in 2008 this indicator posted correspondingly 27.9% and 28%.

In North Caucasus Federal Okrug the following Subjects North-Ossetia – Alania, the Chechen Republic and the Republic of Karachaevo-Cherkessia (however, present indicator is several times lower), as well as the Stavropol Krai where in 2008 over 20% of the graduates of the full-time form of education in state and municipal higher educational institutions were unemployed.

In the last few years a lot has been said about the need to increase the quality of the higher education. High demand for higher education graduates demonstrated by the labor market (on obtained specialization) is considered as one of the most important indicators of improvement of the situation. At the same time, growth of extra-mural education testifies to the fact that notwithstanding the need to improve the quality of higher education the real developments in this field are meanwhile unfolding in the opposite direction.

### Financing of Education

In 2000–2009, both the public and private sources have been increasing their spending on education. From 2000 through 2003 the share of budgetary expenses on education in GDP significantly increased and then it started stabilizing under the growth of absolute volumes (*Table 12*). Private expenses of education are reflected in Russian statistics as the "Volume of paid services for education" taking into account hidden and informal activities. Dynamics of paid services volume in the educational system post sustainable growth, in which connection its rates are overtaking the rates of growth of budgetary expenses on education (*Table 13*).

Table 12 **Budgetary Allocations on Education in 2000–2009** 

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consolidated budget on education, bn. Rb.	214.8	277.8	408.0	475.6	593.2	80.8	1033.3	1342.3	1664.2	1 691.9
Federal budget	38.1	54.5	81.7	99.8	121.6	162.1	201.6	278.5	354.9	413.1
Territorial budgets	176.7	223.3	326.3	375.8	471.6	628.6	831.7	1063.8	1309.3	1278.8
Share of expenditure on education in consolidated budget, in % of GDP	2.9	3.1	3.8	3.6	3.5	3.7	3.9	4.1	4.1	4.0
Federal budget	0.5	0.6	0.8	0.8	0.7	0.8	0.8	0.8	0.8	1.0
Territorial budgets	2.4	2.5	3.0	2.8	2.8	2.9	3.1	3.3	3.3	3.0
Share of expenditure on education in the RF consolidated budget, in %	9.7	9.7	10.2	12.0	12.7	11.8	12.3	11.9	11.8	10.5
Share of expenditure on education of the Federal budget in the RF consoli- dated budget expenditure, in %	1.7	1.9	2.0	2.5	2,6	2.4	2.4	2.5	2.5	2.6
Share of expenditure on education of territorial budgets in the RF con- solidated budget expendi- ture, in %	8.0	7.8	8.2	9.5	10.1	9.4	9.9	9.4	9.3	7.9

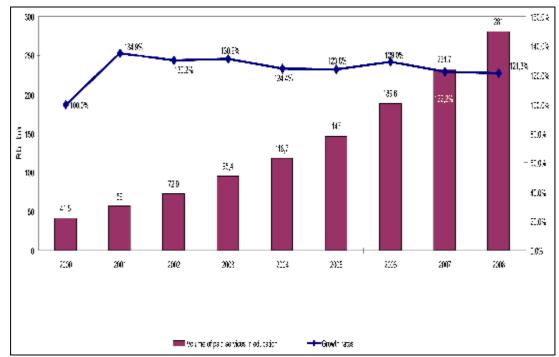
Source: the Rosstat, the Federal treasury.

Table 13
Volume of Paid Services in the Field of Education in 2000–2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Volume of paid services in the system of education, bl Rb.	41.5	56	72.9	95.4	118.7	147	189.6	231.7	281.2
In % of GDP	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Source: the Rosstat.

Dynamics of paid services in the field of education is represented in Fig. 6.



Source: the Rosstat.

Fig. 6. Dynamics of Paid Services in the Field of Education in 2000–2008

In 2009 was a turning point in this trend. As can be seen from *Table 12*, the share of education in the consolidated budget decreased from 4.1% to 4.0% of GDP, at the same time, the share of education in the federal budget went up from 0.8 to 1.0% of GDP, and the share of education in territorial budgets (consolidated budgets of the subjects of the Russian Federation) on the contrary, went down from 3.3% to 3.0%.

The share of expenditure on education in the territorial budgets in the expenditure of the RF consolidated budget has marked a return to the 2001 level, and the aggregate share of expenditure on education in expenditure of the RF consolidated budget has marked a return to the 2002 level.

Breakdown of budgetary expenses according to the levels of education in 2004–2009 is reflected in *Table 14*.

Table 14

Volume and Structure of Allocations of the Consolidated Budget According to the Levels of Education 2004–2009

	2004	2005	2006	2007	2008	2009 (esti- mate)
Consolidated budget expenditure on education, Rb. bn	593.4	801.8	1036.4	1342.3	1664.2	1691.9
Preschool education (PE), Rb. bn	91.7	113	145.3	189.7	254.5	260.6
Share of expenditure on PE in the consolidated budget, in %	15.5	14.1	14.0	14.1	15.3	15.4
General education (GE), Rb. bn	298.1	356	475.9	599	737.1	746.1
Share of expenditure on GE in the consolidated budget, in %	50.2	44.4	45.9	44.6	44.3	44.1
Basic vocational education (BVE), Rb. bn	35.6	39.4	47.4	57.6	65.5	64.3

	2004	2005	2006	2007	2008	2009 (esti-
	200.	2002	2000	2007	2000	mate)
Share of expenditure on BVE in the consolidated budget, in %	6.0	4.9	4.6	4.3	3.9	3.8
Secondary vocational education (SVE), bn Rb.	30.5	43.3	55.3	70.4	93.9	93.1
Share of expenditure on education in the consolidated budget, in %	5.1	5.4	5.3	5.2	5.6	5.5
Higher and post-higher education, bn Rb.	76.9	125.9	169.9	240.2	294.6	328.6
Share of expenditure on higher vocational education in the consolidated budget, in %	13.0	15.7	16.4	17.9	17.7	19.4

Source: the Federal treasury.

As can be seen from *Table 14*, in 2004-2009 the share on expenditures on preschool, general education and secondary vocational education were rather stable in the consolidated budget on education. The share of expenditure on basic vocational education was decreasing during the entire period in spite of declared aim at developing basic vocational education system. Particularly sharply this share went down following the transfer of the basic educational institutions under the jurisdiction of the Subjects of the Russian Federation (in 2005 – 4.9% in comparison with 6% in 2004). In 2009 the share of budgetary expenditures on basic vocational education in the consolidated budget expenditure continued going down coming to 3.8%.

Regarding the share of expenditure on higher education then it grew noticeably during 2004-2007 from 13.0 to 17.9%. In 2008 it somewhat went down to 17.7%, and in 2009 according to preliminary estimate surged upwards to 19.4%.

On the whole, the regional and local budgets are financing general education. Dynamics of these expenses, as well as expenses per a pupil in presented in *Table 15*.

Table 15

Dynamics of Budgetary Expenditure on General Education,
Including per a Pupil, in 2000–2007

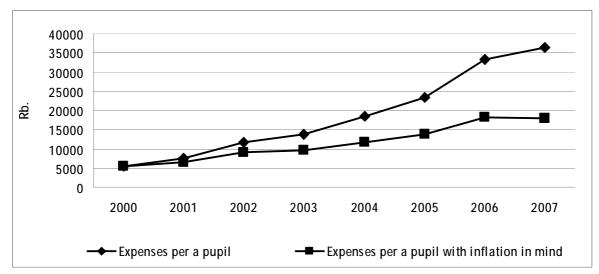
	2000	2001	2002	2003	2004	2005	2006	2007
Expenditure, mln Rb.	107931	143972.8	215261.2	236600	298100	356084.7	475900	398750.6
Number of pupils, thousand.	20073.8	19429.1	18439.7	17322.9	16168	15185.1	14362,3	13670.1
Expenses per a pupil, Rb.	5377	7410	11673	13658	18438	23450	33135	40851.98
Growth of expenses per a pupil in relation to the previous year, in %		37.8	57.5	17	35	27.2	41.3	23.3
Inflation level, in %		18.6	15.1	12	11.7	10.9	9	11.9

Source: Ministry of Education and Science, the Rosstat.

Taking into account the inflation, dynamics of budgetary expenditure per a pupil in the system of higher education is presented in *Fig.* 7.

Thus, real growth of budgetary expenditure per a pupil in the system of general education was practically half of the nominal one.

In 2008 expenditure of the federal budget on education went up by 20.9% in comparison with 2007. At the same time, expenditure on the higher vocational education constituted in 2008 263.2 bn Rb., thus increasing in comparison with 2007 by 22.9%.



Source: Russian Ministry of education and science

Fig. 7. Dynamics of Nominal and Real Budgetary Expenditure per a Pupil in the System of General Education in 2000–2007

Inasmuch as the budget quota in 2006-2008 grew slower than budgetary expenses on higher education, this resulted in the fact that budgetary expenses have grown significantly per a budget student in the state higher educational institutions (*Table 16*).

Table 16

Average Budgetary Expenditure per a Budget Student in Higher Education in 2004–2008

	2004	2005	2006	2007	2008
Budgetary expenses per a student in higher education, thousand Rb.	25.6	41.9	56.8	81.1	100.2
Rate of growth, in %		63.7	35.6	42.8	23.5

Source: Russian Ministry of Finance, the Rosstat, author's calculation.

At the remaining levels of the educational system budgetary expenses per a student in 2004-2008 has also increased appreciably (*Table 17*).

Table 17

Dynamics of Average Budgetary Expenses per a Pupil According to Levels of Educational System (without higher vocational education) in 2004–2008

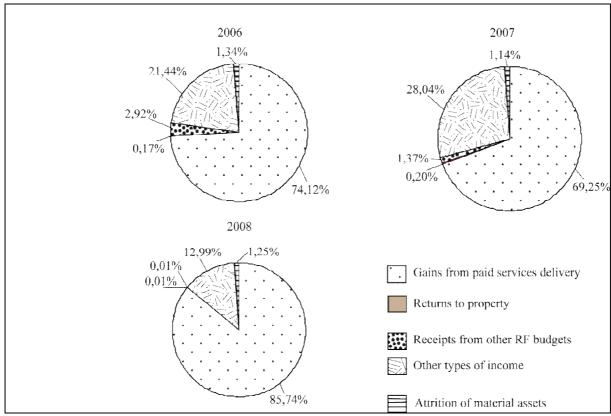
	2004	2005	2006	2007	2008
Budgetary expenses per a pupil in preschool institution, thousands Rb.	20.8	25.1	30.9	39.5	52.8
Growth rates of budgetary expenses, in %		20.5	23.1	27.8	33.6
Budgetary expenses per a pupil in general education school, thousands Rb.	18.4	23.4	33.1	43.7	55.0
Growth rates of budgetary expenses, in %		27.2	41.3	31.9	25.8
Budgetary expenses per a pupil in PVE institutions, thousands Rb.	22.3	26.3	33.9	44.3	54.6
Growth rates of budgetary expenses, in %		18.1	28.9	30.9	23.2
Budgetary expenses per a pupil in SVE institutions	30.3	42.2	53.1	66.8	87.7
Growth rates of budgetary expenses, in %		39.3	25.8	25.8	31.3

Source: the RF Ministry of Finance, the Rosstat, author's calculation.

As can be readily appreciated from *Table 16* and *17*, budgetary expenses per a pupil for the last 5 years were skyrocketing by more than 20% annually. The highest growth rates of budgetary expenses per a pupil in state higher educational institutions were recorded in 2005 when they went up by 63.7%.

All recent years the structure of extrabudgetary expenditure on education remains unchanged: 25% of extrabudgetary funds are allocated on preschool, general and basic vocational education, another 25% are allocated in secondary vocational training and 50% - on higher.

In 2006-2008 the structure of extrabudgetary expenses of higher educational institutions were subjected to major changes (Fig. 8).



Source: IRO SU-HSE data.

Fig. 8. Structure of Extrabudgetary Expenses on Higher Educational Institutions, under the Russian Agency of Education, in 2006–2008.

In 2006-2008 proceeds from students' tuition fees represented main source for the extrabudgetary revenues of the higher educational institutions of the Russian Agency of Education. At the same time, in 2007 in comparison with 2006 other revenues of higher educational institution also went up (from 21.44 to 28.04%), where proceeds from R&D represented the lion's share. In 2008, on the contrary, this share went down sharply (to 13%), and the share of proceeds from paid services boomed. 2008 changes were a reaction to the onset of the global crisis when higher educational institutions got fewer orders for R&D coming from private (non-state) sector. Thus, public-private partnership in the sphere of academic research went down in volume.

By and large, this fact demonstrates certain economic instability of higher educational institutions, which are more geared to research and development in comparison with higher educational institutions which were geared to teaching paid students.

### Institutional Changes in the System of Higher Education

In 2009 out of all institutional reforms which were recently taking place in the system of education, major attention was attracter to the standard state examination.

#### Standard State Examination

On February 12, 2007 the President of the Russian Federation signed a Federal aw "On the Introduction in the Law of the Russian Federation On Education and the Federal Law On Higher and Postgraduate Vocational Education with Regard to Holding a Standard State Examination." According to this Law since 2009 standard state examination (SSE) has been introduced in a regular mode and has become main form for education certification of general school leavers which will serve as a basis for subsequent enrollment into higher educational institutions. Higher educational institution will accept both school leavers with high SSE grades and champions of all-Russia and international competitions.

On September 5, 2008 the Russian Ministry of Education and Sciences issued an order #256 which approved the list of specialties subject to additional entry exams of creative and/or professional nature at the enrollment to the state and municipal institution of higher vocational education for bachelor course and occupational program.

Where the SSE of the olympiads' results on a par with the SSE's results is substantiated by unconventiality of a pat of entrants (correspondingly they are not to be subjected to standard approaches and procedures), then the introduction of additional exams and tests is substantiated by a higher level of a higher educational institution, by particular properties of its curricula.

