

Report on Master Thesis

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

Student:	Bc. David Pergl
Advisor:	Mgr. Magda Pečená, Ph.D.
Title of the thesis:	Estimation of company credit rating by means of ordered probit model applied to Czech bond market

OVERALL ASSESSMENT:

Contribution

Bonds' rating has got attraction from both academics and practitioners in the last years, when interest rates remain low. David Pergl investigates the topic when empirical testing examines the relationship between credit rating and bond yield or alternatively credit spread on the Czech bond market based on a data set in the 2008-2019 observation period. He concludes that financial and company specific data are sufficient to estimate the credit rating by means of ordered probit model. His research did not confirm strong linear relationship between credit risk and bond's return, what is not so surprising. David has identified incorrect pricing of the Czech bond market, which has not been investigated by many researchers so far. His contribution is therefore clear.

Methods

The author applies several standard methods in his research: the ordered probit model and simple OLS. He also discusses potential problems of these models and presents their solutions. Based on these methods 5 hypotheses are tested.

Literature

A 10-page literature review on related theoretical models and empirical studies seems reasonable. The author quotes seminal works in this field such as Altman (1968), Sharpe (1964) or more recently Landschoot (2004) or Livingston, et al. (2018), what makes his research valuable.

Manuscript form

David's thesis meets standard format requirements on bibliography, notes, figures and tables well illustrate discussed issues. However, some format issues should be mentioned (e.g. missing sources under several tables and figures, numbering of headings, relatively long Conclusion etc.).

Summary and suggested questions for the discussion during the defense

David has developed a solid academic approach, reviewed the existing literature, identified open questions and drew relevant conclusions from that. In my view, the 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 B**.

The results of the Urkund analysis do not indicate significant text similarity with other available sources. Though a similar index is 24%, it reflects a previous version of the thesis submitted to Master Thesis Seminar at the IES.

Questions to the defense:

- 1) David estimates that YTM for bonds rated by BBB would be on average lower by 0.76% than for A rated bonds (+0.82% for BB bonds respectively) as indicated in Table 20. It means that BBB-bond investors were not rewarded for higher-risk taking. Was this observable also on other (mature) markets? Does he think that it is common on emerging markets (e.g. in the Central and Eastern European region)?
- 2) Could David compare his results with other researchers from the CEE region? Are they similar or different? I guess that the Polish bond market is more liquid than the Czech one and can therefore report different results.

Report on Master Thesis

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

Student:	Bc. David Pergl
Advisor:	Mgr. Magda Pečená, Ph.D.
Title of the thesis:	Estimation of company credit rating by means of ordered probit model applied to Czech bond market

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

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	27
<i>Methods</i> (max. 30 points)	25
<i>Literature</i> (max. 20 points)	17
<i>Manuscript Form</i> (max. 20 points)	12
TOTAL POINTS (max. 100 points)	81
GRADE (A – B – C – D – E – F)	B

NAME OF THE REFEREE: *prof. PhDr. Petr Teply, Ph.D.*

DATE OF EVALUATION: *May 24, 2021*

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.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
30	15	0

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.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
30	15	0

LITERATURE REVIEW: *The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
20	10	0

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.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
20	10	0

Overall grading:

TOTAL	GRADE
91 – 100	A
81 - 90	B
71 - 80	C
61 – 70	D
51 – 60	E
0 – 50	F