

# FAMILY STRATEGIES AND LABOR MARKET BEHAVIOUR IN MODERN RUSSIA<sup>1</sup>

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## Abstract

There is a variety of theoretical labor supply models which assume that members of household could affect individual's labor decisions. This paper tests the hypothesis that different labor supply models describe the behavior of family members from different family types. Authors aim to reveal typical models of Russian people's behavior in the sphere of employment for different types of households differing by family decision-making models

Using two-step cluster procedure we have defined four types of families according to the principles of decision-making in the partnership. We have found individualistic decision-making is the most widespread among employment decisions. Using a unique data set on Russian families, in the analysis of labor supply we apply logit model to reveal the determinants that could influence the labor supply decision of household members. The special attention is devoted to the issue of cross impact between partners. The paper presents the analysis for males and females from different family types separately. Results provide some evidence in favor of tested hypothesis. We found out that the propensity to have a job versus to have no job as well as the determinants of labor market status labor market status vary a lot across males and females from different family types. The estimates differ for different subsamples especially with respect to partner's income and household composition.

*JEL classification:* J22; C25; D10; P3

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# 1. Introduction

There is no doubt that labor supply decisions are among the most important household decisions. It is widely accepted nowadays in economics that it is rather a family than an individual who is a decision making unit when discussing household-related issues. Families, in turn, differ with respect to the basic principles of within family decision making. Economic science offers a substantial number of theoretical models describing labor supply of family members. These models could be roughly divided into three broadly defined classes: (a) chauvinistic models; (b) family utility and family budget constraint models; (c) individual utility and family budget constraint models. Sociologists, in turn, propose that families differ with respect to the basic principles of within family decision making. The difference in decision making procedures results in distinct behavior of household members on the labor market. In particular, one could expect a wife from a more “traditional” patriarchal family to be less involved on the labor market, both in terms of labor force participation and working hours, as compared to a wife from a less traditional family, other things being equal. Surprisingly, researchers put a little attention to micro-level studying of labor supply behavior in different types of households. The lack of relevant data to identify the differences in decision making across families possibly prevents from utilization the approach in estimation procedures. The majority of the studies has no data to fully control for the differences<sup>2</sup> and hence is left with adding up the family differences to the error term. When more direct information on family decision making is available it makes another approach feasible. Based on the Russian unique dataset, we suggest classifying families according to the decision-making type into three broad categories – “chauvinistic”, democratic and individualistic, and then to study whether there is systematic variation in labor supply decisions across males and females from different family types.

Thus, the purpose of the given research is to reveal typical models of Russian people’s behavior in the sphere of employment for different types of households differing by family decision-making models. Authors believe that the three abovementioned theoretical labor supply models are not that much competing. In our work we attempt to test the hypothesis that different labor supply models describe the behavior of family members from different family types. In other words, we assume that family characteristics could affect labor supply of family members differently for different family types determined by sociologists on the base of differences in decision making procedures.

We expect that the estimates will differ for different sub-samples especially with respect to partner’s labor income. We anticipate that the wage of the partner will matter for people from “democratic”-type families and for partners of family heads in “chauvinists”-type families. To the contrary, we expect

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<sup>2</sup> Panel data allow overcoming the problem to a certain degree. Even in this case it is beneficial to have information on family type to disentangle the fixed effect component.

that partners' income does not play a significant role for people from "individualistic"-type families and for family heads in "chauvinistic" families. Labor supply elasticities are also expected to be significantly different across family groups; propensity to choose part-time versus full-time working regime across family non-heads, as well as propensity for moonlighting across family heads are expected to vary as well. The demand for more stable state jobs as compared to more volatile private sector jobs is likely to vary with the family type.

The remainder of the paper is organized as follows. Section 2 reviews some of related literature. Section 3 describes our data set. Section 4 discusses the determination of decision-making models in households and presents briefs description of obtained clusters. Section 5 introduces methodology and research questions for estimation of labor supply for different household types. Results of estimation are presented in section 6. Section 7 concludes.

## 2. Review of related literature

In sociology the notion of family (household) strategies explains the individual behavior of a member of the household depending on behavioral *orientations* of other household members. Tilly (1979) defines family strategies as a set of "implicit rules that govern the behavior" of family members, families, and households (cit. by Moen and Wethington, 1992). It does not mean that members of the household would necessarily have the same goals. Usually, and also in this project, family strategies are analyzed in the context of the household<sup>3</sup>. Family power pattern influences family strategies. An overwhelming majority of authors study family power relations within married couples. The following three types of power structures are revealed as a result: man-dominated (male-"chauvinistic"), egalitarian and woman-dominated. As a concept of family power is a multifaceted one then it can be measured indirectly through the outcomes of decision-making, conflict management or prevailing division of homework in the household (Safilios-Rotschild, 1970).

Economic approach to labor supply decisions is based on the rational choice models describing individual behavior through individual choices of the best alternatives from the set of available alternatives or opportunities (Pollak & Watkins, 1993). There are two strands of related literature in the area of labor economics. First is presented by allocation of time or household production models pioneered by Becker (1965) and Gronau (1977). The papers stress that time allowed for production of goods and services within household are important components of overall allocation of time, or put it differently, household production is an important component household's life. Allocation of time between work on the labor market, household production (including childbearing and childcaring) and

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<sup>3</sup> Although household is the basic unit of people living together while a family refers to a set of normative kin relations, in this project we will use both terms as synonyms unless the other is mentioned.

leisure is influenced by wage rates on the labor market, non-labor income, household production technology and preferences.

The second important literature strand is related to family models which stress that decision making unit is family rather than an individual (see Killingsworth and Heckman (1986) for a review). Family models could be in turn divided into three broadly defined classes: (a) chauvinistic models; (b) family utility and family budget constraint models; (c) individual utility and family budget constraint models. The predictions of the three types of family models with respect to the influence of labor incomes and employment decisions of other family members on individual labor supply (including labor force participation decision) are quite different thus allowing for testing for the type of decision making process. In particular, the “chauvinistic” family model assumes that the head of the family decides upon his/her labor supply irrespectively of the partner’s choice, while the partner takes into account the head’s decision. As a result, the head’s labor supply decision is determined by his/her own real wage, non-labor income and his/her preferences over leisure and consumption, while the partner’s decision depends, additionally to the aforementioned, on real wage and hours of work of the head. The head’s labor supply choice is a source of additional income for the partner. The “democratic” family model is formulated as family utility maximization problem under family budget constraint. As a result, labor supply decision of a family member depends not only on own real wage and non-labor income but on real wages of all family members. The signs of cross-effects depend on the strength of income and substitution effects, and are ambiguous. Additionally, if intra-family cross-substitution effects are zero, then cross-wage effects become income effects. The “individualistic” family model encompasses the class of individual utility but family budget constraint. The models assume strategic behavior of the partners, and imply that their labor supply decisions depend on own real wage and non-labor income and on real wages of the partners, with the latter dependence being of income-type, direct and indirect.

### **3. Data**

Our project will be based on the unique data obtained as a result of the “Generations and Gender” Survey carried out in Summer 2004 by the IISP and the independent research group “Demoscope” (well-known by their activity in conducting the panel RLMS in Russia) on demand of the IISP with the financial support of the Pension Foundation of the Russian Federation and the Max-Planck Institute for Demographic Research (Germany) basing on the all-Russia representative sampling. The data was collected by means of face-to-face interviewing. To form the sampling the method of multi-stage probability selection of dwelling-units was used; then a relevant household was chosen in the dwelling-unit, and finally a respondent was randomly selected from the household. The sampling design allows to analyze the data either according to households or to the respondents living

in those households. The **household** consists of all the people living in the same premises no less than 4 days a week 3 months a year<sup>4</sup>.

The central idea of the GGS is the notion of partnership. **Partner** is defined as a person with whom a respondent has stable, close, intimate relations, regardless of whether they live together in the same household or not. The marital status of a respondent is therefore of secondary importance. It should be noted, that the amount of information about R's partner<sup>5</sup> is about the same as about R him/herself, which enlarges the number of observations<sup>6</sup>.

The sampling size is 11 261 respondents aged from 18 to 79 years, among those 6563 have a partner in the household, representing 11 261 Russian households from 32 regions. It is worth noting that, on the whole, the sample population of those covered by the GGS program can be evaluated as quite representative.

After the respondents and their partners, who did not meet the criteria of the subject of inquiry of the given research, were excluded (males aged 60 and over, females aged 55 and over, students, pensioners, ill or disabled for a long time or permanently, and those in fixed-term military or alternative civilian services), the final sample size is 6405 respondents of 18-54/59 years old, including 4192 with partners in the household. There are 2603 male respondents, 3802 female respondents, 2395 male partners and 1797 female partners. The main sample characteristics are presented in the Table 1.

#### **4. Models of decision-making: methodology and measures**

The analysis of decision-making was based on the following question: "... *Who makes decisions about the following issues in your household?... 1. Makes decisions about everyday household consumption/purchases? 2. Makes decisions about more expensive purchases for the household? 3. Decides how much time you should spend for paid work? 4. Decides how much time your partner/spouse should spend for paid work? 5. Decides how to bring up children 6. How to organize leisure, meet with people?*

Each question was structure so as to give the respondents a choice between "*always R - 1, usually R - 2, R and P about equally - 3, usually P - 4, always P - 5, always or usually other persons in the household - 6, always or usually someone not living in the household - 7*". Sometimes the situation

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<sup>4</sup> It is important that this definition of household does not include the criterion of the common budget, traditionally used in Russian surveys.

<sup>5</sup> Partner is defined as a person with whom a respondent has stable, close, intimate relations, regardless of whether they live together in the same household or not.

<sup>6</sup> Nevertheless, it goes without saying that when interpreting the results, probable systemic errors need to be taken into account, that are inevitable for such a mode of data collection and have to do with difficulties of recalling information (when speaking about past events) and insufficiency of information that R has (when speaking about other people).

described in the question was “not applicable” to a respondent (code 99). It was assumed though that this answer would be chosen only for the question about children rearing. For the purposes of this project we united answers “*always or usually other persons in the household*”, “*always or usually someone not living in the household*”, and “*not applicable*” (except of the fifth option, where N/A was coded as missing) into one group – “*always or usually someone other*”. Answers “*don’t know*” and “*no answer*” were coded as missing. Besides, for a purpose of the gender analysis a score of 5 was given to the answer “*always woman*”; a score of 4 to the answer “*usually woman*”; a score of 3 to the answer “*woman and man equally*”; a score of 2 to the answer “*usually man*”; a score of 1 to the answer “*always man*”; and a score of 0 to the answer “*someone else*”.

We classified the models of decision-making regarding the time should be spending by each of the partners on paid work using the following procedure. One can suggest that if a respondent decides always or usually about the time s/he (respondent) spends in paid work and her/his partner/spouse decides always or usually about the same for him/herself (i.e. about partner’s work) or in other words both of them make these decisions autonomously then a strategic<sup>7</sup> model of decision-making dominates in the household. If a respondent her/himself decides always or usually about the time both s/he and her/his partner spend in paid work or vice versa both decisions are made by her/his partner, then a chauvinistic decision-making model exists. Finally, when both or at least one of the two decisions are made by a respondent and her/his partner about equally a democratic (egalitarian) model is present at the household. We are not to use respondents’ answers on the questions about household budget management since in Russia these decisions are traditionally “feminine” and from our point of view do not reflect the type of decision making in the household. We also leave aside the process of decision-making on child-rearing as in the most cases partners prefer to decide on this jointly. Gender patterns of decision-making in certain areas are presented in Table 2.