It appears, that equating the results obtained at a strictly particular olympiads to the results of SSE is rather acceptable. At this point, it is only necessary stipulate the status of such olympiads. For instance, they may be Russia-wide or international olympiads with independent judging. However, they may not be different regional or republican olympiads where the level and independence of judges are difficult to verify. Introduction of additional tests and exams by a number of higher educational institutions (except of creative and professional nature), from our point of view, may seriously discredit the idea of SSE in the eyes of the population. First, it will be impossible to enter those higher educational institutions by simply sending the documents, entrant's personal presence will be required which will increase the costs for entering such high-status educational institutions and will make that unattainable for the children from low income households. Second, emergence of additional barrier may breed corruption, to eradicate which the SSE was designed. By no means unimportant is the fact that corruption may breed in the most prestigious higher educational institutions, which, undoubtedly, yet again will disappoint people's expectations. As to the SSE, its results for this part of higher educational institutions will be highly devalued. It seems that, in principle, it may undermine trust to the (and to the SSE) of school leavers and their families.

In 2008 all subjects of the Russian Federation were already subject to the SSE. However, by far all the higher educational institutions where sticking to its results at the enrollment. Part

of higher educational institutions was taking into consideration SSE marks, but the marks got at their entrance exams were paramount.

2009 was the first year when the SSE was held in standard mode and enrollment into all higher educational institutions was exercised according to the USE results (at the same time, 24 higher educational institutions were allowed to hold additional tests in major subjects).

The 2009 standard state examination results are represented in *Table 18*.

Table 18

The 2009 SSE Results in General Subjects

Subject	Number of pupils tak-	Percent of those who took SSE and got test score		Of which, percent of the current year school taking the SSE and getting test score		Of which, percent of past years school leavers taking the SSE and getting test score		Average test
	ing SSE	Above mini- mum number of points	Below mini- mum number of points	Above mini- mum number of points	Below mini- mum number of points	Above mini- mum number of points	Below mini- mum number of points	56.88 43.58 47.88 52.68 55.43
The Russian language	1030236	96.99	3.01	97.24	2.76	94.35	5.65	56.88
Maths	976486	96.27	3.73	96.96	3.04	85.18	14.82	43.58
Physics	239037	93.05	6.95	93.55	6.45	88.41	11.59	47.88
Chemistry	84854	88.24	11.76	89.61	10.39	78.72	21.28	52.68
Informatics and ICT	74402	87.08	12.92	87.94	12.06	76.47	23.53	55.43
Biology	183792	91.01	8.99	91.25	8.75	89.29	10.71	51.32
History	208099	90.51	9.49	90.83	9.17	87.89	12.11	47.30
Geography	37495	89.06	10.94	89.20	10.80	86.96	13.04	49.09
The English language	83778	93.56	6.44	94.30	5.70	86.68	13.32	57.79
The German language	5371	88.61	11.39	89.76	10.24	79.57	20.43	43.11
The French language	2399	97.54	2.46	97.78	2.22	94.87	5.13	58.87
Social studies	484377	94.33	5.67	94.52	5.48	92.15	7.85	56.33
The Spanish language	198	100.00		100.00		100.00		73.90
Literature	63976	91.61	8.39	92.51	7.49	87.60	12.40	50.36

Source: the Russian Federal Service of Supervision in the Sphere of Education and Science.

Due to the standard mode of operation of the standard state examination the following procedure for issuing a certificate of secondary general education has been determined. In the event a school leaver does not pass one of the two compulsory standard state examinations, in other words, has received score below the set out minimum, he/she may resit the examination once. Where he/she has not managed to score a required minimum simultaneously in two compulsory examinations (in the Russian language and Maths), then the school leaver may not resit the examinations and may attempt to pass these subjects only the next year. In this event the leaver does not receive a SSE certificate and instead a secondary school diploma he/she will get a reference of school attendance.

In the event a school leaver when taking any examination of his/her choice (not the Russian language no Maths) does not receive a mark below the minimum number of points, then he/she may resit this SSE only the next year.

Where a school leaver on two compulsory examinations scores the number of points above the set out minimum threshold and in the subject of his/her choice – below the set out minimum, then he/she all the same will receive a secondary school diploma.

Thus, procedure for passing the SSE implicitly determines that in order to obtain a secondary school diploma from a Russian secondary school one has to pass two compulsory exams: in the Russian language and Maths. For mastering other subjects the school actually may not be held responsible. Moreover, procedure for passing the SSE does not specify where and how school leavers who have not paused the Russian language and Maths can improve their knowledge which they failed due to various reasons to obtain. At that, it is not clear how it will be determined where it was due to poor efforts of a pupil or teachers. It also remains unclear the situation with the choice subjects, it is not determined where and how a school leaver can improve his/her knowledge in these subjects in order to able to pass them. Meanwhile, on July 24, 2007 a Law "On Introduction of Amendments into Separate Legislative Acts of the Russian Federation Due to the Introduction of Compulsory General Education" which holds the state responsible for delivery of educational services. Transfer of this task to pupils and their families jeopardizes first of all pupils from low income households who can not afford to get additional knowledge to prepare for the SSE on a paid basis. Correspondingly, these young people do not have roadmap for their subsequent education carrier. To be more precise, secondary school diploma is required to enroll in a secondary vocational education institution; those who have not paused compulsory subjects may consider solely BVE institutions for their subsequent educational carrier. Those who have received secondary school diploma but had not scored required number of points in the choice subjects, most likely, will enroll in SVE institutions.

To a considerable extent, many uncertainties resulting from the introduction of the SSE led to the fact that years 2008 and 2009 can be called of the Standard state examination. Efforts against the USE were enhanced in spring-summer of 2008. Publication of 2008 SSE results to a large extent contributed to this. In 2008 23.5% of pupils failed to pass Maths and 11.2% the Russian language. The worst results in choice subjects were posted in literature – nearly 25.5% of pupils got low grade.<sup>2</sup> This signified that nearly one third of school leavers would not have received a secondary school diploma and would not have been able to enter a higher education institution had it not been for the rule effective in 2008 "plus one point" according to which a higher mark in general subjects is entered into a secondary school diploma where the difference the difference between annual mark and the SSE mark amounts to one point. Taking into account the fact that getting higher education in Russia has become a social norm, such result has shocked the society not because the quality of school education has done down but due to the fact that entering a higher educational institution has again become an unattainable dream for many families. Standard examination instead of widening excess to higher education as it was always underlined during the SSE test period, in a single stroke has tuned according to public opinion into a barrier between school and higher educational institution.

This fact, from our point of view, has become a major reason for the onset of a fierce fight against the SSE. Remaining reasons - insufficiently qualified preparation of control and measuring materials, corruption, etc. – would not have aroused support of parents and pedagogical community in the fight against the SSE. A lawsuit has been filed against the SSE to the Supreme Court. Signatures were collected in support of calling off the SSE (in the Kemerovo oblast, for example, more that 40 thousand signatures have been collected), a draft law has

<sup>&</sup>lt;sup>1</sup> Procedure does not specify in what way issue of a secondary school diploma and the SSE score is connected with the results showed during the course of secondary education.

<sup>&</sup>lt;sup>2</sup> Official data of the Russian Federal Service of Supervision in the Sphere of Education and Science.

been prepared which envisaged strictly voluntary character of the SSE for the school leavers as well as acceptance by higher educational institution of its results. In the wake of the global economic crisis opposition to the SSE was careful on the part of the government bodies in charge of education management. They became aware of the fact that in the event when 25-30% of school leavers were unable to pass the SSE, there would be a threat of mass youth unemployment, criminalization of young people, increase in the number of drag addicts, etc. In the wake of the crisis shortfall of significant number of students (up to 200 thousand persons) would have led higher educational institutions to negative economic and social results, taking into consideration decrease in extrabudgetary revenues and a reduction in teaching staff.

At the same time, the SSE remains a sole symbol of educational reform in Russia. (In addition to the Standard state examination to key reforms in the sphere of education one may attribute introduction of per capita financing in the system of general education and the implementation of the new wage system. However, implementation of these measures has not been completed yet in the wake of the reduction of budgetary expenditure is loosing its meaning, first of all it is true of the stimulating role of the salary).

In 2009 the SSE results may be considered as a significant, however, not definite, defeat of the standard state examination. Only 2.76 and 3.04% of low grades in the Russian language and Maths were posted by the school leavers in 2009. This fact testifies not to the improved situation in general education but to a sharp decline in requirements to the examinee, especially if we compare this results with dynamics of those who got low grades in USE (according to traditional five-grade scale) on these subjects within last four years (*Table 19*).

Table 19
The Share of School Leavers Who Got in the SSE Compulsory Subjects a Low
Grade According to Five-grade Scale in 2006–2009, in %

Subject —	Num	ber of those who got low gra	de (according to five-grade	scale)
	2006	2007	2008	2009
The Russian language	7.91	8.81	11.21	2.76
Maths	19.99	21.14	23.48	3.04

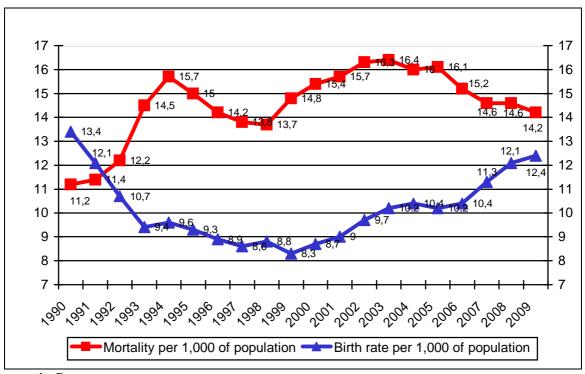
In the meantime, one may not reject the SSE without grounds. This mechanism for certification of school leavers which corresponds to the present stage of development of Russian higher education — transition to universal higher education when 80% of school leavers enroll in higher educational institutions. However, this mechanism needs improvement so that the society stops mistrusting it. Many negative issues regarding the SSE could have been eliminated at the test stage.

One of the negative issues is sending the SSE results to an unlimited number of higher educational institutions which resulted in a mess during the enrollment in higher educational institutions. Sometimes, higher educational institutions were loosing rather strong would-be students and were forced to enroll less knowledgeable ones. This issue became obvious at the stage of experiment. At present the examinee can not send his/her SSE results to more than 5 higher educational institutions.

On the whole, one can draw a conclusion: although an experiment with the SSE has ended, its approbation and adaptation to real conditions carries on.

#### 4.3.2. Health Care in 2009

The year 2009 is noted for an improvement in the demographic indices: the birth rate went up from 12.1 per 1,000 (2008) to 12.4, and the mortality rate fell from 14.6 per 1,000 in 2007– 2008 down to 14.2 (Fig. ). The trend in the fall of mortality was noted since 2006 and is attributed by the government to its concerted efforts in the field of public health, as well as its growing funding, and to the implementation of the National Project "Health" together with the program of medication supply. Healthcare remains a priority in the budget policy, expansion of the state programs implemented in the field of public health, obviously, have a bearing on the life span of the population. Reduction in the number of deaths from cardio-vascular diseases by 56 thousand (from 1,186 thousand in 2008 down to 1,130 thousand) have mainly contributed to the decline in the mortality rate (from 2,076 thousand in 2008 down to 2,014 thousand). If we observe relative figures of the fall of mortality due to natural causes, then the most positive indicators in reduction of the number of deaths were posted by accidental alcohol poisoning – down by 32% compared to 2008 and by road accidents – down by 15%. These results can be rightfully attributed to the implemented measures of the government control over alcohol production, as well as strengthening administrative responsibility for violation of Highway Code since 2009. At the same time, the number of deaths from tumors (second largest to cardiovascular diseases) went up by 2%, despite introduced in the National Project measures aimed at the improvement of medical assistance to oncological patients.

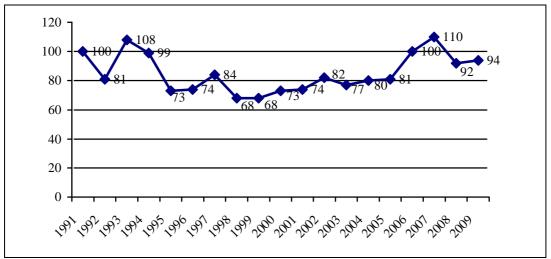


Source: the Rosstat.

Fig. 1. Birth Rate and Mortality in Russia from 1990 to 2009

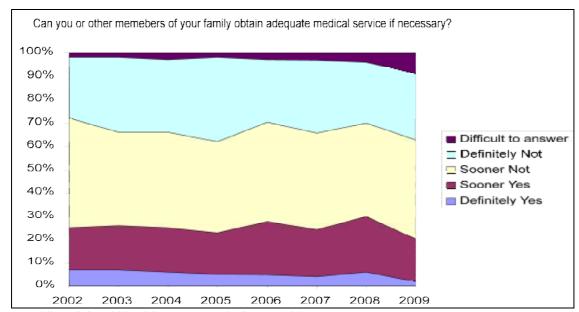
In 2009 in spite of the economic crisis, the federal budget expenditure on public health went up in the nominal terms by 25% - from Rb231.4 bn to Rb289.5 bn. Expenditure from the

budgets of the Subjects of the Russian Federation remained practically untouched: Rb518.7 bn against Rb520.1 bn in 2008. Taking into account contributions to compulsory medical insurance (CMI) made by economically active population, state financing of the health care system went up in 2009 by 5.6% (2.9% in real terms) and reached Rb1, 060 bn. (*Fig.*2).



Source: calculations according to Rosstat data and the Federal Fund of CMI by using GDP indices-deflators.

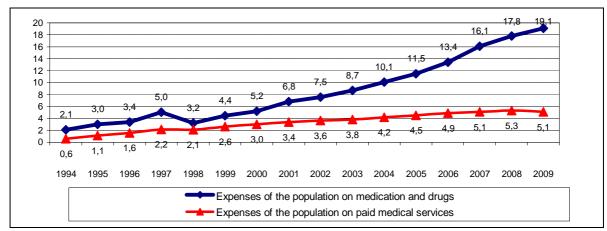
Fig. 2. Dynamics of Government Expenditure on Public Health in Real Terms (1991 = 100%)



Source: Public opinion-2009. Moscow: Levada-Center, 2009. p. 66.

