



Household time allocation in Russia: economic or sociocultural model?

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Abstract

The article is focused on determining the dominant model of household time allocation in Russia based on the analysis of demographic, economic, social, and sociocultural factors. The main method of the study is a statistical analysis of the data from a household survey conducted by the Federal State Statistics Service of the Russian Federation in 2019 titled “Selective observation of the daily time use by the population”. The results of the study indicate an unfinished transition toward gender equality. The economic model of time allocation (the more one participates in the labor market, the less household work one does) is dominant during the work week, while the sociocultural model (gender determines the degree of workload in the household regardless of the level of employment in the labor market) takes precedence on the weekends. This is expressed in the increase in women’s unpaid work on weekends as compensation for missing out on household chores during the working weekdays. In addition, depending on the size of the gender gaps we identified “patriarchal” and “progressive” regions of Russia. Sociocultural characteristics turned out to be significant not only in the “patriarchal” regions but also in most of the constituent entities of the Russian Federation. Sociocultural attitudes weaken the economic model in the allocation of time between partners, especially on weekends. Thus, the economic model dominates on weekdays while the sociocultural one dominates on weekends.

Keywords

gender equality; gender roles; transition toward gender equality; Russian households; time allocation; time use; unpaid labor

JEL codes: J16, J22

Introduction

An analysis of men’s and women’s time use reveals a pronounced asymmetry in the time distribution for certain activities. Time gaps in unpaid work are a good indicator of gen-

der inequality in modern societies, where the employment or education gap has narrowed or disappeared. Gender gaps in the distribution of unpaid labor negatively impact women's and men's quality of life and demographic trends; whereas the reduction of these gaps leads to an increase in fertility and the strength of marriages. For example, improved work-life balance and increased gender equality in households have led to higher fertility in many countries (Rindfuss et al. 2003; Da Rocha and Fuster 2006; Lacalle-Calderon et al. 2017; Zhou and Kan 2019; Duvander et al. 2019). In an egalitarian family, it also reduces the conflict level (Marks et al. 2009).

Gender gaps in household time allocation exist to varying degrees in all countries. Yet, two questions remain unanswered. First, what level of the gender gap should be considered a negative factor for the development of society? And second, what determinants do influence the size of this gap?

It is evident that no society aspires to a fifty-to-fifty ratio in the distribution of unpaid work. However, reducing gender inequality in housework usually has positive demographic and social consequences (Kalabikhina et al. 2021). Moreover, it is important to consider the motivation behind the distribution of unpaid work: rational maximization of the prosperity of partners or the fulfillment of socially constructed gender roles, which may lead to an increased burden on women in societies with high levels of female labor market participation. Namely, which pattern of household time allocation dominates in society – economic (the more one participates in the labor market, the less housework one does) or sociocultural (gender determines the degree of workload in the household regardless of the level of employment in the labor market) (Coltrane 2000)?

The answer to this question can be useful in determining what impacts the allocation of household time in a particular country, and thus what social policies will help to improve household time allocation and increase gender equality.

Although childcare is an important component of unpaid work, in this paper we focus only on the analysis of the gender gap in household time and its determinants. According to the results of various studies, there has been no significant progress towards gender equality in the distribution of partners' household time, but not in the childcare time distribution. Based on the results of previous research, the gender gaps in childcare time mostly decrease due to the increase in the significance of parent-child time and parents' feelings. Hence, it is easier to assess the dominance of the economic or sociocultural model in household time allocation. We include the gender gap in childcare time only as an independent variable when analyzing the gender gap in household time.

Thus, this study sets forth the following objectives: first, to assess the gender gap in household time distribution in Russian households; second, to identify the dominant model of time distribution; and finally, to establish the relationship between the gender gap and its socioeconomic and demographic determinants.

Literature review on gender-related time distribution

Previously, researchers have proposed various theories to explain the existence of differences in time distribution. The main approaches are Becker's theory of the allocation of time, the time availability theory, "doing gender", and explanations through economic bargaining models. Most of them are gender-neutral and adhere to the economic concept of time allocation. Becker's theory of the allocation of time is based on labor specialization with rational

maximization of partners' total utility. Thus, the higher-paid partner does the paid work, while the unpaid work goes to the second partner (Becker 1965). In the time availability theory, the partner who has more free time does the unpaid work (Coverman 1985; Bianchi 2000). However, not all approaches support the decision to share household chores. Economic bargaining models contrast male and female interests. Housework is seen as an undesirable activity that each partner tries to shift onto the other. The decisive factor is the advantage in wages and educational level.

Among others, the approach of "doing gender" according to which partners play individual gender roles stands out (West and Zimmerman 1987). Sociocultural characteristics come to the fore. The partners' beliefs are based on the labor division between their parents and the gender ideology accepted in the country. If partners' beliefs do not concur, women usually change their behavior model. Thus, gender gaps continue to exist because the more influential partner wants to maintain an unequal distribution of responsibilities (McGinnity and Russell 2008).

Researchers of gender inequality in time distribution consider various factors – demographic, economic, social, and sociocultural. The sociocultural ones are difficult to define due to the lack of universally accepted indicators, but researchers have found several ways. For example, Dutch researchers used a country's masculinity index to account for cultural characteristics. The index describes society's degree of division by gender roles, according to which men are assertive, tough, and focused on material gain, while women are modest, gentle, and caring. "Male" characteristics are valued more than "female" ones in masculine countries. It explains the women's preference for work before marriage and fulfillment of gender roles after marriage. As a result, there is a strict specialization of work in masculine countries. In addition, cultural characteristics weaken the positive effects of other factors, such as increased female education (van der Lippe et al. 2011).

A woman's high level of education reduces the gender gap in time allocation. According to the opportunity cost effect, women with a high level of education find it more expensive to engage in household chores. The alternative activity to unpaid work is employment, the payment for which increases as the level of education increases. However, researchers have found a reverse relationship for men – an increase in men's contribution to housework as their educational attainment rises (McGinnity and Russell 2008).

Women's participation in the labor market reduces the gender gap due to the decrease in available time and the increase in financial independence. However, not all countries have such a pattern. There can be a negative correlation between employment and unpaid work on weekdays, but a positive correlation on weekends. Thus, women do less housework during the week, but make up for it on weekends. (Gupta et al. 2015; Kalabikhina and Shaikenova 2019). Moreover, women are still in a weaker position than men in paid employment, and when shocks occur, gender gaps in time allocation do not narrow and sometimes widen.

The marital status of the partners is also a significant factor. Cohabitants have a more egalitarian household time distribution. Female cohabitants are more likely to prefer paid work to housework due to their less secure position than married women. (Shelton and John 1993)

Health and disability have an obvious impact on the allocation of responsibilities. Poor physical or mental health is a barrier to full household responsibilities. If a woman has poor health, there is a smaller gender gap in time distribution due to the inability of the woman to manage most of the household work (Kalabikhina and Shaikenova 2019).

The time distribution also differs depending on the age of the partners. Young couples have the smallest gender gaps in time allocation. Young partners often have egalitarian views, have children less often/later than middle-aged people, and use household appliances more often than older couples (Shelton and John 1993; Batalova and Cohen 2002; Carlsson-Kanyama and Lindén 2007).

Along with the availability of household appliances, other household characteristics are also significant (Kalabikhina and Shaikenova 2019). For example, living in urban areas is associated with less time in paid and unpaid work (Gimenez-Nadal and Molina 2020). Having a passenger car makes shopping easier, which may contribute to greater male inclusion in household chores. Moreover, delivery services, ranging from food to household appliances, are gaining in popularity. These characteristics are predominantly relevant to non-low-income households. As household wealth increases, so does the amount of services purchased to perform household duties.

Having children determines the partners' time allocation. The birth of a child increases the amount of time spent on household chores. Moreover, the time allocation changes more for women (Shelton and John 1993; Bianchi et al. 2000; McGinnity and Russell 2008). The birth of the first child does not increase household time for men, but the birth of subsequent children does (Baxter et al. 2008).

