

The Analysis of Working Conditions Affecting the Federal Civil Servants' Pay Level in Russia

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Abstract

The civil servants' pay is one of the stimulating factors leading to an increase in the efficiency and effectiveness of civil servants. Nowadays a non-competitive civil servants' pay level in Russia leads to a lack of their motivation to work. The purpose of the study is to identify and analyze different working conditions affecting the federal civil servants' pay level. The civil servants' pay is the subject of many studies, however, the influence of working conditions to the civil servants' pay has not been fully studied, which determines the relevance of the chosen topic for research. The research methodology is based on a comparative, correlation and regression analysis of statistical data from a survey of 2479 civil servants conducted by VTsIOM (Russian Public Opinion Research Center) in 2017. The sample consists of 235 surveyed civil servants who work in the central offices of federal executive bodies and who provided data on their salaries.

Based on the results of an empirical analysis of working conditions affecting the surveyed federal civil servants' pay level, it is concluded that their pay is positively influenced by overtime work. The research hypothesis that working conditions such as work location, workplace, work complexity and the volume of work affect the civil servants' pay level was confirmed only in terms of the dependence of civil servants' pay on the overtime work. In connection with the planned optimization of the civil servants' pay system in Russia, the base salary should be multiplied by a coefficient for an irregular work schedule. Bonuses for completing particularly difficult and important tasks should be in additional payments of the civil servants' pay and paid for work with increased stress. In this way civil servants will be motivated to fulfil their tasks and duties effectively, which will affect the performance of government bodies.

Key words: civil servants' pay, civil service, pay factors, public administration, working conditions.

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Introduction

The civil servants' pay is one of the stimulating factors leading to an increase in the efficiency and effectiveness of civil servants. However, the non-competitive civil servants' pay level in Russia leads to a lack of their motivation at work. The civil servants' pay is understood as their salary, taking into account all allowances, bonuses and additional payments.

The purpose of the study is to identify and analyze working conditions affecting the federal civil servants' pay in Russia. Working conditions mean the location of the job, the workplace, the work schedule, the complexity and the volume of the work. The paper uses a comparative and correlation-regression analysis of working conditions affecting federal civil servants' pay and proposes improvements in the civil servants' pay system in connection with the future civil servants' pay reform. A fair system of the civil servants' pay will lead to their enhanced motivation and will allow the formation of a more performance-oriented civil service.

This research paper is structured in the following way: section 1 contains a literature review on the relationship between working conditions and pay, Section 2 describes data and methodology, Section 3 presents the research results. The conclusions are presented at the end of the paper.

1. LITERATURE REVIEW

The civil servants' pay is the subject of many studies. However, issues related to working conditions affecting pay in the public sector have received little attention in the literature, which is confirmed by the small number of articles on this topic.

The hedonistic theory of wages or the theory of compensating differences are based on the assumption that the worker seeks to maximize his utility by choosing a job (Roshchin, 2000). At the same level of wages, the employee will prefer to work for the employer where the conditions and other characteristics of work, from the employee's point of view, will be better. An employer whose labor characteristics turn out to be worse is forced to compensate for them by introducing additional payments to wages. Differences in wages that compensate for differences in the characteristics of jobs are called compensatory. These can be compensations associated with bad working conditions or risks of injury (Abanokova; 2011).

The theory of compensating differences also explains the dependence of the pay of workers on their region of residence and the characteristics of their place of work (Berger, 2003; Gimpelson, 2016; Rosen, 1987; Smith, 1979). Interregional differences in wages are compensatory in nature. Unfavorable working conditions in the regions, associated with high risks, are compensated for employees with high wages (Oshchepkov, 2007).

According to the theory of the efficiency of wages, the salary of employees depends on the quantity and quality of work performed, that is, on their productivity (Akerlof, 1986; Gimpelson, 2008; Gimpelson, 2016; Katz, 1986).

Article 129 of the Russian Labour Code indicates that employee's salary is remuneration for labor depending on the employee's qualifications, and the complexity, quantity, quality and conditions of the work performed, as well as compensation payments (additional payments and allowances, including for work in conditions deviating from normal, work in special climatic conditions and in territories exposed to radioactive contamination) and incentive payments (additional payments and incentive payments, and bonuses). The amount of remuneration directly depends not only on the qualities of the employee himself (qualifications), but on the properties of the work performed (complexity, volume, working conditions, etc.). For example, a job that involves overtime work and risks of significant mental and physical stress is valued much more, so such employees receive higher salaries.

