

# Report on Bachelor / Master Thesis

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

Student:	Bc. Matěj Urban
Advisor:	PhDr. Milan Rippel
Title of the thesis:	Optimal Investment Portfolio with Respect to the Term Structure Of the Risk-Return Tradeoff

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

Matej Urban in his diploma thesis focuses on the analysis of investment strategies in long term investment horizon and tries to develop a model for optimal investment portfolio with respect to the term structure of the risk-return tradeoff. The author derives the numerical results on the empirical data to comment on investment strategies in Czech pension funds where the long-term investment horizon and regulatory rules are the key factors.

Matej applies the commonly used econometrical models such as vector autoregressive model to the different data sets in order to calculate the optimal portfolio allocation. At the end of the thesis author attempts to compare the estimated optimal portfolio with the actual investment portfolio of Czech pension funds.

The list of major comments follows:

- Author should provide a more extensive literature overview. He mainly focused on the classical Markowitz model and did not really discuss the more recent follow-ups for the Markowitz's model.
- The manuscript form of the thesis has serious shortcomings, both from the typographic (i.e. inconsistency in numbering of formulas or graphs) as well as the quality of English language – I would suggest further proofreading.
- Some of the explanation of the methods used are not very clear.

The presented diploma thesis satisfies the IES qualitative requirements. Author is able to develop and calibrate his own model for investment portfolio and he is able to use the econometrical methods for working with data sets. However, the diploma thesis does not fully achieve the goals stated in thesis proposal, i.e. use of four factor Fama&French model.

I recommend the diploma thesis for the defense and I propose to grade it as „**good (2)**“.

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

CATEGORY	POINTS
Literature (max. 20 points)	14
Methods (max. 30 points)	20
Contribution (max. 30 points)	24
Manuscript Form (max. 20 points)	10
<b>TOTAL POINTS</b> (max. 100 points)	<b>68</b>
<b>GRADE</b> (1 – 2 – 3 – 4)	<b>2</b>

**NAME OF THE REFEREE: PhDr. Milan Rippel**

**DATE OF EVALUATION: 13<sup>th</sup> June 2011**

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**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	<b>1</b>	= excellent	= výborně
61 – 80	<b>2</b>	= good	= velmi dobře
41 – 60	<b>3</b>	= satisfactory	= dobře
0 – 40	<b>4</b>	= fail	= nedoporučuji k obhajobě