

# Interregional disparities of preschool educators' salaries in Russia in 2013-2019

Arseniy L. Sinitsa

---

## Abstract

Raising low salaries is one of the most pressing challenges the educational system has to deal with. It affects the system as a whole, though its most affected level is the preschool education since at this level the educators earn salaries that are lower than on average for the educational system. We will review the changes in preschool educators' salaries in Russia after the Presidential Decree No. 597 dated May 7, 2012, was adopted. For this purpose, we will consider the nominal salary of educators and its dynamics as well as its purchasing power taking into account the burden of children. Our findings show that educators are in an unsatisfactory financial standing and that in some of the cases their salaries fail to keep them and their families in being. The trends identified are rather controversial and we assume that currently, the educators' standards of living are close to those of 2013 or even lower.

**Key words:** preschool educator, salary, Russia, interregional disparity, purchasing power

**JEL Code:** I22, J31, O52

---

## Introduction

Today, the degree of success of a country's social and economic development policy is assessed by the level of its human capital development. There is a number of reasons for that. First, everyday life and social relations are becoming more and more complicated and we face the challenge of processing the ever-growing amount of information. Second, knowledge as a factor of production tends to grow in importance. Third, the birth rates in economically developed countries ensure only a narrower reproduction of the population. We pay attention to preschool education as at this stage children receive the basic set of knowledge about the world around us and basic skills and abilities. Besides, this is at this stage that they begin to socialize. It is important even for their future wage (Chetty et al., 2011) and professional trajectories evolution.

A high-quality educational system is one that has a well-developed infrastructure, well-trained staff receiving adequate job compensation and curricula that match the social and

economic needs. These elements are closely linked and if one grows weak this will affect the whole system. In this view, the matter of paying decent salaries to educators becomes particularly sensitive. The love of the profession can largely compensate for their low salaries. However, it is hard to attract and retain the most qualified educators if their important work is so poorly compensated.

The social and economic conditions that began to emerge after the collapse of the USSR required new regulations. Paragraph 2 of Article 54 of the Law of the Russian Federation No. 3266-1 of July 10, 1992 "On Education" states that the average salary in the educational system should have been not lower than the average wage in the country as a whole. The size of the average pay rate and the basic salary for teachers and other teaching staff was determined as not lower than the average wage of industrial staff (paragraph 3 of Article 54). The educational system as a whole has not met the wage standards since the adoption of this law.

In the 2000s, when the country saw some economic recovery, the issue of decent salaries in the educational system became particularly sensitive, as salaries there hardly reached 60% of the average wages. In the last 10 years, there have been two attempts to improve the life of educators. First, the unified wage tariff system was replaced with the new remuneration systems allowing the heads of the educational institutions to manage the payroll and to incent the staff at their own discretion. Then the average salary in the region was chosen as a target for educators' salaries at all levels of the educational system. Considering the low salaries paid to educators, these were must-do steps aimed at increasing the status value of the educators' work and raising their living standards. However, poor funding put significant obstacles to the implementation of this state policy.

## **1 Research methods and literature review**

Though the Presidential Decree No. 597 "On Measures to Implementation the State Social Policy" was adopted on May 7, 2012, the salaries of preschool educators and their living standards are still low. This research shows that in 2013—2019 the salary standards of educators have not been duly met. This situation persists both at the country-wide and at the regional level. Moreover, in 2015-2016, in some of the regions, the educators were so poorly paid that they could not afford themselves to raise even one child. Of course, people may have other sources of income, but analysis shows that salaries often fail to serve their purpose of restoring the physical and psychological forces of educators and their families.

The amount of job compensation of preschool educators largely depends on the ownership form of the preschool institution. Thus, municipally-owned preschool institutions have the lowest salary rates, whereas state-owned institutions can afford to pay much higher salaries. This research covers educators who work in municipally-owned organizations as state-owned institutions (federally and regionally owned ones) are much smaller in number and the salaries paid there are considerably higher (Sinitsa, 2020).