Fig. 3. Dynamics of People's Evaluation of Accessibility of Medical Assistance (according to surveys by Levada-Center)

In spite of these circumstances, people's evaluation of the accessibility of high quality medical assistance was less promising (Fig. 3). Obviously, this was due to a reduction in the ability of the population to pay for required medical assistance: the volume of provision of paid medical services to the population declined in real terms (Fig. 4). In reference to the expenditure on medicine and pharmaceutical products, there was no data available regarding volumes of retail sales for the time of this article. According to estimates, they went up in real terms; the economic crisis has solely slowed down growth rates of these expenses. This distinguishes 2009 situation from 1998 crisis when both the government expenditure on public health and people's expenses on pharmaceutical products and medication plummeted.



*Source:* calculation on Rosstat data; Expenditure of population on medicine and pharmaceutical products in 2009 – estimation on the DSM Group forecast (<a href="http://www.dsm.ru/marketnews/1061">http://www.dsm.ru/marketnews/1061</a> 24.11.2009)

Fig. 4. Expenses of the Population on Drugs and Paid Medical Services in 1994–2009 in 1994 prices.

In 2009 as during three previous years (2006-2008) government policy in the field of public health focused on the implementation of the priority National Project "Health".

### The National Project "Health"

At the beginning of 2009 the government took a decision to continue implementation of the National Project "Health" up to 2012. Its financing is provided from the federal budget and from extrabudgetary funds: Federal Fund of Compulsory Medical Insurance and the Fund of Social Insurance. Despite the economic crisis and associated with it significant contraction of government expenditures, outlays for the national project "Health" were not only subjected to reduction but were increased by 20.2% compared with 2008. This goes to prove that the government gave this national project a priority status in its budget policy.

Since 2009 the project was supplemented with measures aimed at formation of healthy way of life, tuberculoses screening of the population, preventive control aimed at improving medical assistance to oncological patients, improving network of perinatal centers, prophylactic medical examination of orphans and children who live in difficult situations and who stay in permanent establishments of the healthcare system, of education system and social security system.

In 2009 the project comprised 4 components:

- Formation of healthy way of life;
- Development of basic medical and sanitary aid and improvement of disease prevention;
- Increase of accessibility and quality of specialized including hi-tech medical assistance;
- Improvement of provision of medical attendance to mothers and children.

In 2009 the national project's expenditure structure has undergone a series of significant adjustments. Expenses on basic medical and sanitary aid and improvement of disease prevention substantially fell in absolute and relative terms: the share of this component in the overall expenditures of the project decreased from 54.5% to 38.4%. In the first year of the project implementation (2006) this component was a major one: it accounted for 82.6% of the overall expenditure. However, recently the Ministry of Public Health and Social Development invariably placed a priority on the provision of the population with hi-tech medical assistance. The share of expenditure on this component went up from 16.5% in 2006 to 42% in 2009. We should take note of an increase in expenditure on the improvement of medical assistance to mothers and children: the share of these expenses in the project's budget went up from 11.9% to 17.4%.

In 2010 expenditure on the national project as a whole and on its main components remained at approximately the same level as in the previous year.

Distribution of expenditure across the project's directions and undertakings in 2006-2010 is presented in *Table 1*.

Table 1 Expenditure on the Implementation of the Priority National Project "Health", Rb bn.

Directions of the national project, types of expenditure and sources of funds	2006	2007	2008	2009	2010 (plan)
Total expenditure, in % of GDP	0.29	0.42	0.29	0.37	
Overall expenditure, Rb bn.	78.9	139.5	120.7	145.2	146.3
Of which:					
Formation of healthy way of life	_	_	_	0.7	0.8
Development of basic medical and sanitary assistance and improvement	65.2	90.5	65.8	55.7	60.5
of disease prevention					
Training and re-training of general practitioners (family doctors), therapeutists (district doctors) and general pediatricians (district doc-	0.15	0.3	0.3	0.3	-
tors) Salaries and wages to general practitioners (family doctors), therapeutits (district doctors) and convening districtions (district doctors) and	14.6	21.9	19.5	21.6	21.2
ists (district doctor) and general pediatricians (district doctor) and nurses working with them					
Salaries and wages to medical staff of feldsher-midwife stations, doctors, feldshers and nurses of ambulances	4.1	11.2	8.0	9.4	9.7
Supply of diagnostic equipment to municipal dispensaries and outpatient clinics	14.3	15.4	0.05	-	-
Provision of ambulances to departments and emergency and immediate	3.6	3.9	0.2	-	-
care institutions					
Vaccination CATEGORIAN CONTRACTOR	4.5	6.1	5.0	6.5	5.6
Prevention of AIDS, of hepatitis B and C, and identification and treatment of AIDS-infected individuals	2.8	7.8	8.0	9.3	13.5
Tuberculoses screening, treatment of tuberculoses patients, prevention measures	_	_	-	2.7	4.1
Prophylactic medical examination of the working population	5.5	7.0	5.7	3.9	4.4
Additional payment for medical and sanitary aid provided to the non- working pensioners	4.3	_	_	_	_
Additional medical examinations of employed in industries with occupational hazards	1.9	2.0	2.0	2.0	2.0
Provision of the population with hi-tech medical assistance	13.0	46.3	51.3	61.1	60.0
Construction of hi-tech medical technological centers	3.2	28.8	9.5	11.6	6.9
Provision of hi-tech medical assistance	9.8	17.5	24.0	28.2	36.2
Development of new hi-tech medical technologies	-	-	7.7	5.1	-
Undertakings aimed at the improvement of medical assistance to cardio-vascular patients	-	-	3.6	3.0	3.1

Directions of the national project, types of expenditure and sources of funds	2006	2007	2008	2009	2010 (plan)
Undertakings aimed at improvement of medical assistance to those injured in road accidents	-	-	3.2	2.3	3.4
Undertakings aimed at the improvement of oncological assistance to the population	-	-	-	6.7	5.9
Undertakings aimed at the development of blood banking service	_	_	3.3	4.2	4.5
Improvement of medical assistance to mothers and children	9.4	14.9	17.0	25.3	24.9
Payments on birth certificates in the framework of medical assistance	9.0	14.5	16.6	16.8	17.5
provided to women during pregnancy and birth, dispensary observation					
of a child in his first year					
Development of perinatal centers	_	_	_	7.1	6.0
Examination of newborn babies for galactosemia, adrenogenital syndrome, mucoviscidosis	0.4	0.4	0.4	0.6	0.6
Prophylactic medical examination of orphans and children who are in difficult situations and who stay in permanent establishments of the				0.8	0,8
healthcare system, education and social protection					
Implementation of the pilot healthcare modernization project	_	2.0	3.4	_	_
Provision of information support and project management	0.6	0.7	0.2	0.3	0.1

Source: the RF Ministry of Public Health and Social Development data.

During the project's implementation in 2009 tangible accomplishments in provision of various types of medical assistance to the population were achieved. However, it should be remembered that expenditure on the project in 2009 amounted only to 13.7% of the overall government expenditures on health care system and the implementation of such project does not exclude the need for the health care system reform on the whole. Due to its design, the national project was unable to ensure significant progress in the solution of key problems of the Russian public health system. Declarativity and inconcrete character of guarantees of free medical assistance, low efficiency of the chosen model for compulsory medical insurance, insufficient protection of the population from payment risks for medical treatment, inequality in accessibility to medical assistance among different social and territorial groups, low structural efficiency of the system for medical services provision, weak medical staff motivation – solution of all these issues is impossible without major reforms in the organization, administration and financing of the public health system. The national project has cleared the road for these reforms. However, they have not stated. In the framework of the national project, the government financed implementation of the pilot project designed to introduce new public health financial vehicles in 19 Subjects of the Russian Federation in 2007-2008. However, there were no major institutional breakthroughs affecting entire public health system. It is not envisaged in the national project in the future.

### Provision of Medicines to the Population; Strengthening Government Price Control over Medications

The state of drugs provision has become one of the hot buttons in the wake of the economic crisis. According to the data of Russian official statistics, in 2009 growth of retail prices on medicinal drugs amounted to 13.9% exceeding overall consumer price index growth, which for the same time interval constituted only 8.8%. Most rapidly prices grew in the first quarter 2009 – then the growth constituted 14.2% in relation to December 2008. At the same time, there was significant price dispersion on one and the same medication, and this range increased. For example, in St. Petersburg maximum price exceeded minimum one on similar medication 5fold an average, and by March 2009 this ratio went up to tenfold.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The World Bank. Russian Economic Report 19. June, 2009, <a href="http://siteresources.worldbank.org/">http://siteresources.worldbank.org/</a> INTRUS-SIANFEDERATION/Resources/305499-1245838520910/rer19-eng.pdf

Prices on pharmaceutical products are subject to government regulation in Russia. It is worth noting that the price regulation on pharmaceutical products represents a widespread practice in the countries with developed market economies. However, abroad only prices on those pharmaceutical products which are reimbursed (in total or in part) by the government are subject to state regulation. In Russia a different approach to this issue has been chosen: those pharmaceutical products which are in the list of essential and vitally important pharmaceutical products are subject to price regulation. This list is regularly updated. Its latest version was approved on 30 December 2009 and it includes 500 international nonproprietary names for pharmaceutical substances. Sales volume of these pharmaceutical substances amounts to about 40% of the pharmaceutical market. The government purchases about half of these pharmaceutical substances for distribution among medical institutions and in the framework of programs of drugs distribution for several categories of population: social security beneficiaries and certain types of patients (program – provision of necessary drugs and program – high-cost nosology).

Effective prior to 2010 the system of price regulation envisaged registration according to declarative principle of wholesale factory price of producers and importers on essential and vitally important drugs and authorized Subjects of the Russian Federation to set independently wholesale and retail markups on prices of essential and vitally important drugs. At the same time, there was no control over set prices. Actually, in the regions marginal markups were not applied on a cumulative basis – to the wholesale factory price of the producer but to the price of each subsequent distributor. A chain of middlemen emerged in the pharmaceutical market. Each middleman applies corresponding marginal wholesale markup and as a result prices on the same drugs turn out to be dependant on the number of middlemen and may substantially differ in the same region.

Such regulation system of drugs provision to the population turned out to be unable to withstand pressure, as a result of the ruble exchange rate depreciation, on the prices of imported drugs (in 2008 these drugs constituted 77% of the sale volume on the pharmaceutical market<sup>1</sup>) and imported substances used by the domestic pharmaceutical producers. Price growth on drugs turned out to be impressive for the population.

The state with drugs provision and distribution became a subject for discussion at the RF government session. At the session of the Government commission on the increase of the Russian economy sustainability, which took place on 10 March 2009 instructions were issued which were reflected in the Order of the RF Ministry of Public Health and Social Development as of 27 May 2009 № 277H, aimed at regulating price and drugs assortment monitoring, and in the Government Ordinance as of 8 August 2009 №654 "On Improvement of Government Price Regulation on Essential and Vitally Important Drugs." This document introduced significant amendments in the regulation procedure of essential drugs price fixing. The new procedure was put into effect from January 2010. It envisages:

– ceiling wholesale factory prices on the essential and vitally important drugs are fixed in accordance with procedure approved by the RF Ministry of Public Health and Social Development together with the Federal Tariff Agency.<sup>2</sup> This procedure envisages determination of

<sup>1</sup> Source: TSMI "Pharmexpert" (www.pharmtech-expo.ru/.../zip/production\_for\_HARMTEH\_241109.ppt)

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<sup>&</sup>lt;sup>2</sup> Order of the RF Ministry of Public Health and Social Development № 983H and the Federal Tariff Service № 447-a of 14 December 2010. "On Approval of Methodologies for Setting Marginal Release Producer's Prices on Essential and Vitally Important Drugs."

ceiling wholesale factory price of domestic producers on the basis of average weighted real wholesale factory prices for the set preceding time interval (in 2010 – for the period from 1 July to 31 December 2009) and forecasted inflation rate. Formation of ceiling wholesale factory prices of foreign producers is based on comparison of submitted for registration ceiling price levels with the volume of minimal prices on these drugs in the producer country and other countries where these drugs were registered as well as with the volume of their average weighted real import prices for the same preceding time interval;

– in the event of state registration of the ceiling wholesale factory price, prices on similar (according to the international nonproprietary name, form of production and dosage) home-produced drugs shall be taken into account. The Federal Control Service of public health and social development was commissioned with monitoring the assortment and prices on essential and vitally important drugs in compliance with the terms and conditions approved by the RF Ministry of Public Health and Social Development, as well as create and introduce monitoring electronic database for assortment and prices on essential and vitally important drugs. Earlier the Federal Control Service in the field of healthcare and social development conducted price monitoring solely of part of drugs from the effective list of essential and vitally important drugs and/or minimum assortment list of drugs. Drugs of 81 international nonproprietary names represented in 118 pharmaceutical forms were subjected to monitoring. Meanwhile, the minimum assortment list of drugs which are necessary for provision of medical assistance 148 international nonproprietary names of pharmaceutical substances are presented. Effective in 2010 list of essential and vitally important drugs comprised 500 international nonproprietary names of pharmaceutical substances. Thus, the scale of monitoring of prices on drugs must significantly increase:

– ceiling wholesale factory prices are coordinated by the Federal Control Service in the field of healthcare and social development with the Federal Tariff Service. Earlier the following rule was effective: a coordination of ceiling wholesale factory price stated by the producer could not be rejected where it was a minimal wholesale factory price of the same producer according to the statistical data for six months prior to the date of the data submission for the state registration. From 1 January 2010 this rule was rescinded. Until 1 April 2010 which is the set date for termination of price re-registration, producers had to coordinate prices with two different agencies and in the event of disagreement turn to a special commission on dispute resolution which emerge in the event of state registration of ceiling wholesale factory prices on essential and vitally important drugs, which was set up in compliance with the Order of the RF Ministry of Public Health and Social Development of 9 October 2009 № 820.