We assumed that it might be difficult to decide unambiguously what type of decision-making prevails in partnership. Therefore, for revealing the dominating models of decision-making we have realized cluster analysis approach. We used two-step cluster analysis procedure in the SPSS, which determines the similarity using log-likelihood measure allowing for handling of categorical and continuous variables together. By assuming variables to be independent, a joint multinomial-normal distribution can be placed on categorical and continuous variables. Moreover, the procedure is fairly robust to violations of both the assumption of independence and the distributional assumptions. Another advantage of this procedure is that it allows analyzing large data files. We did not include any

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<sup>7</sup> In the strict sense, if we follow sociological approach to a family then we should reject strategic models because any individual decision is embedded in social environment or in other words it is an outcome of previous family interactions (that we cannot measure here). But as individual may report about their decisions as independent, i.e. made mostly by them themselves, then we will talk about *relatively* or *conditionally* autonomous decision-making.

social and demographic characteristics of respondents and partners into the cluster analysis because they “pull over” any other substantial variables.

We tried different set of variables for clustering. First, we applied cluster procedure for two sets differently – (a) the first covered decisions about everyday purchases, more expensive purchases and leisure activities, and (b) the second covered two questions about time to be spent on paid employment by respondents and partners. Second, we tried to incorporate values and attitudes measures into cluster procedure. Third, we narrowed the set of variables keeping only those two describing decisions about employment<sup>8</sup>. Finally, we have obtained the five clusters (Figure 1). The largest is the fourth cluster where it appeared to be 42.0% of the respondents, included in the analysis.

Table 3 indicates that the first, the fourth and the fifth clusters represent respectively egalitarian (democratic), individualistic (strategic) and oriented at the external factors models. The second and the third clusters appeared to be fuzzy again

If examine the distribution of the responses to the questions regarding decisions taken in respect of “employment” decisions by clusters (Table 4), we may assume that the second and the third clusters incline to “quasi-chauvinistic” models. Further analysis indicated that in the second cluster the share of employed partners is the lowest (Table 5), while in the third – employed respondents (Table 6). Herewith in the second cluster the relative share of men-respondents is higher, and in the third, on the contrary overwhelming majority is represented by women-respondents. It allows itemizing: the second cluster is quasi-chauvinistic model with employed man-respondent; the third cluster is quasi-chauvinistic model with employed woman-respondent (employed partner). All other social-demographic characteristics of the respondents, their partners and households from these two clusters are very similar, therefore we combine them into one “chauvinistic model” cluster.

Thus, as a result we have obtained four clusters with following decision-making models: **A** – individualistic, **B** – chauvinistic, **C** – democratic, and **D** – guided by external factors.

What are the differences between individuals and partnerships, following different decision-making models regarding the partners’ employment? The following groups of explanatory variables were examined, characterizing: (1) partnership life-cycle stage – the size and composition of the household, partnership duration, number of children of different ages; (2) partners’ assets– education and presence of wage-earning employment; (3) socio-cultural norms: partner’s value orientations regarding gender roles, inter-generational interrelations, etc., and also their collateral variables – type of the settlement and education.

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<sup>8</sup> In the final version of cluster analysis the initial variables were used in re-encoded form: couples of responses “always” and “usually” (respondent, partner) and a triad “another household member”, “someone not living in a household” and “not applicable” were combined. Thus each of two variables had 4 grades: “always or usually the respondent”, “both partners together”, “external factors”.

Analysis of the cross-tables distributions indicated that all four specified clusters are represented almost equally in households formed in types by the presence of the partner, children and other relatives. Whereby the largest households and those with a great number of the respondent's children, are households with the chauvinistic decision-making model; they are the youngest as well, which is not surprising, while the share of households with children but without any other relatives is the highest among them (Table 7). Thus, we may assume that the chauvinistic decision-making model more often corresponds to the early stages of partnerships' life-cycle – partnership's duration in couples with this model is the lowest, and the number of children under 3 years old – the highest.

Differences between clusters by education of the respondents are statistically significant, but rather weak. In the partnerships where the decisions regarding employment are taken by not the partners, the both partners' educational levels are ones of the lowest that most probably may be the ground of misunderstanding the question. The highest educational levels among men and women are in partnerships with individualistic decision-making model regarding employment, at that more often women here appeared to be more educated than their partner. The partnerships with individualistic decision-making have the highest levels of men and women employment: in 84.3% partnerships of this type both partners are employed (Table 8). In the partnerships with the chauvinist model the gap between the partners' educational levels is the lowest because of lower, comparing to other groups, education level of females belonging to this cluster, and the gap in the employment is the highest. In half (54.6%) of these households the man is employed and the woman is unemployed, in other 8.7% the women is employed and the man has no wage-earning employment. Thus, women in chauvinistic families have much less resources comparing to those from other types of families.

Examination of the differences between partnerships with different decision-making models by respondent's value orientations and attitudes indicated more contradictory picture (Table 9). What we may affirm unambiguously is that the respondents in partnerships with democratic decision-making model and model oriented at the external factors, are remarkable by more traditionalism and conformism, that is indicated by their outstanding religiousness, respect for governmental authorities and faith in social institutes<sup>9</sup>, weak tolerance for the minorities, referring for intergenerational mutual support (at first from elders to juniors), etc. It is not surprising that democratic and oriented to the external factors decision-making to the great extent are spread in rural area. To the contrary, nonconformist referring with their expressed individual autonomy, weak civil morality, value of self-

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<sup>9</sup> Two latter are especially noticeable among the respondents, considering that it is not them who take decisions regarding employment, which supports our hypothesis that a large number of 'not applicable' answers is a result of soviet heritage, when the state was responsible for everything including working time, and employment was obligatory.

expression, unbelief in social institutes, as it was expected, are to the great extent typical for individualistic decision-making model.

## 4. Estimation of labor supply: methodology and research questions

First, we expect that the estimates will differ for different sub-samples especially with respect to partner's labor income. We anticipate that the wage of the partner will matter for people from "democratic"-type families and for partners of family heads in "chauvinists"-type families. To the contrary, we expect that partners' income does not play a significant role for people from "individualistic"-type families and for family heads in "chauvinistic" families. Second, labor supply elasticities are expected to be significantly different across family groups; propensity to choose part-time versus full-time working regime across family non-heads, as well as propensity for moonlighting across family heads are expected to vary as well. The demand for more stable state jobs as compared to more volatile private sector jobs are likely to vary with the family type and perhaps with the number and age of children.

To answer the first group of questions, we attempt to estimate labor supply for each of the family types. One would need to mention endogeneity problem here since the family type is to a certain degree a result of a decision whether to form a family with this partner or not, how to resolve disputes when married, etc. In this sense it is likely that the family type is jointly determined with labor market behavior of individuals, with both depending mostly on the prevailing social norms and preferences of individuals in the domain of "family values"<sup>10</sup>. Moreover, type of household decision making (family type) could be mobile and change over time. Hence, if treated as exogenous and stable, the results of our estimation are likely to be subject to selection bias since the samples used for estimation are formed on an endogenous ground of a family type. There is no easy way to overcome the problem, however, since one would need to model the family formation decision explicitly which is non-feasible with the data we have.

Two other remarks are worth to be made as well. First, the notion of labor supply includes several dimensions: the size and demographic composition of the population, labor force participation rate, the number of hours worked per week or per year, and the quality of labor. Our study will focus on factors that affect the decisions of family members on whether to work for pay and, if so, for how long. Second, given the focus of the paper it would be necessary to estimate labors supply in a broader framework so that to take into account home production. We do not have information on *time* spent on

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<sup>10</sup> It is of course possible to generalize the picture so that to incorporate the preferences in the domain of 'family values' into the preferences across Becker-type composite goods.

various domestic activities, however. As a result we will consider labor market participation (in different forms) as opposed to leisure when estimating labor supply, and will provide some analysis of home production to the extent it is feasible given the data.

Labor supply decision consists of two parts: the decision on whether to participate in the labor force or not, and how many hours to supply, if participate in the labor force. In the study we try to reveal the variables that influence individual decision to work or not (to work or to be unemployed or to be out of labor force, to work full-time or part-time, to work in state firm or in firm of other type<sup>11</sup>). The rationale for this is that the variation in the hours of work of those working (in addition to full-time versus part-time) is likely to be small<sup>12</sup>. The study focuses on testing whether there is systematic difference between the family types with respect to the individual choices.

Labor force participation decision depends on reservation wage<sup>13</sup> and on market wage. In addition to the family composition variables (number of children, age structure of children, number of adults, etc.), age, education degree, reservation wage could include other family members' wages, hours of work and non-labor incomes in accord with the aforementioned predictions of family models. To minimize the potential adverse effect of multicollinearity on the quality of estimates, we use an indirect approach to estimate the influence of potential wage on labor supply decisions. We include the factors which determine potential wage (education, experience and experience squared, regional labor market characteristics) in the labor supply equation<sup>14</sup>. To implement the analysis we estimate the relevant probabilities by using either binary logit models or multinomial logit regressions on the sample of working age population (with the abovementioned division into subsamples based on gender and family type). In particular, we estimate the following equations (separate for genders and family types).

Logit-model:

### Equation 1

$$P(y = 1) = \Lambda(\beta_0 + \beta_1 * age + \beta_2 * age2 + \beta_3 * ed1 + \beta_4 * ed2 + \beta_5 * ed3 + \beta_6 * ch\_03 + \beta_7 * ch\_46 + \beta_8 * ch\_716 + \beta_9 * num\_ad + \beta_8 * social\_par + \beta_8 * linc\_par + \beta_9 * rural + \beta_{10} * unemp\_lev)$$

age – age of agent; age2 – age of agent (squared); Education: ed1- primary professional; ed2 – secondary professional; ed3 – higher professional; Family structure: ch\_03 – number of children aged 0-3; ch\_46 – number of children aged 4-6; ch\_716 – number of children aged -716; num\_ad – number

<sup>11</sup> We suppose that those who work for state firms seek for more job stability and social security.

<sup>12</sup> The estimation of determinants of hours of work could be considered at later stages.

<sup>13</sup> The reservation wage reflects tastes for work and it is believed to depend on the characteristics of individual and her family.

<sup>14</sup> The drawback of this approach as compared to the one when potential wage is estimated by a separate equation is that now we are not able to disentangle the influence, of say, education, on potential wage and on reservation wage. The advantage of the approach is the abovementioned better estimates.

of adults in the household; social\_par– level of social security at partner’s job; linc\_par – log of average monthly income of partner; rural – dummy for living in rural area; unemp\_lev- regional unemployment level

$$y = \begin{cases} 1 & \text{– employed} \\ 0 & \text{– not _employed} \end{cases} \quad \text{or} \quad y = \begin{cases} 0 & \text{– employed} \\ 1 & \text{– unemployed} \\ 2 & \text{– out of labor force} \end{cases} \quad \text{or} \quad y = \begin{cases} 0 & \text{– employed full time} \\ 1 & \text{– employed part time} \end{cases}$$

or

$$y = \begin{cases} 1 & \text{– employed at public firm} \\ 0 & \text{– employed at firm of other type} \end{cases}$$

We expect that the estimates will differ for different sub-samples especially with respect to partner’s labor income. We anticipate that the wage of the partner will matter for people from “democratic”-type families and for partners of family heads in “chauvinists”-type families. To the contrary, we expect that partners’ income does not play a significant role for people from “individualistic”-type families and for family heads in “chauvinistic” families.

Overall, the proposed approach allows identifying important differences with respect to labor market behavior: labor supply elasticities are expected to be significantly different across family groups; propensity to choose part-time versus full-time working regime across family non-heads, as well as propensity for moonlighting across family heads are expected to vary as well. The demand for more stable state jobs as compared to more volatile private sector jobs are likely to vary with the family type and perhaps with the number and age of children.

As it was described before we restrict the sample to households where both respondent and partner are older than 15 and younger than 55 and 60 for females and males respectively. Students, disabled and pensioners were excluded as well. It is important that in order to use as much information as possible, we consider not only respondents but their partners as well. Using such a procedure we have constructed sample of 10611 individuals. The analysis was done for each type of partnership and for singles. The study was conducted for males and females separately thus taking into account the essential differences in the behavior of the two groups on the labor market. The list of variables used is presented in Table 10.

