

Milos Ciganovic

PH.D. STUDENT AT THE DEPARTMENT OF ECONOMICS AND LAW, SAPIENZA UNIVERSITY

✉ milos.ciganovic@uniroma1.it

Education

Sapienza University of Rome

PH.D. IN ECONOMICS

Rome, Italia

Ongoing

- **Research interest:** Macroeconometrics, Forecasting, Nowcasting, Machine Learning, Deep Learning

Sapienza University of Rome

MASTER OF SCIENCE IN ECONOMICS, GPA: 110/110 CUM LAUDE

Rome, Italia

July 2019

- **Course:** Macroeconomic policies and financial markets
- **Thesis:** The transmission of international shocks to the domestic sector: A FAVAR approach

Faculty of Economics, Finance and Administration

BACHELOR OF SCIENCE IN ECONOMICS, GPA: 9.1/10.0

Belgrade, Serbia

July 2017

- **General:** Microeconomics, Mathematics, Statistics, Macroeconomics, Accounting
- **Thesis:** Momentum investment strategy: Case of Italy

Research

Nowcasting – developing the sources and methods to improve high-frequency labour market forecasting

WITH T. ALIAJ (SAPIENZA) AND M. TANCIONI (SAPIENZA), *Publications Office of the European Union*, 2022

- A nowcasting approach to the analysis of Labour Market trends merging real-time data on hiring and firing with standard-frequency official data in a Vector Auto-Regressive (VAR) model to provide high-frequency nowcasts of specific segments of employment. By merging official releases with a high-dimensional set of high-frequency data, we can contribute to the estimation of the current Labour Market dynamics and the understanding of their underlying developments in real time.

Nowcasting inflation with Lasso-regularized vector autoregressions and mixed frequency data

WITH T. ALIAJ (SAPIENZA) AND M. TANCIONI (SAPIENZA), *Journal of Forecasting*

- We evaluate the predictive performances of the least absolute shrinkage and selection operator (Lasso) as an alternative shrinkage method for high dimensional vector autoregressions. The analysis extends the Lasso-based multiple equations regularization to a mixed-frequency data setting in which high-frequency data and very short-term forecasting (nowcasting) are used to target the Euro area's inflation rate.

Augmented Coincident Index: Using soft information to track the economy

WITH T. ALIAJ (SAPIENZA), *working paper*

- Using state-of-the-art methods for Natural Language Inference, we develop Coincident Index for tracking the economy in real-time, relying only on high-frequency information (newspapers, social media, google trends) to provide policymakers with timely information.

Inflation, households' green transition, and unemployment: an analysis using mixed-frequency data and sentiment indexes

WITH F. D'AMARIO (SAPIENZA) AND M. TANCIONI (SAPIENZA), *work in progress*

- This research aims to investigate the effects of energy-saving housing infrastructure policies on households and how these policies are affected by the recent rise in inflation. This also implies studying how inflation impacts household economic indicators and unemployment.

Forecasting Cryptocurrencies Log-Returns: a LASSO-VAR and Sentiment Approach

WITH F. D'AMARIO (SAPIENZA), *working paper*

- In this paper, we leverage the predictive power of Twitter and Reddit sentiment together with Google Trends indexes and volume to forecast the log returns of ten cryptocurrencies. We evaluate the performance of LASSO-VAR using daily data from January 2018 to January 2022. In a 30 days recursive forecast, we can retrieve the correct direction of the actual series more than 50% of the time. We compare this result with the main benchmarks, and we see a 10% improvement in Mean Directional Accuracy (MDA).

From Econometrics to Machine Learning

working paper

- Literature review and cross-analysis between standard econometrics and machine learning

Conferences

Sailing the Macro Workshop (2021)

Ventotene, Italy
September 16-18, 2021

Macroeconomic Analysis and International Finance (ICMAIF 2021)

Crete, Greece
May 26-28, 2022

Economic Modeling and Data Science (EcoMod 2021)

Ljubljana, Slovenia
September 14-16, 2022

Sailing the Macro Workshop (2022)

Ventotene, Italy
September 18-20, 2022

Formation Activities

5th Advanced Course on Data Science & Machine Learning - ACDL2022

UNIVERSITY OF CATANIA

Certosa di Pontignano, Italy
August 22-26, 2022

Using Text as Data for Public Policy: Machine Learning meets Economics

BARCELONA GRADUATE SCHOOL OF ECONOMICS

Barcelona, Spain
July 05-09, 2021

Bayesian Multivariate Models and Forecasting in Economics and Finance

THE ITALIAN ECONOMETRIC SOCIETY (SIE)

Venice, Italy
August 24-28, 2020

Experience

Sapienza University of Rome

TEACHING ASSISTANT

Rome, Italy
October 2021 - PRESENT

- Teaching a practical part of the lectures in the course of Applied Macroeconomics at the graduate level. The course aims to introduce students to the main techniques of structural macroeconomic analysis and policy evaluation using simultaneous equation models (SEMs), structural vector autoregressions (SVARs), and dynamic stochastic general equilibrium models (DSGEMs).

Sapienza University of Rome

TUTOR - ECONOMIA POLITICA (ECONOMICS)

Rome, Italy
October 2021 - December 2021

- Tutoring individual students at the undergraduate level in basic principles of Microeconomics and Macroeconomics to prepare them for the exam of Economia Politica (Economics) while holding recovery lectures for the entire course.

Global shapers

SHAPER

Belgrade, Serbia
February 2017 - PRESENT

- Born out of the World Economic Forum, the Global Shapers Community is a network of inspiring young people under the age of 30 working together to address local, regional and global challenges.

IKBrokers

INTERN

Italia, Roma
July 2019 - October 2019

- Trading commodities
- Oil market analysis
- Development of algo trading scripts

Faculty of Economics, Finance and Administration

STUDENT VICE - DEAN

Belgrade, Serbia
Oct. 2015 - Feb. 2017

- As Student Vice - Dean I was representing the students before the Faculty bodies and advocating their opinions, proposals and requests related to the quality of the education and the complaints about the organization of the educational process.

Skills

Software skills Python, Matlab, Eviews, R

Soft skills Analysis, problem-solving, interpersonal and leadership skills, project management and organization

Languages English, Italian, Serbian

Data: 30/01/2023

Firma