

Report on Bachelor / Master Thesis

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

Student:	Pavel Bittnar
Advisor:	RNDr. Červinka, M. Ph.D.
Title of the thesis:	Analysis of Cost Curves of Companies in Power & Heat Sector on the European Market Depending on the Carbon Allowances

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

Short summary

The thesis investigates the relationship between the profits of companies in the Power and Heat sector and the European carbon allowances. The study aims to determine whether there is a linear relationship between the profits of these companies and the number of allocated allowances. The thesis also provides insight into the European Emissions Trading System. It relies on using two datasets - data from Carbon Market Data and data collected (by the author) from annual reports of individual companies in the Power and Heat sector. Then, the fixed effects regression is conducted. There are four different measures of profit used to analyze the relationship between the profits of these companies and the number of allocated allowances. The findings suggest that there is a positive linear relationship between profits and carbon allowances. The thesis concludes that the study provides a foundation for further research in this area.

Contribution

The problem with bachelor and diploma theses lies in the fact that the contribution is not highlighted enough. In this case, the research gap could be emphasised more, however, the author definitely contributed to the literature by creating a dataset containing financial information about a relatively large share of companies in the Power and Heat sector in the EU, which can be used for further exploration in the future, too. Moreover, the thesis contributes to the existing body of knowledge on the relationship between profits and carbon allowances in the Power and Heat sector. Hence, the study addresses an important research question and provides valuable insights into the European Emissions Trading System. That being said, the thesis also highlights the need for further research in this area.

Methods

The fourth chapter describes the data used for the analysis and is accompanied with relevant tables, however, some graphs could be used, too. The fifth chapter presents methods starting with choosing the right model as well as explaining advantages and disadvantages. Both chapters are clearly written and easy to follow. Even though there are some limitations to the methods used, the results are described well and in the interpretation, the author acknowledges these limitations. Overall, the study uses four different measures of profit to analyze the relationship between profits and carbon allowances. What I missed was the indication or discussion on which model resulted to be the most robust and provides the best, reliable and unbiased/consistent estimates.

Literature

The literature review is comprehensive and well-structured, providing a solid foundation for the study. The author engages with relevant theories and empirical studies, demonstrating a thorough understanding of the existing literature. The review highlights the gaps in knowledge that the thesis aims to address. The author also acknowledges some limitations of the existing literature. Overall, the review is satisfactory, logically organized and the literature is up-to-date. The author quotes relevant literature in a proper way.

Manuscript form

The thesis is well-organized and follows a logical structure, making it easy for the reader to follow the author's line of reasoning. The writing is clear, concise, and adheres to academic standards. The use

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of tables is appropriate, however, some figures, and other visual aids could enhance the presentation of the findings and supports the author's arguments. The text of the thesis effectively refers to graphs and tables and a complete bibliography is included at the end. Moreover, the results of the Turnitin analysis do not indicate significant text similarity with other available sources. There is one inconsistency, tough - a typo in the regression results table (Table 6.4), where we do not see ExAI (Excess Allowances) variable, which is being interpreted in the text. In the table, there is another variable EmCap, which was not defined so I guess it is a mistake/typo.

Overall evaluation and suggested questions for the discussion during the defense

Suggested questions for the discussion during the defense include:

1. How do you think the findings of your study can be applied in real-world settings to improve the profitability of companies in the Power and Heat sector?
2. Can you discuss any potential limitations of your research methods and how they might have impacted your findings?
3. How do you envision the future of research in this area, and what additional questions or topics would you like to see explored?
4. How do you think your research contributes to the broader academic debate on the European Emissions Trading System?

The thesis is well written and catches the attention though there are some minor mistakes. Overall, I enjoyed reading the thesis. The thesis fulfills all formal requirements for a bachelor thesis at IES, Faculty of Social Sciences, Charles University, hence, I recommend it for the defense and suggest a grade A.

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

CATEGORY	POINTS
<i>Contribution (max. 30 points)</i>	26
<i>Methods (max. 30 points)</i>	27
<i>Literature (max. 20 points)</i>	19
<i>Manuscript Form (max. 20 points)</i>	19
TOTAL POINTS (max. 100 points)	91
GRADE (A – B – C – D – E – F)	A

NAME OF THE REFEREE: *Diana Kmeřková, MSc.*

DATE OF EVALUATION:

Digitally signed (23.5.2023):
Diana Kmeřková

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