GAIDAR INSTITUTE FOR ECONOMIC POLICY

RUSSIAN ECONOMY IN 2017
TRENDS AND OUTLOOKS

Gaidar Institute Publishers
Moscow / 2018

332

УДК 338.1(470+571)"2017"(063)
ББК 65.9(2Рос)я46

R95 **RUSSIAN ECONOMY IN 2017. TRENDS AND OUTLOOKS** / [Alexander Abramov etc.; Doctor of sciences (economics) Sergey Sinelnikov-Murylev (editor-in-chief), Doctor of sciences (economics) Alexander Radygin]; Gaidar Institute for Economic Policy. – Moscow: Gaidar Institute Publishers, 2018. – 544 p. – ISBN 978-5-93255-530-9.

The review “Russian economy in 2017. Trends and outlooks” has been published by the Gaidar Institute since 1991. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 6 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: the socio-political issues and challenges; the monetary and budget spheres; financial markets and institutions; the real sector; social services; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

Reviewers:
Lev Yakobson, Doctor of sciences (economics), professor, first pro-rector, NRU-HSE;
Alexey Vedev, Doctor of sciences (economics), Head of Structural Research Laboratory, RANEPA.

УДК 338.1(470+571)"2017"(063)
ББК 65.9(2Рос)я46

ISBN 978-5-93255-530-9

Tatiana Klyachko, Elena Semenova, Galina Tokareva

The state of education in the Russian Federation in 2017[1]

Recently the Russian education system went through significant qualitative and quantitative changes, which were both meaningful and institutional. At the same time, the system of education has been developing both extensively and rigorously. Preschool education has reached greater number of children. Extended learning activities of children have achieved new heights. Secondary vocational education included training of skilled workers and mid-tier specialists. Over eighty percent of high school graduates enter universities now. The unified state exam (USE) which was widely introduced in 2009 has become an important regulator for high school graduates flows to universities, which significantly increased educational migration of the young people. For example, in 2016, over 7.6 percent of high school graduates from other subjects of the Russian Federation strived to enter Moscow and St. Petersburg universities. Meanwhile before the introduction of USE that number did not exceed 1.5 percent of applicants, and the number of those wishing to enter universities in other regions has gone up from 3.5 percent to 16.5 percent.[2]

According to Rosstat, the number of employees with higher education in the system of education in 2015 hit 33.0 percent[3] (in 2005 – 26.6 percent), and those with tertiary education (higher plus secondary vocational education) – 58.8 percent (in 2005 – 51.8 percent).

From 2008, Russia has been creating new architecture for the education system, which presently consists of the federal universities, national research universities, and Basic universities. Moreover, there is a pool of universities (leading ones), which received the right to set their own education standards (in addition to the federal and national research universities).

The 5/100 project, which kick started in 2012, was aimed at strengthening Russia's position on the world higher education market by entering of no less than five Russian universities on the top 100 list of world university rankings by 2020. In 2017, solely the Moscow State University (however, it was not in the 5/100 project) entered the QS World University Rankings (QS rating is produced as a result of experimental and analytical assessment of activities of various world universities and is carried out by Quacquarelli Symonds consulting company). Other Russian universities boast of high rankings solely in QS-BRICS rankings and in a host of subject rankings.

In 2015, according to the Human Development Index Russia took 49th place among 188 countries. It fell into the category of countries with a very high level of human development. In the meantime, weak (insufficient) impact of growing human capital on the economic growth rates, social and technological development remains an issue.

[1] This section is written by Sergey Belyakov, Center for Continuing Education Economics (CCEE) IAES-RANEPA; Tatiana Klyachko, CCEE IAES-RANEPA; Elena Semenova, CCEE IAES-RANEPA; Galina Tokareva, CCEE IAES-RANEPA.

[2] According to Monitoring the Effectiveness of School Education (hereinafter – MESE) conducted by CCEE IAES – RANEPA (till 2009 – data of sociological studies of CCEE IAES – RANEPA).

[3] According to certain experts estimates – 37%.

