Jobsearch: or where to go to find an internship!

Antonio Curado, ¹ Joris Bertens, ² Manuel Demetriades, ³ Morten Dahl ⁴

¹M20180032@novaims.unl.pt

²M20180423@novaims.unl.pt

³M20180425@novaims.unl.pt

⁴M20180047@novaims.unl.pt

The key objective of our project is to investigate and identify key factors affecting portuguese unemployment rates at a municipal level. In addition to implementing a predictive system for unemployment rates, we aim to attain further insight to the underlying factors identified, providing key information for municipalities and their projected path.

Issue

Occupational opportunities are limited and an issue in Portugal. Hence, it should be at local governments best interests to bring more local businesses to their municipalities to create more job opportunities and economic growth.

Solution

Identify and scrutinise factors exhibiting significant influence on (un)employment rates, utilising them for the prediction of investment strategies by local governance.

Data

The data retrieved and utilized to compose this dataset were taken from pordata, the database of Contempory Portugal. All data was retrieved on a municipality level and joined on the unique municipality. The collected is exclusively from year 2011. As in this year the census took place the data is particurally versatile and consists of many features. The data can be retrieved here.

The collected data consists of relevant factors and are described below.

Composition of Unemployment

In this section data was taken describing the composition of unemployment based on age groups, education per sex and job seek per sex (a binary variable saying if the person seeks a job for the first time or not).

Average Wages

Data, which describe the average earnings/wages in each municipality were taken into consideration. These are split into average wages per education, per position and per industry sector.

Municipal Finances & Economy

Municipal finances such as the current revenue, current expenditure and capital expenditure were considered. In order to make the municipalities comparable the *per capita* values were taken. Furthermore, the enterprise density and labor productivity are composed to the dataset.

Population Composition

The share of foreigners living in a municipality, the age composition, the young-dependency ratio, the ageing index, the population density and the potential sustainability index were used.

Political Affiliation

The result of the 2011 parliament election were taken into consideration.