

Report on Bachelor / Master Thesis

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

Student:	Pavel Hloušek
Advisor:	Jiří Novák M.Sc., Ph.D.
Title of the thesis:	Bias and Accuracy in Equity Research: The Case of CFA Challenge

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

Contribution

The thesis extends the existing literature on equity research by employing a unique dataset of equity reports produced by students participating in the CFA Research Challenge to answer questions about drivers of optimistic bias and connection between ability and accuracy of equity analysts.

The first part of the research focuses on optimistic bias. Prior literature has shown that analysts' recommendations are too optimistic but the traditional data samples do not allow for investigating different drivers of the bias and most studies mark conflict of interest as the main source. Pavel explains the importance of understanding the optimistic bias for regulatory bodies and investors and divides the drivers of optimistic bias into two categories – a conflict of interest bias and a behavioural bias. He argues that students participating in the CFA Challenge do not face conflict of interest, which enables him to test the sole impact of behavioural drivers on optimistic bias. He shows that the optimistic bias is present also in the students' reports and conflict of interest thus cannot be the only driver of the optimistic bias.

The second part of the research measures impact of ability, proxied by success in the CFA Challenge, on accuracy using three different methods – analysis of returns, hit-ratio of recommendations, and accuracy of target prices. The results are not significant.

Pavel has contributed to the existing research by using a unique dataset of equity recommendations from the CFA Challenge. To filter out recommendations based on low quality analysis, Pavel reduces the researched report to regional and higher level. He manually extracted the relevant information from almost 500 reports. Thanks to the unique characteristics of the data, he is able to test previously untested hypothesis of influence of behavioural drivers on optimistic bias. Further, he comes with a new proxy for ability of equity analysts.

I miss a brief comparison of reports and evaluation methods used by equity analysts and students that would support the generalization of the results – is the students' work comparable to the work of professional analysts? Are there some skills or information that the students do not have access to?

Methods

The hypotheses are well set and explained. Pavel provides a comprehensive methodological overview introducing and explaining relevant statistics and models used. The reasoning is clear and logical.

Pavel ably deals with the time ambiguity of accuracy testing by measuring the target price bias for each time point during the 300 days following the recommendation, which allows him to investigate whether the target price converges to market price over time or not.

I miss more details on econometrics methods used for estimation of the models (e.g. are the results in Table 3 based on panel data analysis?) I would also appreciate an explanation of the very low adjusted R squared values – are the values comparable across similar studies or is the feature specific to this study?

There are several typos in the equations describing models for estimating alphas – epsilon should vary across both i and t dimensions. SMB, HML, MOM should vary at least across one dimension to not cause multicollinearity.

It would be useful to provide more details on definition of the ability variable and the quality of the used proxy. The success in the CFA Challenge is influenced also by the quality of the presentation – is the

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success mainly driven by the different evaluation methods and thoroughness of the analysis or are the approaches to the analysis similar across participating students and success is significantly driven by presentation skills of the students.

Literature

Pavel shows his ability to work with scientific literature and presents facts in clear and logically structured text. The existing literature has been well researched, Pavel quotes the most influential studies in the field as well as recent research. The literature overview is divided into logical sections which improves readability of the literature overview section. He neatly connects the literature overview with hypothesis development.

Manuscript form

The thesis is well written in terms of language and structure. The text reads well and the formatting is clear and consistent. The tables and figures are clear, well chosen for the type of the output and include sufficient description. The equations could have been numbered to make referencing throughout the document easier.

The introduction clearly lists the motivation and hypotheses tested in the study and conclusion summarizes the main results as well as further research questions. The main body of the thesis follows a logical structure and reads well. The sections 3-5 would benefit from a short introduction before diving into the first subsection to set expectations. I would change the order of methods described in Section 4 to match the order of presented results in Section 5 or at least refer the methods before presenting the results. (E.g. by mentioning number of the equation used in the estimation.)

There are several typos and grammatical errors but they are not too frequent or too disturbing (e.g. one winner **for in** region p.4, distinguish and firm-specific p.12, increases accuracy **and but** we have p.13, **data** extracted **data** p.21 and others).

Summary and suggested questions for the discussion during the defense

I believe that the thesis is of a very good standard and meets all the criteria for the **highest grade** in case of a successful defence.

Suggested questions for the defence:

- What econometric methods were used for estimating the financial models reported in Table 3 and Table 4? Why is the adjusted R squared so low in all of the models (e.g. common results for this type of study or specific to the used data/models)?
- Does the level of optimistic bias in the CFA Challenge recommendation change over time? Is the bias affected by the business cycle? (Especially in relation to the recent crisis.)
- Is the students' work comparable to the work of professional analysts? Are there some skills or information that the students do not have access to?
- If you have an option to run a survey among the participants/jury of the CFA Challenge, are there any question you would like to ask them to improve the quality of the ability proxy?

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

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	28
<i>Methods</i> (max. 30 points)	26
<i>Literature</i> (max. 20 points)	20
<i>Manuscript Form</i> (max. 20 points)	18
TOTAL POINTS (max. 100 points)	92
GRADE (A – B – C – D – E – F)	A

NAME OF THE REFEREE:

Ing. Mgr. Barbora Máková M.A.

DATE OF EVALUATION: 03/06/2018



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