Thus, gender gaps in time allocation are a part of the global problem of gender inequality. There are several approaches to explaining these gender gaps, supporting both economic and sociocultural conceptions of time allocation. Researchers of this gender issue have considered many factors – demographic, economic, social, and sociocultural. Many studies have found no significant shifts toward narrowing gender gaps in household time allocation.

Data, methods and hypotheses

This study employs the results of a household survey conducted by the Federal State Statistics Service of the Russian Federation in 2019 titled “Sample survey of the use of the daily time fund by the population” (Rosstat 2020). The sample covers 45,000 households, and its data are representative of urban and rural settlements, constituent entities of Russia, and the country. The sample of primary sampling units and households is formed on the basis of random sampling, and it is constructed using multiphase sampling with the implementation of two-stage sampling in the last phase. The unit of analysis is a household and persons aged ten and over living in private households.

The survey is conducted on the basis of special forms of federal statistical observation – questionnaires and time diaries. The information contained in the diaries is coded using the “activity codifier” for the “selective observation of the daily time use by the population”. In this article, we divided activities into five spheres: paid employment, household work, childcare, educational activities, leisure time and sleep, where the last sphere includes time for personal hygiene. Some activities were separate categories in time diaries and were not counted. For example, caring for family members outside the household. Household work is divided into the following main activities:

- Cooking, serving, and cleaning food, as well as other activities related to food service and food preparation;
- Cleaning and upkeep of the house;
- Maintenance and repair;

- Care of textiles and shoes (washing, drying, ironing, and repair);
- Household management (including finances, planning, etc.);
- Pet care;
- Purchase of goods and services;
- Driving (related to household activities and the purchase of goods and services).

In addition, we count only the time spent by a man and a woman who are partners, i.e., married or unmarried, on the above activities. We analyze both nuclear households, which include only partners and their children (if any), and extended households with other persons but only one pair of partners. Due to these limitations, the base sample of 45,000 households is reduced to 17,000. The reduced sample remained representative of the constituent entities of Russia and the country considering the shares of the regions.

The main focus is on gender time gaps, where gender gaps in the household time distribution are defined as the difference in minutes spent on housework between men and women (partners in the same household). Compared to the ratio, the gender gap expressed in minutes is more convenient for analysis. The value of this difference has no threshold or limit; the survey considers any value of a gender gap. Moreover, due to significant differences, the assessment of absolute values of gender gaps and their determinants are conducted separately for weekdays and weekends.

Based on the obtained sample, we conduct statistical and graphical analyses of gender gaps in household time distribution. Thus, we determine the differences in the distribution of partners' time on weekdays and weekends, as well as by constituent entity of the Russian Federation. Afterward, we use the ordinary least-squares regression analysis to examine the relationship between socioeconomic and demographic determinants and gender gaps in time allocation.

The model of time distribution between partners – economic or socio-cultural – is determined on the basis of the direction of the relationship between the variables of gender gaps in the time distribution in the household and in the labor market.

A negative relationship indicates an economic model. Moreover, we built additional econometric models, considering the determinants characterizing sociocultural factors.

This study posits the following hypotheses:

Hypothesis 1: the economic model of household time distribution between partners prevails in Russia.

Hypothesis 2: in a number of constituent entities of the Russian Federation, the economic model of the household time distribution between partners has not yet taken shape (these are mainly national republics and southern regions of Russia).

Hypothesis 3: gender gaps in household time have a direct/inverse relationship with the following main determinants (Table 1).

Results

Economic or sociocultural model?

Women's contribution to household work is higher than men's, regardless of the day of the week. Women's unpaid work predominates in 85% of households on both weekdays and weekends. Men's contribution is higher in only about 13% of households. Moreover, on weekends the number of households in which the distribution of time spent on housework is equal or with the predominance towards males decreases (Figure 1).

Table 1. Suggested directions for the relationship between key determinants and gender gaps in household time.

Determinants	Gender gap in household time allocation
A woman’s number of working hours per week	–
A woman having a side job	–
A woman’s education level	–
A woman’s age	+
A woman’s state of health	+
A woman having a disability	–
Status of a young family	–
Average household income (in thousands of rubles)	–
Number of people in the household	+
Availability of transport	–
Use of delivery services	–

Source: compiled by the author based on a review of the relevant literature and assumptions about the direction of the relationship.

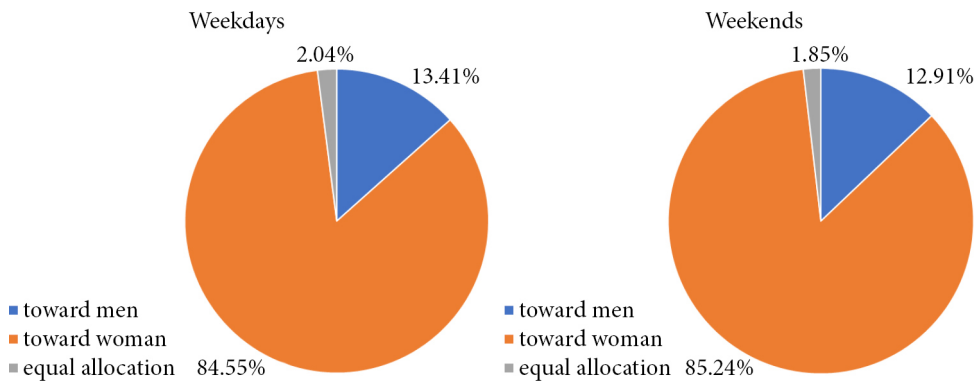


Figure 1. Gender gaps in weekday and weekend household time. Source: Author’s calculations.

The spread of the gender gap decreases in both directions, but more for men. Since the gender gap is calculated by subtracting men’s time from women’s time, there is a large jump in women’s unpaid work on weekends. On weekends (right chart), the columns to the right of zero, which indicate households with a gender gap towards women, increase. At the same time, households with a predominance of male work experience a shift towards zero. (Fig. 2).

The average value of the gender gap increases, which also indicates an increase in women’s contribution to housework (Table 2). Besides, the average value is minimum in nuclear households and maximum in extended households with other people except for partners and children. Hence, the additional housework in extended households is usually done by women. Women’s desire to catch up on household chores missed during the work week explains these changes. The same result was obtained using Russian data from 2014 (Kalabikhina and Shaikenova 2019).

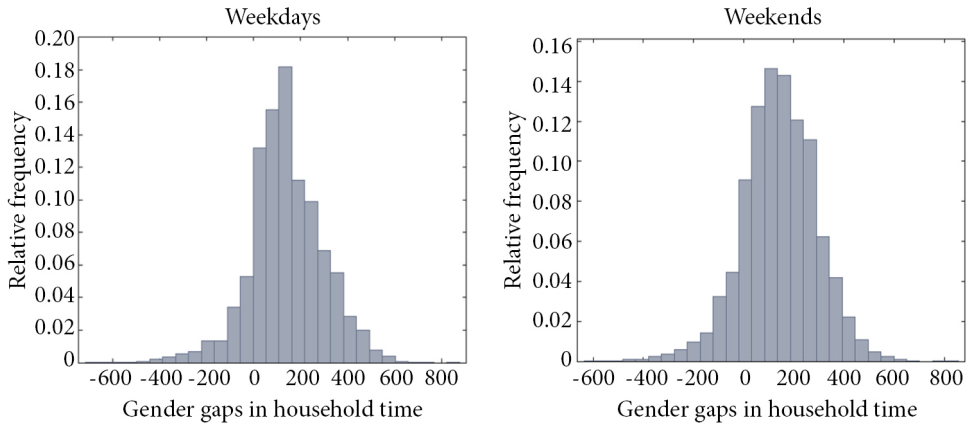


Figure 2. Distribution of gender gaps in household time on weekdays and weekends. *Source:* Author’s calculations.

Table 2. Descriptive statistics on gender gaps in household time.

Average		Median		Min		Max	
Weekdays	Weekends	Weekdays	Weekends	Weekdays	Weekends	Weekdays	Weekends
139	144	130	140	-690	-610	850	830

Source: Author’s calculations.

Thus, it confirms the unfinished transition toward gender equality. The economic model of time allocation is dominant during the work week, while the sociocultural model takes precedence on the weekends.