5.5.1. Pre-school education

Provision of early childhood education represents the main trend in education in contemporary society. It is worth noting that by that indicator Russia is ahead or is at a high level compared to the OECD countries.

For example, around 47 percent of Russian children under 2 years are covered by programs of early childhood education compared to the average 36 percent in OECD. In Russia 78 percent of 3-year olds have been covered by early childhood education against 71 percent in OECD. The scope of early childhood education of 4-year-olds is less in Russia than in OECD countries (83 percent against 86 percent). The same situations is true of 5- and 6-year-olds. In Russia, preschool education is available for 83 percent of 5-year-olds and for 88 percent of 6-year-olds. Meanwhile, OECD boasts of around 90 percent figure. Meanwhile, many European countries create conditions for early childhood education to be provided by mother or father until the age of three. In support of that, a mother or a father receive an allowance for a child, consulting centers are set up, and pedagogical training is provided. Russia is taking the same rout by creating consulting centers for parents. At the same time, there is a shortage of nurseries in Russia (in 2017, 326 thousand children stay in line for nurseries or 28 percent of all children attending nurseries). Putin proposed support measure for low-income families on the birth of their first child (the monthly allowance of around RUB 10,500 for a child until the baby turns 18 months) could significantly aggravate this issue. Mothers of the low-income families will send their child to a nursery and will rush to work when the allowance stops. It should be noted that availability of pre-school education differs much across Russian regions (around one third of regions miss this indicator), although following President's May 2012 decrees the situation began improving. Nurseries overcrowding has been growing in several regions aiming at eliminating lines for kindergartens and nurseries. For example, in the Chechen Republic there are 138 kids for 100 available places, in the Republic of Adygea there are 132 kids, in the Republic of Tyva there are 120 kids, in the Republics of Dagestan and North Ossetia there are 118.6 and 118.2 kids, respectively, in the Republic of Bashkortostan there are 114.4 kids for 100 available places. Thus, workload on the teaching staff is increasing in those establishments; the quality of educational services provided is dropping together with child minding; sickness rate among children goes up.

5.5.2. Secondary (school) education

The average maximum number of students per classroom in case of elementary and secondary education in Russia remains relatively low: twelve students fill the private school classroom and eighteen students fill the typical public school classroom, which is significantly less than on average across the OECD countries where the class size is twenty-one students. In high school, average maximum number of students per classroom in Russia constitutes eleven students in private schools and twenty students in public schools against twenty-two and twenty-four students, respectively, across the OECD. Noticeably less maximum number of students per classroom in Russia is due to a large number of underfilled and ungraded village schools (average maximum number of students per class comes to eleven-fourteen students)[1], which is due to large distances and underdevelopment of road network (in large Russian cities between twenty-four--twenty-six students fill the classroom).[2] Large distances and existing

[1] Russian regions – Socio-economic indexes, 2016.

[2] Ibid.

road network do not allow transportation of students from villages to urban schools (for example, as it is done in Germany or Finland). Transportation of children to the so-called basic (large) village schools is done where possible in all subjects of the Russian Federation. That is why, restructuring of village schools network has run its course.

Large cities boast of educational parks and education centers, which, on one side, increases the effectiveness of budget funds appropriation and ensures a wider choice of specialization in high school, and, on the other side, merger of weak schools with a strong one in many cases undermines accumulated pedagogical experience of a strong school and results in reduced quality of education in a unified educational institution

The level of development of many schools and the lack of conditions for the adoption of modern educational technologies remains an issue. Meanwhile, from 2005 through 2015, the number of schools in disrepair fell fourfold – from 1,796 to 439 (*Fig. 27*). However, still 2,700 schools lack sewerage and hot water supply.