According to article 50 of the Federal Law of 27.07.2004 № 79-FZ "On the State Civil Service of the Russian Federation", civil servants' pay consists of the base salary, the class ranking allowance and additional payments. The base salary is the monthly salary in accordance with the occupied civil service position and the class ranking allowance is the monthly civil servant's allowance in accordance with the assigned civil service class ranking.

Additional payments represent monthly increments to base salary for length of the civil service, for special conditions of the civil service and for work with information constituting state secret, bonuses for completing especially difficult and important tasks, monthly incentive payments, and one-time payments for annual leave and material assistance. Special conditions of the civil service and the completion of difficult and important tasks should affect the civil servants' pay.

The theory of compensating differences establishes the dependence of wages on the region, working conditions and risks, and the theory of wage efficiency on the productivity, quantity and quality of the work. The Russian Labour Code and the Federal Law on the Russian Civil Service establish the dependence of pay on the complexity and the volume of work, on working conditions and other factors.

The identification of working conditions affecting the civil servants' pay level has not been fully studied, which determines the relevance of the chosen topic for research. The research hypothesis is that working conditions such as work location, workplace, work complexity and the volume of work affect the civil servants' pay level. That is, the worse the working conditions (for example, the worse the work location and the workplace, the more difficult the work and the greater the volume of work) —the higher the civil servants' pay level.

2. DATA AND METHODOLOGY

The paper is based on a comparative, correlation and regression analysis of statistical data from a sociological survey of civil servants conducted by VTsIOM (Russian Public Opinion Research Center) in 2017. The survey of civil servants was conducted on their satisfaction, motivation, remuneration, qualifications, project work, key performance indicators and applied technologies in public administration. 2479 civil servants were surveyed in federal, regional and municipal authorities located in 77 regions of Russia.

The limitations of this study are the use of a sample of the central office of federal executive bodies (only ministries and agencies), the lack of sufficient diversity in the respondents' answers (including the unwillingness of respondents to answer questions) and the analysis of data for only 1 year. The final sample consists of 235 surveyed civil servants who provided data on their salaries.

Men account for 39% of all surveyed civil servants, women 61%. The average age is 37 (range 21–67). The average length of service of the respondents is 10 years (range 0–40 years). The average length of service in government bodies in which civil servants worked at the time of the survey is 6 years, and in their positions, 3 years. Most of the surveyed civil servants (75.6%) have higher education, as this is the main requirement for entering the civil service. 15.6% also have a second higher education or have completed postgraduate studies. 8.1% of all respondents have a PhD. 0.6% have secondary special education or incomplete higher education (Figure 1).

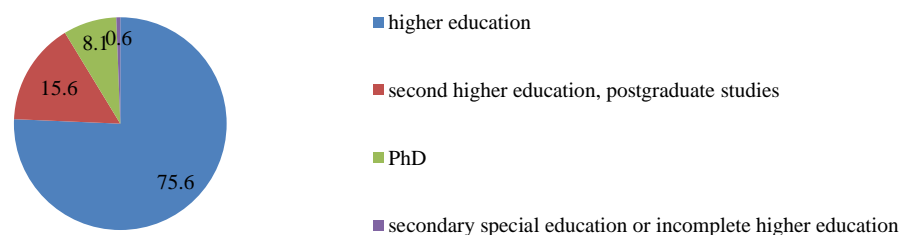


Figure 1. Share of civil servants by the education level, %

The overwhelming majority of the surveyed civil servants hold positions of the category "specialists" (86.5%). A significant proportion of the respondents hold positions of the category "leaders" (12.5%), and only 1% of the respondents hold positions in the category of "assistants (advisers)". Civil servants holding positions in the category of "support specialists" are not represented in the sample. The surveyed civil servants work only in 16 of more than 70 federal executive bodies.

As variables that can potentially be interrelated with the civil servants' pay level, in accordance with the literature and the hypothesis, 6 variables were selected related to location and transport accessibility of work, work schedule, workplace and equipment, quiet work without stress, overtime, and weekend work (Table 1).