The composition of sample with respect to household types is presented in Table 11. It turns out that partner is present in 79% of families. In families with no partner<sup>15</sup> single women prevail: among singles there are 64% women and 36% men. Table 11 demonstrates that strategic (individualistic) type of family is the majority type for partnerships: 42.4% of partnerships are

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<sup>15</sup> We consider respondent single if she or he has no partner or partner do not live in the same household with respondent. The rationale for this is that using the survey data it is rather hard to estimate to what degree partner who lives in other household influences the decisions of respondents

considered in the research as strategic. The rating of the rest of types among partnerships is as follows: chauvinistic (28.4%), democratic (15.0% of partnerships) and external (14.2%).

Table 12 reports summary statistics for the four types of partnerships and singles, males and females separately. The mean age of male in partnership is 38-39 years, 36-38 – for females. Single males are relatively younger on average than males in partnerships – 33.4, although single females are relatively older – 38.1. As far as the highest educational degree is concerned, 18-22% of individuals from different type partnerships completed secondary general school. 29-31% of males who live with partners got junior professional degree and only 20-25% of females who live with partner have this degree. However, “wives” are more likely to have secondary professional degree (34-39%) than “husbands” (25-31%). 18-28% of individuals in partnerships have got university degree. Males and females in different type households are to have similar chances to have completed higher education. As for singles, it can be seen from the table that single males tend to be less educated than single females. 60% of single women have secondary or higher professional degree in comparison with 38% of males. Marital status is known to affect labor market decisions of males and females. In particular, having children implies strong motivation for searching for high paid job or for multiple job holding. At the same time, having little children might prevent a female from searching for a job or could be “negative” factor for employer. The table shows that every third chauvinistic family have children below three years old, however, only every twentieth strategic, democratic or guided by external factors family have small children. Every second family has children below sixteen and every fifteenth – children aged from four to seven. There is much less children in families without partner. For example, single males have almost no children who live in the same household. However, every third single woman is single mother of the schooling age child.

As can be seen from the table, households in Russia are of mixed type. The average number of adults (older 15, excl. respondent and partner) is about 0.3-0.4. The latter reflects the fact that several generations continue to live as one household. There are several channels of influence of household's composition on labor market behavior of its members: on the one hand, more adults in household seem to imply higher non-labor income, hence increasing reservation wage; on the other hand, grandmother tend to take look after children thus diminishing the reservation wage. To control for the possibility of grandmother helps to look after children we use the variable that reflects the presence of female in the household who is older than 50<sup>16</sup>. It turned out there are 12% of partnerships live in households with potential grandmothers. However, for singles this figure is nearly two times higher. 24.5% of singles live in the same household with the females of retirement age.

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<sup>16</sup> The partnership can receive help from outside the household (for example, from parents who live in other household). This issue will be addressed at further steps of our research.

Table 12 reports summary statistics on partners' average monthly income. We construct this variable as logarithm of average monthly income of partner as average monthly income of individual's partner corrected with regional subsistence level. It turns out that there is no big difference between different types of families. The exception is strategic families, where both males and female earn more in comparison with those from families of other type.

One of the main issues of the research is to study individual labor supply decisions although estimating them for different family (partnership) type. We study those who have a job versus those who do not, those who are unemployed or out of labor force versus those who are employed, those who work part-time versus those work full time. Additionally we try to test if there a systematic difference between the family types with respect to the choice of state versus private jobs. To construct this set of dummy variables, we used the information on labor market history of both respondent and his or her partner. In the questionnaire current employment covers: (1) those respondents described their main activity at present as (a) paid employment or self-employment without getting pension, (b) being a helping family member in a family business or a farm without getting pension (c) being on maternity leave, parental leave or childcare leave. All those respondents are asked about their current employment or a business. (2) Other respondents (defined themselves as unemployed, or looking after the home or family without getting pension or any labor incomes, and "other") if they positively responded to the following question: "Did you do any paid work in the 7 days ending last Sunday, either as an employee or self-employed?" The respondents defined themselves as unemployed are asked about if they are looking for a job or trying to start a business now. They are not asked about their willingness to start working if they will be offered a job next week. Those who are neither employed nor unemployed are considered to be out of labor force.

Table 13 reports summary statistics on labor market status for the different types of partnerships and for singles separately for males and females. It is clear from the table that employment rates for both males and females are rather high. However, there is a significant variation within different subgroups. It is noticeable that for chauvinistic families employment rate for females is only 42.4% that is almost twice as low as employment rate among females from families of other type. For males employment rate is 84-95%. The only exception is single males – only 77% of them work. It is also clear that women who do not work are more often out of labor force than unemployed. The opposite could be noticed for men. It can be inferred from the table that the market of part-time jobs is underdeveloped since only small fraction of individuals is part-time employees. In general "wives" are more probable to have part-time jobs in comparison with "husbands". For singles figures are nearly the same for males and females. If look at the firm there individual work one would notice that a substantial part of those working is employed at public firms. Females are more likely to have a job in public sector than males.

## 5. Estimation of labor supply: results

### *Probability of being employed*

To estimate if there is significant variation across different types of households with respect to determinants of being employed logit regressions were run (equation (1), dependent variable  $y_1$ ). Results of estimation for the sub-samples of males and females are summarized in Table 14.

To generate the reference point estimation we estimate the probability of being employed not controlling for family type. It turned out that secondary professional degree and higher professional degree tend to increase the probability of being employed for both males and females as compared with those who completed secondary general degree. However, junior professional degree tends to be no better than secondary general. Older males have better prospect of employment. For females the dependence on age is quadratic – the probability to have a job rises with age until 40 and then it goes down. It is generally believed that grandmothers often help parents to look after their children in Russia. Data shows, that 36% of women older than 40 have grand children, and for those older than 45 this number is 51%. So, it could be the case that women of pre-retirement age are likely to quit their jobs to help with childcare and/or housework. It is worth noting here that age of individual and her education are the determinants of both market wage and reservation wage and we can not distinguish between these concepts in our analysis. Number of children does not influence significantly the likelihood of being employed for males. It is very important factor for female employment, however. Controlling for other factors the probability to have a job for female who have a child not older than 3 is nearly 7 times lower in comparison with female with no children of that age. The number tends to go down with the age of children going up.

We control for number of adults<sup>17</sup> in the household and the presence of females of retirement age in the household. It turns out that for males both factors do not matter. For females the number of adults negatively affects employment prospects. It can be inferred though, that females are likely to regard other adults in the household (except partner) as a source of non-labor income. If there is a female of retirement age in the household then the risk of having no job is 50% lower for female from partnership than for women from households with no females of that age. It could be inferred that female pensioners are likely to help mothers with childcare and housework. This decreases mother's reservation wage and allows them to actively participate in the labor market.

The analysis shows that the index of social security at partner's job is positively related to the probability of employment. This result holds for both men and women. Thus, if one has paid sick leaves, access to daycare centers of good quality, etc. than his or her partner is more likely to be employed.

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<sup>17</sup> Number of adults do not include respondent and his or her partner

Partner's income is not a significant factor for male employment. It significantly matters for females from partnerships, however. The direction of dependence is negative as it was expected to be. The more male-partner earns, the less is the probability of employment for female-partner. Therefore it could be concluded that in general wives consider income of their husbands as non-labor income.

In the study we control for regional labor market differences as well as for differences in urban and rural labor markets. As it was anticipated high regional unemployment level and living in rural negatively influence employment prospects of both males and females.

The further part of this subsection is devoted to the discussion of variation between families of different types.

First, we estimate model (1) (dependent variable  $y_1$ ) for strategic families. For females from strategic families, as in the case of whole sample, the dependence of age is quadratic with the maximum probability of being employed at 44. Age is insignificant for males, though. Having children tend to prevent their mother from working on market. The younger are the children the lower is the probability of having a job. Surprisingly, it turned out that the presence of children aged from 7 to 15 is negatively correlated with male employment for males from strategic families. All the educational dummies turned to have no effect on the probability of being employed for both males and females. It could be noted that regional unemployment and type of settlement do not influence female employment prospects; regional unemployment and type of settlement are significant for males, however.

It is important that number of adults, presence of female of retirement age, index of social security at partner's job and partner's income are likely to have no effect on labor supply decisions of individuals from strategic families (for both males and females). This fact supports our hypothesis that the decisions on labor supply in strategic families do not depend on partner characteristics. This implies that results of our estimation show that in strategic type families individual's behavior could possibly be described through individual labor supply models.

Second, we estimate model (1) (dependent variable  $y_1$ ) for chauvinistic families. In the study we did the estimation for sub-samples of males and females rather than for sub-samples of heads of families and their partners. The rationale for this is that the families are mainly male-headed. Furthermore there are a number of partnerships that were attributed to chauvinistic type by cluster analysis procedure, in which it is rather hard to determine the head.

The estimation shows that age does not affect the probability of having a job for both males and females from chauvinistic families. With regard to household composition the results show that females with small children (0 – 3 years old) have 7 times lower probability of having a job; for males from chauvinistic families with small children the probability of employment is 5 times higher in comparison with females and male from the same type families but with no children. This implies that

small children are likely to force male from chauvinistic family to work, as he (as the head of chauvinistic family) tend to consider his role in the family mainly as the role of bread-winner whose first task is to support his wife and children. Obtained result probably reflects the fact that when there are small children in the family, mother usually does not work and the role of father as the only breadwinner is extremely important. The presence of older children does not affect male employment and negatively affects female employment in chauvinistic families.

Female pensioners in the household play very important role in chauvinistic households, as they tend to increase the probability of female employment by 2 times. The more adults (excluding partner) live in the household the more is probability of being employed for female. Every “additional” adult member of the family decrease chances of female employment by 40%. Index of social security at partner’s job tends to enhance the probability of having a job for females. But the effect is smaller and less significant in comparison with that effect for strategic and democratic families<sup>18</sup>. As it is expected presence of female pensioners, number of adults in the household and social security at partner’s job does not affect male employment.

With regard to partner’s income, it significantly negatively related to female employment in chauvinistic families. It is noticeable, that for males from chauvinistic families the effect of partner’s income on probability of being employed is also negative and significant. The following explanation could be suggested: due to current situation on the labor market for some males it is rather hard to find a job (it is important that employment rate for males from chauvinistic families<sup>19</sup> is not the highest one across different family types) or, at least, it is rather hard to find a job with high wage. Males from chauvinistic type families who can not find a job are more likely to be socially vulnerable than other males. For example, the chances to become alcoholic or home tyrant are tend to be high for this category. Given that, they might force their wives to enter labor market and earn money. On the further stages of the project we will try to determine families with socially vulnerable males (for example, alcoholics or drug takes) and to control for them. We think that this will allow us to provide more accurate analysis of the issue.

It could be noted that regional unemployment and rural type of settlement negatively influence employment prospects for both males and females from chauvinistic type families.

It could be concluded that in general our results support the hypothesis that the decision making mechanism in chauvinistic type families is different for males and females. Our results demonstrate that in chauvinistic type families wives treat income of their husbands as given (as a source of non-labor income); males are to make their decisions individually.

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<sup>18</sup> The results of estimation for democratic families is discussed in details below

<sup>19</sup> See Table 14

Third, we estimate model (1) (dependent variable  $y_1$ ) for democratic families. Initially, we tried to study sub-samples of males and females separately. Results of this estimation are presented in Table 14.1. The careful study of obtained results allow us to conclude that the determinants of the probability of being employed for male and females from the democratic type families are almost the same. Furthermore most of the variables affect male and female employment in the same direction. For example, it is noticeable that for males from democratic type family the presence of children tends to have negative influence on the employment prospective. This influence is significant only at 15% level, however. Therefore it could be inferred that in the democratic families partners are likely to substitute each other in child care as well as in bread-winning. Taking into account this assumption allowed us to estimate the model on the whole sample of individuals without splitting into male and female sub-samples. Hence, we estimate equation (1) using logit procedure on the whole sample of individuals. It turned out that those who have children are less likely to be employed in comparison with those with no children. The most negative effect on employment is for those with small children (0-3 years old).