As long as presently effective list of essential and vitally important drugs contains drugs produced by only one supplier, introduction of new procedure for the price registration creates risks of termination from 1 April 2010 of provision and distribution of those drugs prices for which will not be registered. Refusal in registration will mean that these drugs will be unavailable in pharmacies and inaccessible for patients;

- ceiling wholesale and retail markups on drugs will be determined by bodies of executive power of the Subjects of the Russian Federation with regard to organizations of wholesale commerce of drugs and pharmacies. These markups will be in percentage points and will be differentiated depending on the price of drugs and taking into account geographic remoteness, transport accessibility and other characteristic properties. The Federal Tariff Service by the Order of 11 December 2009 № 442-a approved Procedure for determining by executive au-

thorities of the Subjects of the Russian Federation of ceiling wholesale and retail markups on actual wholesale factory prices on essential and vitally important drugs. This Procedure envisages markups determined on the basis of information on costs incurred and profit margin of wholesale organizations and pharmaceutical institutions and there differentiation across three price groups (up to 50 Rb inclusive; over 50 Rb and up to 500 Rb inclusive). With account of actual level of markups in comparable conditions formed during the reporting regulation period in order to avoid disappearance of cheap drugs correcting coefficients are introduced and applied to the wholesale and retail markups;

– sale of drugs by wholesale organizations will be carried out on condition of compulsory formalization of a protocol on price coordination for the supply of essential and vitally important drugs according to a form approved by the RF Government Decree № 654. Sale of drugs by pharmaceutical institutions should be carried out upon availability of the aforementioned protocol. However, timelines for issuing such protocol for distributors working with foreign drug producers may be unacceptably long.

Decree № 654 does not envisage price regulation on drugs' substances. In the meantime, in the structure o drugs' prime cost expenses on substances (raw materials and inputs) account for 40-80%. At the same time, upon the production of domestic drugs Russian producers mainly use imported substances: they represent 87% of the pharmaceutical substances market in Russia.¹ As a result of price fixing on the ready products where there are no restrictions on markups for foreign substances providers may result in serious negative effect for domestic producers.

New mechanism for government price regulation will have restrictive effect on their growth and reduce their assortment for similar drugs. At the same time, this mechanism of price regulation generates risks for reducing economic incentives of producers to distribute a number of drugs and correspondingly the consumers may find out that these drugs are unavailable in the pharmacies.

One should become aware of the fact that the task of drugs availability for the population by means of price regulation on sought-after drugs is hard to solve. In order to achieve an intended effect it is necessary to modify the approach itself to the drugs supply regulation. More effective seems an approach which engages the drugs insurance system. At the first stage it can be formed on the basis of existing programs essential and vitally important drugs. Implementation of this approach can be commenced in 2011 in the pilot mode in several Subjects of the Russian Federation with gradual increase of the number of regions – projects participants. In the future when Russia overcomes the crisis, it will be feasible to expand categories of the population included in the insurance patterns.

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<sup>&</sup>lt;sup>1</sup> Торгово-промышленная палата Российской Федерации, Союзэкспертиза, МФБ, 2008. Организация биржевой торговли фармацевтическими субстанциями. Пояснительная записка, Москва, октябрь 2008. <a href="http://www.mse.ru/comm\_ex/pharma/docs/pz.doc">http://www.mse.ru/comm\_ex/pharma/docs/pz.doc</a>

## 4.4. The State of Research and Innovation Sphere

# 4.4.1. New Political and Technological Priorities in Scientific and Innovation Development

In the wake of the global crisis the issue of innovation development is mentioned more often than in previous years, despite the fact that "innovation" context has greatly contrasted with the actual results of the formation of the national innovation economy. The principal difference last year was that, first, the innovation vector of development (at least at the level of strategic plans) has appeared in virtually all key ministries and departments, and secondly, in the issues of technological progress, i.e., based on the achievements of science and innovation, the President of the country started to pay much more attention to it.

In 2009 a special Commission has formulated a concept on modernization and technological development of the Russian economy which task is to review public policy in the issues of modernization and technological development, the selection of priorities, forms and methods of government regulation and coordination of activities of executive authorities in this field. Issues of innovation promotion in general and R & D funding in particular became one of the central problems in its work.

At the first meeting of the Commission, the President of Russia declared 5 trends of the "technological breakthrough"<sup>1</sup>:

- Energy efficiency and saving;
- Nuclear technology;
- Space technologies, including the transmission infrastructure of all kinds of information;
- medical technologies, including diagnostic equipment and medicines;
- strategic information technology, including the creation of supercomputers and software development.

In the context of modernization and technological development, particular emphasis was made to encourage businesses to innovation, improvement of the work of development institutions and technical regulation. Moreover, the President<sup>2</sup> also stressed the importance of addressing such issues as the creation of a favorable environment to foreign companies and research organizations to build the research and design centers, the development of ties with the scientific diaspora and invitation of top scientists and engineers to Russia.

In the annual speech of the RF President to the Federal Assembly<sup>3</sup> there was proclaimed the need to:

- establish a permanent mechanism to attract to Russia the prominent Russian and foreign scientists, and entrepreneurs who have experience in commercialization of new developments (including the simplification of rules of recognition of academic degrees and diplomas of higher education received in the leading universities of the world, as well as facilitating visa regime);
- expansion of grant support to the developers of new technologies on a competitive basis;
- creation business incubators on the basis of modern universities:

<sup>&</sup>lt;sup>1</sup> http://www.kremlin.ru/transcripts/4506 June 18, 2009.

<sup>&</sup>lt;sup>2</sup> Russia, go Ahead! Dmitry Medvedev's article. <u>http://www.kremlin.ru/news/5413</u> September 10, 2009.

<sup>&</sup>lt;sup>3</sup> http://www.kremlin.ru/transcripts/5979 November 12, 2009.

- establishing in Russia a powerful center for research and development, which would be focused on the support of all the priority areas;
- oblige large companies to participate in the formation of advance order for the results of research.

In particular, two key measures of "enforcement" nature in respect to public companies were discussed at a meeting of the Commission on Modernization. The proposals were formulated as follows<sup>1</sup>:

- introduction of mandatory corporate innovation development programs for public companies according to the approved by the government requirements that should be taken in line with, rather than as a part of investment programs;
- introduction of a "standard share" to each individual public company to be allocated for of R & D, basing on its industry specifics and comparison with similar companies abroad.

As per the message results, there was formed a list of instructions to the Government, which should be performed by March 1, 2012. The documents to be prepared are covering the following range of tasks:

- 1) expansion of the support to the developers of new technologies by providing grants on a competitive basis;
- 2) simplification of the rules of recognition of academic degrees and diplomas of higher education received in the leading universities of the world;
- 3) simplification of the rules of employment of the needed in Russia foreign specialists, reducing the time frames of issue and extension the term of visas issued to them;
- 4) introduction of international expertise in the implementation of priority research projects.

In the above list there are clearly identified priority areas to the State, which currently include: cooperation with compatriots (three out of four assignments are devoted to this issue), expansion of grant financing, incentives to business for a greater support of research and development. It is clear from the lists, that the chosen priorities are variable in scope. On the one hand, there is a quite particular problem, as the creation of a super center to work on all areas of research, but on the other hand, in fact, a new policy is planned in regard to the large business. It should be noted that the discussed measures of "enforcement" to business remind principles of the Soviet economy. The proposed approach is not practiced in countries with developed innovation systems. In some countries there is indicative planning, but there is no detailed "standards" for each state-owned company (or companies where the state owns the "golden share") for expenditure on R & D and no requirements draw up a plan for innovation development. These issues are in the authority of companies' management, rather than in the federal government competence, and company management is carried out according to market principles.

The issue of technological priorities deserves special consideration. Until now, the priority trends of scientific and technological development and the corresponding critical technologies were defined basing on estimates (in the last year – foresight ones), formed by the Ministry of Education and Science and later approved by the President. Another revision of priorities was made in 2009, and by September was prepared a draft, developed by the RF Ministry of Education, which contains the revised list of priorities (see *Table 1*).

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<sup>&</sup>lt;sup>1</sup> Minutes of the meeting of the Commission on modernization and technological development of economy of Russia. December 25, 2009. http://www.kremlin.ru/transcripts/6460

<sup>&</sup>lt;sup>2</sup> http://www.kremlin.ru/news/6001

Table 1

## The Lists of Priorities for Science, Technology and Engineering Development in the Russian Federation

List of 2006	List of 2009 (draft)	List of the RF President		
Information and Telecommunication	Information and Telecommunication Systems	Information technologies		
Systems	•	-		
Environment conservancy	Environment conservancy	=		
Industry of nanosystems and materials	Industry of nanosystems	=		
Living system	Life sciences	Medical technologies		
Energy and Energy Efficiency	Energy efficiency and conservation	Energy efficiency and conservation		
Transportation, aviation and space	Transportation and space systems	Space technologies, including the infrastructure of		
systems	• • •	all kinds of information transmission		
-	_	Nuclear technology		

Source: 1. Priorities for the development of science, technology and engineering in Russia and the List of critical technologies in the Russian Federation. Approved by the President on May 21, 2006, by the Order Pr-842. 2. Priorities for the development of science, technology and engineering in Russia and the List of critical technologies of Russia. Draft of the Ministry of Education and Science. September 30, 2009 3. The first meeting of the Committee on Modernization and technological development of Russian economy. June 18, 2009. http://www.kremlin.ru/transcripts/4506

As can be seen from the *Table 1*, the presidential priorities differ from the old formats not only informative, but in terminology. Traditionally, the priorities are formulated in terms of broader areas and disciplines ("living systems", "transportation and space systems") or industries ("nano technologies"). Presidential priorities are formulated more narrow and specific, in terms of *technologies*.

As a result, there is developed an unprecedented situation, when, in fact, there are two lists of priority scientific and technological areas: one, which is structured as existing federal targeted programs (FTP), and first of all, the federal program for R & D support – "Research and development on priority directions of scientific-technological complex development of Russia" for 2007-2012, and the new "presidential" priorities, which, according to the reports on the meetings of the Committee for Modernization and Technological Development of Russia's economy, various ministries and agencies should increasingly focus their work. Probably, one should expect a revision of programs and a number of activities aimed at supporting the development of various technologies. In particular, RAS has already responded to the new list, has revised the subjects of research and found that for the projects on 5 areas of technological breakthroughs it is currently spent approximately 23% of funding for Basic Research Program. It was determined that this figure can be increased to 35%.

If we compare the policy speeches of the President on the issues of science and technologies development with the main provisions of the speech of the US President Barack Obama on April 27, 2009 at the National Academy of Sciences of the United States, which became extremely popular in Russia, it becomes obvious, that the development priorities of the two countries coincide in many ways. First, the thematic priorities are overlapping. In the US a top priority, which is linked with a number of other initiatives (both financial and institutional ones), there named the ecologically safe energy and energy efficiency. A priority remains for the United States in a traditional area - health care, in particular the fight against various diseases, and the quality of health care ( "best service at lower prices"). Among the 5 "presidential" pri-

<sup>&</sup>lt;sup>1</sup> See, for instance: Poisk, No. 49. December 4, 2009. P. 5.

<sup>&</sup>lt;sup>2</sup> We can do without a sledgehammer. RAS will help to provide a fundamental basis to modernization//Poisk. No. 3–4. January 22, 2010. P. 5.

orities of technological development there are energy conservation, and new medical technologies.

Secondly, in his speech, the US President stresses the importance of international cooperation, especially in the specified priority areas, as well as establishes a policy of increased openness and the validity of scientific policies and their implementation. These trends can be found in the Russian strategic documents as well. Thus, we can say that the development of innovation systems are increasingly transparent, and countries with different levels of economic development are beginning to choose more and more similar strategic directions of science and innovation support.

However, unlike Russia, the United States and West European countries, the government in the time of crisis has provided substantial additional funding for research, including basic research, while Russia has begun and continues to tighten the budget for research and development. At the same time, the development of anti-crisis measures was much delayed - in fact, intensive discussions began in the first half of 2009. Moreover, both, approaches and measures were non-system, contingency approach in a way. Government policy was based on the concept of efficient use of existing mechanisms and instruments, rather than creating new ones. There was started a review of instruments and measures, which showed that many elements of the innovation system are in place, but communication is not developed, and there are significant gaps between various components. In general, it became obvious that the innovative system is ineffective in each of its components. Therefore, a trend to the use of existing mechanisms after appropriate adjustments is correct, but it cannot be attributed to the rapid response measures.

As a result, there did not appear such trends of scientific policy, which could be interpreted as a anti-crisis ones. Measure of the pre-crisis period were continued. Among the main directions of the government the following ones should be highlighted: support of science in universities, assignment of "status" to organizations and joint structures (federal universities, former industrial associations of industrial and academic research institutes, facilitation of obtaining the status of the State Scientific Center);

- HR policy: measures to attract the Russian scientific diaspora in keeping young people in science;
- support to innovation small business and development of the relevant infrastructure;
- Improvement of tax incentive measures for R & D.

Before the estimation of the effectiveness of the measures imposed, it is important to consider, what was the economic crisis impact on the overall situation in the field of science and technological innovation.

### 4.4.2. Crisis Impact on the State of Research and Development

The impact of crisis in the sphere of science and innovation was evident in the first place in the reduction of private sector spending for research and development and reduction of the number of employees in R & D departments of companies. By the end of December 2008, ex-

<sup>&</sup>lt;sup>1</sup> Policy Responses to the Economic Crisis to Restore Long-Term Growth: Results of the OECD Questionnaire. OECD: DSTI/IND/STP/ICCP(2009)1/ADD. February 20. 2009. 404

penses of private companies to implement innovative projects declined by nearly 80% since the beginning of the crisis, business angels – by 50%, venture capital funds - by 40%.

For projects performed in the framework of the Federal Target Program "Research and development on priority trends of scientific-technological complex of Russia in 2007-2012", the companies began to violate their financial liabilities, what has led to the termination of some contracts that were carried out in cooperation with academic institutions (universities). According to the Ministry of Education and Science, in 2009 commitments to extrabudgetary funding of R & D projects in the framework of the federal program were implemented by 60-70%<sup>2</sup>.

It is indicative, that the reduction in their own R & D departments in companies has not led to more active cooperation of companies with public scientific organizations. In the crisis situation, when optimization of resources spending is required, the existing problems of interaction become more acute. Companies generally negatively assess their experience with public sector scientific organizations<sup>3</sup>. The arguments against cooperation is weak human resource capacity of research institutes and universities, the virtual absence of scientists of the most productive working age (35-50 years), the slow rates of performing orders for research and development. The problem in many cases is unclear allocation of intellectual property rights, as well as the quality and the form of results. As a result, when the need arises in outsourcing, the companies prefer to deal with individual professionals, rather than organizations.

