

# ANNOTATION

of the graduation work for obtaining a bachelor's degree

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(surname, first name)

Agent-based model of region population dynamics

(name of the graduation work)

Odessa National Economic University

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The graduating work consists of the introduction, three sections, conclusions and the list of the used sources. The total volume of the thesis work is 65 pages, it contains 24 pictures and 6 pages, and the list of the used sources contains 39 sources.

The work considers the dynamics of the population of the Odessa region. It gives an overview of the works of Ukrainian's and foreign scientists devoted to the problems of labor migration, population and related demographic issues. The factors influencing the population and the consequences of large-scale migration that swept Ukraine over the past years are analyzed. Some aspects of the demographic processes of the Odessa region are considered. It contains a conclusion about trend of increasing the number of immigrants and low birth rates that based on statistical data. The data collected during the processing of the statistical material formed the basis for constructing a simulation model for the dynamics of the region population. An agent-based model is developed by AnyLogic software. Results of work predict reduction Odessa region population in 2018-2019.

**Keywords:** population, population dynamics, agent-based model, migration.