

Report on Bachelor / Master Thesis

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

Student:	Pavel Irinkov
Advisor:	PhDr. Ladislav Kristoufek PhD.
Title of the thesis:	Construction of a quantum finance model of option premia

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

In this theoretical work the author suggests a model to estimate option price based on the „alternative“ quantum theory. First, the author introduces the reader to the topic, and after some discussion of the stochastic and quantum mechanics theory comes the alternative model. The last part of the thesis concludes.

Given the level of studies of the author, and in general, this is a difficult task as it requires deep knowledge of the mathematics behind it. However, the author shows very good understanding of the mathematics ☺. The main contribution comes in the end of the third part of the thesis where the Black-Scholes formula is expressed in quantum mechanics notation. Let me stress here once again that this is a difficult area of research, and we should encourage the attempts to provide alternative models to the current ones.

The thesis is well written and the organization of the work is logical. I encourage Pavel to develop further the current work e.g. in Master's dissertation.

In case of successful defence I recommend grade 1 (excellent).

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)	28
<i>Manuscript Form</i> (max. 20 points)	20
TOTAL POINTS (max. 100 points)	94
GRADE (1 – 2 – 3 – 4)	1

NAME OF THE REFEREE: *Mgr. Krenar Avdulaj*

DATE OF EVALUATION: 14.01.2014

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