In general, according to the estimates of Russian Science Agency (Rosnauki), by September 2009 the share of innovation-active enterprises has decreased by 1 / 3 as compared to 2005, and the number of small innovative companies has decreased by half.<sup>4</sup> Many small firms were working on the principle of outsourcing, performing R&D works for large and medium-size companies. The latter in response to the crisis considerably reduced the volume of R & D orders. In turn, banks have stopped lending to small high-tech companies, as the least stable in their development. All this has created a serious threat of losing a "critical mass" of small innovative enterprises.

As a second feature of the crisis one can consider changes in the staffing situation, characterized by sharply increased outflow from science, among both, researchers and other categories of employees. If in 2006-2007 the outflow of personnel from the science was rather insignificant (0.7% per year), and the number of researchers even increased from time to time (for example, in 2006 compared with 2005, the growth amounted to 1.7% of researchers), then in 2008, as compared with the previous year, the number of researchers has decreased by 4.2%, while the total number of employees engaged in research and development reduced by 5%.

Therefore, there was no temporary overflow of personnel to the sector research and development, as it was during the 1998-1999 crisis. Herewith, this sharp decline in the number of employees in R & D can not be explained by the reduction of funding for science, since these

<sup>&</sup>lt;sup>1</sup> National Association of Innovations and Development of Information Technology Assessment (NAIRU). *Source:* In the hope of government support // Expert, Siberia. December 22, 2008. <a href="http://inno.ru/press/news/document33157/">http://inno.ru/press/news/document33157/</a>

<sup>&</sup>lt;sup>2</sup> We are doing everything possible. <a href="http://strf.ru/material.aspx?d">http://strf.ru/material.aspx?d</a> no=19500&CatalogId=221&print=1 April 29, 2009.

<sup>&</sup>lt;sup>3</sup> Based on the results of interviews conducted by the author of this section in June - July 2009 in a number of high-tech companies of Moscow.

<sup>&</sup>lt;sup>4</sup> From the report of I. Bilenkina, Deputy Head of Federal Agency for Science and Innovation, presented at the X-th Russian Venture Fair. Moscow, September 24, 2009. Estimated data: Science, Technology and Innovation of Russia: 2009. Short publication. M.: INRA Sciences, 2009. P. 12-13.

processes started in 2009 and will grow in 2010. Most likely, the current HR situation is the result of the low efficiency of government scientific policy.

The third sign of the crisis was the reduction of the public budget funding for research and development. The share of budgetary R & D expenditure in 2009 amounted to an average of 30%, varying depending on the agency, specific program and activities performed within the programs. In 2010, it is planned to reduce the costs further - at 7.5 billion rubles, as compared with 2009, when the reduction in funding for basic research amounted to 3 billion rubles, for applied research - by 4.5 billion rubles; financing of the RAS and its regional branches was decreased by to 5.6 billion rubles. <sup>1</sup>

Reductions will be uneven - funding priorities will be grants and awards to young scientists (presidential and government ones) and grants for the support of leading scientific schools. However, the number of such grants will be reduced (with some increase in their amount). In terms of expenditure the Ministry of Finance of Russia has decided not sequester the so-called norms of costs for wages. Therefore, the level funding for wages, scholarships and allowances for the ranks of full members and corresponding members of the state academies of sciences will be maintained. In this regard, for example, in the RAS other cost items decreased by 40-50%, including expenses for utilities, maintenance of equipment, purchase of consumables. The new positions will be suspended.

Financial support of a number of federal targeted programs will be also significantly reduced. In the first turn, the Federal Program "Research and development on priority directions of scientific-technological complex of Russia for 2007-2012" and the Federal Program "Development of infrastructure of the nanotechnology industry in 2008-2010". There will be no new tenders for this programs in 2010, and funding will be provided only for the concluded contracts.<sup>3</sup>

Herewith, in 2009 the cost of some contracts have already been reduced by 10-15%, while maintaining the originally approved scope of works. However, funding for the Federal Program "Scientific and scientific-pedagogical staff for innovation Russia for 2009-2013" remains at the planned level. Under this program, financing is provided, in particular, for the scientific and educational centers, collaborative projects with domestic scientists, and various academic events and conferences. Financing for public research funds will be reduced by at least 10%. In this regard, for example, Russian Public Research Fund already faced with significantly increased competition for projects. It reached the level of 1:10, while in the previous 15 years it did not exceed 1:5<sup>4</sup>.

Therefore, the reaction to the crisis was the reduction of the national budget financing, with its simultaneous redistribution in favor of certain items (directions). Priority was conservative support of personnel, including scientific schools, and the reduction of those programs, in the framework of which research on priority areas of science and technology are financed.

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<sup>&</sup>lt;sup>1</sup> The next is the less. Research budget will be reduced // Poisk. No. 1-2, January 15, 2010, P. 3.

<sup>&</sup>lt;sup>2</sup> For one salary. RAS budget funds for research are getting less // Poisk. No. 5. January 29, 2010, P. 3.

<sup>&</sup>lt;sup>3</sup> Congratulations with the new grant! What does Rosnauka offer to the scientists in the coming year? // Poisk. N0. 3-4. January 22, 2010, p. 4.

<sup>&</sup>lt;sup>4</sup> From distress to inspiration// Poisk.No. 48. November 27, 2009. P. 4. 406

4.4.3. Measures to Support the Best Universities and Organizations that Perform Research and Development Works:

"Progressive Inequality" Development

In 2009, one of the main priorities was to support university research, in particular, by giving special status (rank) to the selected universities. There appeared so many statuses, that no one can immediately tell the differences between them. At the present time, there are federal, national research universities, there are also universities - participants of innovative educational programs and, finally, Moscow and St. Petersburg State University (MSU and SPSU), which in 2009 there was established the status of "unique scientific and educational complexes".

MSU and SPSU (along with the N.E. Bauman MSTU) can now set up their own educational standards and requirements for the educational programs, implemented by themselves.<sup>2</sup>

In fact, the selection of the best universities began in 2006 when the Government has initiated an innovative educational program (IEP) in the framework of the national project "Education". As a result of the tender, there were selected 57 high schools, which within two years received a substantial budget financing. The aim was to increase support to the high-quality educational and research activities through the purchase of new equipment, staff development, development of new training materials and manuals. This was the first major experience of universities' training in project management, selection of development priorities, as well as the skills of procurement in cases of force majeure, because the budgetary funds were late and time was short for the correct execution of all formal procedures. IEP can be regarded as a first step in the policy of raising the status of higher education institutions – in public opinion, universities, which won the tender, are considered the strongest one in the country.

Then, in 2006 there was formed two federal universities - Siberian Federal and South Federal (SFU and YuFU). They were created by joining several different-profile schools, thus becoming the largest in the country. The federal universities have regional relevance: according to official documents of the universities, they were created to improve the competitiveness of leading industries in the regions. Giving the status of "federal" is accompanied by a significant budgetary financing, which can be spent for certain (but not all) issues. Herewith, Southern Federal University identifies itself also as "research university", which is essentially true. The federal universities, in contrast to the objectives outlined in the IEP, should pay considerable attention to the development of science and its integration with education, in particular, by inviting foreign teachers and researchers, increasing the share of undergraduate and graduate students from abroad and other activities. For all these trends there approved target indicators for universities towards which they should aspire to. Since the initiative to give a "federal" status actually involves the creation of entirely new organizations, this status is permanent. Moreover, in early 2010, federal universities moved to the new organizational and legal form of an autonomous institution.<sup>3</sup> For them, a transitional three-year period is established, during which the government will provide support to the universities in various forms, including the

<sup>&</sup>lt;sup>1</sup> Federal Law No.259-FZ of November 10, 2009 "On the Moscow State University named after M.V. Lomonosov and University and St. Petersburg State University".

<sup>&</sup>lt;sup>2</sup> The list of federal government educational institutions of higher professional education, self-setting educational standards and requirements for ongoing educational programs of higher professional education. Presidential Decree No.732 of July 1, 2009.

Regulation of the RF Government Prime Minister, dated January 16, 2010 No. 12-p. <a href="http://government.ru/gov/results/9056/">http://government.ru/gov/results/9056/</a>

possible provision of the equalization grant, which will cover the funding gap the state targeted financing.

A completely different picture is typical for the research universities - the third initiative, which is started in pilot mode in late 2008. In 2009 a tender was announced, and 12 schools were selected, which received this status.<sup>1</sup>

Many of these schools have previously been involved in the IEP and the experience of crisis management was not in vain: the results of the tender for research universities were assessed at the beginning of October, and the allocated to the universities annual amount of funding was to be spent by 15 December. Research universities will be supported from the budget within 5 years, and they have to implement their development programs by 2018. Herewith funding from the budget is rather significant - thanks to it, the budgets of universities actually doubled. It is assumed that up to 70% of allocated funds will be spent on the purchase of equipment, so that as a result, every university would create 5-7 world-class laboratories. It is certainly important and necessary, though the experience of the IEP shows that the purchase of modern equipment does not yet provide a quality breakthrough in scientific and educational activities.

The status of "national research" university in some way confusing, because behind it there is a temporary, although long-term, project financing of development programs of universities, base on a slightly adjusted principles of IEP. Research universities obtain an additional budget funding in the framework of traditional mechanism for federal programs – on the terms of 20% co-financing (as in the IEP) and are allowed to spend funds on certain items to implement their stated development programs.

Similarities and differences between the IEP, research universities and federal universities are displayed in Fig. 1.

How effective can be the given status? It depends, firstly, on how universities have been selected, which have received the status. Secondly, it depends on the conditions created to the status universities in order to enable them to achieve their goals.

The decision to establish federal universities can be regarded as purely political, adopted at the highest government level, without extensive coordination and discussions. This was once again confirmed in 2009, when President Dmitry Medvedev signed a decree on the establishment of five federal universities<sup>2</sup> in Russia, selected with regard to the regional factors, but unknown to the public criteria. Moreover, as follows from numerous discussions, the transformation of higher schools in the federal ones was surprise to their employees.

If the main criterion for the selection of universities to transform them into federal ones consisted in the uniformity of the distribution of federal universities through the regions, then one should not expect special effect from the fact that some universities will be merged and they will receive an additional funding. This is confirmed by available foreign experience. In addition, nearly three-year development history of SFU and YuFU has identified a number of challenges, primarily related to the existing administrative and bureaucratic restrictions which could be eliminated (such as was done for MSU and SPSU). The transformation to the autonomous agencies removes only part of the problems and at the same time becomes a source of new ones (for example, it is not clear how scientific research will be supported, how relationships with the founder will be built, etc.). Therefore with regard to the experience of

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<sup>&</sup>lt;sup>1</sup> Federal Government Order No. 1613-p from November 2, 2009.

<sup>&</sup>lt;sup>2</sup> Presidential Decree No.1172, dated October 21, 2009 "On establishment of federal universities in the North West, Volga, Urals and Far Eastern Federal Districts".
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SFU and SFU, granting of federal status to the new universities should be accompanied by non-financial measures as well. Otherwise there automatically arises low efficiency of budget spending.

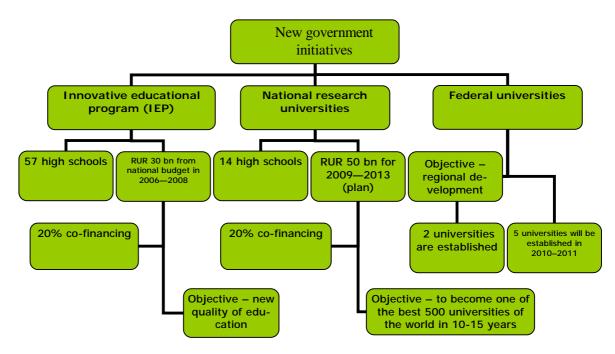


Fig. 1. Types of Universities with a New Status

Selection of universities can also be considered as political decision, as 12 universities were selected from 136 applicants. It is known from the practice of expert selection that when the level of competition is more than 10 nominations for one "place", the choice is not based on the quality of applications as there will be obviously more high-quality projects than the number, which can be financed. What happened as a result? On the one hand, there were selected strong high schools - from 14 universities, which today acquired the status of "national research" (12 selected through a tender in October 2009 and 2 pilot universities that have received this status in late 2008 - National Nuclear Research institute (MEPI) and National Technological University "Moscow Institute of Steel and Alloys (MISA NITU), 12 were the winners of IEP. On the other hand, in the rating of Russian universities in terms of scientific achievements, which was made for the education agencies in 2009 by an independent rating agency "ReytOR, newly emerged "research" universities occupy a good but not the best position: only 5 universities of the 14 belong to the first twenty ones. However, if we take into account that the research university is not "real" title, inconsistent with the Western standards, granted not for the inventions and achievements of the universities, but only the support to universities in the form of the five-year development programs, everything falls in place. In 2010, a tender is planned to select 16 more universities, which will be awarded the status of a national research university.

It is distinctive, that great hope assigned by the Government to the intensification of innovation in the activity of research universities, the creation of new scientific results and their commercial efficiency in the industry. Meanwhile, it is known from foreign experience that there is no direct relationship between extended funding to the institutes and universities and

research "output". In particular, the estimates have shown that there is no direct correlation between the doubling of the budget of National Institutes of Health in the United States, which took place in 1998-2003 and the dynamics of patenting, licensing and agreements on joint research with the business. Herewith, the absence of a clear correlation is typical not only for the period of the budget doubling, but for the next 5 years, when based on the new discoveries made during abrupt budget increases on biomedical research and development, patenting and licensing could be significantly increased.<sup>1</sup>

Basic provisions governing the activities of Russian research universities, remain the same as for other universities. In this regard, there is a difference between Russian initiatives and similar programs implemented in several countries with growing economies. For example, in Kazakhstan, 9 universities have the status of national ones, which means not only additional national budget funding, but also the introduction of a number of specific guidelines, including those that wages are higher than the average rate. With regard to the Western experience, particularly that of the best universities in the world, the USA and Britain, where no status is not provided for the universities. The category "research university" is not awarded, but established by the fact of its activities as a result of *voluntary* participation in the ranking and its position by a number of criteria - such as the amount of research funding per one tutor, publications, citations and international awards (Nobel and Fields awards), the demand for graduates in the labor market, the development of their careers.