We will consider the basic educator salary indicators that may be found in databases published by the Russian Federal State Statistics Service (Rosstat) or are calculated by the author. The first indicator is the nominal average educator's salary per month and the dynamics thereof. The second one is the average educator's salary as compared to the average wages paid region-wide. And the third one is the purchasing power of an average educator's salary as compared to the consumer basket for different age groups.

Many economically developed countries face the challenge of low salaries paid to preschool educators. Articles on educational systems in the USA (Whitebook et al., 2016), Australia (Jovanovic, 2012), the UK (Yarrow & Newman, 2012), and Canada (Beach, 2013) mention this. Teachers' unions raise keep emphasizing the importance of this profession for the society and the need to be paid in a decent and adequate way (Gavin, 2018), but the impact that the teachers' unions have on the average wage amount is quite moderate, around 2%-4.5% (Merkle & Phillips, 2017). That is why we can assume that this is the result of an ill-conceived public policy. However, if teachers' are paid more on an unconditional basis, this will drive their satisfaction with their income and prevent them from holding outside jobs (Ree et al., 2017). This issue is also sensitive for Russia as, despite all the recent efforts, educators' salaries remain low (Abankina & Rodina, 2017), though these grew much higher as compared to the 2000s. Another important parameter which quite essential to assess the educators' living standards is the purchasing power of their salaries. However, despite all its importance, it has poor coverage in the literature (Rodina & Novikov, 2014; Sinitsa, 2019). We touch educators within Russia, that's why we may use the purchasing power of their salaries instead of a purchasing power parity index as was done in (George & Rhodes, 2019).

## **2 Dynamic trends in preschool educators' salaries**

In 2013, the financial standing of preschool educators in Russia was far from satisfactory. The salaries they earned were 73.4% of the national average. Table 1 below presents the regions with the highest and the lowest ratios of educators' salaries as compared to the regional average. There

is only one region (hardly to be named a rich one) where this ratio exceeded 100%, whereas in most of the regions it was quite below 100%. The coefficient of variation for the ratio was 11.2%.

**Tab. 1: Regions having the highest and the lowest ratio of preschool educators' salaries as compared to the average region's wages in 2013**

Region	Ratio	Region	Ratio
Novgorod Oblast	100.5	Moscow	60.1
Penza Oblast	96.3	Altai Krai	61.8
Tyumen Oblast (without Autonomous Okrugs)	95.3	Republic of Dagestan	63.6
Perm Krai	94.3	Tyva Republic	64.6
Stavropol Krai	94.1	Zabaykalskiy Krai	66.3

Source: Rosstat data, author's calculations.

A low ratio is mainly typical for the less developed regions located in different parts of the country. With its high average salaries, Moscow has the lowest ratio. Most of the regions having a high ratio are well-developed and mid-developed, although most of such regions are included the group having the medium ratio. This group doesn't show any distinguishable geographical relations.

Throughout the reviewed period, nominal wages countrywide increased by 57.3%, while for preschool institutions nominal salaries showed an increase of 49.1%. We should, however, mention that countrywide increase with its region-wise coefficient of variation of 5.2% was more homogeneous as compared to the preschool educators' salaries increase with its region-wise coefficient of variation of 11.5%.

Table 2 below presents data on regions having the highest and the lowest growth rates of preschool educators' nominal salaries for the period from 2013 to 2019. Figures in brackets show the growth of nominal wages in the region as a whole. Though trends identified are heterogeneous, we can still draw some conclusions.

**Tab. 2: Regions having the highest and the lowest salary growth rates**

Region	Growth Rate	Region	Growth Rate
Altai Krai	107.0 (53.8)	Novgorod Oblast	18.3 (36.6)
Vologda Oblast	100.1 (56.6)	Chechen Republic	18.6 (28.0)
Republic of Dagestan	95.8 (58.2)	Khabarovsk Krai	21.9 (48.7)
Sakhalin Oblast	87.6 (77.9)	Perm Krai	22.8 (55.3)
Republic of Karelia	79.9 (54.1)	Stavropol Krai	23.0 (53.3)
Republic of Kalmykia	76.0 (60.5)	Kabardino-Balkarian Republic	25.0 (51.4)
Tyva Republic	71.6 (52.3)	Khanty-Mansi Autonomous Okrug	25.3 (36.6)
Moscow Oblast	70.2 (53,6)	Yamalo-Nenets Autonomous Okrug	25.5 (44.5)
Chukotka Autonomous Okrug	69.3 (52.1)	Republic of North Ossetia – Alania	26.0 (46.0)

Leningrad Oblast	65.2 (54.6)	Tambov Oblast	31.1 (50.0)
------------------	-------------	---------------	-------------

Source: Rosstat data, author's calculations.

