

Report on Bachelor / Master Thesis

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

Student:	Pavĺína Jandov
Advisor:	Mgr. Henrieta Maďarov
Title of the thesis:	Cost Analysis of Health Care of Outpatient Providers Employing Risk-adjustment

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

The thesis analyses an economic efficiency of outpatient health care providers. The study uses OLS regression to estimate costs of patients. Then the attempt to present profiling of providers is done. The thesis is well written, the author demonstrates good orientation in the literature and presents interesting and policy-valuable empirical work. There are several issues to be discussed with the author, however I do not regard them as serious. Even though that the model does not exhibit high explanatory power which has also impact on provider profiling, the thesis is inspirational for other applied analyses in this field. The author also discusses the weaknesses of the model presenting potential limitations of Czech data sources. Therefore I grade the thesis as **excellent**.

My comments except of one are of very minor nature. They generally relates to few typos or improvement of explanatory and reader-friendly nature of the text. However one important issue related to the nature of the dataset belongs to relevant issues to be discussed in the defense.

Data Issues

- I generally question the attempt to conclude something general about the Czech healthcare using the data which are very unequally distributed across regions (see figure 1 on page 23). Then we can easily suspect the results related to regional or district dummies from being biased. Definitely the data can provide us strong outcomes for regions where OZP is strong but I would be sceptical in case of otorhinolaryngology for their relevance in other regions. This is not a critique of using OZP data, it is just a note about the limitation of the interpretations. The author confirms the unequal distribution and claims that „Still, we consider the number of people in the districts enough big for significant results“. I would attack this sentence and encourage author to defend it at the defense or explain in which sense or meaning the data can bring significant results. If we look at the figure 1 we see that in most regions the total number of patients hardly exceeds 1000. If we take into account potential high heterogeneity between patients (age, social-economic conditions, family background, etc.) we would have problem to argue that the numbers represent random sample inside the regions. This would be my line of attack.
- One way how to cope with this unequal distribution of patients could be to run the analysis just on region 1 and 2 (Figure 1, p.23). The author then could compare the results of whole and reduced model. Did the author think about this possibility or was that regarded as inappropriate treatment because of some reasons?
- My second question related to the data issue is why have you chosen otorhinolaryngology? Was it the only data available from the company?

Minor comments

- Very likely the sentence in the footnote 1 is incomplete...
- Proofreading for some typos would help: e.g. „(Parlament esk republiky, 2012)(Ministerstvo zdravotnictv esk republiky, 2006)“ on page 5 – wrong citation style. Should be „(Parlament esk republiky, 2012; Ministerstvo zdravotnictv esk republiky, 2006)“
- I would welcome little bit more detailed explanation of the fixed effect model on page 12. To what does the lower subscript „j“ refer? If to a provider then the „x“ may be sufficient. But then what does the upper subscript „F“ mean?

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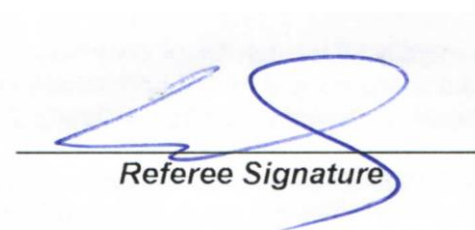
- When we speak about FE or RE models we usually work with a panel data. However I see no time dimension in the notation. What is the difference between the panel FE and RE estimators and their usage here?
- I expect that by the term „second column“ on page 22 the author means the column „Econ_category1“ in table 4.

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

CATEGORY	POINTS
<i>Literature</i> (max. 20 points)	20
<i>Methods</i> (max. 30 points)	28
<i>Contribution</i> (max. 30 points)	25
<i>Manuscript Form</i> (max. 20 points)	18
TOTAL POINTS (max. 100 points)	91
GRADE (1 – 2 – 3 – 4)	1

NAME OF THE REFEREE: Michal Paulus

DATE OF EVALUATION: 26. 8. 2015



Referee Signature