The results of a more in-depth analysis based on a regression model controlling for socio-economic and demographic factors are presented in Table 4.

We used dummy variables to control for educational characteristics. The full description of the educational variables is presented in Appendix 1. Appendix 2 shows the coefficient estimates in front of the corresponding variables, the values of the standard errors in parentheses, and the significance level of the coefficients: “*” at a significance level of 0.1, “**” at 0.05, “***” at 0.01 and below.

Differences in the gender gap between weekdays and weekends are mainly related to paid employment. The number of hours worked by women per week is significantly independent of the day of the week and, as expected, reduces the gender gap on weekdays. However, on weekends the connection is positive: the more hours a woman works per week, the greater the gender gap in time spent on housework. The availability of side jobs is significant for women on weekdays and weekends and for men only on weekends. On both weekdays and weekends, the gender gap is reduced by about 0.17 hours.

Similar to previous years’ studies, men’s and women’s education levels appeared to be significant regardless of the day of the week. If a woman has a level of education higher than secondary vocational, the gender gap in time for housework is less, and vice versa. For example, on a weekday, the gender gap is about 0.25 hours smaller for women with postgraduate education. At the same time, if a woman has no basic education, the gender gap increases by 0.72 hours.

The relationship is not that strict for men. At the level of education below secondary vocational, the gender gap can either decrease or increase. The economic model explains

this difference. Since paid employment strongly affects the time distribution on weekdays, a poorly educated man is more likely to have a low-paid job. It allows him to devote more time to housework. Consequently, education plays a less decisive role on weekends.

Thus, there are significant gender gaps in the time spent on household activities in the Russian households. Their negative correlation with a number of socioeconomic determinants indicates the dominance of the economic model of time allocation between partners on weekdays. At the same time, there is a sharp increase in women’s unpaid work on weekends, including among working women. Hypothesis 1 is partially confirmed.

“Progressive” and “patriarchal” regions

Gender gaps in household time allocation vary by constituent entities of the Russian Federation. There are regions with large and small gender gaps, the so-called “patriarchal” and “progressive” regions (Fig. 3).

The constituent entities of Russia that are most close to gender parity in the household time distribution include the city of Moscow, the Perm Territory, and the Yamal-Nenets Autonomous Area, while the greatest gender inequality in this type of activity is found in the Northeast and Northwest Caucasus regions, as well as the Republic of Kalmykia.

Due to the small sample size, we decided to group the Caucasian regions according to the type of sociodemographic behavior. Based on the work of K.I.Kazenin (2017), we grouped the Stavropol Territory, the Karachayevo-Circassian Republic, the Kabardino-Balkarian Republic, the Republic of North Ossetia into the Northwest Caucasus, and the Republic of Ingushetia, the Chechen Republic, and the Republic of Dagestan into the Northeast Caucasus.

In the first model, we considered the average age of women at birth of the first child by region. We chose the variable to test the hypothesis about differences in the time distribution in the constituent entities of the Russian Federation due to sociocultural features. The smaller this parameter, the more likely the prevalence of traditional attitudes in the region.



Figure 3. Weighted average values of gender gaps in the constituent entities of the Russian Federation. *Source:* Author’s calculations.

Often regions with an ideology of traditional gender roles have relatively early marriages, especially for young women, the birth of children at a young age, as well as a high proportion of women with incomplete education. The connection between the degree of demographic modernization and the degree of cultural modernization has been proven for Russia (Kalabikhina et al. 2021).

The results of the model for housework identify the average age of women having their first child as a significant variable. The significance of the variable in the distribution of household time means that the partners allocate time and responsibilities according to their gender ideology, “doing gender”. As expected, increasing the mother’s age by one year reduces the gender gap in time spent on housework, with an almost fourfold reduction on weekends.

As an alternative to the average age of women having their first child by region, we used the share of the ethnic Russian population in the constituent entity according to the 2010 All-Russia Population Census. Based on Hypothesis 3, we expect the gender gap to increase over time in regions with a smaller share of the ethnic Russian population, such as national republics. The results confirm the negative relationship of this determinant with the gender time gaps on both weekdays and weekends. The higher the share of the ethnic Russian population in the constituent entity, the smaller the gender gap in the time for the household. At the same time, the impact, as in the first model, is stronger on weekends. The fact that the manifestation of roles (“doing gender”) is characteristic on weekends explains the higher influence on these days.

For further analysis, it was necessary to identify constituent entities with significant differences in the distribution of partner time. We constructed OLS models that considered a region in which household members reside and excluded indicators of the average age of women having their first child by region and the share of the ethnic Russian population (Table 5). Since the variables are dummies, we took the region with the lowest weighted average household gaps as the reference group – the city of Moscow.

Between a quarter and almost half of the variables of all constituent entities are significant in the regression models for weekdays and weekends. In addition, there are more significant variables of constituent entities on weekends, 37 versus 20 constituent entities. When a variable of a constituent entity is significant on both weekdays and weekends, the effect is always stronger on weekends. Thus, the effect of partners’ residence is dominantly based on the sociocultural characteristics of the constituent entity.

In addition, the direction of the effect of living in a certain region of the Russian Federation compared to the base region often differs depending on the day of the week. Gender gaps in the time spent on housework usually reduce on weekdays, and increase women on weekends. Among the significant variables of constituent entities, only living in the Novosibirsk Region and Perm Territory increases the gender gap towards men on weekends.

Compared to Moscow, which has the lowest weighted average value of the gender gap in household time, the Republic of Kalmykia and regions of the Northeast Caucasus have the greatest increase in gender inequality towards women – more than half an hour on weekdays and more than an hour on weekends. The average age of women having their first child in the regions is 25.24 and 23.83 years respectively, which is much lower than Moscow’s average of 28.89 years. The proportion of the ethnic Russian population is also significantly different – 30.2 percent in the Republic of Kalmykia and 2.1 percent in the Northeast Caucasus regions, compared to 91.7 percent in the city of Moscow.

The regions of Russia differ in the level of gender equality in time distribution, and to consider a more general picture, we have grouped the constituent entities of the Russian

Federation into quartiles based on the values of the average age of women having their first child by region (Table 6). Thus, compared to the group of the most “progressive” regions, where the values of the average age fall in the top quartile, the gender gaps in the time of other groups are significantly larger. The difference between the most traditional and the least traditional groups of regions is 15.6 minutes. At the same time, these indicators are not significant on weekdays, which once again confirms the greater contribution of sociocultural characteristics to the distribution of time on weekends.

To ensure that the differences were based on sociocultural characteristics in addition to economic ones, we built OLS models with cross-sectional variables. The difference in time spent on paid work was employed as an indicator of the economic parameter. As confirmed in all previous models, the larger the gender gap in time spent on paid work, the smaller the gender gap in time spent on housework. Women spend less time on housework and become more economically independent. However, sociocultural characteristics such as gender ideology may strengthen or weaken this effect. Thus, a cross-sectional variable of the gender gap in time spent on paid work and the constituent entity of the Russian Federation will allow us to see differences in the effect of economic characteristics in the regions of Russia.

First, we introduced cross variables for the grouped regions (Table 6). Compared to the group of the most “progressive” regions, all cross variables were significant, except for the variable of the second group on the weekend. Consequently, the economic effect in all groups of regions is weaker than in the group of “progressive” regions. In addition, for a more in-depth analysis, we constructed cross-variables for each region separately (Table 7). The region with the lowest weighted average value of the gender gap in the household is also taken as the base. Given the previous results, we focused only on weekends, when partners are more committed to gender roles. As a result, 43 variables of constituent entities of the Russian Federation turned out to be significant for the gender gap in time spent on housework.

The constituent entities the variables of which are significant for the gender gap in household time are predominantly national republics, territories, and autonomous areas. However, Hypothesis 2 is only partially confirmed, as a large number of regions do not belong to the national republics or southern Russia.

Additional determinants of gender gaps in household time allocation

The regression models also take into account the characteristics of both partners individually and of the household as a whole (Table 4). Among the individual characteristics, a man’s age and a man’s age-squared on weekdays and a woman’s age-squared on weekends are significant. As a man’s age increases by one year, the gender gap in time spent on housework increases by 2.61 minutes. A man’s and woman’s age-squared variables have negative coefficients, confirming the non-linear influence previously found by researchers. (Shaikenova 2019). A woman’s age is insignificant on both weekdays and weekends.

