

Report on Bachelor / Master Thesis

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

Student:	Ihor Kruchynenko
Advisor:	Mgr. Svatopluk Svoboda
Title of the thesis:	Financial Risk and Models of its Measurement: Altman's Z-score Revisited.

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

The author decided to draft his diploma thesis on the topic of financial risk, its classification and measurement, which I believe is well chosen and relevant topic in current financial state around the world. The thesis contains 78 pages, out of which 26 pages are author's own analytical work.

In the first chapter Mr. Kruchynenko provides classification, introduction and depiction of financial risks. Second chapter is devoted to the closer look at credit risk and to the compilation of the models of its measurement. The practical part (chapter 3) then consists of a) computation of Altman Z score, b) assessment of its accuracy in terms of prediction success and c) testing the given specification of the model. There is also special subchapter, which provides characteristic of construction sector in UK, as the sector that is afterwards subjected to analysis. In the conclusion author summarizes his findings.

In my view in the theoretical part Mr. Kruchynenko convincingly demonstrated his ability to synthesize existing approaches towards financial risks' classification and assessment. Systematization of the credit-risk-models according to their evolution in time I consider also worthy and deserving endeavor. There is not much to say about the theoretical part; author followed well established sources – mainly BIS and relevant works on the subject.

Chapter on Altman Z score model is well elaborated and written – Model is appropriately introduced; the results are provided in nice form and are comprehensively interpreted. Also author's important findings are succinctly stated.

Unluckily, econometric testing did not yield desired results because of data characteristics (heteroscedasticity). Still, in my view, Mr. Kruchynenko performed all data-equilibristic that is required (and possible) in such cases – employing "fat-tails", WLS and FGLS techniques. By doing so he displayed skill, knowledge and understanding of econometric modeling that I consider adequate for good Master student of our faculty.

I have only three concerns from the methodological point of view that may be addressed by Mr. Kruchynenko during the defense of the thesis:

- 1) Closer explanation of the reasons why he chose the given specification of the model would in my view be appropriate. The Altman Z score is known to be used under several specifications (page 61), in order to match the characteristics of various sectors. Is the specification as studied by the author suitable for examination of firms from given industries? I missed the discussion in the thesis.
- 2) Are "type 1" and "type 2" errors employed correctly? The "grey area" seems to cause possible inconsistency in the relationship between "false-negative" and "false-positive" groups. This in turn could influence the interpretation of obtained results. How the author approached the "grey area" group in the errors' computation?
- 3) The heteroscedasticity is quite common problem when employing Multiple-discriminant-analysis. What are the methods that are usually used for avoiding the necessity of dealing with it (especially in cases like the author's, when WLS, FGLS do not help)?

Report on Bachelor / Master Thesis

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

Student:	Ihor Kruchynenko
Advisor:	Mgr. Svatopluk Svoboda
Title of the thesis:	Financial Risk and Models of its Measurement: Altman`s Z-score Revisited.

I believe that the thesis as a whole represents very fine piece of academic work. In case Mr. Kruchynenko provides satisfactory answers to the questions stated above, I recommend to evaluate it as **grade 1 (“výborně”)**.

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

CATEGORY	POINTS
<i>Literature</i> (max. 20 points)	18
<i>Methods</i> (max. 30 points)	28
<i>Contribution</i> (max. 30 points)	22
<i>Manuscript Form</i> (max. 20 points)	16
TOTAL POINTS (max. 100 points)	84
GRADE (1 – 2 – 3 – 4)	1

Report on Bachelor / Master Thesis

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

Student:	Ihor Kruchynenko
Advisor:	Mgr. Svatopluk Svoboda
Title of the thesis:	Financial Risk and Models of its Measurement: Altman`s Z-score Revisited.

NAME OF THE REFEREE:

DATE OF EVALUATION:

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

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

Strong Average Weak
20 10 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.*

Strong Average Weak
30 15 0

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.*

Strong Average Weak
30 15 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.*

Strong Average Weak
20 10 0

Overall grading:

TOTAL POINTS	GRADE		
81 – 100	1	= excellent	= výborně
61 – 80	2	= good	= velmi dobře
41 – 60	3	= satisfactory	= dobře
0 – 40	4	= fail	= nedoporučuji k obhajobě