Highly developed regions are evenly distributed across all groups. Developed regions fall mainly in the group with average growth. Mid-developed regions are the most numerous and lots of them can be found in all the groups; however, the majority of them also fall in the group having the average growth rates. Ill-developed regions mainly fall in the group with high growth rates. This is quite logical as even a small increase in preschool educators' salaries results in a large percentage increase.

Geographically, about half of the regions having high salary growth rates are located in the Urals and east of the Ural Mountains. Another 20% are located in the South of Russia. The rest of the regions are located in other parts of Russia. Regions having low salary growth rates are distributed more evenly. About one-third of the regions are those of the Urals or even more remote areas. About 25% of these regions are located in the South. The remaining regions those of the Volga Region, the Central part of Russia, and the European North. This means that the regions of the Central and Volga Federal Districts are mostly those that have average salary growth rates.

The increase in educators' salaries was lower than the wage increase in general, so we can assume that their position has deteriorated as compared to other employees. To prove this we refer to the fact that the ratio of preschool educators' salaries to the national average decreased to 69.6%. The distribution of regions became more even as the coefficient of variation decreased to 7.7%. Table 3 below presents the regions having the highest and the lowest ratio of educators' salaries to average wages. There are some changes in regions distribution. However, having considered more regions, we will see that the distribution of regions has not changed so much.

**Tab. 3: Regions having the highest and the lowest ratio of preschool educators' salaries to average regional wages in 2019**

Region	Ratio	Region	Ratio
Moscow Oblast	99.1	Zabaykalskiy Krai	67.9
Leningrad Oblast	97.8	Tyva Republic	72.4
Vladimir Oblast	90.4	Republic of North Ossetia – Alania	73.0
Kaliningrad Oblast	89.5	Omsk Oblast	73.1
Penza Oblast	89.1	Magadan Oblast	73.3

Source: Rosstat data, author's calculations.

Regions characterized by lower development level are not included in the group regions having a high ratio. Well-developed and mid-developed regions are represented in

proportion to their total number. The share of highly developed regions is considerable, as four of ten regions are included in this group. This is a negative change. In terms of geographic coverage, none of Southern Russia or the Urals regions is included in this group and only a few regions of Siberia and the Far East.

Regions having a low ratio are those that are mostly the mid-developed and less-developed ones. However, three well-developed regions and one highly developed region are also included in this group of 15 regions. Another 11 regions are located in the South of Russia, Siberia and the Far East and three other regions belong to the North of European Russia.

### 3 Purchasing power of preschool educators' salaries

In terms of the purchasing power of their salaries preschool educators can afford to buy a set of goods and services that exceed the minimum subsistence level. However, an employee must support his or her unemployed family members. The birth rates in Russia are low. One of the reasons for that is low wages. Just consider how many children can be supported by a single educator if a very modest minimal set of goods and services is provided to them. Table 4 shows that in some of the cases salaries fail to address these needs. Throughout the period under review, in some of the regions, educators could not afford to raise even one child with their salaries. This means that the state policy on educators' salaries still needs to be reviewed.

**Tab. 4: Regions of Russia: how many children an educator may raise considering the minimum subsistence level of goods and services to be purchased**

Year	<1 Child	1-1.5 Children	1.5-2 Children	>2 Children
2013	3	20	28	32
2014	1	19	30	33
2015	19	31	24	11
2016	20	29	26	10
2017	10	36	30	8
2018	3	27	39	15
2019	2	27	38	17

Source: Rosstat data, author's calculations.