Moreover, there is no significant association with men’s state of health. Since women’s contribution to housework is predominant, the deterioration of their state of health reduces the gender gap in housework, confirming the results of previous literature. A woman’s disability is also expected to reduce the gender gap. A man’s disability increases the share of women in the household, but only on weekends.

The results also confirmed the significance of most of the household characteristics. Except for family status and household composition, which were found to be insignificant neither on weekdays nor on weekends. Predominantly, the connection between the deter-

minants and the gender gap in the time spent in the household is negative. For example, the average household income and living in the city compared to the village. Thus, the gender gap reduces because there are fewer household duties in the city than in the village that high-income households can delegate to third parties who provide paid services. At the same time, a positive connection was also found, for example, with the number of people in the household. The presence of pets in the household reduces the time difference on weekends by 5.32 minutes. Since pet care is directly related to housekeeping, men increase their contribution to housework.

Some modes of transport are also significant. For example, the availability of a car leads to a difference of 0.17 hours on weekdays and 0.25 hours on weekends. However, the availability of a bus, a minibus, a motorcycle, or a moped turns out to be insignificant for gender gaps in household time distribution. The availability of a truck and other types of vehicles, such as a motorboat or a scooter, is significant on weekends. While the truck reduces the gap by 0.4 hours, the availability of the other type of transportation increases the gap by 0.3 hours. People usually use a truck to facilitate processes such as transportation or moving, while the use of other types of transportation can be considered leisure and reduce the disposable time of partners. As vehicles such as motorboats and scooters are more likely to be owned by men, the gender gap increases towards women. In addition to cars and trucks, delivery services facilitate unpaid work. On weekends, using home delivery services to buy food or appliances reduces the gender gap by slightly more than 5 minutes.

Thus, Hypothesis 3 is partially confirmed. Some variables were insignificant or had an inverse relationship from the expected direction (Table 3).

Table 3. Directions of the relationship between major determinants and gender gaps in household time.

Determinants	Gender gap in household time allocation	
	Expected direction of connections	Calculated direction of connections
A woman's number of working hours per week	-	- (weekdays) + (weekends)
A woman having a side job	-	-
A woman's education level	-	-
A woman's age	+	NS
A woman's state of health	+	+
Having a disability	-	-
Status of a young family	-	NS
Average household income (in thousands of rubles)	-	-
Number of people in the household	+	+
Availability of transport	-	- (a car and a truck) + (other modes of transport)
The use of delivery services	-	-

Source: Author's calculations.

Conclusion

In this paper, we have assessed the situation with gender gaps in the distribution of time on household activities in the Russian households at the national and regional levels. There is an asymmetry in the distribution of time spent on this type of activity in the Russian households. A larger share of housework is performed by women. The gender gap in the distribution of time differs between the constituent entities of the Russian Federation; there are regions with large and small gaps.

Based on the research of the last years, we have identified what exactly can be associated with the existence of gender gaps in the household. Previous researchers on this topic have identified many factors associated with the differences in time allocation between partners – demographic, economic, political, social, and sociocultural. The vast majority identified women's education level and age, partners' marital status, their economic status, and the presence of children and their age and gender as important factors. Some studies included household indicators, such as the availability of household appliances or a car, while others included institutional indicators. Special attention has been given to sociocultural factors that are difficult to assess.

In this paper, we have selected the main determinants that are significant in other studies and added some new ones that have not been analyzed before. To assess their association with the gender gap, we constructed several OLS models controlling for weekday and weekend differences. The regression models confirmed the importance of most of the estimated determinants, including both individual and household characteristics. New determinants such as food delivery, clothing delivery, delivery of household appliances, and pet care were found to be significant. These determinants reduce the gender gap in time spent on housework.

The importance of economic determinants, such as the number of hours worked, the availability of extra work, and the gender gap in paid employment, indicates that the economic pattern prevails on weekdays. On weekends, however, the importance of economic aspects decreases and there is a sharp increase in unpaid work by women, including working women.

Based on the values of gender gaps, we distinguished “progressive” and “patriarchal” regions. According to the hypothesis, the sociocultural pattern will be stronger in “patriarchal” regions. As for sociocultural characteristics, we took the average age of women having their first child by region and the share of the ethnic Russian population in the region. However, these determinants turned out to be significant not only in the “patriarchal” regions we selected but in more than half of the constituent entities of Russia. At the same time, the importance of sociocultural factors turned out to be higher on weekends.

To assess the role of sociocultural characteristics more accurately, we built an OLS model with cross-variables. This model showed that sociocultural factors can strengthen or weaken the effect of other factors. For example, they suppress the economic model in the regions of Russia, which can be noticed on weekends. Thus, the economic model of household time allocation dominates on weekdays and the sociocultural model dominates on weekends.

In this study, we analyze the distribution of partners' time for housework only. Further research could focus on including care for household members – children, elderly family members, and the disabled.

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Appendix 1. Educational determinants

Determinants	Description
Education_1	Postgraduate
Education_2	Graduate (Master's degree, Specialist Degree)
Education_3	Undergraduate (bachelor's degree)
Education_4	Incomplete higher education - three or more years graduated
Education_5	Secondary vocational
Education_6	Secondary vocational (initial vocational)
Education_7	Basic Secondary Education (High School)
Education_8	Basic General Education (Middle School)
Education_9	No Basic General Education

Appendix 2. OLS regression estimates

Table 4. Modeling gender gaps in the household time distribution in Russian households. OLS regression estimation. Weekdays and weekends. 2019.

	Weekdays	Weekends	Weekdays	Weekends
	Model 1	Model 2	Model 3	Model 4
Constant	103,594*** (22,936)	216,012*** (28,516)	75,36*** (10,40)	79,13*** (14,11)
Gender gap in time to paid employment	-0,551*** (0,007)	-0,537*** (0,008)	-0,551*** (0,007)	-0,536*** (0,008)
Gender gap in childcare time	-0,495*** (0,011)	-0,336*** (0,015)	-0,492*** (0,011)	-0,332*** (0,015)
Gender gap in time on educational activities	-0,542*** (0,028)	-0,451*** (0,098)	-0,539*** (0,026)	-0,445*** (0,099)
Gender gap in leisure time	-0,457*** (0,009)	-0,452*** (0,008)	-0,455*** (0,009)	-0,449*** (0,008)
Gender gap in sleep and personal hygiene time	-0,516*** (0,009)	-0,445*** (0,012)	-0,515*** (0,009)	-0,444*** (0,012)
Settlement type	-10,358*** (1,847)	-11,235*** (2,202)	-9,762*** (1,844)	-10,61*** (2,197)
Status of a young family (ages 16-25)	0 0	-9,39 (7,427)	0 0	-9,353 (7,476)
Status of a large family (3 and more children)	2,414 (4,334)	-8,102 (6,052)	0,998 (4,335)	-10,30* (6,034)
Household size	5,721*** (1,146)	10,936*** (1,487)	5,287*** (1,143)	10,66*** (1,480)
Household consisting of disabled persons	-7,984 (8,701)	-16,406* (9,052)	-7,88 (8,687)	-16,39* (9,034)
Household consisting of pensioners	4,785 (3,192)	-2,261 (3,537)	5,148 (3,192)	-1,191 (3,531)
Average household income	-0,054* (0,029)	-0,203*** (0,04)	-0,056** (2,753e-05)	-0,248*** (3,770e-05)
Passenger car	-11,93*** (1,851)	-15,18*** (2,136)	-11,78*** (1,849)	-14,78*** (2,132)
Bus, minibus	0,744 (6,861)	0,403 (9,168)	0,492 (6,863)	0,7 (9,176)
Truck	3,112 (5,882)	-24,189*** (7,038)	2,72 (5,852)	-23,77*** (7,003)
Motorcycle, scooter	9,392 (6,075)	0,358 (7,633)	10,09* (6,067)	2,105 (7,63)
Moped	-6,825 (7,33)	3,755 (9,506)	-5,549 (7,318)	5,639 (9,494)
Other mode of transport	-4,928 (5,745)	17,756** (7,474)	-5,007 (5,732)	18,34** (7,428)