As it was in the case of females in chauvinistic families, the probability to have a job increases with the number of other adults (except partner) in the household. The presence of retirement age female in the household tends to have no effect on employment. The more social security is provided at partner's job place the more is the probability to participate in the labor market for an individual from democratic family. It turns out that partner's income is likely to have no effect on the employment in democratic families. One could argue that this empirical finding do not support theoretical family models. This product, however, coincides with the findings from theoretical family models under the assumption that partners have nearly the same wages<sup>20</sup>.

It could be noted that regional unemployment and rural type of settlement negatively influence employment prospects for both males and females from chauvinistic type families.

It could be supposed that in general our results support the hypothesis that the decision making mechanism in democratic type families is not much different for males and females. One can infer that males and females in democratic families could substitute each other in both housework and market work. Our results show that in democratic families individuals make their decisions on the labor market participation taking into account working conditions of their partner and probably, his/or her income. These findings infer that the process of decision making in such families probably could be described by theoretical family labor supply models.

Third, we estimate model (1) for the families of external type. As individuals from such families make their decisions mostly under pressure of external forces, it seems rather hard to interpret

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<sup>20</sup> to be tested at the further steps of this project

obtained results. For example, it turned out that for males from “external” families the probability of being employed is positively correlated with his partner’s income. Results of estimation are summarized in Table 14.

Last, we estimate equation (1) for single males and single females separately. For single females with small children the chances of employment are considerably lower in comparison with those without children. For single males number of children does not matter significantly<sup>21</sup>. Single females tend to consider additional adults in the household as the source of non labor income – the more adults are in the household, the less likely is woman to be employed. Surprisingly, the presence of retirement age female does not affect labor market behavior of single females. Two explanations could be suggested: average age of single woman in the sample is 38 years and she is less likely to have small children or single females for some reasons are more likely to have outside help.

#### *Probability of being employed/unemployed/out of labor force*

To estimate if there is significant variation across different types of households with respect to determinants of being unemployed or out of labor force multinomial logit regressions were run (equation (1), dependent variable  $y_2$ )<sup>22</sup>. Results of estimation for the sub-samples of males and females are summarized in Table 15.

First, we estimate equation (1) (dependent variable  $y_2$ ) for the sub-sample of strategic families. The results of study OLF males versus employed males from strategic families could hardly be discussed due to lack of observations. Indeed, only 0.85% of males from strategic families are OLF. Male holders of secondary professional degree are less likely to be unemployed than those with secondary general. Local labor market conditions are to affect male unemployment prospects. For females we observe quadratic dependence of age on probability of being unemployed/OLF. Children are likely to force female from strategic family to be OLF, but not unemployed. The higher is index of social security at partner’s job the higher if the probability of being OLF for females from strategic families.

These findings tend to confirm, that in strategic families the decisions (on both employment and participation in labor force) are more likely to depend on individual characteristics than on characteristics of partner and/or household.

Second, we estimate equation (1) (dependent variable  $y_2$ ) for the sub-sample of chauvinistic families. If there are small children (aged 0-3) in chauvinistic family then their father has significantly higher probability to be employed than to be unemployed and their mother is much more likely to be out of labor force in comparison with males and females from families with no children of that age.

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<sup>21</sup> we take into account children who live in the same household only

<sup>22</sup> Reference category – those who are employed

Children aged from 7 to 15 tend to prevent their mother to enter the labor force. It is noticeable, that children aged from 4 to 6 have no effect on the labor market status for individuals from chauvinistic families. It could be explained that the system of daycare centers in Russia mainly aims this age category of children.

The more other adults are in the household the higher is the probability of female from chauvinistic family to be out labor force (but not to be unemployed). Retirement age female in the household lowers the probability of being OLF for females by 50% (for the probability of being unemployed – no effect). The higher is partner's income the higher is the probability of being unemployed for males from chauvinistic families (for the probability of being OLF – no effect). It seems that if wife have rather high income then husband can afford to search for a job longer. For females partners' income is likely to increase the probability of both being unemployed and being OLF. It is noticeable that the marginal effect of husband income on the probability of being OLF is much higher than on the probability of unemployment.

It could be concluded that these results generally support the discussion devoted to chauvinistic type families in previous sub-section. Females from chauvinistic families are more likely to be OLF than unemployed, however.

Third, we attempt to find out the factors that influence the probability of being unemployed/OLF. Using multinomial logit procedure we estimate equation (1) (dependent variable  $y_2$ ) for the sub-sample of democratic families. The analysis is done for the whole sample of males and females as the determinants of the probability of being unemployed/OLF for male and females from the democratic type families are almost the same.

It turned out that if there are small children in democratic family than the chances of individuals to be unemployed are nearly 7 times higher than for those with no small children; small children do not affect the probability of unemployment, however. If individual from democratic family have children aged from 4 to 16 she/or he is more likely to be unemployed than individual with no children. Children of that age do not influence the probability of being OLF. These findings seem to be quite intuitive.

Number of other (except partner) adults and the presence of retirement age female in the household does not affect the probability of both unemployment and being OLF. It could be noted that the better is social security at partner's job the lower is the probability of being unemployed; for the chances of being OLF social security at partner's job tend to have no effect. With respect to partner's income, it tends to affect the probability of being unemployed/OLF in a different way. Those whose partner earn more are more likely to be OLF; partner's income, though, tend to have no effect on the likelihood of being unemployed. It could be inferred that in democratic families characteristic of partner's job and his/or her income are to be the determinant of labor market status of individuals -

characteristic of partner's job affects the probability of being unemployed, but partner's income tend to be the determinant of the probability of being OLF. The results show that the local labor market characteristics are likely to influence labor market status of individuals in democratic families.

It could be inferred that obtained results support the suggestion that partner characteristics are important determinants of labor market status for individual in democratic families in comparison, for example with strategic families.

Third, we estimate model (1) (dependent variable  $y_2$ ) for the families of external type. As individuals from such families make their decisions mostly under pressure of external forces, it seems rather hard to interpret obtained results. Results of estimation are summarized in Table 15.

Forth, we estimate model (1) (dependent variable  $y_2$ ) for singles. It turned out that regional unemployment level is the only factor that significantly influences the probability of being OLF for single males. Older single males are more likely to be unemployed than younger ones. For single females dependence of the probability of being unemployed/OLF on age tends to be quadratic with the minimum at age of 48/38 respectively. Single women with children are more likely to be OLF (that effect is stronger for those with small children) in comparison with those who have no children. The chances of unemployment tend to be almost equal for single females with and without children.

Having in the household retirement age females does not significantly influence labor market status of single women. Number of other adults in the household tends to have slight positive effect on the probability of unemployment, but there is no effect of other adults on the probability of being OLF.

#### *Probability of being part-time employed*

It is important to note that it is widely believed that the market of part-time jobs is underdeveloped in Russia. Indeed, only 3.7% (2.5% for males and 5.2% for females) of employed in our sample are employed at part-time jobs. This numbers, however, tend to vary across different type families.

To estimate if there is significant variation across different types of households with respect to determinants of being part-time employee logit regressions were run (equation (1), dependent variable  $y_3$ )<sup>23</sup>. Results of estimation for the sub-samples of males and females are summarized in Table 16.

It turned out that in strategic families males are less likely to be part-time employees if they have junior and secondary professional education in comparison with holders is secondary general degree. Female holders of junior professional degree from strategic families are less likely to have part-time jobs in comparison with those with secondary general degree. The index of social security is negatively related to the part-time employment for males from strategic families. Children aged from 7 to 15 positively affect the probability of being part-time employee for females from strategic families.

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<sup>23</sup> Reference category – those who employed full-time

The result seems to be quite intuitive since if female have small children she would better stay home, than work on the market. When children are of schooling age, it allows female to spend some time on market work; home production, however, is still important for them. Surprisingly, in strategic families the probability to work part time for females is likely to be positively related to their partner's income. It could be inferred that in strategic families females individually decide on whether to work or not, but in process of job search they tend to take into account their partner's wage.

Our study does not reveal any factor that significantly influences the probability of being part-time employee for males from chauvinistic families. For females the only significant factor is index of social security level at partner jobs. This index tends to be negatively related to the probability of being part-time employee for wives from chauvinistic families. Given that the percentage of part-time employed among all employees in chauvinistic families is nearly the same as in strategic families, it possibly could be concluded that there are other factors out of our analysis that determine the probability of being part-time employed for chauvinistic families<sup>24</sup>.

In democratic families<sup>25</sup> holders of secondary professional degree are more likely to work full-time than part-time in comparison with those with secondary general degree. In such type of families females have nearly two times higher probability of being part-time employees than males. In our study it turns out that other factors tend to be insignificant. At the further steps of our project we will attempt to find out other factors that could possibly determine the probability of being part-time employee. In particular, we will try to look more carefully at the structure of local labor market.

We do not stop on the result on external families as they could hardly be interpreted on this stage of the project (for detailed discussion see above)

The highest "part-time employment" level is among singles. Our study does not reveal any factor, except local labor market characteristics, that significantly influences the probability of being part-time employee for single males. Single female holders of secondary or higher professional degree are more likely to work part-time than full-time in comparison with those with secondary general education only.

For individuals from almost all family types those who live in rural areas are more likely to be employed part-time in comparison with urban citizens. The only exception is those from chauvinistic families. It could be due to the structure of labor demand in the rural areas. It seems that there are more part-time jobs in rural areas than in urban ones.

#### *Probability of being employed at public firm*

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<sup>24</sup> We will try to identify these factors at further steps of our project

<sup>25</sup> For democratic families the analysis is done for the whole sample of males and females controlling for gender

To estimate if there is significant variation across different types of households with respect to determinants of being employed at public firm logit regressions were run (equation (1), dependent variable  $y_4$ )<sup>26</sup>. Results of estimation for the sub-samples of males and females are summarized in Table 17.

The results show that there tend to be little difference among different family types with respect to determinants of being employed at public firm. Holders of higher professional degree are likely to have higher probability to work for public firm in comparison with those with only general secondary education. If one live in rural area then her or his chances to be employed at public firm are quite higher than for those from urban areas. These results hold for all family types and for both males and females. It could possibly be explained by the structure of labor demand. Possibly there are not so many non-state firms in rural areas. It could be supposed that state-owned firms are more likely to demand highly educated labor (for example, science, education, medicine).

It is worth noting that females are more likely to work in public sector than males. This finding supports our hypothesis that females are more likely to search for more stable, but less profitable employment.

## 6. Conclusions

The paper presents the analysis of labor supply for types of families differentiated by models of decision-making on the issue of time to be spent on paid work by each of the partners. Specifically, the study tests the hypothesis that different theoretical labor supply models could describe labor supply decisions of family members from different family types.

For the purposes of our research using two-step cluster analysis we have determined four types of households according to the process of decision-making. We have found individualistic decision-making the most widespread, covering 42% of partnerships in the analysis. The next one is so called “chauvinistic” or “one person-dominated”, which embraces 28% of partnerships. The democratic model, describing the situation when decisions are made by both partners collectively, encompasses 15%. Some people did not understand the question well, and therefore, reported that decision how many hours to work is made either by someone outside the household or not applicable to them. Because many of these respondents are in fact employed we classified them as people whose employment decisions are guided by external factors. They comprise 14% of partnerships, combined into the fourth cluster.

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<sup>26</sup> Reference category – those who are employed at non-state firms

In the analysis of labor supply we use logit model to reveal the determinants that could influence the labor supply decision of household members. The special attention is devoted to the issue of cross impact between partners.

