The subjective perception of property inequality in Russia – urban-rural differentiation

The problem of citizens' awareness of their own financial situation has begun to cause special interest of researchers in recent decades due to the growing awareness of the role of material positioning as an important political and economic force that can be regulated, as well as in connection with the development of quantitative and qualitative research in sociology, political science and partly economics as a whole. Initially, the researchers justified the psychological attitude of citizens only by economic factors, such as the respondent's income, which obviously deprived the study of a significant share of objectivity [Milanovic 2005; Bartels 2008; Kaltenhaler 2008]. The main emphasis was placed on the respondents' psychological understanding of social and material inequality in the country, without reference to their awareness of their own position regarding the total population [Loveless, Whitefield 2011]. It is also worth noting that the vast majority of the studies did not relate to the situation in Russia either due to a lack of data or due to a lack of interest in this problem. The work of Binelli and Lovelace, whose regression formula is used as the basis for this study, for the first time identified the respondents' place of residence factor as a determinant of their own financial situation evaluation [Binelli, Lovelace 2016]. As for the qualitative research on this topic, they have not yet been carried out, which makes the need for an integrated approach to this problem especially relevant.

The use of qualitative comparative analysis method QCA has been widely used by a number of researchers in socio-political studies since the late 1980s and mainly served as a means of identifying causal relationships between events and factors, as well as a combination of factors leading to a particular result [Ragin, Charles 1987]. Moreover, recently this combinatorial method began to be used not only in political studies, but also in studies of a socio-economic nature. Despite a number of drawbacks of this analysis, including, in particular, the impossibility of measuring the importance of a factor compared to other conditions, as well as the impossibility of abandoning econometric studies in identifying relationships, QCA proves its effectiveness in studies with an average and a small number of cases, and therefore, it draws our attention to this study [Jordan, Gross, et.al. 2011].

Thus, the reasons for this current study were, firstly, the insufficient coverage of previous studies of Russian specifics in determining the respondents' own financial situation, as well as the lack of comprehensive approaches to the analysis of this research problem, which leads to the opportunity to concretize the previous results or even change them.

The study presented in this paper is based on the use of elements of an econometric model of the abovementioned study by Binelli and Lovelace, but is

based on data for Russia. Also, the authors of this work included a number of additional indicators and variables. The aim of the study was to analyze factors that influence the subjective perception of material inequality in Russia by its citizens. The analysis presented in this paper is relevant for a number of reasons: first of all, it helps to establish more accurate connections between the social environment in which the individual is located and his subjective perception of his own material wealth, and also helps to more accurately further predict social sentiments in Russia and abroad. This study is conducted by means of quantitative data analysis methods, as well as the combinatorial QCA method (Qualitative Comparative Analysis).

The authors of the article, Binelli and Lovelace, propose the following economic model:

$$\boldsymbol{y}_{\boldsymbol{i}} = \boldsymbol{\beta_0} + \boldsymbol{\beta_1 income_1} + \boldsymbol{\beta_2 urb\_rural_i} + \boldsymbol{\beta_3}(\boldsymbol{income_i} * \boldsymbol{urban_i}) + \boldsymbol{X_i'\gamma} + \boldsymbol{\varepsilon_i}$$

where y_i is a dependent variable that reflects the subjective opinion of a respondent about his degree of social or material inequality, $income_i$ is an indicator of household income, urb_rural_i is a dummy variable equaling 1 if a respondent lives in the city, and 0 for rural areas. The X_i indicator, developed in an earlier article by Lovelace and Whitefield in 2011, is a set of variables representing individual characteristics, divided into 4 subgroups (normative contribution to the economic market and democratic political institutions, individual characteristics of the respondent, economic and political experience with the market and democratic institutions and individuals representing social progress) [Loveless, Whitefield 2011].

Applying this econometric model to the Russian Federation data, the authors of this work optimized it so that it better meets the characteristics of Russian social realities. To optimize the model, it was necessary to select factors that, in addition to the income and *urb_rural* indicators indicated by Binelli and Lovelace, influence the respondents' characteristics of their financial state. We stated the hypotheses as follows:

Hypothesis 1: Villagers tend to rate their material and social status higher than urban residents.

Hypothesis 2: Representations of material and social status are directly proportional to the respondent's income.

The problem of choosing factors that directly determine the indicator y in econometric analysis was solved by conducting the analysis using combinatorial methods. To conduct the study, a standard analysis of "boolean" sets of csQCA (crisp-set QCA) was used by reducing the data to a dichotomized form by encoding data as (1) and (0).

Based on the results, we formulated the following conclusions:

1. The results of the qualitative part of the study found that the determining factors that influence the respondents' assessment of their own material

state are age, income satisfaction, size of income, higher education, family, job availability and gender of the respondent.

2. In the course of the study, we were able to fully prove the hypothesis that villagers tend to rate their material and social status higher than urban residents. The magnitude of the difference in subjective perception between the city and the village comprised 10.3%.
3. The hypothesis that the degree of material and social status perception is directly proportional to the respondent's income was partially confirmed, since in general there are 2 trends in the data - a downward trend in the assessment of one's own property welfare with wage growth in the range up to 40 thousand rubles, and there is also a tendency to increase the idea of material wealth with a further increase in income above the value of 40 thousand rubles.
4. The accuracy of the econometric model was improved by adding indicators that indirectly affect the standard of living and well-being, as well as the attitude of citizens regarding both the work and personal life of Russians.
5. Regarding the fact that the final econometric model has been tested and its correctness has been proved, there is reason to argue that it can be used as a base in further studies with other databases, in particular for making forecasts, etc.

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