Table 1. Survey questions characterizing variables

Variable names	Survey questions	Answer options
Civil servants' average monthly pay level	What was your average monthly pay level (salary, taking into account all allowances, bonuses and additional payments) in the civil service for the last year (you must specify in thousand rubles per month)?	free-form answer
Location and transport accessibility of work	How satisfied are you with the location and transport accessibility of work?	1 - completely dissatisfied, 5 - completely satisfied
Work schedule	How satisfied are you with the work schedule?	1 - completely dissatisfied, 5 - completely satisfied
Workplace and equipment	How satisfied are you with the workplace, including machinery and equipment?	1 - completely dissatisfied, 5 - completely satisfied
Quiet work without stress	How much do you agree with the statement: "It is possible to work calmly, without undue stress at my work"?	1 - strongly disagree, 5 - strongly agree
Overtime work	How often do you have to stay late at work in order to fulfill your official duties?	1 - constantly, 2 - often, 3 - occasionally, 4 - rarely, 5 - I don't have to stay late at work

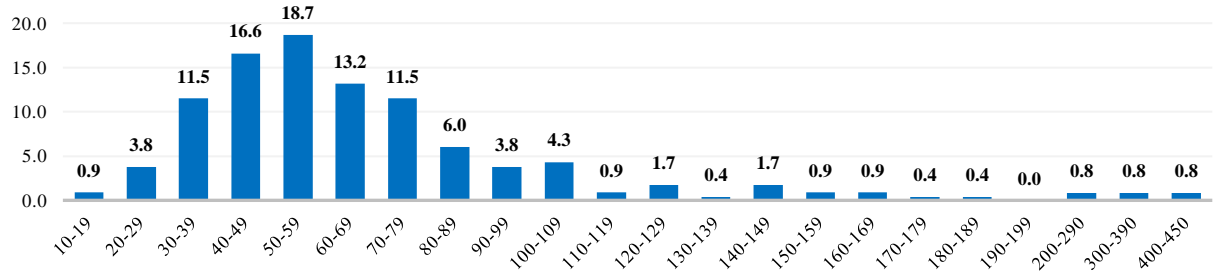
Weekend work	How often do you have to work at the weekends to fulfill your official duties?	1 - constantly, 2 - often, 3 - occasionally, 4 - rarely 5 - I don't have to work at the weekends
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According to the results of the VTsIOM survey, the average monthly pay of the surveyed civil servants in 2016 was 69,000 rubles (range 17,000 to 450,000), taking into account all allowances, bonuses and additional payments (1 USD = 66,9 RUB in 2016). Table 2 shows descriptive statistics of the sample.

Table 2. Descriptive statistics of the sample

Variable names	Mean	Std. Dev.	Minimum	Maximum
Civil servants' average monthly pay level	69,350	52,837	17	450
Location and transport accessibility of work	4,526	0,835	1	5
Work schedule	3,922	1,184	1	5
Workplace and equipment	3,996	0,974	1	5
Quiet work without stress	2,451	1,224	1	5
Overtime work	2,185	1,060	1	5
Weekend work	4,110	1,018	1	5

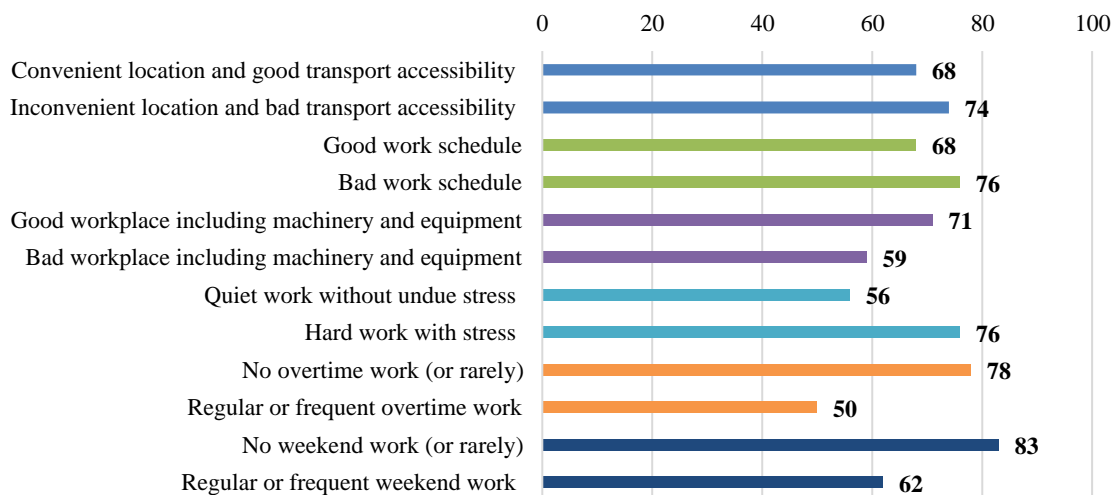
As shown in Graph 1, most of the surveyed civil servants (18,7%) received salaries in the amount of 50–59,000 rubles. The pay level of more than half of the respondents (71,5%) was in the range from 30–79,000 rubles.



