Report on Master Thesis

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

Student:	**Pavel Žofák**
Advisor:	**Jaromír Baxa**
Title of the thesis:	**The Role of Income Tax Progressivity in GDP Smoothening: Empirical Analysis**

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

Please provide your assessment of each of the following four categories. The minimum length of the report is 300 words.

In his thesis, Pavel studies the relationship of income tax progressivity and output volatility. According to intuition, progressive taxation shall function as an additional automatic stabilizer so that the relation shall be negative. This idea is pretty old and refers to classics like works by P. Musgrave and others.

Contribution

The thesis by Pavel mainly relies on contribution by Attinasi et al. (2011) who studied the effects of tax progressivity on output volatility in OECD countries between 1982 and 2009. Interestingly, even the in period of the Great Moderation in which the importance of fiscal policy was often neglected, the evidence for negative correlation between tax progressivity and output volatility was confirmed.
Pavel precisely states his contribution to this paper: The paper by Attinasi et al. considers rather narrow measure of tax progressivity. Hence, Pavel thinks about a measure of tax progressivity in a similar way as for example the slope of the term structure is calculated. From the OECD data, extracts average tax rates for those who earn 66%, 100% and 167% of average incomes and calculates the difference between those tax rates. From my point of view, this is a clear-cut, clever and relevant measure of tax progressivity.
The results are pretty convincing, his measure of tax progressivity has probability inclusion over 90% and its coefficient is negative and significant, which is in line with the intuition and with findings presented in earlier literature. Then, robustness of the results is investigated extensively: different priors and endogeneity are tested. Surely, there are some more dimensions, at which the sensitivity analysis can be extended as well, i.e. replacing the rolling window with sequences of averages across 5, 7 or 10Y periods or estimation of the final model using panel data techniques, but like this, it's quite sufficient.
Finally, it is shown that one of the main channels through which the volatility is decreased, is consumption smoothing.
Perhaps, Pavel could have been somewhat more ambitious as he could have attempted to deliver some policy implications whether it's good to have progressive taxation or not. Obviously, such discussion would require some investigation of the effects of tax progressivity on growth itself, but this can be done in a very similar way as it is done here and so the marginal investment to such an extension wouldn't make this analysis prohibitive one. Nevertheless, the fact the author decided for rather descriptive analysis and restricted his attention to a very specific topic is just fine.

Methods

The dataset includes 31 OECD countries and to tackle the model uncertainty (especially with respect to the choice of control variables) the Bayesian model averaging method (BMA) is used. The methodology seems to be well described and applied. Also, the author is aware of the fact that BMA does not solves the problem of model uncertainty completely, sensitivity

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analysis is provided as well. In particular, the impact of different priors and potential endogeneity has been taken under scrutiny.

Literature

The literature survey is sufficient and adequate, on top of that, the value-added is clearly specified.

Manuscript form

Without flaws, professionally written, there‘s not much else to add.

Overall, the thesis is well written and the empirical exercise is carefully executed. Hence, I've enjoyed reading and I recommend grade A.

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

CATEGORY		**POINTS**
Contribution	*(max. 30 points)*	28
Methods	*(max. 30 points)*	30
Literature	*(max. 20 points)*	20
Manuscript Form	*(max. 20 points)*	20
TOTAL POINTS	*(max. 100 points)*	**98**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE: ***Jaromír Baxa***

DATE OF EVALUATION: ***June 13, 2017***

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

LITERATURE REVIEW: *The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.*

Strong	*Average*	*Weak*
20	*10*	*0*

METHODS: *The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.*

Strong	*Average*	*Weak*
30	*15*	*0*

CONTRIBUTION: *The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.*

Strong	*Average*	*Weak*
30	*15*	*0*

MANUSCRIPT FORM: *The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.*

Strong	*Average*	*Weak*
20	*10*	*0*

Overall grading:

TOTAL POINTS	**GRADE**		
81 – 100	**1**	= excellent	= výborně
61 – 80	**2**	= good	= velmi dobře
41 – 60	**3**	= satisfactory	= dobře
0 – 40	**4**	= fail	= nedoporučuji k obhajobě