

## ABSTRACT

The purpose of this master dissertation is to estimate and forecast the level of Human Sustainable Development Index in 2020 for Ukraine and to compare its level with the neighbor country Poland, and Norway, as a country with the highest level of sustainable development.

The object of the study is sustainable development indicators together with statistical data on them.

The subject of the study is mathematical models and methods used to estimate the level of sustainable development.

Research methods include autoregressive models, multiple linear regression and neural networks. Mathematical modeling is performed in statistical packages EViews 8.0 and SAS Enterprise Miner 12.1.