Regions, where educators are in the best financial standing, include six well-developed financial centers and regions where energy commodities are extracted. Besides, this group includes the well-developed Leningrad Oblast adjacent to a major financial center and the well-developed Republic of Tatarstan with a significant share of its economy relating to oil production and processing. Chukotka Autonomous Okrug is the only less-developed mining

region that belongs to this group. All macro-regions except Southern Russia and Siberia are presented in this group.

Regions, where the educators have the worst financial standing, are only those that are mid-developed and less-developed with their economy mostly focusing on agriculture. This group includes almost all regions of the North Caucasus and almost no regions of Siberia and the Far East. The higher standards of living in Siberian regions are most probably due to the high share of extractive and manufacturing industries in their economy.

Regions with high purchasing power include the remaining highly-developed regions and half of the developed ones. Regions in this group are located in all the federal districts except the North Caucasian Federal District. Regions, where educators' salaries have low purchasing power, are the remaining less-developed agricultural regions of the South and Siberia. There is one region in this group with its economy focused on mining (Zabaykalskiy Krai).

Regions with average purchasing power are mainly the mid-developed regions with a high share of agriculture in their economy. These are located in the Central, North-Western, Southern, and Volga Federal Districts. Only 3 of 27 regions are located in the Urals or beyond the Ural Mountains. Highly-developed regions are not a part of this group.

The analysis shows that on average for Russia, the purchasing power of a preschool educator's salary allows supporting at least 1.5 children. However, during the period under review, the purchasing power was decreasing which means deterioration in educators' financial standing. At the same time, in the majority of less-developed regions, the purchasing power of educators' salaries is extremely low and it is hardly possible for educators to raise even one child. We should also bear in mind that most educators are women, so their low salaries are partly balanced by their husbands' higher wages. Though this is highly inconsistent with the high public significance of their work.

Another feature of the above figures is related to the specifics of defining the subsistence minimum in Russia which serves the basis for defining the poverty indicators. In the 1990s, it was significantly reduced as compared to those figures that it was based on when conceptualized during the 1980s. As a result, the subsistence minimum concept fails to function properly. This means that even the advantaged regions where salaries are sufficient to raise two children are actually in a difficult situation and families of educators have much lower standards of living in these regions than it is declared. If the subsistence minimum is increased, the number of disadvantaged regions will increase significantly.

## Conclusion

The reform of the remuneration system for preschool educators initiated by the Presidential Decree No. 597 is a must. Nevertheless, the outcomes fail to match the target indicators and are not as good as they could have been under other circumstances. In 2019, the salaries of educators were slightly lower as compared to those of 2013. Their standards of living have decreased on a larger scale as a result of macroeconomic dynamics strongly influenced by the economic sanctions imposed on Russia.

The low standards of living limit the consumption level of educators and their households meaning that this profession is of low prestige. Besides, low salaries mean that educators fail to recover to the full extent. This may be one of the reasons for the low number of children in their families.

In some regions, educators' salaries are not enough to raise even the only child. As the allowance paid to parents of a child under the age of one year and a half is only 40% of the average earnings of the beneficiary, the birth of a second child in such families means extreme poverty for all the members of such family. In other words, financial constraints prevent low birth rates from increasing. The above suggests that significant mistakes were made by the Government while planning and implementing its socio-economic and educational policies.

An educator's financial standing largely depends on the level of economic development and geographical location of the region where he/she lives. Thus, in financial centers and regions with a focus on mining (primarily extracting energy commodities), the salaries of educators are higher whereas in agricultural regions the salaries are lower. As far as industrially-oriented regions are concerned, salaries there depend on the region's specialization. Lower salaries are paid in regions with a prevalence of light and food industries whereas higher salaries are paid in regions where heavy industries prevail. This means that the better the region is economically developed the higher is the average purchasing power of an educator's salary. The purchasing power of educators' salaries is higher in regions of the Extreme North than in the densely populated regions of Central and Southern Russia. East of the Urals the educators enjoy a better financial standing than in the European part of Russia.

Though the Presidential Decree No. 597 has brought to the agenda an important issue of low wages in the education system it was not backed by sufficient funding. Government expenditure on educators' salaries has definitely to be increased. The low standards of



educators' living require public policy measures to improve their financial standing. First and foremost, economic measures have to be taken. The most important measure is to increase the basic pay of educators to the amount of regional average salary as it is the basis for calculating the educators' salaries.

