Opponent's Report on Dissertation Thesis

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| Title of the Thesis: | Three essays on public procurement | |
| Type of Defense: | DEFENSE | |
| Date of Pre-Defense: | November 2, 2016 | |
| Opponent | István János Tóth, Ph.D. | Summer |

Address the following questions in your report, please:

- a) Can you recognize an original contribution of the author?
- b) Is the thesis based on relevant references?
- c) Is the thesis defendable at your home institution or another respected institution where you gave lectures?
- d) Do the results of the thesis allow their publication in a respected economic journal?
- e) Are there any additional major comments on what should be improved?
- f) What is your overall assessment of the thesis? (a) I recommend the thesis for defense without substantial changes, (b) the thesis can be defended after revision indicated in my comments, (c) not-defendable in this form.

(Note: The report should be at least 2 pages long.)

Content of the Report:

Assessment of Jiří Skuhrovec's thesis "Three Essays on Public Procurement"

I. Summary

a) Can you recognize an original contribution of the author?

YES

b) Is the thesis based on relevant references?

YES

c) Is the thesis defendable at your home institution or another respected institution where you gave lectures?

YES

- d) Do the results of the thesis allow their publication in a respected economic journal? YES
- e) Are there any additional major comments on what should be improved? NO
- f) What is your overall assessment of the thesis? (a) I recommend the thesis for defense without substantial changes; (b) the thesis can be defended after revision indicated in my comments, (c) not-defendable in this form.
- (a) I RECOMMEND THE THESIS FOR DEFENSE WITHOUT SUBSTANTIAL CHANGES

II. Detailed assessment

Topics

Jiří Skuhrovec has chosen an important topic for his dissertation, in which he attempts to investigate corruption risks and misuse of EU funding of public procurement and performance of public spending by using micro data. Spending public funds, and determining whether it is done with legal compliance and without social losses, is a very important issue for public policies aiming at establishing good governance. It's an obvious requirement, that state institutions should spend public funds with legal compliance, in the same way as taxpayers are required to pay their taxes.

Methods

Jiří Skuhrovec's dissertation is a pioneering work in several aspects and is a novelty concerning the research conducted in the field.

The paper is largely based on the database building techniques of data mining and of the big data approaches (i). The paper analyses and interprets the irregularities, which occur during public procurement procedures (corruption, the violation of legal standards etc.) primarily based on micro data. With this the author uses an analytical framework focusing on the behavior of the actors, which is crucial in assessing and interpreting the problem of corruption risks and irregularities of public procurement (ii). Building this database is not done for its own sake, but makes it possible for the author to create and test a new indicator to measure the corruption potential (zIndex) (iii). Using zIndex may also help to improve the targeting of the investigation of the public procurement procedures. The paper recommends a new method (also based on linking several database and analyzing micro data) to investigate, whether the EU grants have been spent according to their original aims or not. (iv).

The great strength of the research is that the author managed to connect database elegantly and with creativity, and created new indicators in an innovative way choosing the appropriate statistical methods to achieve his aims. (His methodological strength is quite outstanding in this respect while creating his zIndex).

The most significant novelty of this paper has been achieved by joining the different database and making use of the synergies deriving from them, and of the increased potentials in the analyses. Among the database there are administrative data, such as the database of EU public procurement procedures, the balance sheet data of the winning companies, the data on the expenditure and revenue of the municipalities, and data collected by the author himself (for example the survey in the case of zIndex), which he attaches to the previously mentioned ones.

Results

1. The first essay: "Profitability of Bearer Shares in Public Procurement"

The results published in the first paper are rather problematic, primarily due to the extremely small case number (N=68). It does not solve this initial weakness by the fact that the number of public procurement cases in the second sample is much higher (more than 30,000), since one can only use the variance of the existing 68 companies of the sample during the estimations. Under such low number of cases, the reliability of the data received is extremely low due to the sampling error; therefore the results tend to be rather accidental, and are not suitable for drawing conclusions.

The specification applied is partly connected to this weakness, concerning the problem of the corporate discrepancy of measuring the indicators ROE, ROI from the average measured in the sector: if ROIj refers to the year when the given company won the highest value of the public procurement, it is misleading, since it does not take into account the effects of the business cycle, or the effect of the Great Recession on the average or given company's ROI, ROE. The analysis of 3rd, 4th and 5th hypothesis (which are based on the second simple) gives us rather strong results, especially in case of competitive intensity. The results of this analysis are convincing and very important: the winners with non-transparent ownership structure enjoy environment with low level of competition in public tenders. This is a clear evidence of relationships between the significantly higher probability of irregularity and non-transparent ownership structure.

2. In the second essay: "zIndex – Benchmarking Municipalities in Public Procurement". In this section we have to highlight three important achievements of this part of the paper: the first is the relatively weak correlation among the components of the zIndex, which is a promising results, because in itself shows that the components that are not or only weakly related to each other; so they take different dimensions of the behavior concerning the corruption potential of the actors. According to this, the zIndex can be regarded as a good

synthetic indicator (a). There is another result, which also points at this feature. The relationship of the zIndex' and legal misconduct reveals that the zIndex is a good indicator of the probable occurrence of a fraudulent behavior, and with this of the corruption risk (b). We shall get the same result when we compare the value of the zIndex with the relative prices (c). The validity tests of the zIndex reinforce the plausibility and goodness of the index.

3. In the third part of the dissertation ("Do EU funds crowd out other public expenditures? Evidence on the additionality principle from the detailed Czech municipalities' data") the author investigates the use of EU funds, which were not spent according to the targeted aim, based on Czech data.

This is the most clearly and thoroughly elaborated part of the dissertation. Although the results do not confirm the author's initial hypothesis based on intuition and on several anecdotal evidences on the functioning of the crowd out effect, the method applied — and the author manages to show it convincingly — may be suitable to improve the performance of inspection of the EU funds to be more targeted.

| Date: | | |
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| botheses and tested times | with aid | |
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