Case Study

Toulouse Business School

MSc AIBA

March 2021 / 2022

Duration: 4h

Context

Unemployment is considered to be a key measure of the health of the economy. Since it is a key macroeconomic variable and is crucial for economic planning, there is a need to provide accurate predictions. The most frequent measure of unemployment is the unemployment rate, which is the number of unemployed people divided by the number of people in the labor force.

Objective

The aim of this Case Study is to propose to the Organization for Economics Co-operation and Development (OECD) a model able to predict the next **12** monthly unemployment rates for the considered country (Predictions from January 2022 to December 2022).

Dataset

Each student will receive 01 dataset through c@mpus, containing historical monthly unemployment rates for a specific OECD country from January 1990 to December 2021. Data are not the same from one student to another one.

Evaluation criteria

Your submission report should contain clear and well explained codes and their outputs. You should present clearly and briefly your:

- Methodology
- Data description
- Modelization steps
- Model Evaluation (Performance, using error measures)
- Interpretation of results
- Recommendations / Insights

Your report will be submitted via c@mpus under the section "EXAMEN AIBA" **before 01:30 pm.**

NB: Students are free to choose the software of their convenience.