Advisor’s Report on Dissertation Thesis

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<table>
<thead>
<tr>
<th>Author:</th>
<th>Martin Štěpánek</th>
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<td>Advisor:</td>
<td>PhDr. Jaromír Baxa Ph.D.</td>
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<tr>
<td>Title of the Thesis:</td>
<td>Essays on labour force and its productivity</td>
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<tr>
<td>Type of Defense:</td>
<td>DEFENSE</td>
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<tr>
<td>Date of Pre-Defense:</td>
<td>October 16, 2019</td>
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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.)

1. Can you recognize an original contribution of the author?

The thesis written by Martin consists of four papers that are a valuable contribution to the current policy issues. Moreover, all of them are built around advanced methodologies which encompass both, theoretical models and empirical approaches as well. In the first essay, Martin discuss the options for alternative pension reforms in the Czech Republic which faces population changing and adverse demographical development due to a drop in birth rates in the 1990’s. Following this, Martin continues with a second paper on potential impact of immigration on economic development in the Czech Republic, both at sectoral and at aggregate level. Both essays rely on computational general equilibrium model, developed by Martin, with obvious links to the previous research in the field. The calibration of that complex model for the Czech economy is completely new.

The other two papers focus on the determinants of labour productivity. First, Martin evaluates the positive effects of later school starts in the United States, and then he exploits unique dataset of more than 30,000 individuals from the United Kingdom to infer the main determinants of individual labour productivity. All papers are original, two of them written solely by Martin, and three of them are already published.
2. *Is the thesis based on relevant references?*

Yes, the thesis contains well-executed literature reviews in each chapter. Also, the contribution is well stressed. Additional sources recommended by the referees are included in the final version as well.

3. *Is the thesis defendable at your home institution or another respected institution where you gave lectures?*

Already the preliminary version of the thesis submitted for the pre-defense was already in line with all the criteria for a good dissertation thesis to be defended at the IES or elsewhere.

4. *Do the results of the thesis allow their publication in a respected economic journal?*

Three papers have been already published (in Czech Journal of Economics and Finance, Sleep Health, and in Journal of Occupational and Environmental Medicine). I believe the fourth study can be easily published in the future as well.

5. *Are there any additional major comments on what should be improved?*

Since I had the opportunity to comment the articles at times of writing, and my notes were incorporated, I have no additional comments.

Hence, I warmly recommend to award Martin by doctoral degree.

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<th>Date:</th>
<th>December 6, 2019</th>
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<td>Opponent’s Signature:</td>
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