

Report on Bachelor / Master Thesis

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

Student:	Bc. Michael Bogren
Advisor:	Vilém Semerák
Title of the thesis:	The Cross-Country and Cross-Sectoral Study of TFP and its Determinants

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.

Contribution

The overall contribution is not easy to evaluate. The author amassed a rather big volume of papers and facts and attempts to interpret them critically. The interpretation is unfortunately often obscured by the form of the manuscript.

Similar comments can be made with respect to methods. Mr Bogren attempted to use econometric analysis as well as extensive descriptive statistics, but the results of especially the econometrics parts are again difficult to build upon by future researchers because of methodological issues as well as (again) because of the form of their description.

Methods

Mr Bogren also attempted to provide own results in the form of: (i) simple evaluation of the properties of analyzed data and their relationships based on descriptive statistics, (ii) econometric analysis.

The econometric section is based on two estimators applied on the same specification:

- (i) A random effect model which however incorporates country-specific fixed effects and lagged explained variable.
- (ii) Estimation by means of Arellano-Bond estimator for dynamic panels.

Michael made an interesting progress in his knowledge of econometrics terminology and ability to describe the results during the work on the paper. However, quite a few problems survived till the final version of the text:

- (i) Interpretation of some of the results is a bit unusual – e.g. the author's description of the estimated "fixed effects" on p. 52 ("The Eastern European region (Czech Republic, Poland) has a positive response to the TFP").
- (ii) The author included into the paper many tests of the properties of the variables (normality, stationarity, etc.) – some of which only made the text more cluttered and do not help the quality of the econometric work.
- (iii) Most importantly – the motivation and logic of the econometric specification proposed by the author is not explained. It is clearly different from the papers which inspired his topics initially and it does not seem to be inspired by any micro-foundations. It is also not clear why one variable is in logs, while the other variables are not. This means that there is no guarantee that the model is correctly specified and that it can provide unbiased results (even if all other econometric issues are dealt with properly).

Literature

Mr Bogren presents results published by many other researchers. He mentions quite a few papers, books and presentations which are relevant for the topic as well as for the properties of underlying variables or for features of econometric techniques he had decided to use. The extensive character of the literature review is unfortunately not matched by the quality of organization of the text. The author sometimes jumps from one paper to another or from his own results to other literature and back. While he is trying to separate his own claims from the cited sources, the resulting text is at times a bit discontinuous.

Report on Bachelor / Master Thesis

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

Student:	Bc. Michael Bogren
Advisor:	Vilém Semerák
Title of the thesis:	The Cross-Country and Cross-Sectoral Study of TFP and its Determinants

Some cited texts seem to be reinterpreted in a rather oversimplified way – e.g. Aghion & Howitt (1997) and the author's description of endogenous growth models in general; and some sources cited in the text are surprisingly absent from the final list of references – again for example Aghion & Howitt.

Manuscript form

The style and manuscript form are the weakest links of the whole thesis and they significantly devalue the author's effort. The style is not easy to describe, but in some sections of the text it may resemble a collage – author's ideas and citations are harder to follow because of the poor organization of the text. Part of that can be an issue of individual preferences, it is also true that Mr Bogren attempted to improve the organization of the text, the resulting form and structure are still not quite at academic level.

The author uses quite a few charts, many of which were moved to the appendix. However, some of the charts do not seem to be really useful (e.g. Figure 2, p. 17 – does it make sense to compare absolute numbers of new students across as diverse countries as China and Germany?) or their form can a bit obscure their information value (e.g. Figure 1, p. 16 – the decline in 2014 seems to be driven just by missing observations for some of the analyzed countries, or Figure 34, p. 42).

Overall evaluation

It is not easy to summarize the overall result. Mr Bogren had a very ambitious plan and attempted to gather and include many sources. He also attempted to improve his understanding of statistics and econometrics. However, all this effort is not fully reflected in the quality (and form) of the final results.

Question for the final defense:

Why did you decide to use R&D stocks instead of flow variables such as R&D expenditures? Which other authors/papers used this approach and why?

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

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	19
<i>Methods</i> (max. 30 points)	15
<i>Literature</i> (max. 20 points)	16
<i>Manuscript Form</i> (max. 20 points)	9
TOTAL POINTS (max. 100 points)	59
GRADE (1 – 2 – 3 – 4)	3

NAME OF THE REFEREE: Vilém Semerák

DATE OF EVALUATION: September 5th, 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