Continuation of the table 4

	Weekdays	Weekends	Weekdays	Weekends
	Model 1	Model 2	Model 3	Model 4
Food delivery	2,514 (2,077)	-5,523* (2,863)	2,428 (2,074)	-5,774** (2,859)
Clothing Delivery	-1,604 (2,201)	4,325 (3,013)	-1,718 (2,193)	3,432 (3,004)
Delivery of household appliances, etc.	3,47* (2,003)	-5,984** (2,579)	3,202 (1,995)	-7,16*** (2,569)
Receiving help with childcare	-6,035** (2,474)	0,979 (3,537)	-5,735** (2,475)	1,262 (3,53)
Pets	-1,198 (1,554)	-5,317*** (1,887)	-0,555 (1,555)	-3,947** (1,888)
Having a disabled child in the household	-2,512 (14,607)	-8,765 (17,029)	-2,081 (14,39)	-7,342 (16,90)
A woman's age	-0,298 (0,734)	1,254 (0,894)	-0,3090 (0,733)	1,203 (0,894)
A man's age	2,61*** (0,751)	0,884 (0,938)	2,584*** (0,75)	0,8760 (0,937)
A woman's age-squared	0,001 (0,008)	-0,015* (0,009)	0,001 (0,008)	-0,014 (0,009)
A man's age-squared	-0,023*** (0,008)	-0,003 (0,009)	-0,023*** (0,008)	-0,004 (0,009)
Hours of work per week (F)	-1,409*** (0,074)	0,141** (0,058)	-1,392*** (0,074)	0,171*** (0,058)
Hours of work per week (M)	0,12 (0,088)	0,028 (0,072)	0,116 (0,087)	0,039 (0,072)
Side job (F)	-9,727** (4,44)	-11,359* (6,514)	-9,548** (4,439)	-10,54 (6,503)
Side job (M)	2,583 (3,449)	-10,501** (4,919)	2,644 (3,442)	-10,34** (4,947)
State of health (F)	-3,568** (1,646)	-3,841** (1,957)	-3,051* (1,648)	-3,024 (1,959)
State of health (M)	-0,959 (1,519)	-2,34 (1,841)	-0,611 (1,521)	-1,789 (1,843)
Education_1 (F)	-15,818* (8,177)	-9,22 (11,522)	-16,23** (8,112)	-9,385 (11,49)
Education_2 (F)	-1,943 (1,908)	-1,39 (2,364)	-2,086 (1,906)	-1,504 (2,358)
Education_3 (F)	-4,767 (3,087)	-3,382 (4,311)	-5,251* (3,086)	-4,408 (4,302)

Continuation of the table 4

	Weekdays	Weekends	Weekdays	Weekends
	Model 1	Model 2	Model 3	Model 4
Education_4 (F)	-4,441 (5,791)	-14,125** (6,729)	-4,868 (5,78)	-15,49** (6,737)
Education_6 (F)	-1,568 (3,232)	6,257 (3,998)	-1,683 (3,236)	5,952 (3,995)
Education_7 (F)	2,314 (2,884)	1,86 (3,272)	1,838 (2,879)	1,305 (3,271)
Education_8 (F)	5,226 (5,313)	12,209** (5,66)	4,617 (5,310)	11,64** (5,671)
Education_9 (F)	43,283* (23,488)	-17,509 (21,397)	42,92* (23,68)	-17,24 (21,22)
Education_1 (M)	10,859 (8,347)	12,064 (9,578)	9,84 (8,272)	10,15 (9,529)
Education_2 (M)	5,947*** (1,996)	-3,235 (2,481)	5,483*** (1,997)	-4,16* (2,474)
Education_3 (M)	2,956 (3,613)	5,978 (5,334)	2,233 (3,599)	3,885 (5,316)
Education_4 (M)	6,207 (6,021)	15,209* (7,803)	5,426 (6,004)	13,21* (7,851)
Education_6 (M)	-1,426 (2,474)	-3,485 (2,993)	-1,638 (2,473)	-4,001 (2,989)
Education_7 (M)	4,151 (2,682)	7,342** (3,104)	3,754 (2,684)	6,677** (3,104)
Education_8 (M)	0,183 (4,924)	1,52 (5,399)	0,3126 (4,916)	1,804 (5,403)
Education_9 (M)	-47,068** (23,506)	-12,139 (19,952)	-45,95* (23,61)	-9,848 (19,62)
1st disability group (F)	-70,422*** (14,954)	-67,488*** (19,513)	-70,84*** (15,00)	-67,50*** (19,70)
2nd disability group (F)	-4,071 (7,203)	-9,407 (7,023)	-4,225 (7,194)	-9,33 (7,017)
3rd disability group (F)	-14,229** (6,044)	-14,218** (6,328)	-14,61** (6,053)	-15,24** (6,339)
Disability in the process of registration (F)	-4,626 (18,135)	-5,417 (16,316)	-5,883 (18,25)	-8,316 (16,13)
1st disability group (M)	-6,16 (9,263)	28,863*** (10,857)	-6,854 (9,234)	27,79*** (10,73)
2nd disability group (M)	2,968 (5,277)	21,777*** (5,614)	2,705 (5,271)	21,57*** (5,611)

End of the table 4

	Weekdays	Weekends	Weekdays	Weekends
	Model 1	Model 2	Model 3	Model 4
3rd disability group (M)	0,687 (4,855)	16,437*** (5,529)	0,1643 (4,858)	15,49*** (5,530)
Disability in the process of registration (M)	-16,14 (10,548)	4,108 (13,866)	-16,66 (10,42)	1,95 (13,85)
Average age of women having their first child by constituent entity	-1,686** (0,779)	-6,411*** (0,953)	-	-
Share of the ethnic Russian population by constituent entity	-	-	-0,207*** (0,035)	-0,399*** (0,041)
n	17130	17130	17130	17130
R ² _{adj}	0,619	0,374	0,62	0,376
lnL	-1,026e+05	-1,059e+05	-1,026e+05	-1,058e+05

Table 5. Modeling gender gaps in the household time distribution in Russian households. OLS regression estimation. With the constituent entities of the Russian Federation. Weekdays and weekends. 2019.

	Weekdays	Weekends
Constant	60,19*** (10,66)	36,81** (14,51)
Gender gap in time to paid employment	-0,55*** (0,007)	-0,535*** (0,008)
Gender gap in childcare time	-0,489*** (0,011)	-0,332*** (0,015)
Gender gap in time on educational activities	-0,542*** (0,028)	-0,437*** (0,103)
Gender gap in leisure time	-0,454*** (0,009)	-0,445*** (0,008)
Gender gap in sleep and personal hygiene time	-0,514*** (0,009)	-0,441*** (0,011)
Settlement type	-9,529*** (1,855)	-10,88*** (2,215)
Status of a young family (ages 16-25)	0 0	-10,30 (7,507)
Status of a large family (3 and more children)	-0,759 (4,335)	-11,16* (6,055)
Household size	5,019*** (1,149)	9,971*** (1,490)
Household consisting of disabled persons	-8,667 (8,659)	-16,06* (8,991)

Continuation of the table 5

	Weekdays	Weekends
Household consisting of pensioners	4,593 (3,189)	-2,258 (3,538)
Average household income	-0,05304 (3,429e-05)	-0,205*** (4,461e-05)
Passenger car	-12,69*** (1,876)	-15,40*** (2,154)
Bus, minibus	-0,464 (6,862)	-0,588 (9,237)
Truck	2,605 (5,856)	-24,04*** (7,083)
Motorcycle, scooter	12,13** (6,109)	2,470 (7,649)
Moped	-4,514 (7,364)	5,603 (9,427)
Other mode of transport	-3,585 (5,855)	17,76** (7,626)
Food delivery	2,934 (2,087)	-4,253 (2,858)
Clothing Delivery	-3,067 (2,218)	3,119 (3,027)
Delivery of household appliances, etc.	2,350 (2,019)	-7,215*** (2,592)
Receiving help with childcare	-4,798* (2,486)	2,227 (3,549)
Pets	-0,017 (1,571)	-4,057** (1,896)
Having a disabled child in the household	-1,739 (14,02)	-6,615 (16,58)
A woman's age	-0,278 (0,733)	1,145 (0,895)
A man's age	2,511*** (0,752)	0,844 (0,939)
A woman's age-squared	0,002 (0,008)	-0,013 (0,009)
A man's age-squared	-0,023*** (0,008)	-0,004 (0,009)
Hours of work per week (F)	-1,382*** (0,075)	0,167*** (0,058)
Hours of work per week (M)	0,097 (0,088)	0,009 (0,072)