As a result, the question naturally arises: why there is a need for statuses, such as "national research university"? Will the artificial creation of "inequality" contribute to improve the quality of education and science in high schools? And would not the policy be more effective, if the government preferred creation of favorable conditions for work, including the development of science for all universities? And they could have then apply for budgetary financing of research projects depending on their capacity to receive or not this additional funding on a competitive basis. Thus, ultimately, an "elite" group would emerge among the total mass of universities, which will be a natural result of the development in a competitive environment and equal opportunities.

By all appearances, Russia remains committed to the path of "status" with the aim to "rise in the ratings" - the mentality, that goes beyond the strictly scientific or innovation activity, but rather capturing them. In fact, the idea of assigning a status has a historical trend, if we recall a number of other distinguished and well-established titles (the leading scientific schools, public research centers). Thus, in the course of time the concept of status and level of prestige get smeared out. This happened with the status of leading scientific schools, the same thing happens with the status of the State Scientific Center (SSC). In January 2010, the Federal Law "On Amendments to the Article 5 of the Federal Law "On Science and State Science and Technology Policy" entered into force<sup>2</sup>. Now the status can be assigned to the organization of any form of ownership, which has a unique equipment and the ability to demonstrate the international recognition of its scientific and technological activities. Thus, currently the SSC is not a unique organization of the former industrial science, responsible for the development of certain industries (technologies) in the country, but the successfully operating organizations with unique equipment.

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<sup>&</sup>lt;sup>1</sup> http://ott.od.nih.gov/about\_nih/statistics.aspx

<sup>&</sup>lt;sup>2</sup> Federal Law No. 358-FZ of 27 December 2009 "On Amendments to Article 5 of the Federal Law "On Science and Government Science and Technology Policy".

The policy of creating a "progressive inequality" has involved not only universities, but also a number of organizations in other sectors of science. The selected principle is the same: the new status, And in view of it - merger of organizations, creation of conglomerates, and the support of the new structure through a significant surplus budget funding, allocated on the basis of a special government order. Under this scheme a new National Research Center - Kurchatov Institute was established in 2009. By the Decree of the RF President 3 organizations were joined to the Institute, one of which is an academic institution, and two others are Federal State Unitary Enterprises. By the same decree Kurchatov Institute becomes the chief manager of budgetary funds, as "the most remarkable institution of science", and then by the order of the Government of Russia receives additional budget funding for the program of its development. As in the case of federal universities, with the formation of new organizations the administrative arbitrariness was observed, since the staff of the number of "merged" organizations were not aware of the impending reorganization.

For the new structure quantitative performance indicators of development are established, many of which seem too low (for example, to increase the percentage of young scientists and experts in the total number of employees to 10%), especially against the background of the allocated additional budget funds (RUR 10 billion for 3 years). A similar approach is likely to be used in the enlargement of the Central Aerohydrodynamic Institute (TsAGI) - under its management Ministry of Industry and Trade plans to join all the other research institutes, relevant to the development of aircraft technologies. All in all, it is planned to establish 5.7 national research centers under such scheme.

On the one hand, the additional support of the best universities and "centers of excellence" can contribute to the emergence of qualitatively new scientific results. On the other hand, consolidation of structures means to some extent the growth of monopolies in science, which, as experience shows, leads to a decrease in the quality of scientific research. Therefore, such a critically important procedures for the selection and formation of status organizations, as well as the balance between the support for advanced institutions and the creation of an overall favorable environment for the development of scientific research.

In the past year, systemic organizational reform of the sphere of science has not been initiated, despite the issue of the governmental regulation "On the performance evaluation of scientific organizations, performing research, development and civil engineering works" (No. 312 as of April 8, 2009). Under this decision all organizations after a proper inventory will be divided into three categories - the leaders, stable and those that lost the scientific profile and development prospects. Then, measures have to be taken to optimize the organizational structure

<sup>&</sup>lt;sup>1</sup> RF President's Decree No. 1084, dated of September 30, 2009 "On additional measures to implement a pilot project to establish a National Research Center "Kurchatov Institute".

<sup>&</sup>lt;sup>2</sup> RF government Order of ratifying the "Programs of support and development for the research, technology and engineering infrastructure of the National Research Center "Kurchatov Institute" No. 1730-p of November 16, 2009.

<sup>&</sup>lt;sup>3</sup> National Kurchatov Institute <a href="http://strf.ru/material.aspx?d\_no=26643&CatalogId=221&print=1">http://strf.ru/material.aspx?d\_no=26643&CatalogId=221&print=1</a> January 13, 2010

<sup>&</sup>lt;sup>4</sup> Boris Alyoshin will take care of aerodynamics // Commersant. No. 225. December 2, 2009. P. 9.

<sup>&</sup>lt;sup>5</sup> At the start of five years. Preme Minister instructed the Kurchatov Institute experts // Poisk.No. 1-2. January 1-2, 2010. P. 3

<sup>&</sup>lt;sup>6</sup> More information on the initiative to assess the organizations, see: Russian Economy in 2008. Trends and Prospects. Issue 30. Moscow: IET, 2009. P. 408-410.

of science structure and funding flows. In fact, this work has been substituted by project for the status granting.

### 4.4.4. Priorities of National HR Policy in Science

In 2009, the priorities of the last year are totally preserved in HR policy: the main focus was sustained on the issues of supporting and involving young people in science, as well as the development of relations with former Russian scientists, who are working abroad to attract them, either temporarily or permanently, to the Russian science.

In 2008, for the first time in the last 10 years was observed an upward trend in the share of academic staff aged 30-39 years (Table 2), in the background of in the continuing decline in the two subsequent cohorts. This can be explained by a considerable number of government initiatives, aimed at supporting the young (under 35) scientists.

Support of young people in science in the period under review was characterized by two different processes. On the one hand, the amount of government grants was increased (grants of the RF President were increased 4 times!) for the young scientists, while reducing their total number. However, payments of monetary assets have been greatly delayed and started only in autumn, i.e., the youth programs were also characterized by force majeure conditions of national budget financing. On the other hand, young people did not have more opportunities to stay in science for a long time. Thus, the end of the pilot project in the RAS, resulting in the reduction of 20% of jobs, has not led to the release of seats for young scientists. For social reasons, many scientists of retirement age were not transferred to part-time or temporary contracts, but retained their jobs. As a result, the number of the young scientists, annually employed in the institutions of RAS has decreased from 1,012 persons in 2005 to 630 in 2008<sup>1</sup>. RAS Management is planning to implement a new approach that could lead to an increase of the share of young scientists. Actually it means the annual reduction of the number of employees of RAS institutions by 3-4%, and providing the released jobs to the youth candidates<sup>2</sup>.

Researchers Age Structure Dynamics, %

Table 2

Year	Under 29 years old	30–39 years old	40–49 years old	50–59 years old	60 years old and older	Total
2000	10.6	15.6	26.1	26.9	20.8	100
2002	13.5	13.8	23.9	27.0	21.8	100
2004	15.3	13.0	21.9	27.8	22.0	100
2006	17.0	13.1	19.0	27.8	22.1	100
2008	17.6	14.2	16.7	26.3	25.2	100

Sources: Science in Russia. Statistical handbook, Moscow: HSE, 2005. P.35; Science Indicators: 2007. Statistical handbook. Moscow: HSE, 2007. S. 63; Science Russia in Figures: 2008. Statistical handbook. Moscow: CSRS, 2008. P. 17.

Position of Sciences is also in the fact that the scientific foundations, Russian Foundation for Basic Research (RFBR) and Russian Humanities Research Fund (RFH) - could provide more funds to the young people, in particular, funding temporary positions in the institutions. Taking into account the fact that the budgets of research funds are many times less than the

<sup>1</sup> Poisk. No. 21. May 22, 2009. P. 4.

<sup>&</sup>lt;sup>2</sup> In the phase of activation. Young Scientists RAS are alerted. Poisk. No.47. November 20, 2009. P. 9. 412

RAS budget, one should have formulated the problem in another way: to expand the system RAS "program for post-graduates," according to which there would be allocated surplus rates for young scientists. Meanwhile, in the framework of this program there were opened only 400 positions<sup>1</sup> only for the core staff of the RAS.

It should be noted that in 2009 there were new factors, contributing to the outflow of young people from science. Russia joined the Bologna process, exchange programs were expanded, which inspired the outflow of students from the country, rather than the circulation of personnel. Unexpectedly, a negative impact on the staffing situation in science and innovation was provided by the activities of public corporations. The State Corporations (Rosatom, RUS-NANO) attract the most active graduates and post-graduates, offering them much higher salaries as compared with academic institutions or small innovative enterprises. Therefore, the scope of scientific innovation began to suffer not as much as only from insufficient inflow of the young staff, as from the low-quality human resources. And here there is not only the impact of the outflow of the active staff outflow to the corporations capable to the departure abroad, but also a general weakening of school education, a decline in training in several disciplines, especially natural science.

In regard to the incentives to the circulation of personnel and increased interaction with fellow countrymen one could note the beginning of implementation in 2009 of the Subprogram "Research performed by scientific teams under the guidance of visiting researchers", aimed at mobilizing Russian scientists working abroad. This is a part of the Federal Target Program "Research and scientific-pedagogical staff of innovative Russia for 2009-2013". The Subprogram is providing funding for projects that are implemented by Russia's scientific teams on a competitive basis under the guidance of famous Russian scientists working abroad. Each year, approximately 100 two-year research projects will be selected, funding for which is 2 million rubles per year. Herewith, the Project Manager will spend two calendar months of the year in Russia. The objectives of this subprogram are: development of a sustainable and effective cooperation with the Russian scientists working abroad on a permanent and temporary basis, their involvement in the Russian science and education, implementation of their experience, skills and knowledge for the development of national systems of science, education and high technology.

As of 2009 results, it is decided to finance 110 projects, which are carried out in 84 Russian organizations. The distribution of project managers by countries has little difference from the projects of other tenders (in parameters): 60% - are scientists from the USA, Germany and France. This foreign scientists are quite respectable and, as a rule, keep permanent positions: 33% are professors, 25% are the Heads of Divisions, Departments and Laboratories. 52% of Project Managers have the second (Russian) citizenship. Thus, half of the participants have no visa problems, which facilitates the development of cooperation.

In 2010 it is planned to start another program on attracting foreign scientists, not only representatives of the Russian Diaspora, the idea of which is to finance the best foreign scientists willing to come to work to the Russian universities to carry out their research projects. Herewith, the application should be filed by the Russian university, which undertakes to create the best conditions for the foreign specialist in the project, in the framework of the tender there

<sup>&</sup>lt;sup>1</sup> (or the same.) In the Phase of Activation. Young Scientists RAS are alerted// Poisk. No. 47. November 20, 2009. P. 9.

will be evaluated as the scientists themselves (by the number of publications and citations), as the application for funding prepared by them with the university. Experts should be both, Russian and authoritative foreign scientists, and the final decision will be made by a specially created committee, whose membership is approved by the Government. For the realization of this program it is expected to allocate about 12 billion rubles for 3 years (2010-2012). Apparently, in the development of this program it was taken into account the available experience in the support of joint projects (for example, in the adjustments of evaluation criteria in regard to the invited specialists, as well as procedures for project assessment). Attention is drawn to the fact that the program would be applicable only to universities and foreign scientists wishing to work in any of the institutions of RAS, Russian Academy of Medical Sciences or scientific research institutes, will not be able to do so. Thus, the program clearly demonstrates the Government's commitment to supporting it is high school science.

In connection with the unfolding activities to attract the Russian diaspora, it is important to assess to what extent the scientists who left the country are ready for cooperation, in what forms, in their view, such cooperation should take place, as well as whether - and under what conditions - the return of those who left.

Exhaustive and unambiguous answers to the set up questions can not be obtained, because the scientific diaspora is very diverse. Intentions and estimates depend on age, the time of departure, the field of science. Nevertheless, some idea of what opinions of scientists who left the country on cooperation with Russia, what forms of cooperation are most attractive to them, can give the in-depth interviews with the members of Russia scientific diaspora. The information presented below is the result obtained on the basis of personal interviews of the author of this section with the Russian scientists working abroad, held in November 2008 and again in May 2009 in the U.S.<sup>2</sup>

Results of interviews indicate that in Russia attracts the diaspora representatives by an opportunity of communication, including friends and relatives, while other countries attract and retain basically in terms of social arrangement, and science as its integral part.

Unanimous negative assessments were given on two aspects - the organization of science in Russia and Russian state of society in general. Poor resource base, as well as low wages in the science, were mentioned not as often as the problem of its organization and the state of the Russian society in general. Bureaucratization of academic life is the factor that significantly reduces the optimism about the prospects of cooperation with representatives of the scientific diaspora. The level of bureaucracy for filing applications for project lots, procedures for generating tender documentation and reporting is so high that for the scientists working abroad, where the application for funding can be justified quite briefly and clearly, have no sufficient motivation to participate in the Russian tenders. Moreover, the understanding of the emigrants of bureaucracy and inflexibility of the scientific system in Russia is even incomplete in comparison with what actually expects them in connection with a possible visit to Russia for a short, or even more so for the long term of work. And these are serious problems, in particular, in connection with the peculiarities of the projects financed from national budget funds, with the is-

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<sup>&</sup>lt;sup>1</sup> Yu.Medvedev. Attractive million. Will the best scientists of the world go to the Russian universities//Rossiyskaya Gazeta. February 3, 2010. http://www.rg.ru/2010/02/03/nauka.html

<sup>&</sup>lt;sup>2</sup> In-depth interviews were attended by scientists of natural sciences: physics, geologists, chemists, material experts, working in national laboratories in the U.S.. All respondents are men in the age from 35 to 60 years old.

sues of integration in the existing hierarchical structure of the institutes and universities, with adaptation to the peculiarities of research management, etc.

At the same time, there are most powerful factors of attraction overseas - the system of social organization, children who grow up in another country and gradually forgetting the Russian language, the work to enjoy and very well paid. However, virtually any emigrant keeps up relations with Russia on an individual level, but all official cooperation is far more rare, and only few experts are involved in the Russian science.

The most common form of cooperation are joint projects, including with those experts who temporarily come to work to the United States and other countries. It is gradually beginning to develop such kind of interaction, as the expertise of projects under the order of the Russian entities (primarily RUSNANO), as well as foreign funds that have a program of support for the Russian science.

