

Report on Bachelor Thesis

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

Student:	Adam Tůma
Advisor:	prof. PhDr. Ladislav Křišťoufek, Ph.D.
Title of the thesis:	Analysis of the US stock market during the COVID-19 pandemic

OVERALL ASSESSMENT

Short summary

In the last years, we saw many new trends impacting the stock markets one of which was the global pandemics. Mr. Tůma in his thesis provides empirical evidence confirming the impact of the COVID19 pandemics on the volatility of the US stock market. He also tackles the topics of the distribution of traded volume within the daily session and the Monday and Friday effect. These are as well assessed from the perspective before, during and after the COVID19 pandemics crash.

Contribution

Studies covering the topic of the COVID19 pandemics' influence over the stock market are just starting to appear and this study provides a solid general view on the general impacts. Adam in his research confirms significantly higher volatility values for the period from the 3rd of February till March 20th 2020 based on the provided evidence – both from the general market and from the sector level perspective.

The study also provides empirical evidence that *„returns on Mondays in the period from March 23, 2020, onwards have been significantly higher“*. This effect is particularly strong in the IT sector. Little evidence supporting the existence of the Monday and Friday effect appear in the results, however, most of these are inconclusive.

Methods

Adam in his thesis is not afraid to apply methods taught in master-level courses (Applied Econometrics). He shows good grasp of estimating volatility via GARCH and T-GARCH. I personally appreciate that these methods were applied not only on the general market level, but also more in detail, on the sector level. I have a minor comment here: it might have been interesting to increase the granularity of the data (the study is using 30min).

Literature

Well-structured, brief but to-the point, the literature review provides a decent introduction to the topic. I find nothing major to challenge.

Manuscript form

Again, no objection to be made here: the study reads well and there is nothing disturbing in the format.

Overall evaluation and suggested questions for the discussion during the defense

I consider the submitted work a solid bachelor thesis at IES, Faculty of Social Sciences, Charles University. I therefore recommend it for the defence and suggest grade A. The Urkund analysis for plagiarism does not indicate any significant text similarity with other available sources.

For the defence I suggest the following questions to be addressed:

- Your results show that Monday returns after the 23rd of March 2020 have been significantly higher. On the other hand, the Monday returns during the crash are negative, but not significant. Do you think that if you extend the crash period (e.g. have since January 2020 or

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since December 2019) and thus add more observation, the significance of the Monday returns during the crash would be impacted? I am here relating to one of the points in your conclusion.

- You mention a not lasting increase in the volatility in the healthcare sector after the crash: cannot this just be that the focus on healthcare was already priced-in during the crash period? Remember healthcare equities are well known for being defensive stocks.

SUMMARY OF POINTS AWARDED

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	25
<i>Methods</i> (max. 30 points)	28
<i>Literature</i> (max. 20 points)	20
<i>Manuscript Form</i> (max. 20 points)	20
TOTAL POINTS (max. 100 points)	93
GRADE (A – B – C – D – E – F)	A

NAME OF THE REFEREE: Nicolas Fanta

DATE OF EVALUATION:

*Digitálně podepsáno (23.5.2021):
Nicolas Fanta*

„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.*

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.*

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

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.*

Overall grading:

TOTAL	GRADE
91 – 100	A
81 - 90	B
71 - 80	C
61 – 70	D
51 – 60	E
0 – 50	F