

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

Academic year: 2023/2024

**Student's name and surname:** Alex Farid Zayat

**Student's ID:** 34298291

**Type of the study programme:** Master's (post-Bachelor) **Study programme:** Economics and Finance

**Study ID:** 758721

**Title of the thesis:** Machine Learning in Macroeconomic Nowcasting

**Thesis department:** Institute of Economic Studies (23-IES)

Language of the thesis:EnglishLanguage of defence:English

**Advisor:** prof. PhDr. Ladislav Krištoufek, Ph.D.

**Reviewer(s):** Mgr. Luboš Hanus, Ph.D.

**Date of defence:** 18.09.2024 **Venue of defence:** Praha

Attempt: regular

**Course of the examination:** Mr Zayat briefly explained what nowcasting is and why it has

become popular, and why machine learning can be expected to provide an interesting contribution to nowcasting methods and which additional pre-requisites (transparency, interpretability) should ideally be met for a better acceptance of the methods by their potential users. Then, the machine learning methods used in the thesis were listed and briefly outlined. Mr Zayat then focused on the

interpretability of the results.

In the follow-up discussion, the unusual focus of the nowcasting exercise (Argentina, monthly data), as well as the possible issues related to overfitting and questions on the implementation of support vector machine regressions, was discussed. The student was very well prepared and answered most of the questions and comments

from the reports relatively convincingly.

Result of defence:	very good (C)	
Chair of the board:	Geršl Adam, doc. PhDr., Ph.D. (present)	
Committee members:	Havránek Tomáš, prof. PhDr., Ph.D. (present) Holub Tomáš, doc. Mgr., Ph.D. (present)	
	Semerák Vilém, Ing., M.A., Ph.D. (present)	