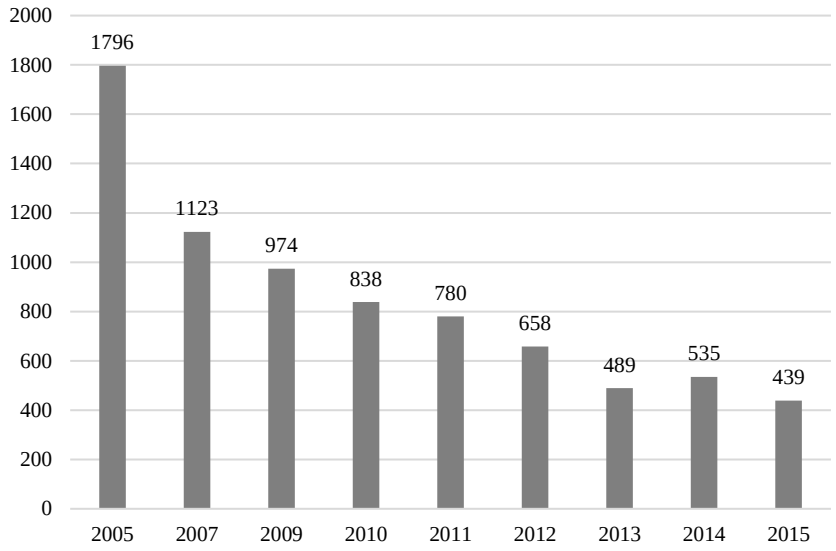

Fig. 27. Number of schools in disrepair, u.

According to MSE, during 2016–2017, parents' dissatisfaction with the conditions their children get education went up twofold including dissatisfaction with school facilities and resources. Especially high such dissatisfaction grew in rural arears and urban-type settlements. Despite all taken efforts, twenty-three percent of students study in second and third shifts (in 1991, in RSFSR twenty-seven percent of student studied in second and third shifts, meanwhile, since then the overall number of school students fell from 21 million to 15.2 million).

Personnel problem in the system of general education has formally been resolved: schools practically lack vacancies – 99.2 percent of workplaces have been taken. However, according to Monitoring of schools' effectiveness, parents' dissatisfaction went up in 2017 owing to the lack of subject teachers in schools where their children go. The share of such parents is low – 2.3 percent, but in 2016 they were less – solely 1.2 percent. There is a shortage of subject teachers in foreign languages, mathematics, chemistry, and biology.

Speaking about the teachers, in 2016, the RANEPA's Monitoring of Effectiveness of School Education demonstrated sharp rise of the teachers' dissatisfaction with their salaries–nearly two thirds of respondents were dissatisfied with their salaries (against 56 percent in 2015). The peak

of dissatisfaction passed in 2017 (or was somewhat levelled). At the same time, the share of teachers willing to go on pension increased (from 10.3 percent in 2015 to 12.2 percent in 2016). In the meantime, 72 percent of teachers do not plan to leave their occupation, while part of the teachers stay at school not so much as being satisfied with their work being afraid to find a job outside the system of education. Such attitude of the teachers is negatively telling on their motivation and undoubtedly negatively affects teaching process.

It is not growing teaching workload that recently brings complaint from teachers but a rapid growth of bureaucratic workload and although often fictitious control over their pedagogical activity and lack of trust in their professionalism.

The inflow of young school teachers somewhat increased from 2016 (*Fig. 28*)

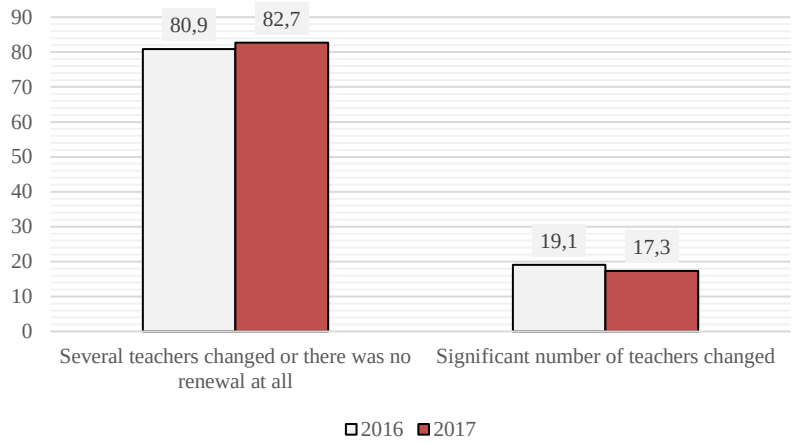

Fig. 28. Renewal of teachers personnel, %

Teachers with longstanding work in educational institutions indicate that young teachers are attracted to school first of all not by growing salaries but by stability of employment in the wake of economic uncertainty and what is more important by the specific work schedule , i.e. by additional side business (*Fig. 29*)

