

Report on Bachelor / Master Thesis

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

Student:	Pavel Fuchs
Advisor:	Petr Pleticha, M.Sc.
Title of the thesis:	Productivity of Czech state administration with focus on IT technology and costs connected with use of modern technologies

OVERALL ASSESSMENT

Contribution

Pavel Fuchs wrote a good thesis covering a policy-relevant topic and addressing a well-motivated research question.

The thesis is a good example of the fact that Czechia is a good place to empirically study local public finance because of the relatively good data availability for its municipalities. Indeed, the data used are relevant and state-of-the-art for the purpose at hand (and its restrictions and limitations are sufficiently discussed). Pavel Fuchs uses data for municipalities with extended competence and exploits their relative homogeneity in terms of local government. These around 200 municipalities need to guarantee a relatively fixed portfolio of services for citizens, but at the same time they have a relative freedom in terms of investment decision making, which makes their set suitable for empirical investigation.

In terms of findings, Pavel Fuchs found that higher investment in IT is not associated with improved efficiency. Furthermore, he described an ambiguous effect of the size of the district and a significant negative effect of number of clerks. While the contribution is far from earth-shattering in the international perspective, the thesis can be considered a carefully prepared contribution to the role of Czech municipalities in government service provision and, more generally, to the increasingly extensive and rigorous empirical evidence base on public policies in Czechia.

Methods

Pavel Fuchs used Data Envelopment Analysis and assigned each municipality with efficiency score. Consequently, he found that higher investment in IT is not associated with an improved efficiency. While I am not an expert on the method, I understand the Data Envelopment Analysis to be a standard tool in efficiency analysis and commendable for a use in an undergraduate thesis, but not necessarily the most convincing (e.g. in terms of causality etc) tool economists or other public finance experts are using these days. Overall, his two-staged approach, with DEA in the first stage and either OLS or Tobit model in the second stage, seems appropriate for the research questions at hand.

Literature

The discussion of the existing literature in the dedicated section is wide-ranging and seems detailed enough. What I would surely like to see more of in the thesis is the comparison of its findings with those of existing studies, most likely directly in the results section.

Manuscript form

The manuscript form is generally of sufficient quality. The writing is mostly understandable and the use of English is good.

I would prefer for meaningful labels to be used instead of shortcuts in tables such as Table 5.1 on page 24. More generally, the figures and tables could be presented in much clearer way, with

As a very minor technical point, let me point out that the suggested on page 3 includes the wrong year – as far as I know it should be 2021 rather than 2017. ("FUCHS, Pavel. Productivity of Czech state

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administration with focus on IT technology and costs connected with use of modern technologies. Praha, 2017....”).

Also, very minor, at least in the title, I would prefer to see either “information technology” or “IT”, but not the currently used “IT technology” – I am not a language expert, but it does not sound good.

Suggested questions for the committee

While I respect your choice to focus on municipalities with extended competence, have you considered using the data for more than 6000 Czech municipalities? What opportunities and threats would using such a data set pose in contrast with your current data set?

Could you name specific policy recommendations that are supported by your findings, if any, and what public authority or office should implement them?

Summary

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 B.

The results of the Urkund analysis do not indicate significant text similarity with other available sources.

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

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	23
<i>Methods</i> (max. 30 points)	22
<i>Literature</i> (max. 20 points)	19
<i>Manuscript Form</i> (max. 20 points)	17
TOTAL POINTS (max. 100 points)	81
GRADE (A – B – C – D – E – F)	B

NAME OF THE REFEREE:

DATE OF EVALUATION:

Digitally signed (17. 8. 2021)
Petr Janský

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