# **Report on Bachelor Thesis**

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

Student:	Lukáš Jílek
Advisor:	PhDr. Ladislav Krištoufek
Title of the thesis:	Analysis of stock market anomalies: US cross-sectoral comparison

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

On its approximately 45 pages of text, the submitted thesis "Analysis of stock market anomalies: US cross-sectoral comparison" focuses on one of the traditional "unanswered questions" of the financial markets – calendar anomalies. Even though the topic is quite extensively discussed in the literature, Lukas focuses on comparison between different sectors of the US stock market, which has not been done before. This way, he is able to comment on potential anomalies and their different behavior across banking/financial, pharmaceutical, energy and other industries.

The thesis is nicely constructed and readable. The author was able to write the thesis in a way that a reader is not overwhelmed by repetitive passages. The thesis also includes a well-written literature review.

In its main part, the author focuses on three typical calendar anomalies – day of the week effect, January (turn of the year) effect and monthly effect (different behavior during different parts of each month). To do so, Lukas constructs an AR(1)-GARCH(1,1)-t and includes several dummy variables to uncover potential anomalies. Unfortunately, the model including the dummies in GARCH(1,1)-t does not converge so that the author had to move to an alternative approach – pre-filtering the series of logarithmic returns with GARCH(1,1)-t and then applying the dummy variables + AR(1) approach, which seems to be appropriate and well supported by the author. Importantly, using this approach, the author controls for heteroskedasticity as well as serial correlation of the series. Eventually, Lukas comes to the conclusion that there are practically no calendar anomalies present in the examined period, i.e. 2000 onwards, which is in contradiction with the "older" studies but well reflects the fact that in the present time, such a simple anomaly would have been immediately captured by algorithmic traders and would vanish very quickly.

In summary, the thesis is nicely written and uses methods which are advanced for the bachelor level. There are no formal or methodological problem in the thesis and the results are well described. If successfully defended, **I recommend grade A.** 

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

CATEGORY		POINTS
Literature	(max. 20 points)	18
Methods	(max. 30 points)	26
Contribution	(max. 30 points)	27
Manuscript Form	(max. 20 points)	19
TOTAL POINTS	(max. 100 points)	90
GRADE	(1 - 2 - 3 - 4)	1

NAME OF THE DECEDED.

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