For Russian scientists living abroad, the most attractive in decreasing order of frequency of mentioning are the following forms of cooperation with Russia:

- trips to Russia for consultations and participation in conferences. This allows to combine specific research interests with an opportunity to visit the motherland;
- expertise (of scientific projects, public programs and plans, projects at the regional level), reviewing articles;
- joint projects with parallel performance thereof in Russia and abroad;
- lectures in the Russian universities;
- establishment of joint structures departments in universities, laboratories in research institutions;
- arrival of Russian students in foreign laboratories in order to enable them to gain experience with modern equipment and an idea how differently can the science be organized.

The most popular are consulting and expertise. In the support of these activities there were cited arguments such as knowledge of immigrants of different systems (including Russian one), with all their strengths and shortcomings, and skills to work in those systems, as well as personal relations and direct contacts. However, gradually there develops such trend as the establishment of joint structures or the involvement of Russia in the advanced centers of leading scientists from the Russian diaspora. Under this scheme there was established a new Research and Education Center "Bionanophysics" based on Moscow Physics-Technical Institute (MPTI). More than 30 former Russian scientists agreed to take part in its activities. The concept of the center implies that each of its laboratories will work in close cooperation with foreign scientific institutions - leaders in their fields<sup>1</sup>. The remuneration for the young scientists is funded in the center at the expense of the Sub-program of support for the scientific and educational centers of the Federal Program "Scientific and scientific-pedagogical cadres of innovative Russia for 2009-2013", and the purchase of equipment is planned from the funds, transferred by MPTI upon the receipt of the status of a research university. A similar center, operates for several years on the basis of the Nizhny Novgorod State University, but still, for the scale of Russia, this is a minimum.

<sup>2</sup> See fro details: Russian economy in 2007. Trends and Prospects. Issue 29. Moscow: IET, 2008. p. 445-446. .

<sup>&</sup>lt;sup>1</sup> They don't let the stars to work // Expert. No. 44. November 16, 2009.

In general, from the survey of the opinions of scientists living in Russia and abroad, we can conclude that both parties have incentives for cooperation and interaction on a rather pragmatic basis.

The success of government initiatives to attract foreign scientists and tutors will largely depend on the extent to which the bureaucratic barriers to cooperation will be removed. Thus, currently a contract with the foreign experts, invited to Russia by universities as professors can be concluded only for one year. Therefore, foreign scientists have annually to undergo the procedure of dismissal and then reemployment, what takes time and makes the overall situation unstable.

The ideology of expanding the contacts should be formed at the level of organizations and universities and encouraged by the State as part of standard scientific environment. We need to start with small steps: to invite representatives of the scientific community as experts, to organize joint seminars, provide grants for travel to Russia, but not only in order to communicate with friends and relatives, but also to devote part of the trip, for example, lecturs to students and post-graduates. Given the growing problem of the quality of higher education, this measure is relevant.

In connection with the already being implemented program of joint projects, it should be noted that if the objective is the greatest contribution of foreign researchers in the development of the Russian system of education, science and high technology (that is the way it is formulated as one of the objectives of the subprogram), it would be useful to modify several terms of the program. In particular, it makes sense to oblige the visiting scientists to read a short course of lectures, to conduct several workshops, as well as to announce tenders on topics of relevant priority trends in of science and technology of the RF. Herewith, the task of "retention" of foreign researchers should not be the main purpose, because it deprives the event of flexibility. On the one hand, there may arise a pressure on the participants in the projects, which will repel, rather than attract them, and on the other hand, those who will stay, may be not only those who are needed for a long time. Ideally, for the two-year research projects there should not be the task of foreign investigators retention in Russia. Instead, the goal might be further development of scientific and other relations.

Finally, stimulating the circulation of personnel means also the expansion of Russian scientists ability to work and have probation abroad. The first step in this direction can be the financing of post-doctoral positions for the Russian researchers, interested to undergo three years of training in foreign laboratories of their compatriots and other foreign scientists.

### 4.4.5. Development of International Relations

Work to attract the diaspora representatives can be regarded as one of the aspects of the government international activities in science and technology. Meanwhile, one of the main trends in this area was the development of relations with the EU, in particular, the discussion of the conditions for Russia joining the 7-th EU Framework Program as an associate member.

There are grounds for Russia to become an associate member. Among the "third" countries, Russia has been the most successful member of the 6-th EU Framework Program and continues to lead in the 7-th Framework Program in terms of number of projects in which the country participates, and the amount of funding obtained by the Russian teams. By these indicators Russia is ahead of such countries as China, India and Brazil. However, in terms of industries, participation of Russia is irregular; the highest "presence" of Russia is noted in such areas as

sustainable development, global reforms and ecosystems, nanotechnology and nanoscience, as well as information communication technologies<sup>1</sup>. In the 7-th Framework Program similar trend persists (the most active participation of Russia is noted in such areas as ICT, nanoscience and environment). However, this statistics does not provide an answer to the question of economic feasibility of Russia entry into the 7-th Framework Program, as the volume of funds received as a result the won tenders may be lower than the financial contribution to the country as an associate member of the Program.

What are the advantages of an associate membership as compared with the status of the "third" country?

The first one is an opportunity to be the coordinator of projects, rather than just their party. However, in order to be able to perform the functions of the coordinator, in Russia there must be organizations (structures) that can work in compliance with the standards and rule of the EU, including financial, accounting, auditing, etc. Regulations. There is relevant infrastructure in Russia yet.

Second one is participation in all tenders of the Framework Program. For example, currently grants of the European Research Committee to independent scientists and grants to advanced researchers are provided only to the scientists-residents of the European Union and associated countries,<sup>2</sup> whereas such grants would be very helpful as a tool to attract the leading scientists, including our former compatriots.

However, the associate membership in the 7-th Framework Program does not allow to participate in identifying the topical areas of cooperation, what would be very important for Russia. Other countries, willing to become the associate members, have the goal of the subsequent entry into the EU. Therefore, associate membership in the Framework Program can be considered as one of the steps to achieve it. Russia has no such goal, and therefore, the issue of associate membership should be discussed in the context of reasonable economic benefits. From this point, the bilateral agreements and cooperation are equally important. The fact that Russian scientific teams can obtain, by participating in the Framework Program, the experience of modern project management, access to modern equipment and information, exchange of ideas, the ability to access the European markets with high-tech products - can be obtained in the framework of bilateral and multilateral cooperation.

Multilateral cooperation could potentially lead to a fundamentally new scientific findings as a result of a synergistic effect, however, bilateral relations are much easier for administration. It is no accident that the country-members of the Framework Program are allocating for its implementation significantly less funding than for the development of bilateral international scientific and technical relations. Thus, Russia's accession to the Framework Program as an associate member deserves support, but not to the detriment of other forms of cooperation.

In the situation of the budget reduction the programs of support to science and innovation, realized through foreign scientific foundations, which have their representative offices in Russia, become relevant again. Meanwhile, upon the adoption in June 2008 of the RF Government Decree No. 485 "On the List of international organizations receiving grants (free assistance) as a taxpayer, are not taxable and not excluded from the income for tax purposes for the Russian statement of the situation of

<sup>&</sup>lt;sup>1</sup> According to the results for the 6-th Framework Program. *Source*: European Commission, FP6 Data, 2008.

<sup>&</sup>lt;sup>2</sup> 7-th Framework Program for Research and Technological Development of the European Union. M., 2007. P. 8.

sian organizations - grant recipients", have lost their force in exempting the international organizations from income tax. Other international and foreign organizations-grantors addressed to the authorized agencies with an application for inclusion in the new List. By 2010, there were no new foreign organizations-grantors, whose payments were not taxable. As a result of delays with the approval of the List, from January 1, 2009 everything is subject to taxation, including payment of individual grantees and the purchase of equipment from the grant funds. Therefore, the conditions of foreign scientific foundations in Russia deteriorated, which led to the freezing of a number of programs, including innovative ones.

Thus, the benefits of international cooperation are not used to the full extent. At the governmental level, there is no clear position on the development of national priorities for science and innovation, and hence, the priorities for international cooperation, as well as coordinated inter-agency and intra-organizational and financial policies of international cooperation. There is no monitoring and assessment of international cooperation within the country. Actually, there is no information about the strengths and weaknesses of instruments and forms of cooperation.

In addition, international cooperation can not be developed outside the broader economic and political context, and its success depends on what conditions are created inside the country to carry out research activities. Among the important conditions are such provisions as the state of scientific equipment, the work on which would be attractive to foreign partners, the level of legislation elaboration in terms of intellectual property rights, working conditions of foreign organizations and scientists coming to work to the country. The failure to resolve all those issues limit the scope and form of international scientific cooperation.

## 4.4.6. Support to Small Innovative Enterprises and Innovation Infrastructure

Increased attention to the supporting of small innovative business and related technological infrastructure was due to the fact that small firms were, first, the least protected elements of the innovation system in crisis situation, and, secondly, a small business is regarded as one of the most important "intermediaries" of the transfer of knowledge and transformation of enterprises into new products and technologies. It should be noted that the second provision is only partly true, because in the absence of large high-tech companies the support to small businesses will have a relatively low efficiency, either because small firms usually work on outsourcing, or they are buying big companies, or they die. The transformation of small firms in the medium and large ones is a relatively rare phenomenon. In other words, support to small firms cannot be the basis for the development of large business.

In a crisis situation, the problems associated with the mechanisms of support for small innovative entrepreneurship get aggravated. First, the government's attention was drawn to the inconsistency between the organizational and legal form of the basic national Fund supporting small innovative companies - the Foundation for Assistance to Small Innovative Enterprises in Science and Technology (Assistance Fund) to the norms of the Civil and the Budget Codes.

Secondly, new technological infrastructure did not start to work to full extent (technical-promotional zones (TIZ), technology parks), and in late 2009 there was started interagency transfer of responsibility for its development.

Currently the Assistance Fund is guided in its activities the Fund Regulations, <sup>1</sup> according to which it is a public non-profit organization, without specifying the organizational and legal form. On the one hand, it gives the Fund a certain freedom of action. On the other hand, it brings the Assistance Fund outside the norms of the Civil and Budget Codes. The Fund is the manager of budgetary funds, but according to the Budget Code (Article 38.1 "The principle of departmental distribution of the budgets expenditures"), it can allocate funds only to those organizations that are under its supervision. Assistance Fund has no subordinate organizations and allocates funds for R&D on the basis of tenders, making contracts (under the Federal Act No. 94-FZ of July 21, 2005 "On Procurement of goods, works and services for national and municipal needs") with the winning organizations, regardless of their affiliation.

Nevertheless, the activities of public funds support for science and innovation (primarily in regard to the Russian Fund of Federal Property (RFFI) and Russian Government National Fund (RGNF) was legitimate because federal law No. 63-FZ of April 26, 2007 "On Amendments to the Budget Code of Russian Federation in terms of regulating the budgetary process and bringing in line with the budget legislation of the RF some legal acts of the Russian Federation" gave them a deferral until January 1, 2010 to bring the documents in compliance. Strictly speaking, The Assistance Fund was not affected by those provisions, but acting on the basis of its Regulations which does not specify, if the Fund is a budgetary or autonomous agency, or acts in any other legal-organizational form, it is found within the area of regulatory uncertainty and hence risk.

In this situation there are several possible solutions.

First choice: Assistance Fund can be converted into an autonomous institution. On the one hand, it removes an obstacle in the form of requirements to allocate funds only to subordinate organizations and makes it possible to receive funds from the federal budget subsidies. On the other hand, autonomous institutions can not be the main managers of budgetary funds, and because in this case the Fund is deprived of a separate budget line and would receive funding indirectly, through the ministry or department. Accordingly, it would be difficult to guarantee the preservation of the Fund's current standard of funding (1.5% of budget allocations for civilian science). This is especially true in view of the economic crisis, as the legal basis of autonomous institutions functioning is not well developed. Subsidies, with help of which autonomous institutions are financed are vulnerable budget lines and can be cut down in the first place.

The second option would be to amend the Budget Code, namely the provisions which gave special status to the Fund, and allow it to be the main manager of budgetary funds and allocate these funds through grants. Permission to the Assistance Fund to fund R&D through grants, rather than under the law on public procurement would simplify many of the procedural aspects.

The third option is an extension of the current statuses of funds, but that is not a solution of the issue. However, namely this way was chosen, and at the end of December 2009 the Federal Act was adopted to extend for another year the existing procedure for financial support through grants and budgetary subsidies.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Regulations of the Assistance Fund to Small Innovative Enterprises in science and technology (approved by the RF Government No.65 dated February 3, 1994) (as amended on January 5, 12 December 1995, March 6, 1996, 31 March 1998.).

<sup>&</sup>lt;sup>2</sup> Federal Law No. 314-FZ of December 17, 2009 "On Amendments to Certain Legal Acts of Russia in connection with the federal law" On federal budget for 2010 and the planned period for 2011 and 2012".

Technology infrastructure, which was developing in the form of special projects since 2006 - IT Parks in nine regions of the country, as well as four technology-innovative zones - has proved to be so ineffective that the management of those projects was transferred to the new agencies. Federal Agency for Management of Special Economic Zones (RusSEZ) was dissolved and its powers transferred to the Ministry of Economic Development. Herewith, the changes were quite unexpected, with no public justification, in fact carried out without prior arrangement. The situation with IT parks is similar - apparently, this program will be transferred from Ministry of Communications to the Ministry of Economic Development. In regard to Technical Innovation Zones it was noted that the general economic climate is so unfavorable for innovation, that the creation of "closed zones" is unable to change the conditions for innovation. In addition, zone residents have no tangible economic incentives to be engaged in technological innovation.

At the same time in the field of legal regulation and the formation of a new financial infrastructure to support small innovative businesses, especially those in the starting stage, there have been some changes that can be estimated positively.

One of the major changes is the adoption in August 2009 a new Federal law, under which the budgetary academic institutions, including the state academies of science, as well as universities, non-budgetary institutions, by the notification procedure can become the founders of business entities, created for commercialization of intellectual activity. Despite the existence of various risks and serious shortcomings, including gaps between the Act and the Budget and Tax codes, its adoption should contribute to the growth sector of small innovative enterprises.

