

# Report on Bachelor Thesis

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

<b>Student:</b>	<b>Michal Nedelka</b>
<b>Advisor:</b>	<b>Milan Ščasný</b>
<b>Title of the thesis:</b>	<b>Analysis of Consumers' Preferences for Cars on Slovak Market</b>

## OVERALL ASSESSMENT

### Short summary

Thesis by Michal Nedelka analysis the effect of vehicle registration tax and fuel price on new registrations of passenger vehicles in Slovakia. It aims specifically on the effect of the vehicle registration tax which was introduced in October 2012, and then revised in 2017, with the rates linked to engine power and later also to age of registered second-hand (used) vehicle. The effect is estimated from panel fixed effect model.

It was found that both fuel price and registration fee negatively affected the number of vehicle registrations in Slovakia. The effect of fuel price (per km) is stronger for diesel-fuelled vehicles, while only diesel vehicles that are less efficient are affected by the registration tax. Registration tax had stronger effect on registrations of petrol vehicles, especially those that were fuel efficient. Fuel price responsiveness differed during the periods when fuel price was steadily rising compared to a period when fuel price was rather declining, however, since responsiveness was also declining over time, it does not allow to disentangle the effect of time from the effect of changing price change pattern.

### Contribution

Michal's thesis contributes to the literature that analysis the effect of economic instruments on passenger vehicles and this study is one of the first its kind performed in CEE region. His analysis aims at several different market segments defined by fuel used (petrol vs. diesel), whether registered vehicle was new or used, and fuel efficiency. Such segmentation is very useful since usage and environmental burden of these types of vehicles differ significantly. I appreciate also specific focus on potentially asymmetric response on increasing vs. decreasing fuel costs (only rarely analysed with respect to fuel demand).

### Methods

The author uses standard method and econometric model that are appropriate for this kind of analysis. Specifically, panel data, pooled OLS, model is estimated, with make-model and year-month fixed effects (confirmed by Hausman test) and clustered standard errors. Tests on heteroskedascity and serial correlation are performed. Data cleaning with chosen data restriction (fuel consumption smaller than 3.5 l and higher than 20 l per 100 km) was appropriate.

### Literature

Reviewed literature is relevant to the topic and all key materials has been covered by the presented review.

### Manuscript form

This thesis follows standard, logical structure. The text refers to tables and disposes with a complete bibliography. The thesis is written in competent English and typeset nicely in LaTeX.

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## Overall evaluation and suggested questions for the discussion during the defense

This bachelor thesis is written in very high standard (even if it was a master thesis). The author has consulted his research with me on a regular basis, and all of my previous comments have been incorporated and are reflected in the final version of this thesis.

I find this thesis corresponding academic standards for bachelor theses written at the Institute. The results of the Urkund analysis do not indicate significant text similarity with other available sources.

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 **"excellent"** („vřborně“, 1).

**Question for defense:** Discuss the research design (and the data needed) if you like to estimate the effect on Slovakian vehicle market by the DiD approach.

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

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

**NAME OF THE REFEREE:** *Milan řčasny*

**DATE OF EVALUATION:** *September 2, 2022*

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*Referee Signature*