We found out that there is a significant variation across different types of households with respect to the labor market behavior. Indeed, the propensity to have a job versus to have no job as well as the determinants of labor market status vary a lot across males and females from different family types. As it was expected, the estimates differ for different sub-samples especially with respect to partner's income and household composition. It turned out that these factors are likely to have no effect on labor supply decisions of individuals from individualistic (strategic) families. In chauvinistic families, however, females are to treat income of their husband as given, but males tend to make their decisions individually. It turned out that in democratic families individuals are likely to make labor supply decisions taking into account working conditions of their partner and probably her or his income. On this stage of the project it seems rather difficult to interpret the results obtained for the individuals from families, whose decisions are guided by external factors. The results show that there is no much variation among different family types with respect to determinants of being employed at public firm.

It is noticeable that empirical results on chauvinistic families support findings from "chauvinistic" theoretical family model, empirical results on strategic type families goes in line with deductions from individual labor supply models. The findings also provide some evidence on the behavior of individuals from democratic families. It could be supposed that results of labor supply estimation for individuals from democratic families support theoretical individual utility and family budget constraint models under some relevant assumptions. Taken broadly, our results indicate the importance of decision-making type of household for individual labor supply. They also suggest that theoretical labor supply models are not competing, they could exist at one point in time describing the behavior of individuals from different family types.

These findings could have several policy implications. Given that the households in Russia differ according to the principles of decision-making and influence labor supply of their members in differently, it could be concluded that the social policy should take such differences in account. The possible way to overcome the problem is to provide the variety of social programs for each family to choose.

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## Tables and charts

**Table 1.** Selected characteristics of the sample used

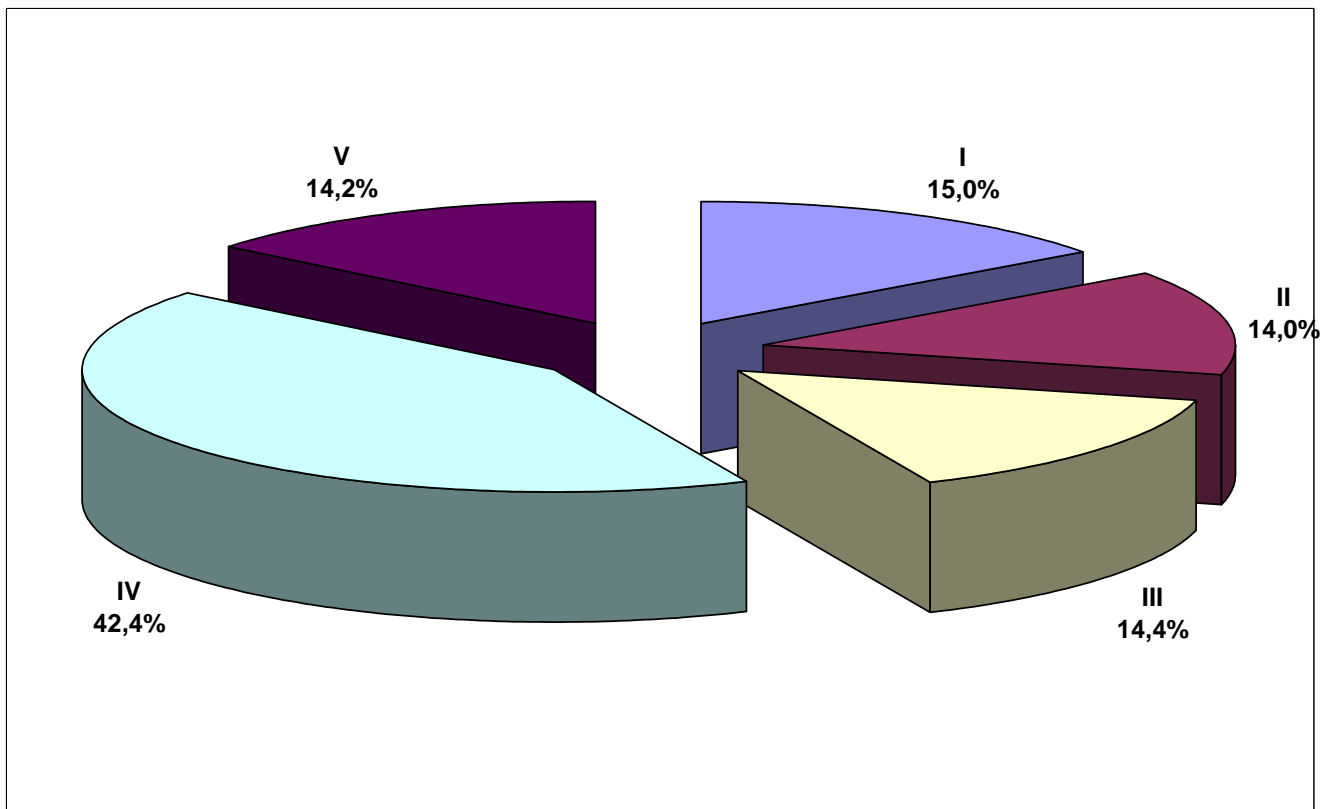
	Selected respondents		Partners, living with the respondents	
	<i>N</i>	%	<i>N</i>	%
<b>Sample N</b>	<b>6405</b>	<b>100%</b>	<b>4192</b>	<b>100%</b>
<b>Has a partner</b>				
total	5006	78.2%	–	–
including a person living with R	4192	65.4%	–	–
separately	814	12.7%	–	–
<b>Type of the settlement</b>				
regional center	2599	40.6%	1578	37.6%
town	1771	27.7%	1133	27.0%
urban settlement	365	5.7%	252	6.0%
village	1670	26.1%	1229	29.3%
<b>Sex</b>				
male	2603	40.6%	2395	57.1%
female	3802	59.4%	1797	42.9%
<b>Distribution by 10-years age-groups</b>				
under 20	121	1.9%	23	0.5%
20-29	1618	25.3%	917	21.9%
30-39	1856	29.0%	1319	31.5%
40-49	2021	31.6%	1449	34.6%
50-59	789	12.3%	484	11.5%
<b>Main activity by self-report</b>				
paid employee, self-employed	5075	79.2%	3413	81.4%
unpaid family worker	25	0.4%	25	0.6%
unemployed	621	9.7%	326	7.8%
on maternity or child-care leave	238	3.7%	154	3.7%
engaged in housekeeping , subsidiary facilities and doesn't work (housewife)	446	7.0%	274	6.5%
<b>Type of household</b>				
single person without any other relatives	559	8.7%	–	–
respondent with children under 18 years old without any other relatives	300	4.7%	–	–
respondent with children under 18 years old or without children and any other relatives	1354	21.1%	–	–
partners living together without children and any other relatives	576	9.0%	–	–
partners living together with children under 18 years old without any other relatives	1233	19.3%	–	–
partners living together under 18 years old or without children and any other relatives	2383	37.2%	–	–

**Table 2.** Gender patterns of decision-making in certain areas

	External factors (partners do not decide)		Male always or usually		Male and female equally		Female always or usually		Total observations (N=100%)	
	Males	Females	Males	Females	Males	Females	Males	Females	Male respondents	Female respondents
Everyday purchases	1.3%	1.6%	6.4%	2.5%	44.8%	35.2%	<b>47.4%</b>	<b>60.8%</b>	1791	2392
More expensive purchases	1.8%	2.6%	11.5%	7.4%	<b>77.0%</b>	<b>74.5%</b>	9.8%	15.5%	1791	2392
Hours to be spent on paid work by male (respondent or partner)	17.2%	16.3%	<b>59.3%</b>	<b>60.2%</b>	21.0%	18.4%	2.6%	5.1%	1789	2392
Hours to be spent on paid work by female (respondent or partner)	27.5%	27.2%	5.0%	3.2%	19.6%	18.9%	<b>47.8%</b>	<b>50.8%</b>	1791	2390
Children rearing <sup>27</sup>	0.1%	0.3%	2.2%	1.3%	<b>83.4%</b>	<b>77.6%</b>	14.2%	20.8%	1534	2073
Leisure activities	1.3%	1.5%	4.4%	3.9%	<b>86.7%</b>	<b>81.7%</b>	7.6%	12.9%	1796	2394

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<sup>27</sup> Answers “not applicable” were excluded.



**Figure 1.** Distribution of partnerships by clusters according to different models of decision-making

**Table 3.** Cluster composition by responses about who makes decision on hours should be worked by respondent or his/her partner (row percentage)

Clusters	Respondent always or usually	Both partners together	Partner usually or always	External factors (partners do not decide)	Total
<i>Decisions about respondent's work</i>					
<b>I</b>	0.0%	<b>100.0%</b>	0.0%	0.0%	626
<b>II</b>	<b>86.8%</b>	0.0%	5.5%	7.7%	584
<b>III</b>	0.0%	33.1%	14.6%	<b>52.2%</b>	601
<b>IV</b>	<b>100.0%</b>	0.0%	0.0%	0.0%	1767
<b>V</b>	0.0%	0.0%	0.0%	<b>100.0%</b>	591
Total	54.5%	19.8%	2.9%	22.8%	4169
<i>Decisions about his/her partner work</i>					
<b>I</b>	0.0%	<b>100.0%</b>	0.0%	0.0%	626
<b>II</b>	32.2%	26.5%	0.0%	<b>41.3%</b>	584
<b>III</b>	4.0%	0.0%	<b>88.2%</b>	7.8%	601
<b>IV</b>	0.0%	0.0%	<b>100.0%</b>	0.0%	1767
<b>V</b>	0.0%	0.0%	0.0%	<b>100.0%</b>	591
Total	5.1%	18.7%	55.1%	21.1%	4169

**Table 4.** Distribution of responses to the questions about who makes decisions on hours should be worked within clusters (column percentage)

Clusters	Respondent always or usually	Both partners together	Partner usually or always	External factors (partners do not decide)	Total
<i>Decisions about respondent's work</i>					
<b>Democratic (egalitarian) model I</b>	0.0%	<b>75.9%</b>	0.0%	0.0%	15.0%
<b>II</b>	22.3%	0.0%	26.7%	4.7%	14.0%
<b>III</b>	0.0%	24.1%	<b>73.3%</b>	33.1%	14.4%
<b>Individualistic model IV</b>	<b>77.7%</b>	0.0%	0.0%	0.0%	42.4%
<b>Guided by external factors V</b>	0.0%	0.0%	0.0%	<b>62.2%</b>	14.2%
Total N	2274	825	120	950	4169
<i>Decisions about his/her partner work</i>					
<b>Democratic (egalitarian) model I</b>	0.0%	<b>80.2%</b>	0.0%	0.0%	15.0%
<b>II</b>	<b>88.7%</b>	19.8%	0.0%	27.4%	14.0%
<b>III</b>	11.3%	0.0%	23.1%	5.3%	14.4%
<b>Individualistic model IV</b>	0.0%	0.0%	<b>76.9%</b>	0.0%	42.4%
<b>Guided by external factors V</b>	0.0%	0.0%	0.0%	<b>67.2%</b>	14.2%
Total N	212	781	2297	879	4169

**Table 5.** Cluster composition by respondent's self-reported main activity (column percentage)

Respondent's main activity by self-report	Decision-making models (clusters)					Total
	I Democratic	II Quasi-chauvinistic	III Quasi-chauvinistic	IV Individualistic	V Guided by external factors	
Paid employee, self-employed, unpaid family worker	81.5%	85.3%	<b>34.9%</b>	92.2%	75.1%	78.9%
Unemployed	9.9%	6.5%	17.1%	2.8%	11.7%	7.7%
On maternity/parental leave	2.9%	4.5%	14.3%	2.7%	4.4%	4.9%
Housewife, person, engaged in housework activities and not employed	5.8%	3.8%	33.6%	2.4%	8.8%	8.5%
Total	626	584	601	1767	591	4169
Pearson $\chi^2$	1012.292 (12 d.f.), at the $\alpha=0.000$ level					
Contingency coefficient	0.442 at the $\alpha=0.000$ level					
Goodman-Kruskal $\tau$ (dependent=main activity)	0.143 at the $\alpha=0.000$ level					