Continuation of the table 5

	Weekdays	Weekends
Side job (F)	-8,923** (4,431)	-10,31 (6,526)
Side job (M)	3,459 (3,468)	-9,254* (4,940)
State of health (F)	-2,817* (1,653)	-2,948 (1,962)
State of health (M)	-0,599 (1,525)	-1,649 (1,837)
Education_1 (F)	-16,92** (8,027)	-8,521 (11,3)
Education_2 (F)	-2,354 (1,902)	-1,825 (2,363)
Education_3 (F)	-5,813* (3,097)	-4,515 (4,308)
Education_4 (F)	-5,673 (5,714)	-15,52** (6,719)
Education_6 (F)	-1,422 (3,241)	6,57* (3,982)
Education_7 (F)	1,527 (2,883)	0,732 (3,276)
Education_8 (F)	3,665 (5,321)	10,74* (5,682)
Education_9 (F)	44,73* (23,32)	-15,22 (21,21)
Education_1 (M)	7,660 (8,241)	11,62 (9,412)
Education_2 (M)	4,59** (2,013)	-4,329* (2,481)
Education_3 (M)	1,628 (3,637)	6,004 (5,284)
Education_4 (M)	4,753 (6,034)	15,18* (7,81)
Education_6 (M)	-1,217 (2,483)	-2,957 (2,991)
Education_7 (M)	3,434 (2,693)	6,246** (3,101)
Education_8 (M)	0,9672 (4,882)	2,588 (5,389)
Education_9 (M)	-47,02** (22,89)	-11,4 (18,96)

Continuation of the table 5

	Weekdays	Weekends
1st disability group (F)	-73,88*** (14,98)	-69,45*** (19,73)
2nd disability group (F)	-4,744 (7,161)	-10,69 (6,914)
3rd disability group (F)	-14,89** (6,045)	-14,65** (6,313)
Disability in the process of registration (F)	-10,03 (18,73)	-12,18 (15,89)
1st disability group (M)	-7,922 (9,359)	26,28** (10,77)
2nd disability group (M)	1,732 (5,279)	20,63*** (5,613)
3rd disability group (M)	0,788 (4,849)	16,59*** (5,523)
Disability in the process of registration (M)	-17,62* (10,27)	1,747 (13,83)
Altai Territory	-8,764 (6,659)	12,61* (7,37)
Krasnodar Territory	6,779 (5,078)	20,03*** (6,578)
Krasnoyarsk Territory	-11,1 (6,980)	15,95** (8,084)
Primorye Territory	0,6450 (6,285)	-2 (8,013)
Khabarovsk Territory	7,499 (7,352)	30,93*** (11,3)
Amur Region	9,094 (13,03)	25,76* (14,97)
Arkhangelsk region (without autonomous area)	15,53* (8,874)	26,03** (10,38)
Astrakhan Region	12,96* (7,505)	17,45* (9,716)
Belgorod Region	3,850 (7,061)	8,153 (9,955)
Bryansk Region	-6,630 (8,242)	12,59 (10,35)
Vladimir Region	-1,868 (7,289)	12,08 (9,915)
Volgograd Region	2,831 (6,51)	20,26** (8,189)

Continuation of the table 5

	Weekdays	Weekends
Vologda Region	1,069 (8,904)	6,681 (10,03)
Voronezh Region	11,71 (7,731)	26,13*** (8,694)
Nizhny Novgorod Region	-11,1* (6,342)	-6,576 (8,381)
Ivanovo Region	-18,40* (9,791)	14,28 (11,74)
Irkutsk Region	8,714 (10,81)	20,60* (11,69)
Kaliningrad Region	-2,420 (9,603)	24,20** (9,473)
Tver Region	-11,62 (8,051)	-13,64 (8,863)
Kaluga Region	-4,331 (7,659)	37,28*** (9,876)
Kamchatka Territory	-2,043 (10,97)	9,827 (11,31)
Kemerovo Region	11,91* (7,163)	25,54*** (8,334)
Kirov Region	-3,761 (9,42)	4,422 (10,4)
Kostroma Region	-14,74* (7,842)	2,106 (10,09)
Republic of Crimea	-9,874 (7,817)	-10,04 (8,607)
Samara Region	19,35*** (5,976)	18,35** (7,592)
Kurgan Region	-4,022 (9,604)	12,03 (10,13)
Kursk Region	8,496 (8,797)	41,69*** (10,05)
St. Petersburg	-2,584 (4,360)	10,96** (5,507)
Leningrad Region	-5,638 (6,462)	7,908 (8,628)
Lipetsk Region	-7,975 (7,596)	9,881 (9,387)
Magadan Region	-18,73* (9,972)	22,83 (20,09)

Continuation of the table 5

	Weekdays	Weekends
Moscow Region	23,54*** (5,746)	-3,662 (7,110)
Murmansk Region	-13,75* (7,805)	-8,874 (9,893)
Novgorod Region	7,238 (10,32)	-5,037 (12,03)
Novosibirsk Region	-7,5 (6,557)	-15,48* (8,091)
Omsk Region	-13,28* (7,808)	15,38* (8,567)
Orenburg Region	0,4914 (6,887)	0,2799 (9,421)
Orel Region	-8,44 (10,19)	25,13* (12,91)
Penza Region	0,3638 (7,53)	27,93*** (9,123)
Perm Territory	-16,31** (7,476)	-21,37** (8,368)
Pskov Region	4,278 (9,361)	2,536 (11,94)
Rostov Region	-2,034 (5,76)	12,09* (6,938)
Ryazan Region	-4,282 (9,452)	4,648 (9,966)
Saratov Region	6,153 (6,792)	25,75*** (8,584)
Sakhalin Region	7,016 (10,43)	9,133 (14,41)
Sverdlovsk Region	-2,125 (5,887)	6,108 (6,804)
Smolensk Region	9,25 (9,348)	9,472 (10,42)
Sevastopol	-1,798 (9,34)	18,72 (11,54)
Tambov Region	1,532 (10,08)	12,77 (13,03)
Tomsk Region	5,078 (8,575)	11,11 (10,24)
Tula Region	-4,048 (7,713)	-0,5244 (8,607)

Continuation of the table 5

	Weekdays	Weekends
Khanty-Mansi Autonomous Area – Yugra	24,95*** (6,727)	53,67*** (9,450)
Ulyanovsk Region	11,76 (7,618)	8,908 (9,785)
Yamal-Nenets Autonomous Area	-2,447 (10,49)	-10,81 (13,42)
Chelyabinsk Region	-2,314 (5,424)	17,47** (7,126)
Trans-Baikal Territory	-28,78*** (8,239)	0,09538 (11,55)
Chukotka Autonomous Area	-10,88 (8,584)	38,31** (15,87)
Yaroslavl Region	-14,63* (7,707)	-9,516 (9,609)
Republic of Adygeya	-22,06** (10,3)	27,79*** (10,55)
Republic of Bashkortostan	-3,802 (6,421)	14,82** (7,491)
Republic of Buryatia	-7,301 (10,53)	8,413 (11,31)
Republic of Altai	-22,98* (13,33)	-6,075 (15,34)
Republic of Kalmykia	37,81*** (11,88)	83,30*** (14,88)
Republic of Karelia	11,09 (10,15)	46,60*** (12,61)
Komi Republic	-8,027 (10,13)	2,642 (13,87)
Republic of Mari El	-0,946 (9,854)	13,30 (11,31)
Republic of Mordovia	-11,77 (8,870)	22,88** (10,34)
Republic of Tatarstan	6,677 (5,778)	33,17*** (7,051)
Republic of Tuva	15,48 (14,95)	20,90 (13,83)
Udmurtian Republic	-5,391 (7,365)	22,14** (9,634)
Republic of Khakassia	-3,487 (11,36)	10,65 (12,29)

End of the table 5

	Weekdays	Weekends
Chuvash Republic	-7,381 (8,436)	16,67* (9,607)
Republic of Sakha (Yakutia)	10,25 (9,622)	41,78*** (10,71)
Jewish Autonomous Region	3,138 (14,96)	10,59 (20,74)
Nenets Autonomous Area + Tyumen Region	-7,132 (6,797)	12,67 (8,519)
the Northeast Caucasus	33,99*** (6,093)	61,04*** (7,28)
the Northwest Caucasus	17,96*** (5,141)	35,84*** (6,545)
n	17130	17130
R ² _{adj}	0,6259	0,3868
lnL	-1,025e+05	-1,057e+05

Table 6. Modeling gender gaps in the household time distribution in Russian households. OLS regression estimation. With the constituent entities of the Russian Federation in groups. Weekdays and weekends. 2019.