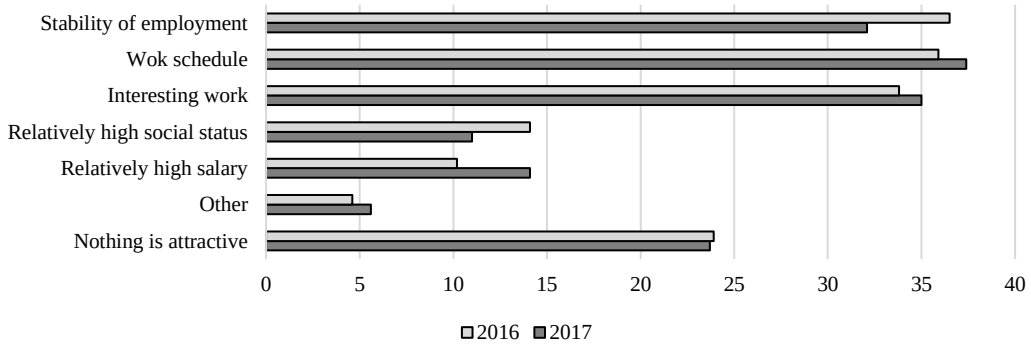

Fig. 29. Factors Determining the Attractiveness of Secondary School Teaching in the Eyes of Young Teachers, % (More Than One Poll Answer Was Allowed)

The low share of young teachers together with dissatisfaction with the salaries coupled with falling teachers' motivation to work productively represent an obvious issue of the general education development in Russia.

Currently student as a rule better master modern IT technologies compared with the teachers and are able easily and quickly (than the teachers) search for required information. Many students switch to a different, which is contrary to traditional process, delivery mode (they do it individually). The traditional process of learning is viewed by the high school students as detached from reality.

Development of multinational and multireligious student groups, growing number of migrants' children who badly master the Russian language (even at a simple level) represent another complex challenge facing by the school.

It should be noted that although the number of schools which boast of innovation changes is growing, the number of schools which are in a difficult state.

5.5.3. Extended learning activities for children

Extended learning activities for children is viewed by the parents and society as one of major conditions for obtaining modern (good) education (*Table 11*).

Table 11

Households' view on factors affecting good formal education for children, %

Assertion	Consensus level			
	Complete consensus	Rather agree	Rather disagree	Completely disagree
In order to get good education, one has to attend a good school	49.0	37.3	10.2	3.6
In order to get good education, one has to attend extended learning activities	*36.9*	*44.8*	*15.8*	*2.6*
In order to get good education, one has to study individually	56.1	29.4	11.5	3.0

Source: CCEE.

At the same time, around ten percent of schools deliver *various* extended learning activities, which, by parents' opinion, reduces their availability for the majority of households. Nevertheless, nearly fifty percent of preschool-aged children attend activities at youth athletic centers, music and art schools, art centers, hobby groups and clubs, etc.

At present, residents of small and even medium-size towns as well as villages (in 2017, solely 10.2 percent of parents indicated that their children managed to obtain extended learning activities at schools, in small town – a shade over 40 percent, and in regional and administrative centers – around 50 percent) meet with major problems regarding obtaining extended learning activities by their children.

Parents largely link extended learning activities with the need to sit successfully the main state exam (MSE) and unified state exam USE). Even parents of primary school kids take aim at passing MSE and USE by their children in five-seven years and one of the targets of extended learning activities view preparation for those exams. In junior high school preparation for the exams becomes even more important and in high school this task become paramount (*Fig. 30*).

