Report DOPP Exercise 3

Topic 16 - Change of City Quality of Life Rankings over Time

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Report

Executive Summary

We have been analysing data for various city and country rankings and indices, measuring overall quality of live (QoL). These data were merged with additional statistics for cities and countries related to health, environmental and economical situation.

Our goal was answering the questions:

- How do the rankings change over time?
- How do these rankings correlate with each other for one specific year?
- How do they correlate with other statistics about the countries in which the cities are located? How do they correlate with quality of life rankings of the country in which the cities are located?
- What are the determining characteristics for livability of a city? How do they correlate with cost of living?

We found that - with some recent changes, potentially related to the economic crisis starting in 2007 - the quality of live indices are going upwards.

There is a strong correlation between the indices published by Mercer and the one calculated by Numbeo.

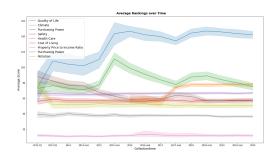
TODO - correlation with country QoL rankings

TODO - correlation with country statistics

We found that the three major characteristics determining the livability of a city (according to these QoL rankings) are health care, cost of living and purchasing power.

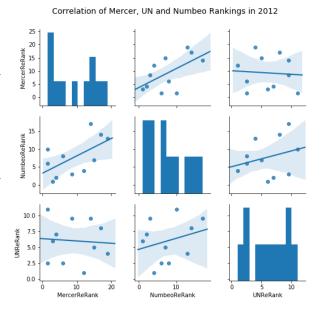
Change of QoL Rankings and Indices over Time

The following plot shows the average index values over time for the Quality of Live (QoL) identified by Numbeo, together with the components which influence this index.



Correlation of City QoL Rankings with each other

With this plot we investigated the correlation of the rankings identified by Numbeo with those identified by Mercer as well as the UN Habitat data, specifically looking into the year 2012 (where the most data was available).



The correlation betweek Numbeo and Mercer is very clearly visible; the correlation to the UN Habitat ranking however is very small.

Correlation of City QoL Rankings with Country Statistics

Correlation of City QoL Rankings with Country QoL Rankings

Determining Factors for City QoL