	Weekdays	Weekends
Constant	57,69*** (10,03)	39,6*** (13,82)
Gender gap in time to paid employment	-0,568*** (0,009)	-0,558*** (0,012)
Gender gap in childcare time	-0,496*** (0,011)	-0,335*** (0,015)
Gender gap in time on educational activities	-0,543*** (0,028)	-0,45*** (0,1)
Gender gap in leisure time	-0,458*** (0,009)	-0,452*** (0,008)
Gender gap in sleep and personal hygiene time	-0,517*** (0,009)	-0,447*** (0,011)
Settlement type	-10,56*** (1,844)	-11,67*** (2,199)
Status of a young family (ages 16-25)	0 (0)	-9,148 (7,424)
Status of a large family (3 and more children)	2,559 (4,347)	-7,353 (6,062)
Household size	5,97*** (1,145)	11,3*** (1,484)

Continuation of the table 6

	Weekdays	Weekends
Household consisting of disabled persons	-8,42 (8,706)	-16,88* (9,077)
Household consisting of pensioners	4,925 (3,191)	-1,902 (3,537)
Average household income	-7,873e-05*** (2,811e-05)	-0,247*** (3,835e-05)
Passenger car	-11,84*** (1,851)	-14,98*** (2,134)
Bus, minibus	0,9117 (6,84)	1,214 (9,153)
Truck	3,885 (5,883)	-23,24*** (7,04)
Motorcycle, scooter	9,394 (6,072)	0,753 (7,615)
Moped	-7,292 (7,347)	3,6 (9,516)
Other mode of transport	-4,589 (5,747)	19,13** (7,473)
Food delivery	2,559 (2,079)	-5,514* (2,863)
Clothing Delivery	-2,068 (2,196)	3,424 (3,009)
Delivery of household appliances, etc.	3,106 (1,999)	-6,497** (2,576)
Receiving help with childcare	-6,358** (2,478)	0,8431 (3,532)
Pets	-1,180 (1,554)	-5,556*** (1,889)
Having a disabled child in the household	-3,477 (14,85)	-8,091 (16,98)
A woman's age	-0,2740 (0,733)	1,266 (0,896)
A man's age	2,593*** (0,750)	0,912 (0,941)
A woman's age-squared	0,001 (0,008)	-0,015* (0,009)
A man's age-squared	-0,023*** (0,008)	-0,003 (0,009)
Hours of work per week (F)	-1,396*** (0,075)	0,148** (0,058)
Hours of work per week (M)	0,131 (0,088)	0,047 (0,072)

Continuation of the table 6

	Weekdays	Weekends
Side job (F)	-9,597** (4,462)	-10,81* (6,53)
Side job (M)	2,464 (3,449)	-10,56** (4,927)
State of health (F)	-3,622** (1,645)	-4,134** (1,959)
State of health (M)	-0,938 (1,521)	-2,488 (1,842)
1st disability group (F)	-69,50*** (14,95)	-65,98*** (19,54)
2nd disability group (F)	-3,827 (7,198)	-8,983 (7,029)
3rd disability group (F)	-14,04** (6,041)	-14,17** (6,332)
Disability in the process of registration (F)	-4,758 (18,12)	-6,623 (16,38)
1st disability group (M)	-5,793 (9,302)	29,95*** (10,84)
2nd disability group (M)	3,058 (5,271)	21,68*** (5,622)
3rd disability group (M)	0,796 (4,85)	16,51*** (5,541)
Disability in the process of registration (M)	-15,96 (10,49)	2,963 (13,79)
Education_1 (F)	-15,1* (8,209)	-8,64 (11,43)
Education_2 (F)	-2,005 (1,905)	-1,156 (2,363)
Education_3 (F)	-4,869 (3,081)	-3,443 (4,316)
Education_4 (F)	-5,188 (5,793)	-14,07** (6,739)
Education_6 (F)	-1,722 (3,233)	6,346 (4,001)
Education_7 (F)	2,530 (2,882)	2,337 (3,269)
Education_8 (F)	5,494 (5,317)	13,03** (5,656)
Education_9 (F)	43,37* (23,24)	-16,24 (21,44)
Education_1 (M)	10,59 (8,362)	12,04 (9,605)

End of the table 6

	Weekdays	Weekends
Education_2 (M)	5,923*** (1,996)	-3,179 (2,481)
Education_3 (M)	2,645 (3,601)	5,481 (5,336)
Education_4 (M)	5,999 (6,022)	14,32* (7,835)
Education_6 (M)	-1,390 (2,477)	-3,413 (2,995)
Education_7 (M)	4,042 (2,682)	7,806** (3,105)
Education_8 (M)	-0,294 (4,914)	1,503 (5,398)
Education_9 (M)	-47,15** (23,37)	-12,69 (19,97)
Region_group_1	3,951 (2,616)	15,65*** (2,827)
Region_group_2	1,187 (2,22)	9,47*** (2,487)
Region_group_3	-0,03 (2,276)	8,963*** (2,496)
Region_group_1* Gender gap in time to paid employment	0,02** (0,008)	0,034** (0,016)
Region_group_2* Gender gap in time to paid employment	0,026*** (0,007)	0,023 (0,014)
Region_group_3* Gender gap in time to paid employment	0,023*** (0,008)	0,037*** (0,014)
n	17130	17130
R ² _{adj}	0,6211	0,3763
lnL	-1,026e+05	-1,059e+05

Table 7. Modeling gender gaps in the household time distribution in Russian households. OLS regression estimation. With cross-sectional variables. Weekend. 2019.

	Weekends
Constant	221,6*** (28,79)
Gender gap in time to paid employment	-0,631*** (0,032)
Gender gap in childcare time	-0,334*** (0,015)
Gender gap in time on educational activities	-0,444*** (0,096)

Continuation of the table 7

	Weekends
Gender gap in leisure time	-0,453*** (0,008)
Gender gap in sleep and personal hygiene time	-0,448*** (0,012)
Settlement type	-11,53*** (2,208)
Status of a young family (ages 16-25)	-10,87 (7,411)
Status of a large family (3 and more children)	-7,942 (6,095)
Household size	10,99*** (1,489)
Household consisting of disabled persons	-15,9* (9,042)
Household consisting of pensioners	-2,59 (3,542)
Average household income	-0,21*** (4,046e-05)
Passenger car	-15,18*** (2,136)
Bus, minibus	0,688 (9,183)
Truck	-23,15*** (7,017)
Motorcycle, scooter	0,147 (7,638)
Moped	5,664 (9,455)
Other mode of transport	18,56** (7,452)
Food delivery	-5,451* (2,871)
Clothing Delivery	4,056 (3,017)
Delivery of household appliances, etc.	-6,07** (2,588)
Receiving help with childcare	0,547 (3,566)
Pets	-5,438*** (1,89)

