Original article

Modeling Population Dynamics: Testing the Approach of Fact Selection(the Example of Far Eastern Regions of the Russian Federation)

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Abstract. The article presents results of the study aimed at testing a methodological approach to selecting facts for modeling population dynamics based on their ranking according to the degree of «statistical priority» in the economy. The main hypothesis was that if the rank of one factor exceeds the rank of another, then the first factor should be taken into account when modeling the resulting feature. The study took the Far Eastern subjects of the Russian Federation as an example, based on data for 2016–2022. The spatial heterogeneity and dynamics of the hierarchy of factors of the population of the Far East, their differences at different levels of decomposition of the object of study were quantitatively identified. The obtained results showed that the fact ranking could act as a criterion for selecting the latter in a linear additive regression model of the corresponding indicator.

Keywords: population, total growth, natural increase, migration growth, hierarchy analysis method, modeling, Far Eastern Federal District

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