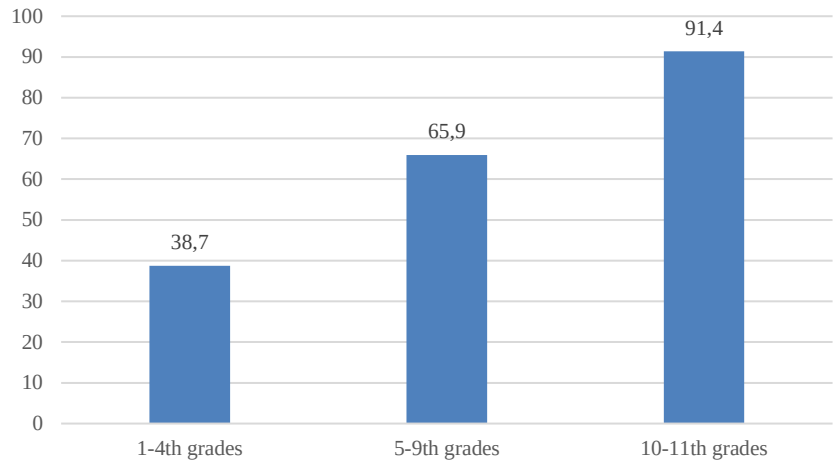

Fig. 30. Preparation for successful of state final certification as a target of extended learning activities depending on the school grade, % of those attending extended learning activities

Thus, already at the junior high school, two thirds of parents consider preparation for MSE more important than versatile education of their children, and in high school, this task becomes paramount for over 90 percent of households with children attending graduation class.

In spite of the fact that the Law "On Education in the Russian Federation" grants the form of network implementation both of basic and extended learning programs there is no real implementation mechanism, which could have ensured this possibility including to credit the knowledge obtained in the system of extended learning activities into the framework of school learning process. Contractual form of network implementation permit to resolve solely a limited number of tasks because the ratio of per capita funding in its present form does not allow to separate spending on certain types of educational activity in case of its network implementation.

5.5.4. Secondary vocational education

Following the countrywide implementation of the USE in 2009 and the introduction of the Main state exam (MSE) as mandatory in 2014 (the experiment was carried out since 2004) over 40 percent of junior high school graduates went to continue their education in the system of secondary vocational education (SVE) (SVE train blue-collar workers and mid-ranking specialists). Around 15–17 percent of high school graduates head to the secondary vocational education. Thus, around 50–52 percent of those who in due course started school went to the secondary vocational education.

This resulted in a way to avoid the USE owing to the fact that the vocational education graduates have the right to enter universities on profession-oriented departments without taking exams. However, according to the 2016 Rosstat's sample survey only 7 percent of the vocational education graduates (mid-ranking specialists) entered universities straight after graduating from the secondary vocational education institutions compared to 35 percent registered seven to ten years ago. It should be noted that the dropout rate from the system of the secondary vocational education exceeds 30 percent. After a while dropouts partially return to the educational institutions (young men usually return after having served in the army) but, as a rule, to different programs (professions/specialties).

According to surveys of teachers in the SVE system conducted by the Monitoring of educational economics,[1] the share of the teachers who use lab instruments does not exceed 20 percent. Meanwhile, 13 percent of heads of the secondary vocational education institutions indicated that they lacked lab instruments and around 40 percent of surveyed consider provided instruments as outdated (such situation is observed in the regional institutions). The secondary vocational education institutions of Moscow and St Petersburg are privileged in having instruments corresponding to the world level of technological development in this area.

