

Report on Bachelor / Master Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University in Prague

Student:	Valeria Efimenko
Advisor:	PhDr. Lenka Šťastná, Ph.D.
Title of the thesis:	Alternative approach to measuring development progress of countries

OVERALL ASSESSMENT (provided in English, Czech, or Slovak):

Contribution

The thesis studies the indicator measuring well-being of the society called the Social Progress Index (SPI). It is definitely an interesting measure how to evaluate progress of countries' development. Nevertheless, the contribution of the thesis is not very clear to me. The SPI is very broad and it is calculated as a simple average of 3 dimensions, each of these dimensions is calculated as a simple average of 4 components, while each component is computed using a principal component analysis based on the data of various indicators within each component (so the component is the first component from the PCA). Actually, the author just states that the SPI is computed using the PCA.

The author deals with 3 hypotheses: the first one is clear – to analyze relationship between SPI and GDP, while arguing that high GDP does not necessarily mean high SPI; the value added of the second and the third hypothesis is questionable. In the hypothesis 2, the author aims to test whether each dimension can be explained by its four components (but actually it is calculated as a simple average of these four components!). In the hypothesis 3, the author tests whether the SPI itself can be explained by 12 components in total (4 components for each dimension), but actually SPI is computed as a simple average of these 12 components!! The author also divides 49 countries into 4 clusters based on values of 12 components, this clustering somehow helps her to support the hypothesis 1.

Not surprisingly, the best models for different dimensions are exactly the models containing all components. Concerning the model for the SPI, the author finds that it can be a function of only 4 components – other components may be correlated across different dimensions, therefore they can be skipped, that is the only conclusion which can be made I think.

Methods

The author uses the K-means clustering to divide countries into clusters and the Bayesian model averaging for selecting the correct model for hypotheses 2 and 3. Both methods are carefully described in the methodology section. Nevertheless, I am not convinced that the BMA method was necessary to use when having model with maximum 12 variables. The hypothesis 1 is verified only graphically using scatterplot. And the relationship is discussed already in earlier chapters when discussing the relationship between GDP and SPI.

Literature

The literature review is very poor, rather than presenting recent research on well-being using SPI, it discusses the SPI and its relationship with GINI index and GDP. It also provides an overview of other indices evaluating well-being of population, but this should definitely be in a different section. In total, only 5 studies related to the SPI are mentioned in this section.

Manuscript form

The thesis is well structured, but many typos and some grammar mistakes occur throughout the thesis. When citing a source in the text, the author uses also the first name (not only surname) which is not standard in academic texts. Not all figures and tables are properly numbered and hence referenced in the text.

Summary and suggested questions for the discussion during the defense

In general, I think that the contribution of the thesis is very poor. In addition, the literature review and the manuscript form could have been improved. That's why I suggest the grade E. The potential simple question for the author is the following: How your findings contribute to the current stream of research in the field?

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SUMMARY OF POINTS AWARDED (for details, see below):

CATEGORY	POINTS
Contribution (max. 30 points)	15
Methods (max. 30 points)	20
Literature (max. 20 points)	10
Manuscript Form (max. 20 points)	10
TOTAL POINTS (max. 100 points)	55
GRADE (A – B – C – D – E – F)	E

NAME OF THE REFEREE: Lenka Šťastná

DATE OF EVALUATION: January 24, 2018



Referee Signature