**Table 6.** Cluster composition by partner's main activity reported by respondent (column percentage)

Partner's main activity as reported by respondent	Decision-making models (clusters)					Total
	I Democratic	II Quasi-chauvinistic	III Quasi-chauvinistic	IV Individualistic	V Guided by external factors	
Paid employee, self-employed, unpaid family worker	83.4%	<b>52.1%</b>	88.0%	92.0%	75.1%	82.2%
Unemployed	8.8%	15.9%	5.5%	3.8%	12.7%	7.8%
On maternity/parental leave	2.6%	9.8%	2.5%	2.4%	3.7%	3.7%
Housewife, person, engaged in housework activities and not employed	5.3%	22.3%	4.0%	1.7%	8.5%	6.4%
Total	626	584	601	1767	591	4169
Pearson $\chi^2$	571.466 (12 d.f.), at the $\alpha=0.000$ level					
Contingency coefficient	0.347 at the $\alpha=0.000$ level					
Goodman-Kruskal $\tau$ (dependent=main activity)	0.081 at the $\alpha=0.000$ level					

**Table 7.** Characteristics of households differentiated by decision-making models

	Decision-making models (clusters)				No partner in the household
	A	B	C	D	
Average household size, persons	3.53	3.69	3.54	3.49	2.5
Household composition:					
Respondent alone / together with partner without respondent's children and other household members	14.5%	12.2%	14.1%	14.6%	25.0%
Respondent alone / together with partner with respondent's children below 18 but without other household members	20.4%	23.9%	21.6%	22.8%	8.4%
Respondent alone / together with partner with respondent's children below 18 and other household members	65.1%	63.9%	64.4%	62.6%	66.7%
<b>Total N</b>	<b>1767</b>	<b>1185</b>	<b>626</b>	<b>591</b>	<b>2127</b>

**Table 8.** Education and employment of males and females (either respondents or partners) from partnerships with different decision-making models

	Decision-making models (clusters)								No partner in the household		Total	
	A		B		C		D		male	female	male	female
	male	female	male	female	male	female	male	female				
Level of education:												
below secondary school	7.9%	5.9%	11.0%	8.8%	10.9%	8.8%	12.5%	9.8%	15.1%	8.0%	10.7%	7.8%
secondary school	12.6%	11.4%	14.5%	16.0%	17.9%	14.1%	14.7%	15.9%	17.0%	12.5%	14.7%	13.5%
primary vocational	23.1%	14.7%	21.6%	17.4%	19.6%	17.4%	20.1%	15.1%	23.9%	13.9%	22.1%	15.4%
secondary vocational	32.1%	39.4%	30.9%	38.0%	30.5%	38.7%	36.5%	41.3%	23.7%	38.0%	30.9%	38.9%
higher (including unfinished), postgraduate	24.3%	28.6%	22.0%	19.8%	21.1%	21.1%	16.1%	17.9%	20.2%	27.6%	21.7%	24.5%
Self-reported employment	94.3%	88.9%	87.5%	41.6%	85.8%	78.1%	83.2%	65.1%	75.5%	82.6%	87.4%	73.5%
<b>Total N</b>	<b>1767</b>	<b>1767</b>	<b>1185</b>	<b>1185</b>	<b>626</b>	<b>626</b>	<b>591</b>	<b>591</b>	<b>746</b>	<b>1381</b>	<b>4915</b>	<b>5550</b>

**Table 9.** Attitudes of respondents by prevalent decision-making models in partnerships

	Decision-making models (clusters)				Total
	A	B	C	D	
Elders should help younger VS should not	<b>2.92</b> (1.206)	2.84 (1.177)	2.67 (1.124)	2.81 (1.175)	2.84 (1.184)
Younger should help elders VS should not	<b>2.49</b> (0.875)	2.39 (0.895)	2.36 (0.919)	2.47 (0.898)	2.44 (0.892)
Importance of devotions VS unimportance	<b>6.92</b> (2.425)	6.63 (2.526)	6.57 (2.433)	6.50 (2.204)	6.73 (2.431)
Conformism VS non-conformism	<b>3.12</b> (0.821)	3.06 (0.870)	3.07 (0.843)	3.05 (0.844)	3.09 (0.842)
Positive discrimination on labor market: pros VS cons	<b>3.55</b> (1.451)	3.38 (1.507)	3.32 (1.496)	3.31 (1.454)	3.43 (1.477)
Care of other people – to be provided by public VS by family	4.26 (1.192)	<b>4.30</b> (1.272)	4.20 (1.229)	4.15 (1.230)	4.25 (1.227)
Postmaterialism VS materialism	3.65 (0.507)	3.62 (0.526)	3.66 (0.509)	<b>3.67</b> (0.512)	3.65 (0.513)
Qualities cultivated in a child: internal regulation (independence, resolution, etc.) VS external (diligence, obedience, etc.)	4.55 (1.536)	4.60 (1.542)	<b>4.80</b> (1.416)	4.75 (1.606)	4.63 (1.533)
Inequality between men and women VS egalitarianism (protection of females rights)	<b>4.16</b> (0.822)	4.09 (0.872)	4.08 (0.803)	3.99 (0.819)	4.10 (0.835)
<b>N</b>	<b>1767</b>	<b>1185</b>	<b>626</b>	<b>591</b>	<b>4169</b>

**Table 10.** List of variables

Variable	Content	Construction
Age	Age of individual	Date of birth is used
Age^2	Age squared	Date of birth is used
Gender	Gender of respondent	Gender of respondent
Edu0	Dummy variable : 1 – if the highest achieved degree is secondary school (irrespective of number of grades completed) 0 - otherwise	1 is assigned if individual did not study after school
Edu1	Dummy variable : 1 – if the highest achieved degree is junior professional (PTU, FZU, vocational school) 0 - otherwise	1 is assigned if individual got junior professional degree but did not get either secondary or higher professional degree
Edu2	Dummy variable : 1 – if the highest achieved degree is secondary professional (tekhnikum, etc.) 0 – otherwise	1 is assigned if individual got secondary professional degree but did not get higher professional degree
Edu3	Dummy variable : 1 – if the highest achieved degree is higher professional (university) 0 – otherwise	1 is assigned if individual got higher professional degree
Ch	Number of children	Household composition data are used
Ch_03	Number of children below 3 years old	Household composition data are used
Ch_36	Number of children from 4 to 6 years old	Household composition data are used
Ch_616	Number of children from 7 to 16 years old	Household composition data are used
Num_ad	Number of adults in households (older than 16)	Household composition data are used; proxy for non-labor income
Old_female	Dummy variable: 1 – if there is retirement age female 0 - otherwise	Household composition data are used
Lminc_par	Logarithm average monthly income of partner	Variable wage is constructed as logarithm of average monthly income of partner
Index of social security at partner's job	Number of social guarantees provided by employer (0-7)	Information about paid leaves, daycare, hospitals, compensations for transportation, etc
Rural	Dummy variable for living in rural areas	1 is assigned if individual lives in rural are,
Regional unemployment rate	Regional unemployment rate	Percentage of economically active population
Y1	Dummy variable: 1 – if individual has a job 0 - otherwise	Individuals are considered as employed are those who work for pay and not pensioners, those on maternity leave, self employed and others, who did some paid work in the 7 days prevailing interview.
Y2	Dummy variable: 0 – if individual is employed 1 – out of labor force 2 - unemployed	Individuals are considered as unemployed are those who defined themselves as unemployed and are looking for a job
Y3	Dummy variable: 1 – if individual is employed part-time 0 - otherwise	Only for employed
Y4	Dummy variable: 1 – if individual is employed in public firm 0 - otherwise	Only for employed
Fam_type	Dummy variable: 1- individualistic 2 - chauvinistic 3 - democratic 4 - external	Information on the process of decision making in the household is used

**Table 11.** Family type distribution

Subgroup	Partner in the household				Single		Total
	A	B	C	D	Males	Females	
Number of families	3534	2370	1252	1182	807	1408	10611
% of sample	33.5%	22.5%	11.9%	11.2%	7.6%	13.3%	100%
% of subgroup	42.4%	28.4%	15.0%	14.2%	36.4%	63.6%	100%

**Table 12.** Summary statistics

Variable	A		B		C		D		Single	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Age	39.5	37.6	37.6	35.9	39.2	37.1	39.1	36.6	33.4	38.1
General secondary	0.18	0.15	0.22	0.22	0.24	0.19	0.22	0.20	0.23	0.15
Primary professional	0.31	0.20	0.31	0.24	0.29	0.25	0.30	0.23	0.40	0.25
Secondary professional	0.28	0.37	0.25	0.34	0.26	0.35	0.31	0.39	0.17	0.33
Higher professional	0.23	0.28	0.21	0.19	0.21	0.21	0.15	0.18	0.21	0.27
Number of children below 3 years old		0.13		0.31		0.14		0.20	0.00	0.05
Number of children from 4 to 6 years old		0.12		0.15		0.12		0.14	0.01	0.07
Number of children from 7 to 15 years old		0.51		0.49		0.59		0.54	0.03	0.31
Number of adults in households (older than 16)		0.30		0.37		0.23		0.24	1.24	0.75
Female older than 50 in HH		0.13		0.12		0.9		0.10	0.34	0.21
Logarithm average monthly income of partner <sup>28</sup>	0.20	0.70	-0.82	0.54	-0.15	0.42	-0.16	0.50		N/A
Index of social security at partner's job		2.34		1.59		1.82		1.95		
Dummy variable for living in rural areas		0.23		0.30		0.35		0.37	0.19	0.20
Number of observations		3534		2370		1252		1182	807	1408

<sup>28</sup> Logarithm of average monthly income of partner corrected with regional subsistence level

**Table 13.** Labor market status of males and females from different type families

Variable	A		B		C		D		Single	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Employed	95.18%	89.6%	88.37%	42.4%	85.96%	79.07%	84.43%	66.2%	77.45%	85.44%
Employed full-time <sup>29</sup>	97.47%	94.99%	96.9%	90.7%	96.99%	94.19%	96.18%	96.51%	94.2%	93.35%
Employed part-time <sup>30</sup>	2.53%	5.01%	3.1%	9.4%	3.01%	5.81%	3.82%	3.49%	6.65%	5.85%
Have no job	4.92%	10.36%	11.63%	57.6%	14.06%	20.83%	15.57%	33.8%	22.55%	14.56%
Unemployed	4.07%	2.55%	9.7%	12.8%	11.18%	7.51%	12.52%	11.8%	20.57%	9.53%
OLF	0.85%	7.81%	1.94%	44.7%	2.88%	13.42%	3.05%	22.0%	1.98%	5.02%
Work for public firm <sup>31</sup>	32.02%	49.12%	28.75%	48.91%	32.53%	46.06%	45.49%	55.24%	23.7%	44.4%

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<sup>29</sup> As a percentage of employed