5.5.5. Higher education

Higher education has been accumulating issues linked with:

- Demographic pitfall trap till 2024 when the number of students will be declining steadily (*Fig. 31*);
- Increasing number of institutional issues and issues due to the imbalance in management and financing of universities (for example, budget financing of sectoral higher educational institutions where the adopted model of per capita financing resulted in a sharp reduction of allocation of budget funds for leading medical, agrarian higher educational institutions, institutes for transport and this issue remains unresolved for over a year);
- Shortage of budget funding owing both to a contraction of federal budget expenses on higher education and adopted model of per capita financing;
- Outdated universities' facilities and resources;
- Tough financial situation of the universities that are not popular among young people but are very important for the long term economic development of the country;
- Presence of several poorly coordinated systems of the universities performance assessment: monitoring of universities performance evaluation system, licensing and accreditation of universities and institutions, tender for distribution of enrollment numbers (state-funded places and budget financing);
- Ageing faculty members, differentiated salaries and growing academic workload;
- Preparation for becoming quickly out of date programs despite the constant adoption of new Federal state educational standards.
- With the model of per capita funding operating in socio-economic and humanitarian higher educational institutions (first group which does not require lab equipment) for example in Moscow, expenses on the faculty members salaries per one group of state-funded bachelor students in 2016 constituted 81.5 percent of the overall volume of public funds allocated in line of per capita funding on such group. Meanwhile, according to the basic normative salaries should constitute 54.6 percent. Thus, underfunding in the higher educational institutions of this type constitutes around third per one study group. In case of master's degree and post graduate course the situation is better as a whole as in the higher educational institutions training engineering and technical specialists especially with respect to those where the training requires sophisticated lab equipment. The level of underfunding remains high although this underfunding varies depending on the higher educational institution type and regional location.

[1] Monitoring of educational economics conducted by NRU HSE from 2002.

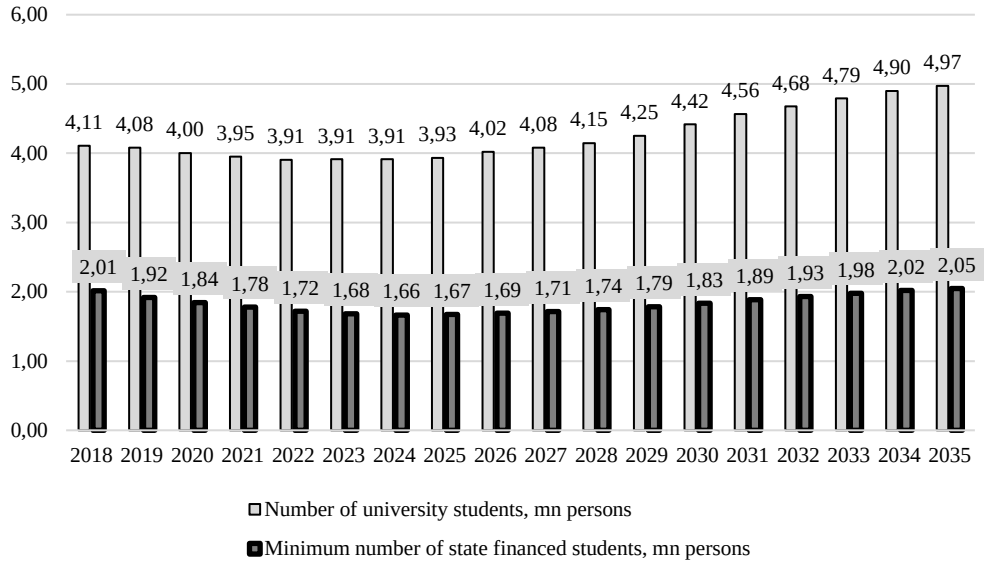

Fig. 31. Forecast number of university students and the minimum number of state-funded students, million persons (average forecast version)

With the provisions put forth in Presidential Executive Order No 597, which stipulates that the average faculty salaries should go up to 200 percent of the average salary size in each given region by the year 2018. *Actual salaries of the faculty members*, according to the Monitoring of educational economics, in 2017 constituted RUB 30-38,000, which was equal or below the average across the country's economy. According to the Rosstat data, in January-September 2017, the average faculty members salary in higher educational institutions on average across the Russian Federation constituted RUB 57,283 exceeding the average salary across the country by 1.7 times.[1]

