Report on Bachelor / Master Thesis

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

Student:	**Petr Čala**
Advisor:	**doc. PhDr. Zuzana Havránková, Ph.D.**
Title of the thesis:	**Ability bias in the returns to schooling: How large it is and why it matters**

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

Short summary

Petr Cala is my star student. He presented the results of this thesis at the Meta-Analysis of Economics Research Network colloquium in 2023, a rare distinction for an MA student. Because the conference took place last year, he had plenty of time to incorporate all the comments he received. The thesis is the best existing research synthesis on the causal effect of education on earnings: about 6% per additional year of schooling, after controlling for publication bias, endogeneity, and various other biases. The thesis also examines, in great detail, how context affects the returns to schooling. Eventually and after revisions, a paper based on these results will be published in a good journal.

Contribution

The subject of this thesis ranks among the most commonly estimated parameters in education and labor economics. It is commonly believed that the effect is around 9% per additional year of schooling. So, Petr's result of 6% on average makes a lot of difference for related research, policy models, and evidence-based policy. The effect often serves as a benchmark for other computations or comparisons in education economics.

Petr has already written a meta-analysis for his bachelor's degree (awarded), and his experience shows. During the work on his master's thesis, he developed a web-scraping algorithm that collects and checks information on primary studies, rewrote Bom & Rachinger's publication bias correction method into R, increased the speed of the stem-based technique's script 30-fold. Needless to say, he selflessly helped a considerable number of my graduate and undergraduate students with their own meta-analyses, running his six-thousand-line superscript to re-check their work and provide advice.

Methods

The thesis uses modern meta-analysis methods, such as stem-based technique, WAAP, hierarchical Bayes, Andrews and Kasy, endogenous kink, MAIVE, p-uniform*, caliper tests, Elliott et al tests for p-hacking, ROBMA, BMA, FMA. These techniques go far beyond the econometrics curriculum taught at the Institute of Economic Studies. In this context I should note that Petr will continue as my PhD student, and we have already arranged funding for his work. He is also working on joint projects with Tom Stanley, the founding father of meta-analysis.

Literature

All relevant sources are properly cited. I appreciate that the second part of the meta-analysis focuses on twin studies, which are especially strong on methodological grounds.

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Manuscript form

The thesis is typeset beautifully in LaTeX and written in good English. I appreciate the remarkably good formatting of tables and figures. The thesis is easy to read.

Overall evaluation and suggested questions for the discussion during the defense

Huge amount of time and effort went into this thesis. I have great difficulty in deducting a single point from the evaluation.

In my view, the thesis fulfills the requirements for a bachelor thesis at IES, Faculty of Social Sciences, Charles University, I recommend it for the defense and suggest a grade A and a distinction. The results of antiplagiarism software analysis do not indicate significant text similarity with other available sources. Question for defense: Based on your analysis, what methodological recommendations would you have for the authors of primary studies?

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

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

NAME OF THE REFEREE: *Doc. PhDr. Zuzana Havránková, Ph.D.*

DATE OF EVALUATION: *May 9, 2024* *Digitally Signed, Zuzana Havrankova*

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Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

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.*

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.*

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

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.*

Overall grading:

TOTAL	GRADE
91 – 100	**A**
81 - 90	**B**
71 - 80	**C**
61 – 70	**D**
51 – 60	**E**
0 – 50	**F**