Report on Master Thesis

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

Student:	**Lenka Tomášková**
Advisor:	**Milan Ščasný**
Title of the thesis:	**The impact of the EU ETS in the Czech Republic**

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

Short summary

This master thesis the effet of EU's Emission Trading System (EU ETS) on CO2 emissions released by the Czech companies. Additionaly, it analysis the effect of the EU ETS on carbon-fuel intensity and arbon intensity of production. This analysis covers all three phases of the EU ETS, i.e. 2005-2008, 2009-2012 and 2013-2019. It uses the differene-in-difference method with propensity score matching to infer the causal effect of the regulation. It was found the EU ETS has not had any effect on carbon emissions, at least in the case of the Czeh Republic – that is not surprising results considering the results from other similar studies.

Contribution

There are not many studies that analysed the effet of this very speific regulation – the EU ETS – and if there are some most of them relied on aggregated, setor-level, data. Lenka used a miro-level data (company-level finanial data and facility-level emission and energy data). Econometric model she used—DiD with PSM when not-regulated failities represent a ontrol group— is also more advanced than most of similar studies have been using. Moreover, this research was quite challenging for thwo reasons: first, there have been only a few hundreds facilities (and even less companies) regulated within the EU ETS in the Czech Republic, and, second, the regulated companies are, given by law, muh different wrt production size and/or installed capacity than un-regulated ompanies, that both result in many challenges when the casual effet shall be inferred. Last, the original datasets recording emission data required a lot of data cleaning, making this master thesis time-intense.

Methods

The presented analysis uses the difference-in-difference method with propensity score matching to infer the causal effect of the EU ETS, when unregulated failities/companies omprise the control and the matching is based on the regulated and not-regulated units before the regulation started to be implemented (i.e. priot 2005). This has been the only one appropriate and feasible method (due to the data) for this kind of analysis, althoug many other alternative econometri models have been discussed and tested among Lenka, prof. Alberini and myself. This analysis was performed for different ETS stages and for differently defined outcome variable. Considering the Czech context and similar studies that evaluated rather than analysed the effect of the EU ETS, this thesis is exceptionally good.

Literature

This thesis inludes very omprehensive and thorough literature review, with nicely summarised the key characteristics of and findings from the key studies. Most, if not all, empirical studies have been included in the review and/or disussed during our onsultations.

Manuscript form

In this respet I do not have any (negative) comment or criticism.

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Overall evaluation and suggested questions for the discussion during the defense

This master thesis presents exceptional piece of researh work. Research, data issues, model selection have been widely discussed with me and Professor Anna Alberini in regular (almost weakly online) basis that took for several months. All of our comments have been refleted in the final version of her thesis.

The results of the Urkund analysis do not indicate significant text similarity with other available sources. In my view, this thesis fulfills the requirements for a master thesis at IES, Faculty of Social Sciences, Charles University, I recommend it for the defense and suggest a **grade A**.

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: *Milan Ščasný*

DATE OF EVALUATION: *Sept 9th, 2021*

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Referee Signature