Graph 1. Share of civil servants by the size of their average monthly pay level (in thousand rubles) in 2016, %

3. RESULTS AND DISCUSSION

A comparative analysis of civil servants' pay depending on working conditions shows that inconvenient location and bad transport accessibility, bad work schedule and hard work with stress have a positive effect on civil servants' pay (Graph 2). However, civil servants who have bad workplace and work overtime and at the weekends don't get higher pay than civil servants who are satisfied with their workplace and don't work or work rarely overtime and at the weekends.



Graph 2. Civil servants' average monthly pay level depending on working conditions

The dependent variable (y) is the average monthly pay of federal civil servants. The salaries of the surveyed civil servants were converted to an ordinal scale by calculating quartiles. To identify working conditions associated with the dependent variable, a correlation analysis was carried out. According to the results of the analysis, 4 of the potential 6 independent variables turned out to be correlated with the surveyed civil servants' pay level. These variables relate to the work schedule, quiet work without stress, overtime and weekend work. The values of the coefficients of the independent variables correlated with the respondents' pay are presented in Table 3. It should be noted that these variables don't correlate strongly with each other. Location of work and workplace do not correlate with the civil servants' pay, therefore, they will not be included in the regression model.

Table 3. A correlation table of the respondent's average monthly pay level (in quartiles) with independent variables

		Civil servants' average monthly pay level (in quartiles) (y)	Location and transport accessibility of work (x ₁)	Work schedule (x ₂)	Workplace and equipment (x ₃)	Quiet work without stress (x ₄)	Overtime work (x ₅)	Weekend work (x ₆)
Civil servants' average monthly pay level (in quartiles) (y)	Correlation coefficient	1,000	-0.068	-0.141*	-0.049	-0.168**	-0.230**	-0.183**
	Significance	.	0.240	0.011	0.376	0.002	0.000	0.001

In order to analyze working conditions that determine the civil servants' pay, it is necessary to apply an ordinal regression as the dependent variable is measured on an ordinal scale. The model includes all 4 independent variables that correlate with the civil servants' pay (Table 4). The ordinal regression model is statistically significant since Sig < 0.0005. The number of observations in the model is 221.

Table 4. Assessments of ordinal regression parameters

Variables	Coefficient	Std. Error	Prob
Dependent variable	Civil servants' average monthly pay level (in quartiles) (y)		
Work schedule (x ₂)	-0.0555259	0.1291377	0.667
Quiet work without stress (x ₄)	-0.0717362	0.1152279	0.534
Overtime work (x ₅)	0.3567084	0.1466686	0.015
Weekend work (x ₆)	0.1828491	0.1362895	0.180

The evaluation of the parameters of the ordinal regression model indicates that overtime work positively influences the civil servants' pay (Table 4). So, if the civil servant works overtime, his salary is higher. The effect of the remaining independent variables (work schedule, weekend work and stress) on the dependent variable is not statistically significant. However, in the correlation analysis a direct relationship was found between these variables and the respondents' pay level.

Due to the fact that the optimization of the civil servants' pay system is planned in Russia it can be suggested to multiply the base salary by a coefficient for irregular work hours (overtime and weekend work). Bonuses for completing especially difficult and important tasks should be in civil servants' additional payments and paid for work with increased stress. This will help civil servants to be motivated to fulfil their tasks and duties effectively, which will have a positive effect on the performance of government bodies.

Conclusion

A comparative analysis of civil servants' pay depending on working conditions showed that inconvenient location and bad transport accessibility, bad work schedule and hard work with stress have a positive effect on civil servants' pay. Based on the results of a correlation-regression analysis of working conditions affecting the surveyed federal civil servants' pay level, it is concluded that their pay is positively influenced by overtime work. The effect of other variables (work schedule, weekend work and stress) on the dependent variable turned out to be statistically insignificant. The research hypothesis that working conditions such as work location, workplace, work complexity and the volume of work affect the civil servants' pay level was confirmed only in terms of the dependence of civil servants' pay on the overtime work.

In connection with the planned improvement of the civil servants' pay system in Russia, the base salary should be formed taking into account irregular work hours (for example, overtime and weekend work). Bonuses for completing particularly difficult and important tasks should be included in civil servants' additional payments because in this way civil servants will be more motivated to fulfil their tasks and duties effectively.

As for the directions of possible further development of the research topic, the influence of a larger number of factors on the civil servants' pay level can be analyzed. Also, not only federal civil servants, but also civil servants working in the regions of Russia can be taken as the object of research.

All in all, if irregular work schedule will be counted towards civil servants' pay, civil servants will be more interested in improving their work results and motivated to perform their duties efficiently. A fair system of the civil servants' pay will lead to the formation of a more performance-oriented civil service.

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