FACULTY
OF SOCIAL SCIENCES
Charles University

Report on the part of the final state examination
Record of the thesis defence

Academic year: 2023/2024

Student's name and surname:	Bc. Jan Cvrček
Student's ID:	33921250
Type of the study programme:	Master's (post-Bachelor)
Study programme:	Economics and Finance with specialisation in Financial Markets and Data Analysis
Study ID:	713273
Title of the thesis:	Can Image-Based Convolutional Neural Networks Forecast Volatility?
Thesis department:	Institute of Economic Studies (23-IES)
Language of the thesis:	English
Language of defence:	English
Advisor:	doc. PhDr. Jozef Baruník, Ph.D.
Reviewer(s):	Mgr. Lukáš Vácha, Ph.D.
Date of defence:	18.09.2024 **Venue of defence:** Praha
Attempt:	regular

Course of the examination: The student delivered a high-quality, clear, and confident presentation. He successfully covered the literature review, motivation of his research topic, data description of SP500, methodology of CNN, and the main results within a limited time. After the summary of the evaluation by the thesis supervisor and thesis opponent, the committee asked for clarification of the economic intuition for one-month prediction outperforming one-week and one-quarter ahead forecast, the general purpose of the image recognition combined with CNN, and the specifics of empirical data. The student reacted perfectly using a set of pre-prepared slides.
In accordance with both reports, the committee decided to evaluate the thesis defense by A.

Result of defence:	excellent (A)
Chair of the board:	Geršl Adam, doc. PhDr., Ph.D. (present) ....
Committee members:	Bauer Michal, prof. PhDr., Ph.D. (present) ....
	Dědek Oldřich, prof. Ing., CSc. (present) ....
	Kukačka Jiří, PhDr., Ph.D. (present) ....