<sup>30</sup> As a percentage of employed

<sup>31</sup> As a percentage of employed

**Table 14.** Probability of having a job (reference category – those who have no job)

	All partnerships		A		B		C	D		No partner	
	Males	Females	Males	Females	Males	Females	Males and Females	Males	Females	Males	Females
Age	-0.021*** [2.75]	0.223*** [5.35]	-0.019 [1.17]	0.261*** [2.72]	-0.005 [0.36]	0.107 [1.51]	0.161* [1.72]	-0.026 [1.40]	0.429*** [3.85]	-0.015* [1.67]	0.244*** [3.48]
Age^2		-0.003*** [4.93]		-0.003** [2.34]		-0.001 [1.26]	-0.002** [1.98]		-0.005*** [3.64]		-0.003*** [3.28]
Primary professional	-0.008 [0.06]	0.182 [1.48]	-0.063 [0.21]	0.116 [0.41]	-0.07 [0.27]	0.081 [0.37]	0.255 [1.04]	-0.407 [1.13]	0.137 [0.44]	0.366* [1.76]	-0.103 [0.46]
Secondary professional	0.300* [1.88]	0.557*** [4.86]	0.502 [1.46]	0.065 [0.26]	0.169 [0.59]	0.699*** [3.45]	0.445* [1.83]	-0.239 [0.64]	0.884*** [3.00]	1.279*** [4.10]	0.561** [2.46]
Higher professional	0.870*** [4.08]	0.698*** [5.29]	0.52 [1.33]	0.439 [1.56]	1.659*** [3.51]	0.407* [1.70]	0.657** [2.34]	0.362 [0.64]	1.020*** [2.80]	1.495*** [4.73]	1.506*** [4.77]
Number of children aged 0-3	0.006 [0.04]	-1.933*** [17.89]	-0.052 [0.13]	-1.850*** [9.16]	0.895*** [2.91]	-1.979*** [9.18]	-1.379*** [5.89]	-0.663* [1.84]	-1.699*** [5.84]		-1.395*** [5.01]
Number of children aged 4-6	-0.091 [0.58]	-0.377*** [3.26]	-0.113 [0.31]	-0.523** [2.14]	0.122 [0.44]	-0.325 [1.60]	-0.550** [2.12]	0.092 [0.25]	0.123 [0.37]		-0.178 [0.56]
Number of children aged 7-15	-0.147* [1.91]	-0.243*** [3.62]	-0.323** [2.08]	-0.340** [2.28]	-0.027 [0.19]	-0.286** [2.42]	-0.221* [1.68]	-0.088 [0.48]	-0.118 [0.64]		-0.165 [1.06]
Number of children										1.11 [1.51]	
Number of adults	0.011 [0.10]	-0.286*** [3.84]	0.341 [1.08]	0.015 [0.09]	-0.096 [0.63]	-0.455*** [3.30]	-0.268* [1.60]	0.069 [0.22]	-0.075 [0.28]	-0.065 [0.80]	-0.133* [1.68]
Female older 50 in HH	-0.357 [1.61]	0.453*** [2.71]	-0.78 [1.58]	0.151 [0.42]	-0.288 [0.80]	0.721** [2.45]	0.22 [0.51]	-0.66 [1.13]	0.346 [0.71]	-0.323 [1.64]	-0.189 [0.86]
Index of social security at partner job	0.126*** [3.03]	0.121*** [4.66]	0.108 [1.33]	0.113** [2.09]	-0.062 [0.87]	0.079* [1.78]	0.156** [2.48]	0.186* [1.72]	0.107 [1.49]		
Average monthly income of PARTNER (log)	0.018 [0.35]	-0.150*** [3.38]	0.018 [0.15]	-0.015 [0.15]	-0.251*** [2.67]	-0.319*** [4.35]	-0.077 [0.94]	0.216* [1.94]	-0.013 [0.11]		
Rural	-0.813*** [6.68]	-0.219** [2.20]	-0.647*** [2.58]	0.097 [0.44]	-0.964*** [4.34]	-0.308* [1.73]	-0.419** [2.03]	-0.799*** [2.85]	-0.12 [0.48]	-0.529** [2.52]	-0.782*** [4.25]
Regional unemployment level	-0.075*** [5.41]	-0.063*** [5.73]	-0.061* [1.78]	-0.023 [0.84]	-0.084*** [3.22]	-0.063*** [3.21]	-0.078*** [3.98]	-0.094** [2.55]	-0.076** [2.20]	-0.069*** [2.89]	-0.060*** [2.71]
Gender							-0.548*** [2.92]				
Constant	3.784*** [9.96]	-2.461*** [3.41]	4.239*** [5.04]	-2.499 [1.55]	2.880*** [4.46]	-1.49 [1.18]	0.507 [0.30]	4.258*** [4.29]	-6.729*** [3.39]	2.062*** [4.81]	-1.88 [1.62]
Observations	3683	3798	1669	1652	912	1037	1101	516	540	807	1374

Absolute value of z statistics in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 14.1.** Probability of having a job for democratic families (reference category – those who have no job)

	<b>Males</b>	<b>Females</b>
Age	-0.053*** [2.89]	0.186 [1.36]
Age^2		-0.003 [1.45]
Primary professional	0.236 [0.68]	0.26 [0.72]
Secondary professional	0.452 [1.22]	0.379 [1.11]
Higher professional	0.899** [2.11]	0.584 [1.45]
Number of children aged 0-3	-0.399 [1.01]	-2.098*** [6.15]
Number of children aged 4-6	-0.548 [1.44]	-0.527 [1.41]
Number of children aged 7-15	-0.267 [1.54]	-0.172 [0.89]
Number of adults	-0.035 [0.11]	-0.425* [1.72]
Female older 50 in HH	-0.27 [0.40]	0.377 [0.63]
Index of social security at partner job	0.185* [1.76]	0.123 [1.45]
Average monthly income of PARTNER (log)	0.104 [0.87]	-0.105 [0.84]
Rural	-0.550* [1.79]	-0.305 [1.03]
Regional unemployment level	-0.055* [1.88]	-0.094*** [3.38]
Constant	4.564*** [5.00]	-0.32 [0.14]
Observations	559	542

Absolute value of z statistics in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 15.** Probability of being employed, unemployed, out of labor force (reference category – those who are employed)

	All partnerships, males		All partnerships, females		A, males		A, females		B, males		B, females	
	OLF	Unemploye d	OLF	Unemploye d	OLF	Unemploye d	OLF	Unemploye d	OLF	Unemploye d	OLF	Unemploye d
Age	0.054*** [2.95]	0.015* [1.81]	-0.173*** [3.54]	-0.329*** [5.24]	0.071 [1.56]	0.01 [0.56]	-0.203* [1.72]	-0.361** [2.35]	0.041 [1.23]	-0.002 [0.13]	-0.066 [0.85]	-0.215** [2.21]
Age^2			0.002*** [3.06]	0.004*** [5.00]			0.002 [1.49]	0.004* [1.93]			0.001 [0.60]	0.003** [1.99]
Primary professional	0.427 [1.33]	-0.078 [0.50]	-0.232* [1.65]	-0.065 [0.35]	20.761*** [8.92]	-0.224 [0.70]	-0.079 [0.23]	-0.082 [0.18]	0.43 [0.73]	-0.001 [0.00]	-0.108 [0.45]	-0.035 [0.12]
Secondary professional	-0.006 [0.02]	-0.355** [2.06]	-0.620*** [4.68]	-0.429** [2.42]	20.052*** [8.38]	-0.741** [2.03]	0.077 [0.25]	-0.309 [0.71]	0.061 [0.09]	-0.204 [0.67]	-0.798*** [3.58]	-0.503* [1.80]
Higher professional	-0.940* [1.65]	-0.871*** [3.87]	-0.722*** [4.83]	-0.695*** [3.09]	-16.752 [0.00]	-0.569 [1.45]	-0.375 [1.12]	-0.507 [1.01]	-0.693 [0.78]	-1.955*** [3.50]	-0.397 [1.54]	-0.543 [1.50]
Number of children aged 0-3	0.054 [0.15]	-0.019 [0.11]	2.298*** [19.62]	0.273 [1.26]	-36.291 [0.00]	0.188 [0.48]	2.453*** [10.38]	-0.862 [1.36]	-1.547 [1.47]	-0.838*** [2.61]	2.355*** [10.39]	0.220 [0.64]
Number of children aged 4-6	0.265 [0.84]	0.057 [0.33]	0.368*** [2.81]	0.369** [2.10]	1.349* [1.76]	-0.152 [0.36]	0.796*** [2.82]	-0.196 [0.42]	-0.498 [0.64]	-0.038 [0.13]	0.356 [1.64]	0.198 [0.73]
Number of children aged 7-15	0.146 [0.93]	0.145* [1.73]	0.339*** [4.42]	0.018 [0.17]	0.524 [1.40]	0.287* [1.68]	0.423** [2.41]	0.065 [0.23]	-0.079 [0.25]	0.049 [0.31]	0.398*** [3.10]	-0.017 [0.10]
Number of adults	-0.661 [1.63]	0.057 [0.53]	0.342*** [4.20]	0.144 [1.21]	-20.821*** [25.69]	-0.239 [0.77]	-0.062 [0.31]	0.04 [0.15]	-21.033*** [26.57]	0.166 [1.10]	0.533*** [3.68]	0.245 [1.33]
Female older 50 in HH	1.064* [1.74]	0.285 [1.22]	-0.470** [2.53]	-0.449 [1.61]	21.439 [.]	0.676 [1.33]	-0.232 [0.53]	0.019 [0.03]	21.323 [.]	0.265 [0.72]	-0.791** [2.52]	-0.566 [1.32]
Index of social security at partner job	-0.285*** [2.82]	-0.095** [2.11]	-0.119*** [4.09]	-0.119*** [2.72]	-0.328 [1.43]	-0.062 [0.71]	-0.133** [2.13]	-0.023 [0.22]	-0.086 [0.54]	0.092 [1.20]	-0.109** [2.25]	0.001 [0.01]
Average monthly income of PARTNER (log)	-0.019 [0.17]	-0.017 [0.32]	0.256*** [4.82]	-0.048 [0.75]	-0.595** [2.20]	0.108 [0.77]	0.075 [0.62]	-0.142 [0.88]	0.339 [1.54]	0.231** [2.31]	0.386*** [4.69]	0.169* [1.70]
Rural	1.690*** [5.55]	0.644*** [4.85]	0.117 [1.01]	0.422*** [2.79]	0.605 [0.98]	0.651** [2.37]	-0.191 [0.73]	0.208 [0.54]	1.965*** [3.55]	0.771*** [3.23]	0.165 [0.83]	0.607** [2.54]
Regional unemployment level	0.109*** [4.01]	0.066*** [4.36]	0.049*** [3.91]	0.099*** [5.81]	-0.112 [1.04]	0.080** [2.25]	-0.007 [0.21]	0.089* [1.86]	0.117** [2.14]	0.076*** [2.68]	0.041* [1.92]	0.123*** [4.47]
Constant	-7.728*** [8.22]	-3.579*** [8.84]	1.255 [1.50]	3.038*** [2.81]	-26.885 [.]	-4.136*** [4.70]	0.886 [0.44]	3.292 [1.29]	-6.774*** [3.98]	-2.698*** [3.96]	0.577 [0.42]	1.788 [1.04]
Observations	3683	3683	3798	3798	1669	1669	1652	1652	912	912	1037	1037

Absolute value of z statistics in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 15 (continued).** Probability of being employed, unemployed, out of labor force (reference category – those who are employed)

