Maria Saveria Mavillonio

Curriculum Vitae

Via Hermada, 36
Pisa (PI), Italy
+39 329 93 85 190
mariasaveria.mavillonio@phd.unipi.it
mariasaveria-mavillonio
27/10/1993
Tricarico (MT)
Italian

Education

Nov. 2021– Now — **Candidate PhD in Economics**, *Econometrics and Finance*, University of Pisa, Italy.

Oct. 2016– Oct. 2019 — **Master's degree in Banking, Corporate Finance and Financial Markets**, *Curriculum in Financial Markets and Intermediaries*, University of Pisa, Pisa, Italy, 110/110 with Honors.
Thesis: Analysis on the cointegration of multivariate processes: an econometric application to the term structure term of rates.
Supervisor: Prof. Caterina Giannetti

Sept. 2012– Sept. 2016 — **Bachelor's degree in Banking, Finance and Financial Markets**, University of Pisa, Pisa, Italy, 102/110.
Thesis: Stochastic theories for the distribution of wealth.
Supervisor: Prof. Davide Fiaschi

PhD Research Project

Title — *Business Plan & Soft Information: a synthetic and global index*

Supervisors — Prof. Caterina Giannetti (Department of Economics), Prof. Francesco Marcelloni (Department of Information Engineering)

Description — The main objective of the project is to analyze the content, the language and the construction of companies' documents, such as Business Plan, financial report and teams' CV, to identify and transform qualitative explanatory variables into quantitative ones through text analysis models (Natural Language Processing). Project application is on equity crowdfunding, where it is mandatory to provide these documents to explain the business idea and obtain the required funds. The idea is to build a model that predicts, based on mixed characteristics, the success of equity crowdfunding and create a goodness-of-fit index of the Business Plan.

Master's Thesis

Title — *Analysis on the cointegration of multivariate processes: an econometric application to the structure term rates.*

Supervisor — Prof. Caterina Giannetti

Description — The thesis applied the statistical concept of cointegration, which is useful for analyzing the long-run relationships of non-stationary macroeconomic variables (e.g. government bond yields). The first part introduces the theory behind cointegration. At first, stochastic processes are discussed since they can well represent univariate time series. Then, the multivariate setting is considered by introducing the Vector Auto-Regression (VAR). Tests for the presence of unit roots in the univariate case, as well as tests for the processes integration in the multivariate case, are analysed. In the last empirical part, the term structure of interest rates is described. The concept of cointegration is applied, via the Johansen procedure, to the yields of short and long-dated Italian government bonds.

Research Experience

Nov. 2021– Feb. 2023 **Research Collaborator**, Sant'Anna School of Advanced Studies, Pisa.
Development and application of statistical techniques in different domains (e.g. health care); management of large health administrative data streams for measurement, monitoring and evaluation of regional services with a focus on the Emergency Department.

Gen. 2021– Dec. 2022 **Research Project of the University of Pisa (PRA-2020)**, University of Pisa, Pisa.
Creation of a dataset with accounting and market indicators of Italian listed firms to understand the performance parameters of the firms involved in strategic operations.

Oct. 2020– Nov. 2021 **Research Scholarship**, *Application of statistical analysis to health care data*, Sant'Anna School of Advanced Studies, Pisa, Italy.

Dec. 2019– Feb. 2020 **Researcher on National Research Project PRIN_2015**, *Changing Cost and Performance Management Systems to enable business Servitization and improve competitiveness of Italian manufacturing SMEs*, University of Pisa, Pisa.

Teaching Experience

Gen. 2021– Now **Teaching Assistant**, *Finance and M&A operations*, University of Pisa, Pisa.

Gen. 2020– Oct. 2020 **Teaching Assistant**, *Finance*, University of Pisa, Pisa.

Apr. 2019– Sept. 2019 **Teaching Assistant**, *Computational Methods for Finance with implementations on Matlab*, University of Pisa, Pisa.

Oct. 2018– Apr. 2019 **Peer Tutor**, *Department of Economics and Management*, University of Pisa, Pisa.

Publication

November 2023 **Green Economy and Credit Quality in the European Banking Industry: What are the Opportunities for Sustainability?**, *Bruno, E., Iacoviello, G., Mavillonio, M.S.*, Business for Sustainability, Volume I, Springer International Publishing.

August 2022 **Relationship between R&D intensity and the value,operating performance and systematic risk of businesses**, *Mariani, G., Mavillonio, M.S., Teti, E., Pistolesi,P.*, World Finance Conference, August 2022.

Computer Skills

Programming language MATLAB, Python

Softwares R, Gretl, STATA, SAS, LaTeX

Languages

Italian **Native**

English **Fluent**

German **Basic**