## Acknowledgments

This publication is based on research carried out as part of the state assignment for the work plan of the Laboratory for Economic Education (Faculty of Economics, Lomonosov Moscow State University). Theme: “Methodology of economic analysis of education development in the Russian Federation with the view to ensure the global competitiveness of the Russian education”.

## References

- Abankina, I. V., & Rodina, N. V. (2017). Performance-Based Contracting and Increase in Wage in Preschool Education: Development Strategies, Motivation and Incentives. *Voprosy Obrazovaniya – Educational Studies Moscow*, (4), 60–82. doi: 10.17323/1814-9545-2017-4-60-82
- Beach, J. (2013). *Overview of Child Care Wages. 2000-2010*. Ottawa: Child Care Human Resources Sector Council.
- Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W., & Yagan, D. (2011). How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project Star. *The Quarterly Journal of Economics*, 126(4), 1593–1660. doi: 10.1093/qje/qjr041
- Gavin, M. (2018). Working Industrially or Professionally? What Strategies Should Teacher Unions Use to Improve Teacher Salaries in Neoliberal Times? *Labour & Industry: a Journal of the Social and Economic Relations of Work*, 29(1), 19–33. doi: 10.1080/10301763.2018.1548068
- George, G., Rhodes, B. (2019) The Economics of Teaching in India Versus Teaching Aboard: Teacher Salary Differentials Using Purchasing Power Parity (PPP). *Journal of International Migration & Integration*. doi: 10.1007/s12134-019-00658-z
- Jovanovic, J. (2012). Retaining Early Childcare Educators. *Gender, Work & Organization*, 20(5), 528–544. doi: 10.1111/j.1468-0432.2012.00602.x

- Merkle, J. S., & Phillips, M. A. (2017). The Wage Impact of Teachers Unions: A Meta-Analysis. *Contemporary Economic Policy*, 36(1), 93–115. doi: 10.1111/coep.12234
- Ree, J. D., Muralidharan, K., Pradhan, M., & Rogers, H. (2017). Double for Nothing? Experimental Evidence on an Unconditional Teacher Salary Increase in Indonesia. *The Quarterly Journal of Economics*, 133(2), 993–1039. doi: 10.1093/qje/qjx040
- Rodina, N. V., & Novikov, A. V. (2014, February). Salaries of Teachers of General and Preschool Education and its Purchasing Power in the Subjects of the Russian Federation. In *Trends in the Development of Education: What Are an Effective School and an Effective Kindergarten*. XI International Research-to-Practice Conference, 2014 (Moscow). Moscow (pp. 286–296), Delo Publ.
- Sinitsa, A. L. (2019). Salaries as a Factor of the Family Size of Pedagogical Employees in General Education. *Transactions of the Institute for National Economic Forecasts RAS*, 17, 415–435. doi: 10.29003/m828.sp\_ief\_ras2019/415-435
- Sinitsa, A. L. (2020). Preschool Teachers' Salaries in Russia in the Context of the Russian Federation Presidential Decree no. 597 Goals. *DEStech Transactions on Social Science, Education and Human Science*, (aems), 169–173. doi: 10.12783/dtssehs/aems2019/33539
- Whitebook, M., McLean, C., & Austin, L.J.E. (2016). *Early Childhood Workforce Index – 2016*. Berkley, CA: Center for the Study of Child Care Employment.
- Yarrow, A., & Newman, B. (2012). The Value of Childcare: Class, Gender and Caring Labour. *Contemporary Issues in Early Childhood*, 13(3), 242–247. doi: 10.2304/ciec.2012.13.3.242

## Contact

Arseniy L. Sinitsa

Laboratory for Economic Education, Faculty of Economics, Lomonosov Moscow State University

1-46, Leninskie gory, Faculty of Economics, Lomonosov Moscow State University, Moscow, 119991, Russian Federation

[sinitsa@econ.msu.ru](mailto:sinitsa@econ.msu.ru)