Curriculum vitae

PERSONAL INFORMATION

Beatrice Foroni

JOB APPLIED FOR

Tutoraggio nell'ambito del Master of Science in Economics all'interno del corso Advanced Statistics

WORK EXPERIENCE

April 2024 - April 2025

Postdoctoral Researcher

University of Pisa - Department of Economics and Management

Estimation and Prediction of Indicators for measuring and monitoring Sustainable Development Goals

April 2023 - April 2024

Postdoctoral Researcher

La Sapienza University - MEMOTEF Department, Faculty of Economics, Rome

Generalized Dynamic Graphical Models for the impact of the COVID-19 pandemic on financial markets

May 2024

Course for PhD students of the MEMOTEF Department, 8 hours

La Sapienza University - MEMOTEF Department, Faculty of Economics, Rome

Financial risk modeling and forecasting using quantile regression methods

Feb 2024 – May 2024

Teaching Assistant in Econometrics, SECS-S/01

LUISS Guido Carli University, Business Administration bachelor's degree, Rome

Sept 2023 – Dec 2023

Teaching activity in Statistics, disciplinar sector SECS-S/01

La Sapienza University - MEMOTEF Department, Faculty of Economics, Rome

Winner of the comparative procedure 1132/2023 for the performance of additional teaching activities for the course of Statistics to master's degree students of the Faculty of Economics.

Feb 2023 – May 2023

Teaching Assistant in Statistics, SECS-S/01

LUISS Guido Carli University, Rome

Business Administration bachelor's degree

Sept 2021 – Aug 2022

Integrating tutoring and teaching activity for disciplinar sector SECS-S/01, for a total of 40 monthly hours for 12 months

LUISS Guido Carli University, Faculty of Political Science, Rome

March 2021 – Sept 2021

Integrating tutoring and teaching activity for disciplinar sector SECS-S/01, for a total of 40 hours

La Sapienza University - MEMOTEF Department, Faculty of Economics, Rome

Winner of the comparative procedure 1223/2020 for the performance of additional teaching activities and tutoring for courses falling within the disciplinary scientific sector SECS-S/01 Statistics.

March 2020 – March 2021

Integrating tutoring and teaching activity for disciplinar sector SECS-S/06, for a total of 40 hours

La Sapienza University - MEMOTEF Department, Faculty of Economics, Rome

Winner of the comparative procedure 80/2020 for the performance of additional teaching activities and tutoring for courses falling within the disciplinary scientific sector SECS-S/06 Mathematical methods of economics and actuarial and financial sciences.

EDUCATION AND TRAINING

Nov 2019 – June 2023

PhD in Models for Economics and Finance, Title: "New Insights on Hidden Markov Models for Time Series Data Analysis " ISCED 6

La Sapienza University, Rome

- GARCH models
- Graphical Models
- Copula-based models for financial time series Quantile Regression
- Expectile Regression
- Hidden Markov Models

2017–2019

Master degree in Finance and Insurance

Summa cum Laude

La Sapienza University, Rome

2012–2017

Bachelor's Degree in Mathematics

La Sapienza University, Rome

PERSONAL SKILLS

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	B2	C1	C2
French	B2	B1	B2	B1	B1
	Diplôme d'études en langue française (DELF) B2				

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

Digital competences

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences - Self-assessment grid

Computer skills

– competent with most Microsoft Office and Adobe programmes
– R, C++, MAtlab, HTML

Driving licence A, B

PUBLICATIONS

[1] **Beatrice Foroni**, Luca Merlo, and Lea Petrella. "Expectile hidden Markov regression models for analyzing cryptocurrency returns". In: *Statistics and Computing* 34.2 (2024), p. 66.

[2] **Beatrice Foroni**, Giacomo Morelli, and Lea Petrella. "The network of commodity risk". In: *Energy Systems* 15.1 (2024), pp. 167–213.

[3] **Beatrice Foroni**. "New insights on hidden Markov models for time series data analysis". PhD thesis. PhD Thesis, 2023.

[4] **Beatrice Foroni**, Luca Merlo, and Lea Petrella. "Graphical Models for Commodities: A Quantile Approach". In: *Methods and Applications in Fluorescence*. Springer International Publishing, 2022, pp. 253–259.

[5] **Beatrice Foroni**, Luca Merlo, and Lea Petrella. "Using expectile regression with latent variables for digital assets". In: *Book of short papers SIS 2023*. Pearson, 2023, pp. 1309–1314.

[6] **Beatrice Foroni**, Luca Merlo, and Lea Petrella. "Analyzing the Correlation Structure of Financial Markets Using a Quantile Graphical Model". In: *Book of the Short Papers*. Pearson, 2022, pp. 852–857.

[7] **Beatrice Foroni** et al. "GLASSO Estimation of Commodity Risks". In: *Book of Short Papers SIS 2020*. Pearson, 2020, pp. 957–962.