5.5.6. Supplementary vocational education

In 2016, Russia boasted of the highest rate of adult population (between 25–64 age group) with tertiary education compared to the OECD countries and partner countries that release data with nearly 58.8 percent against 38 percent on average among the OECD countries and 27 percent on average among G20. Moreover, 94 percent of Russians boast of complete secondary education, which is significantly above the average index for the OECD countries – 5 percent.[2] At the same time, Russia compared to the OECD countries is behind with respect to supplementary vocational education and supplementary social[3] education.[4]

As a rule, adoption of the new technologies requires advanced training and retraining of employees. According to research data released by RANEPA only 9.5 percent of employees with vocational education went in for re-education in 2016. Where there is no advance training the adoption of the new equipment and consequently manufacture of pioneer products (or the

[1] See: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/salarys/
[2] Education at a Glance, OECD, 2016.
[3] Education of migrants and pensioners.
[4] It should be noted that in Russia unlike in most of the OECD countries population coverage by these types of education comprise solely formal advance training courses, while abroad this also includes conference attendance and participation in seminars and methodological associations, etc.

same products of higher quality) as may be supposed does not take place or happens in very small volumes at Russian enterprises. Consequently, the low level of the working population coverage by supplementary vocational education (according to Rosstat, 13.8 percent in 2013)[1] indirectly indicate the low level of the implementation of innovations in the Russian economy.[2] According to the sociological surveys, the majority of employees indicate that the employer either is not interested in the training and education of employees or lacks funds for that or employees have no time.

Presently, the high level of supplementary vocational education coverage is characteristic of the oil and gas sector, nuclear industry, number of transport and communications sectors, and ICT sphere. Recently, the social sphere sectors boast of significant growth of coverage (however, in many cases it is rather formal).

5.5.7. State-funded education

Of late years there is a gradual reduction of the GDP share of expenses on education (*Fig. 32*).

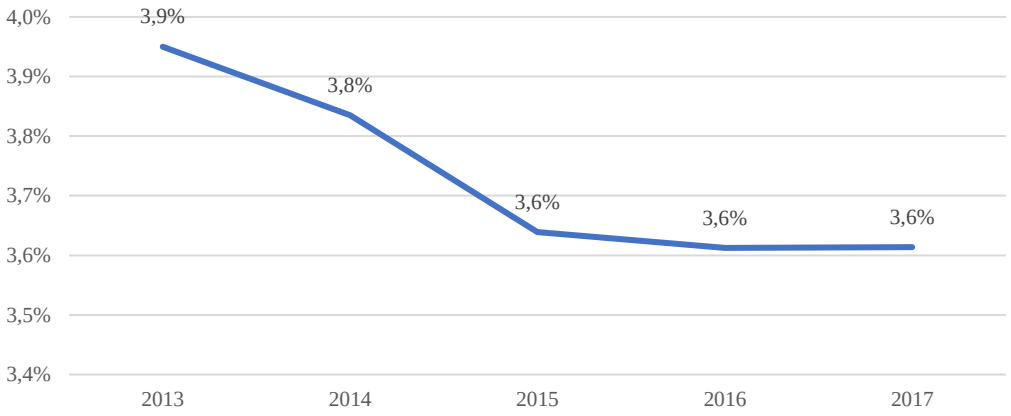

Fig. 32. GDP ratio of expenses on education in 2013–2017, %

The secondary vocational education (SVE) system having stable budget funding experiences rapid growth of students, which puts it in a tight situation (SVE has a low share of extra budgetary funds). As a result, budget expenses per state-funded student (training of mid-ranking specialists) significantly decreased since 2014 (*Fig. 33*).

From 2013, the GDP share of budget expenditure on basic education fell by 0.7 p.p. constituting in 2017 merely 1.75% of GDP. This is a wake-up call amid the number of students has been growing. Moreover, as was shown above parents' dissatisfaction has also been gradually growing. However, over 84 percent of the parents consider that the school efficiently performs its duties.

[1] According to Rosstat data released in 2016, the coverage of the working population by the programs of supplementary vocational education (SVE) constituted 20.1 percent, which raises doubts.

[2] In 2015, only 9.3 percent of institutions in Russia were engaged in the innovation activity (Innovation activity in the Russian Federation. Information and statistics materials. Moscow. Scientific Research Institute – Federal Research Center for Projects Evaluation and Consulting Services, 2016.).