	C, males and females		D, males		D, females		No partner, males		No partner, females	
	OLF	Unemployed	OLF	Unemployed	OLF	Unemployed	OLF	Unemployed	OLF	Unemployed
Age	-0.228*	-0.01	-0.004	0.031	-0.378***	-0.450***	-0.012	0.019**	-0.286**	-0.214***
	[1.71]	[0.07]	[0.10]	[1.52]	[2.71]	[3.00]	[0.41]	[2.05]	[2.45]	[2.66]
Age^2	0.003*	0.001			0.004**	0.006***			0.004**	0.003**
	[1.80]	[0.38]			[2.31]	[3.01]			[2.40]	[2.43]
Primary professional	-0.459	-0.097	0.088	0.475	0.046	-0.448	0.799	-0.406*	-0.400	0.367
	[1.26]	[0.31]	[0.11]	[1.23]	[0.12]	[1.03]	[1.05]	[1.92]	[1.16]	[1.37]
Secondary professional	-0.931**	-0.067	0.822	0.075	-0.709**	-1.102***	-0.693	-1.274***	-0.859**	-0.381
	[2.56]	[0.22]	[1.13]	[0.18]	[1.96]	[2.73]	[0.57]	[4.01]	[2.48]	[1.37]
Higher professional	-0.666*	-0.824**	-36.655	-0.234	-1.083**	-0.973*	0.545	-1.653***	-1.914***	-1.292***
	[1.72]	[2.09]	[0.00]	[0.40]	[2.39]	[1.92]	[0.57]	[4.89]	[3.36]	[3.48]
Number of children aged 0-3	1.992***	0.568	0.786	0.634	2.032***	0.448			2.263***	0.651*
	[6.59]	[1.54]	[1.19]	[1.61]	[6.49]	[0.90]			[6.34]	[1.71]
Number of children aged 4-6	0.195	0.806***	-1.313	0.06	-0.292	0.276			0.912**	-0.358
	[0.48]	[2.58]	[1.19]	[0.16]	[0.76]	[0.60]			[2.14]	[0.83]
Number of children aged 7-15	0.095	0.317**	0.404	-0.011	0.338	-0.288			0.482**	-0.077
	[0.49]	[1.98]	[1.21]	[0.05]	[1.55]	[0.99]			[2.15]	[0.37]
Number of children							0.803	-1.709*		
							[0.86]	[1.67]		
Number of adults	0.331	0.202	-0.379	-0.025	0.006	0.163	0.044	0.104	0.092	0.153*
	[1.38]	[0.82]	[0.63]	[0.08]	[0.02]	[0.49]	[0.21]	[1.35]	[0.71]	[1.71]
Female older 50 in HH	-0.698	0.125	1.674	0.478	-0.084	-0.922			-0.119	0.306
	[1.07]	[0.23]	[1.46]	[0.77]	[0.15]	[1.25]			[0.31]	[1.24]
Index of social security at partner job	-0.06	-0.232***	-0.501*	-0.131	-0.027	-0.298***				
	[0.68]	[2.69]	[1.90]	[1.13]	[0.33]	[2.59]				
Average monthly income of PARTNER (log)	0.313**	-0.098	-0.162	-0.224*	0.164	-0.107				
	[2.29]	[1.00]	[0.78]	[1.83]	[1.08]	[0.71]				
Rural	0.891***	0.112	1.752**	0.621**	-0.125	0.519	0.8	0.499**	1.201***	0.563**
	[2.85]	[0.42]	[2.51]	[2.06]	[0.41]	[1.53]	[1.23]	[2.31]	[4.27]	[2.54]
Regional unemployment level	0.108***	0.049**	0.053	0.101***	0.073*	0.082*	0.297***	0.043*	0.019	0.078***
	[3.87]	[1.96]	[0.71]	[2.59]	[1.83]	[1.70]	[4.49]	[1.72]	[0.53]	[3.15]
Gender	1.711***	-0.253								
	[5.23]	[1.05]								
Constant	-1.314	-3.284	-4.904**	-4.644***	5.283**	6.312**	-7.120***	-1.932***	1.682	0.642
	[0.56]	[1.30]	[2.44]	[4.33]	[2.22]	[2.33]	[4.92]	[4.38]	[0.88]	[0.49]
Observations	1101	1101	516	516	540	540	807	807	1374	1374

Absolute value of z statistics in brackets; \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 16.** Probability of being part-time employed (reference category – full-time workers)

	All partnerships		A		B		C	D		No partner	
	Males	Females	Males	Females	Males	Females	Males and Females	Males	Females	Males	Females
Age	-0.004 [0.27]	-0.280*** [2.99]	0.004 [0.17]	-0.520*** [3.91]	-0.034 [1.23]	-0.049 [0.25]	-0.014 [0.66]	0.112** [2.14]	-0.603 [1.54]	-0.004 [0.23]	0.119 [1.06]
Age^2		0.003*** [2.70]		0.007*** [3.69]		0 [0.03]			0.008 [1.51]		-0.002 [1.20]
Primary professional	-0.763** [2.53]	-0.334 [1.11]	-0.982** [2.20]	-0.740* [1.65]	-0.851 [1.29]	0.46 [0.73]	-0.501 [1.04]	-0.22 [0.25]	-0.889 [0.60]	-0.561 [1.39]	-0.532 [1.55]
Secondary professional	-0.679** [2.21]	-0.135 [0.53]	-1.165** [2.42]	-0.233 [0.65]	-0.049 [0.08]	0.266 [0.46]	-0.911* [1.83]	0.073 [0.09]	0.267 [0.23]	-0.727 [1.39]	-1.069*** [3.02]
Higher professional	-0.665* [1.94]	0.021 [0.07]	-0.749 [1.50]	-0.283 [0.74]	-0.1 [0.16]	0.512 [0.75]	-0.316 [0.60]		-0.733 [0.49]	-0.625 [1.29]	-1.209*** [3.14]
Number of children aged 0-3	-0.412 [1.11]	0.288 [1.05]	-0.371 [0.57]	0.55 [1.46]	-0.941 [1.50]	-0.356 [0.54]	0.254 [0.49]	0.538 [0.53]			-0.508 [0.67]
Number of children aged 4-6	-0.295 [0.81]	-0.252 [0.81]	-0.485 [0.77]	0.354 [0.98]	-0.351 [0.56]	-1.718 [1.63]	-1.661 [1.60]	1.595** [1.98]			-0.038 [0.07]
Number of children aged 7-15	-0.158 [0.91]	0.315** [2.20]	-0.335 [1.17]	0.538*** [2.68]	-0.041 [0.12]	0.443 [1.46]	-0.19 [0.73]	0.399 [0.90]	0.153 [0.25]		-0.576** [2.00]
Number of children										0.167 [0.25]	
Number of adults	-0.201 [0.75]	0.043 [0.22]	-1.169 [1.29]	-0.096 [0.38]	-0.13 [0.34]	0.092 [0.24]	-0.083 [0.16]	0.472 [0.77]	1.075 [1.40]	-0.021 [0.14]	0.052 [0.37]
Female older 50 in HH	-0.434 [0.74]	-0.554 [1.29]	-0.202 [0.14]	-0.484 [0.86]	0.215 [0.26]	-0.463 [0.55]	-0.993 [0.77]	-0.364 [0.24]		0.531 [1.48]	-0.031 [0.08]
Index of social security at partner job	-0.258*** [3.12]	-0.057 [0.97]	-0.321*** [2.59]	0.026 [0.33]	-0.216 [1.36]	-0.293** [2.22]	0.147 [1.22]	-0.292 [1.05]	-0.283 [1.09]		
Average monthly income of PARTNER (log)	0.181* [1.68]	0.018 [0.19]	0.323 [1.52]	0.352** [2.14]	0.277 [1.57]	-0.044 [0.29]	0.006 [0.03]	-0.226 [0.78]	-0.055 [0.15]		
Rural	0.31 [1.20]	0.734*** [3.55]	0.968** [2.53]	1.268*** [4.32]	-0.39 [0.65]	0.454 [1.00]	0.831** [2.02]	-0.89 [1.14]	-0.159 [0.19]	0.577 [1.50]	0.888*** [3.11]
Regional unemployment level	0.031 [1.01]	-0.016 [0.59]	0.063 [1.17]	-0.013 [0.32]	0.011 [0.18]	-0.05 [0.92]	0.019 [0.40]	0.035 [0.37]	0.116 [0.81]	0.031 [0.68]	-0.048 [1.35]
Gender							0.822** [2.13]				
Constant	-2.606*** [3.74]	2.398 [1.49]	-2.985*** [2.58]	5.846*** [2.58]	-1.242 [1.03]	-0.314 [0.09]	-3.291*** [2.91]	-8.450*** [3.10]	7.209 [0.99]	-2.599*** [3.28]	-3.385* [1.75]
Observations	3254	2693	1561	1469	775	416	906	357	264	632	1179

Absolute value of z statistics in brackets ; \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 17.** Probability of being employed at public firm (reference category – those employed at firm of other type)

	All partnerships		A		B		C	D		No partner	
	Males	Females	Males	Females	Males	Females	Males and Females	Males	Females	Males	Females
Age	0.014*** [2.93]	0.017*** [3.18]	0.018** [2.47]	0.012* [1.71]	-0.003 [0.26]	0.032** [2.46]	0.030*** [3.08]	0.013 [1.02]	0 [0.01]	0.015 [1.47]	0.028*** [4.02]
Primary professional	0.04 [0.37]	0.081 [0.61]	0.136 [0.83]	0.1 [0.54]	0.051 [0.22]	-0.094 [0.28]	-0.278 [1.28]	0.404 [1.41]	0.176 [0.46]	-0.002 [0.01]	0.162 [0.74]
Secondary professional	0.1 [0.90]	0.406*** [3.36]	0.153 [0.92]	0.381** [2.27]	0.33 [1.37]	0.303 [1.01]	0.001 [0.01]	0.083 [0.29]	0.308 [0.93]	-0.277 [0.83]	0.515** [2.51]
Higher professional	0.352*** [2.97]	0.705*** [5.29]	0.389** [2.22]	0.669*** [3.74]	0.549** [2.17]	0.590* [1.68]	0.381* [1.65]	0.416 [1.25]	0.769** [1.98]	0.365 [1.22]	0.689*** [3.28]
Number of children aged 0-3	0.046 [0.42]	0.12 [0.82]	0.092 [0.53]	0.093 [0.47]	-0.272 [1.37]	-0.144 [0.39]	0.650*** [2.66]	0.407 [1.33]	-0.374 [0.93]		0.769** [2.19]
Number of children aged 4-6	0.284*** [2.59]	0.145 [1.11]	0.289* [1.69]	-0.165 [0.91]	0.279 [1.37]	0.372 [1.10]	0.636*** [2.69]	0.096 [0.33]	0.311 [0.89]		0.238 [0.94]
Number of children aged 7-15	-0.01 [0.18]	0.127** [2.06]	-0.04 [0.48]	0.124 [1.48]	-0.001 [0.01]	0.138 [0.81]	0.273** [2.47]	-0.441*** [2.88]	0.067 [0.40]		0.067 [0.58]
Number of children										0.695* [1.91]	
Number of adults	0.015 [0.22]	-0.034 [0.51]	0.054 [0.50]	-0.079 [0.71]	0.184 [1.61]	0.1 [0.44]	-0.117 [0.58]	-0.456* [1.77]	-0.417 [1.27]	0.054 [0.57]	-0.051 [0.67]
Female older 50 in HH	-0.111 [0.72]		-0.148 [0.67]	0.164 [0.75]	-0.535* [1.76]	-0.129 [0.30]	-0.137 [0.33]	0.658 [1.37]	0.481 [0.89]	0.305 [1.37]	0.152 [0.82]
Average monthly income of PARTNER (log)	0.003 [0.09]	-0.136*** [3.18]	-0.067 [1.14]	-0.175*** [2.76]	0.005 [0.08]	-0.059 [0.65]	-0.002 [0.02]	0.054 [0.63]	-0.343*** [2.64]		
Rural	0.769*** [8.97]	0.881*** [8.85]	0.343*** [2.59]	0.834*** [5.88]	1.025*** [5.66]	0.973*** [3.82]	1.071*** [6.31]	1.037*** [4.67]	0.735*** [2.84]	0.971*** [3.98]	1.282*** [7.47]
Regional unemployment level	0.047*** [4.44]	0.032*** [2.64]	0.032* [1.93]	0.035** [2.11]	0.057*** [2.60]	0.016 [0.53]	0.069*** [3.44]	0.033 [1.02]	-0.031 [0.81]	0.032 [1.16]	0.035** [2.11]
Gender							0.729*** [4.75]				
Constant	-2.015*** [8.17]	-1.507*** [5.54]	-1.981*** [5.28]	-1.260*** [3.33]	-1.748*** [3.45]	-2.007*** [3.09]	-3.238*** [6.41]	-1.329** [1.98]	0.123 [0.15]	-2.359*** [4.68]	-2.320*** [5.92]
Observations	3316	2715	1586	1477	790	420	920	440	370	625	1174

Absolute value of z statistics in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