Continuation of the table 7

	Weekends
Having a disabled child in the household	-7,088 (16,7)
A woman's age	1,216 (0,895)
A man's age	0,94 (0,94)
A woman's age-squared	-0,015 (0,009)
A man's age-squared	-0,003 (0,009)
Hours of work per week (F)	0,131** (0,058)
Hours of work per week (M)	0,046 (0,072)
Side job (F)	-12,36* (6,522)
Side job (M)	-9,824** (4,98)
State of health (F)	-3,694* (1,962)
State of health (M)	-2,329 (1,846)
Education_1 (F)	-8,801 (11,46)
Education_2 (F)	-1,331 (2,366)
Education_3 (F)	-3,648 (4,309)
Education_4 (F)	-13,1* (6,743)
Education_6 (F)	6,018 (4,018)
Education_7 (F)	2,129 (3,264)
Education_8 (F)	12,92** (5,672)
Education_9 (F)	-18,65 (21,46)
Education_1 (M)	12,43 (9,504)

Continuation of the table 7

	Weekends
Education_2 (M)	-2,932 (2,489)
Education_3 (M)	6,316 (5,347)
Education_4 (M)	13,57* (7,817)
Education_6 (M)	-3,469 (2,998)
Education_7 (M)	7,646** (3,104)
Education_8 (M)	1,9 (5,429)
Education_9 (M)	-10,88 (19,98)
1st disability group (F)	-67,96*** (19,54)
2nd disability group (F)	-10,6 (7,026)
3rd disability group (F)	-14,73** (6,308)
Disability in the process of registration (F)	-3,631 (16,29)
1st disability group (M)	28,49*** (10,89)
2nd disability group (M)	21,40*** (5,629)
3rd disability group (M)	16,57*** (5,544)
Disability in the process of registration (M)	4,742 (13,91)
Average age of women having their first child by constituent entity	-6,67*** (0,964)
Altai Territory* Gender gap in time to paid employment	0,123*** (0,042)
Krasnodar Territory* Gender gap in time to paid employment	0,071* (0,04)
Krasnoyarsk Territory* Gender gap in time to paid employment	0,083 (0,061)
Primorye Territory* Gender gap in time to paid employment	0,115*** (0,038)

Continuation of the table 7

	Weekends
Khabarovsk Territory* Gender gap in time to paid employment	0,057 (0,047)
Amur Region* Gender gap in time to paid employment	0,06 (0,057)
Arkhangelsk region (without autonomous area) * Gender gap in time to paid employment	0,118** (0,055)
Astrakhan Region* Gender gap in time to paid employment	0,03 (0,039)
Belgorod Region* Gender gap in time to paid employment	0,047 (0,065)
Bryansk Region* Gender gap in time to paid employment	0,142 (0,103)
Vladimir Region* Gender gap in time to paid employment	0,1** (0,043)
Volgograd Region* Gender gap in time to paid employment	0,096* (0,05)
Vologda Region* Gender gap in time to paid employment	0,175*** (0,052)
Voronezh Region* Gender gap in time to paid employment	0,145** (0,067)
Nizhny Novgorod Region* Gender gap in time to paid employment	0,042 (0,054)
Ivanovo Region* Gender gap in time to paid employment	0,062 (0,067)
Irkutsk Region* Gender gap in time to paid employment	0,145** (0,061)
Kaliningrad Region* Gender gap in time to paid employment	0,181*** (0,053)
Tver Region* Gender gap in time to paid employment	0,181*** (0,06)
Kaluga Region* Gender gap in time to paid employment	0,113* (0,058)
Kamchatka Territory* Gender gap in time to paid employment	0,24*** (0,058)
Kemerovo Region* Gender gap in time to paid employment	0,055 (0,046)
Kirov Region* Gender gap in time to paid employment	0,041 (0,054)
Kostroma Region* Gender gap in time to paid employment	0,114* (0,064)

Continuation of the table 7

	Weekends
Republic of Crimea* Gender gap in time to paid employment	0,074 (0,056)
Samara Region* Gender gap in time to paid employment	0,083 (0,055)
Kurgan Region* Gender gap in time to paid employment	0,166*** (0,053)
Kursk Region* Gender gap in time to paid employment	0,047 (0,059)
St. Petersburg* Gender gap in time to paid employment	-0,02 (0,037)
Leningrad Region* Gender gap in time to paid employment	0,056 (0,046)
Lipetsk Region* Gender gap in time to paid employment	0,084 (0,066)
Magadan Region* Gender gap in time to paid employment	-0,044 (0,067)
Moscow Region* Gender gap in time to paid employment	0,017 (0,044)
Murmansk Region* Gender gap in time to paid employment	0,039 (0,056)
Novgorod Region* Gender gap in time to paid employment	0,14** (0,064)
Novosibirsk Region* Gender gap in time to paid employment	0,152*** (0,042)
Omsk Region* Gender gap in time to paid employment	0,13*** (0,048)
Orenburg Region* Gender gap in time to paid employment	0,123*** (0,044)
Orel Region* Gender gap in time to paid employment	0,22*** (0,059)
Penza Region* Gender gap in time to paid employment	0,04 (0,057)
Perm Territory* Gender gap in time to paid employment	0,136*** (0,052)
Pskov Region* Gender gap in time to paid employment	0,121** (0,055)
Rostov Region* Gender gap in time to paid employment	0,055 (0,046)
Ryazan Region* Gender gap in time to paid employment	0,136*** (0,046)

Continuation of the table 7

	Weekends
Saratov Region* Gender gap in time to paid employment	-0,055 (0,104)
Sakhalin Region* Gender gap in time to paid employment	0,18*** (0,049)
Sverdlovsk Region* Gender gap in time to paid employment	0,053 (0,041)
Smolensk Region* Gender gap in time to paid employment	-0,051 (0,047)
Sevastopol* Gender gap in time to paid employment	0,108* (0,062)
Tambov Region* Gender gap in time to paid employment	0,158*** (0,055)
Tomsk Region* Gender gap in time to paid employment	0,196*** (0,066)
Tula Region* Gender gap in time to paid employment	0,146*** (0,054)
Khanty-Mansi Autonomous Area – Yugra* Gender gap in time to paid employment	0,143** (0,064)
Ulyanovsk Region* Gender gap in time to paid employment	0,009 (0,058)
Yamal-Nenets Autonomous Area* Gender gap in time to paid employment	0,099 (0,064)
Chelyabinsk Region* Gender gap in time to paid employment	0,059 (0,041)
Trans-Baikal Territory* Gender gap in time to paid employment	0,276*** (0,061)
Chukotka Autonomous Area* Gender gap in time to paid employment	0,239*** (0,041)
Yaroslavl Region* Gender gap in time to paid employment	0,102* (0,062)
Republic of Adygeya* Gender gap in time to paid employment	0,131** (0,056)
Republic of Bashkortostan* Gender gap in time to paid employment	0,082* (0,048)
Republic of Buryatia* Gender gap in time to paid employment	0,034 (0,134)
Republic of Altai* Gender gap in time to paid employment	-0,07 (0,114)
Republic of Kalmykia* Gender gap in time to paid employment	-0,013 (0,123)

End of the table 7

	Weekends
Republic of Karelia* Gender gap in time to paid employment	0,064 (0,046)
Komi Republic* Gender gap in time to paid employment	0,12** (0,054)
Republic of Mari El* Gender gap in time to paid employment	0,113** (0,045)
Republic of Mordovia* Gender gap in time to paid employment	0,168*** (0,042)
Republic of Tatarstan* Gender gap in time to paid employment	0,148** (0,065)
Republic of Tuva* Gender gap in time to paid employment	0,14*** (0,048)
Udmurtian Republic* Gender gap in time to paid employment	0,201*** (0,06)
Republic of Khakassia* Gender gap in time to paid employment	0,171** (0,069)
Chuvash Republic* Gender gap in time to paid employment	-0,047 (0,079)
Republic of Sakha (Yakutia) * Gender gap in time to paid employment	0,057 (0,053)
Jewish Autonomous Region* Gender gap in time to paid employment	0,077 (0,066)
Nenets Autonomous Area + Tyumen Region* Gender gap in time to paid employment	0,125*** (0,046)
the Northeast Caucasus* Gender gap in time to paid employment	0,093** (0,041)
n	17130
R ² _{adj}	0,376
lnL	-1,058e+05

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