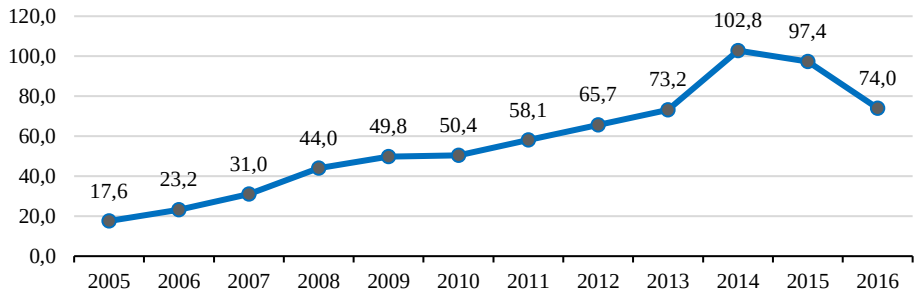

Fig. 33. The Russian Federation consolidated budget expenditure per one student attending training programs for mid-ranking specialists

In 2013–2017, budget expenditure on pre-school education stayed around 0.8 percent of GDP. However, in case the nursery sector is expanded the indicated share must be increased otherwise the situation in pre-school institutions for the kids of 3–7 will get for the worse due both to the increased involvement of kids in pre-school learning activities and to growing numbers of kids of that age group. Overcrowding in those group will increase, which will result in inferior quality of provided educational services. Moreover, kids' sickness rate in groups will increase, which will lead to negative social and economic consequences.

The government expenditure on education declined from 0.7 percent to 0.56 percent of GDP. The number of state-funded students has been contracting recently, however it was not so sharp compared to the decrease of the overall number of university students. Nevertheless, precisely the decrease of the number of state-funded places maintained public expenditure per one state-funded student in the nominal terms at a rather stable level (*Fig. 34*). Meanwhile, in real terms the situation has been getting worse despite deceleration of inflation.

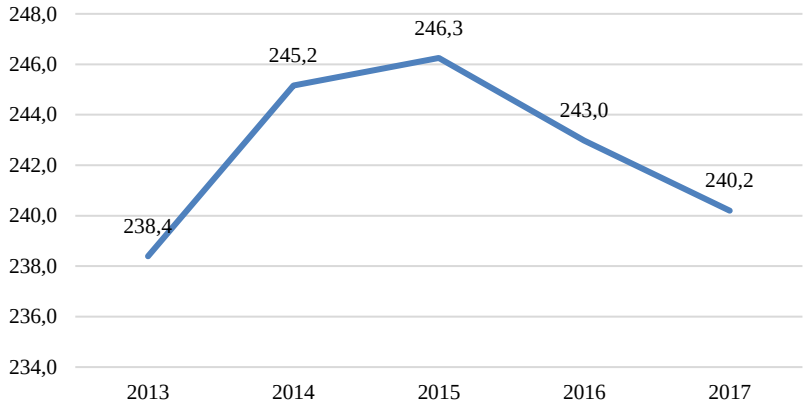

Fig. 34. Public expenses per one state-funded student, thousand rubles

* * *

In 2017 as a whole, the state of the system of education remained rather stable although its resource base was contracting. First signs of parents' dissatisfaction with the system of school education appeared. They indicated inferior conditions of educational services provision and shortage of teachers. Waiting line for nurseries has been growing. In the number of regions kindergartens suffer from overcrowded groups. Secondary vocational education suffers from double pressure – on the one part, the number of students is growing, which is by 93 percent is state-funded, and on the other part, public funding has been contracting. As a result, secondary vocational education trains specialists to work with outdated technologies. The majority of the SVE graduates do not work according to their speciality.

Public inadequate funding of higher education comes to around one third. As a result, the task of raising international competitiveness of Russian universities is achieved at the expense of those higher educational institutions, which can not compete with leading Russian universities. In the long-term, this leads to a decline of the overall level of higher education in Russia.