As a contribution to the authorized capitals of small firms, agencies can transfer to them the rights for the objects of intellectual property. The adoption of this Law is successfully completed with new rules on limited liability companies (LLCs).<sup>3</sup> According the entered into force on July 1, 2009 new edition of the Law on LLCs allowed to make contributions to the authorized capital in the form of property rights.

The measures provided by the Federal Law № 217-FZ, should create incentives for the development of small innovative businesses. However, meanwhile their practical implementation is complicated by inconsistency with a number of other existing regulations and established accounting practice of intellectual property (incomplete registration of intellectual property, registration of undervalued property).

1. Only the right to use to intellectual property can be transferred to the authorized capital, rather than the exclusive rights. Newly established companies cannot grant license rights for the results of intellectual activities to the third parties. This limits the ability of companies in business structuring, including the placement of production at existing production areas, belonging to third parties.<sup>4</sup> This provision also allows research institutes and universities to establish multiple companies, which will have right to use the same results of intellectual activity.

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<sup>&</sup>lt;sup>1</sup> Technology parks have replaced their profile // Kommersant. No. 225. December 2, 2009, P. 13.

<sup>&</sup>lt;sup>2</sup> Federal Law No.217-FZ of August 2, 2009 "On Amendments to Certain Legislative Acts of Russia on a budget research and educational institutions, business entities working for practical application (implementation) of the results of intellectual activity".

<sup>&</sup>lt;sup>3</sup> The relevant changes were introduced by the Federal Law No.312-FZ of December 30, 2008 "On Amendments to the first part of the Civil Code of Russia and some legislative acts of Russia".

<sup>&</sup>lt;sup>4</sup> Innovations in Russia: legal challenges and legislative initiatives. Salans LLP. 2009.

2. The difficulty is in identifying those objects of intellectual property, for which research institutes and universities have exclusive rights. Many developments were created through the budget funds and the allocation of rights in this case is not always clearly defined in contracts. There arise some problems in the system RAS concerning the origin of intellectual property rights: they can be claimed by both, a scientific institution - the establishment of RAS, and by RAS itself.

3. According to the Law, the share of the institution in the authorized capital should be at least 25% in joint stock companies and at least one third in the LLC. This limits the development of partnership projects between research institutes and universities, where a number budget-funded agencies jointly establish a small business, because then the investor's share will be below 50%, which is unlikely to be acceptable to it.

The problem is also, where will be located and under what conditions will operate the created small firms. There is insufficient vacant space in the existing incubators and industrial parks, and the development of conditions for granting them a beneficial rent is only started. In this case, it should be noted that the government has reacted to this problem promptly, and is currently reviewing proposals of the RF Ministry of Education and Science to introduce benefits for the rent for small innovative enterprises, created by scientific and educational institutions. Under those rules in the first year there will be paid 40% of the market value of the rented premises, in the second year - 60% and in the third year - 80%.

In addition, the Ministry of Education and Science plans to hold two tenders to support the innovation infrastructure of the leading universities of Russia. In the framework of the first tender it is expected to implement a three-year program of infrastructure in 50-60 universities (business incubators, technology parks, etc.), legal protection of intellectual property, as well as advanced personnel training in the field of innovation. Herewith, among the selection criteria will be the number of established of small businesses in the university under Federal law No. 217-FZ. The second tender is aimed at supporting business entities through the provision of additional subsidies. Each business entity, established with the university under the Federal Law N. 217FZ, will be able to obtain on a competitive basis up to 100 million rubles per year from federal funds in case of 100% cost sharing. In general, the Ministry of Education and Science pays special attention to the Federal Law No. 217, and even going to assess the effectiveness of scientific and educational activities of budgetary institutions, created by small innovative firms. The Assistance Fund, also participates in the support of established scientific institutions and business entities through the program START for special financing of small businesses, created by the Federal Law No. 217.

With this "attention" from the federal government, universities have begun actively to create small businesses. By the end of 2009, from 364 high schools, administered by the Federal Agency of Education, 44 have established 116 business entities with 881 workstations<sup>3</sup>. It takes only a few days to register a small business, so the real impact is yet to come - namely, how long the established small businesses will survive and how well they will work.

<sup>&</sup>lt;sup>1</sup> Ministry of Education is preparing two new tenders for high schools. http://www.strf.ru/material.aspx?d\_no=26704&CatalogId=223&print=1 January 15, 2010.

<sup>&</sup>lt;sup>2</sup> 217-FZ: the law is adopted, but is it working? <a href="http://strf.ru/organization.aspx?CatalogId=221&d\_no=25423">http://strf.ru/organization.aspx?CatalogId=221&d\_no=25423</a> November 19, 2009.

<sup>&</sup>lt;sup>3</sup> Innovations in higher education: sluggish mode. http://www.strf.ru/material.aspx?d\_no=26759&CatalogId=223&print=1 January 18, 2010.

Another positive development can be seen in the changes taking place throughout the year in the Russian Venture Company (RVC). It has gone from nearly a closure (because of the placement of free funds on deposit at the banks, what was classified by the General Prosecutor's Office as the gross violations and ineffective use of public funds<sup>1</sup>) to the development of a new performance strategy and establishment of Seed Stock.

RVC was also accused of inflating their expenses for administration in 2008. RUSNANO state corporation was blamed for the same failure in late 2009. According to the results of audits, the state corporation received 130 billion rubles, spent only 10 billion, of which 5 billion rubles of them were spent for its own activities.<sup>2</sup> There are many ways to interpret what happened. On the one hand, it is to some extent a lack of understanding on the part of auditing authorities of the specifics of those structures, which cannot and should not spend all funding as soon as possible. On the other hand, it is the result of the slow unfolding of the work and indeed its low efficiency in terms of organization and management.

The RVC Head was replaced, and the Head brought a new concept of the fund operation, based on good understanding of the problems and deficiencies of the established innovation infrastructure, which primarily include the lack of commercial potential of projects and skilled teams, interest in the origin of intellectual property rights, the lack of qualitative technology and business expertise, strategic investors, as well as the lack of service organizations (consulting, legal and others).<sup>3</sup>

In order to partially compensate for the above failures, RVC made a strategic decision to establish the Investment Fund of Seed Stock. The Fund establishment in the form of limited liability company with capitalization of 2 billion rubles was made in late November 2009. Investment in projects on the part of the Fund will not exceed 75% of project cost. Herewith, RVC expects to receive a 25% share in the financed venture project. It is expected that within 2-3 years there will be funded 80 start-ups. A notable feature of the new fund organization is that the selection of projects and presentation thereof the RVC Investment Committee will be implemented through a system of the so-called venture partners, i.e. organizations which will seek and "package" the projects. To become a venture partner, one has to meet a number of not very difficult conditions, but if after a year of work the venture partners are not be able to submit projects for consideration, it will be deprived of that status. This approach is quite reasonable from two perspectives. First, the RVC takes off the burden of the direct search for projects, negotiations with their authors, and secondly, through the system of venture partners, potentially there could be built a system of intermediary companies, qualified teams, which are currently very few.

In general, this direction of innovation support can be effective in the long run, if it results in creation of a reserve for new products and technologies, serving as a basis for favorable conditions for overcoming the crisis and the further innovation development.

However, when speaking about the development of venture capital industry in general, it should be noted that in the absence of the stock market and large high-tech companies, an ex-

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<sup>&</sup>lt;sup>1</sup> Prosecutor General's Office proposes to suspend the activities of RVC..

http://strf.ru/material.aspx?d no=17999&CatalogId=221&print=1 February 26, 2009.

<sup>&</sup>lt;sup>2</sup> Public corporations simply do not fit in the "shady' economy.

http://www.strf.ru/organization.aspx?CatalogId=221&d\_no=25258 November 12, 2009.

<sup>&</sup>lt;sup>3</sup> Igor Agamirzyan. Three priorities in development.

http://strf.ru/material.aspx?d no=23349&CatalogId=223&print=1 August 31, 2009.

cessive focus on the creation of numerous venture capital funds in financing the high-tech projects will not be efficient. According to the RADVI (Russian Association for Direct and Venture Investments), the majority of created in the country most venture capital funds (today there are 155 of them) are primarily the funds of direct investments. They invest in late stages of consumer market development, and investment in IPO (initial offering of shares in the market) is statistically close to zero.

### 4.4.7. Tax Incentives for R&D Development

Measures of tax incentives for innovation were actively introduced in 2007-2008, and in 2009 the government was paying close attention to this trend of innovation policy.

In 2009 an amendment was introduced, providing a possibility of recognition for certain single R&D expenditures, including effect less, and their writing-off by 1.5 index. The introduction of writing-off standard for R & D by a specified index is a progressive step at first glance. However, the effect of this measure may be lower than in developed countries. Overseas there is a progressive income tax rate, and reducing the tax base also reduces the tax rate. However, this exemption is applied only to certain types of R&D, the list which is approved by a special government decree. It consists of 32 advanced technologies. At the same time, the list does not include research and development works aimed at developing technologies in traditional industries, what hinders them in innovative activity. In general, this measure could cause problems for tax administration and increase the risks of abuse on the part of taxpayers and tax authorities.

Another measure is the exemption of the grant recipients, including two government research funds - Russian Fund of Federal Property (RFFP) and Russian Humanitarian Science Foundation (RFSF), from income tax². In the situation of sequester of the amount of grants for innovative projects this measure can be regarded as a partial compensation for losses. However, the absurdity of the situation lies in the fact that there is no term "grant" in the Minutes of Association of public research Funds, so they can not apply this regulation .

In general, tax incentives for innovation activity is developed and becomes more diverse. However, a number of problems in tax regulation are more clearly revealed.

First, often imposed measures are inconsistent with other rules and regulations, therefore, they are either immediately become ineffective or rarely used by the taxpayers. Secondly, the terms and conditions of tax benefits applicability are set worded in the legislation so that allow various interpretations. To clarify the rules for the use of benefits and the interpretation of the law, the RF Ministry of Finance regularly publishes letters, but they do not always provide an unambiguous interpretation. This is one reason why experts give restrained and critical assessments of recently introduced measures: the rules of applicable benefits are ambiguous and open ways to different interpretations, and therefore, there is arbitrariness in their application and administration.

<sup>&</sup>lt;sup>1</sup> The RF Government Resolution No. 988 of December 24, 2008 "On approval of the list of scientific research and experimental developments, the expenses of the taxpayers for which, in accordance with Paragraph 2 of Article 262 of the Tax Code of the Russian Federation are included in other expenses in the amount of actual costs with coefficient of 1.5".

<sup>&</sup>lt;sup>2</sup> The RF Government Resolution No. 602 of July 15, 2009 "On approval of the list of Russian organizations, on taxpayer's grants (subsidies), provided to support science, education, culture and art in Russia, which are not taxable".

Third, the "privileged" groups (organizations, products), in respect of which certain tax incentives are applied are often ignored in the norms of general tax regulations, which nullifies the provided benefits. A typical example is the support of small innovative businesses, which enjoys the priority attention on the part of the state. On the one hand, there are permanent discussions of the tools for the support and promote innovation of small businesses, a variety of measures aimed at reducing their tax burden are proposed. Thus, currently the issue is under discussion of canceling some restrictions for organizations wishing to apply the simplified taxation system, including the following measures:

- 1) to increase the upper threshold of annual income for eligibility to use the right for simplified taxation system to the innovative small businesses, to 200 million rubles;
- 2) to remove restrictions for the subjective part of founders, shareholders, scientific organizations and innovative companies;
- 3) to reduce the tax rate to all the innovation of small businesses from 6 to 3% for the simplified tax system, if the object of taxation is the total income, and from 15 to 5%, if the object of taxation is income, reduced by the amount of costs;
- 4) To provide an open list of deductible expenses for those taxpayers who use the system of "income minus expenses". 1

On the other hand, from January 1, 2010, the Federal Law No. 212-FZ of July 24, 2009 came into force "On the insurance premiums to the Pension Fund of Russia, Social Insurance Fund of Russia, the Federal Fund for Mandatory Medical Insurance and territorial funds of obligatory health insurance, according to which from January 1, 2010 the unified social tax is replaced by insurance premiums to the Pension Fund of Russia, Social Insurance Fund of Russia, the Federal Fund for Mandatory Medical Insurance and territorial funds of obligatory medical insurance. At the same time, in 2010, the rates will remain the same, but from 2011 they will be increased so that the tax burden on businesses using the simplified taxation system will grow by 2.4 times. Therefore, the discussed and introduced tax incentives for small innovative companies can be nullified by changes in the basic system of taxation of enterprises.

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The crisis has aggravated the existing problems in the field of scientific innovation. Public funding, which is the main source of support to scientific research is getting reduced, while business has also reduced its expenses for R&D. The established development institutions are unable to cover the gaps, as the mechanisms of their work are far from perfect, the overall environment for innovation promotion, is underdeveloped. This situation is partly due to the imbalance of public policies. In general, specific measures to counter fight the crisis have not been adopted, and developed primarily through the available tools. New measures, introduced or proposed in 2009 - the establishment of research institutes and university status through the merger of organizations, permission to research institutes and universities to create small innovative enterprises, introduction of a new list of priorities, development of measures of "coercion" for business to participate in innovation activities cannot be regarded as crisis-counter fighting.

Herewith, government authorities expect and even demand too quick feedback from the new measures, and such pressure is likely to adversely affect the field of science and innova-

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<sup>&</sup>lt;sup>1</sup> State Duma proposes to cut down taxes for innovative small businesses. October 25, 2009. http://www.bashinform.ru/news/220910/

tion. In addition, a major obstacle in the implementation of the adopted measures is that during their development the prevailing legal regulations were disregarded in regard to both, the sphere of innovation, as well as the relations outside its scope. Therefore, being theoretically promising and significant, those measures can not provide a the rapid positive effect in the near future.

The nature of the majority of the new measures indicates, that the decision-making process is increasingly based on the direct government interference in the innovation sector, whereas a number of approaches resembles the Soviet practice of "management". Meanwhile, government policy should be based on participation in the creation and dissemination of various incentives, forming a fair competitive environment, increasing the degree of freedom for the participants of the innovation system and encouraging cooperation and collaboration between them, rather than on direct interference. Important principles of government policy, which are currently omitted or insufficiently implemented are the maximum publicity in the preparation and implementation of new projects and initiatives, consistency of actions, account for the possible negative effects of new initiatives and measures to address them.