Aida Salko

PhD Fellow in Economics and Finance, Sapienza University of Rome

Research Interests

Application of Statistical and Machine Learning Methods in Credit Risk Analysis; Ensemble Learning; Risk Management and Capital Requirements; Loss Given Default Modeling; Banking Statistics and Supervision.

Education

Dates (from – to)	March 2020	
Name of Institution	**Goethe University Frankfurt, House of Finance, SAFE Research Center,** Frankfurt (DE)	
Program title	PhD Visiting Period of Research.	

Dates (from – to)	November 2018 – Present	**PhD Programme**
Name of Institution	**Sapienza University of Rome,** Rome (IT)	
Program title	Ph.D. Program in Economics and Finance	
Subjects	Econometrics, Probability, Statistics, Mathematics, Macroeconomics, Microeconomics, Stochastic Finance, Bayesian Statistics, Monte Carlo Methods, Python for Data Science, Research Methods in Macroeconometrics and Microeconometrics. **PhD Topic:** The Application of Innovative Algorithms in the Context of Machine Learning for LGD Forecasting: Empirical Evidence from Bank Loans. **PhD Supervisor**: Prof.Dr. Rita Laura D'Ecclesia	

Dates (from – to)	October 2015 – November 2017	**Master Degree (9.3/10)**
Name of Institution	**University of Ljubljana, Faculty of Economics,** Ljubljana (SLO)	
Program title	Master of Science in Money and Finance	
Subjects	Advanced Macroeconomics, Advanced Microeconomics, Econometrics, Optimization Methods in Economics, Advanced Monetary Economics, Public Finance, Financial Economics, Cross Cultural Communications Management, International Human Resources Management, Taxes and Tax harmonization in EU, History of Economic Thought. **Thesis title**: Monetary Policy and Exchange Rate interactions in a small open economy: Empirical Evidence from Albania. **Thesis Supervisor**: Prof.Dr. Igor Masten	

Dates (from – to)	October 2012 – July 2015	**Bachelor Degree (10/10)**
Name of Institution	**University of Tirana, Faculty of Economics and Agribusiness**, Tirana (AL)	
Program title	Bachelor in Finance and Accounting	
Subjects	Macroeconomics, Microeconomics, Statistics, Financial Mathematics, Linear Algebra, Financial Accounting, Public Accounting, Cost Accounting, Basics of Finance, Taxation, Financial Management, Marketing, Money and Banking, Investments.	

Work Experience

Dates (from – to)	October 2020
Employer	**Sapienza University of Rome**
Position	**Assistant in Asset Pricing**
Main activities	Asset Pricing, Options, Futures and Derivatives

Dates (from – to)	January 2018 – November 2018
Employer	**Grant Thornton**
Type of business	Audit, Tax and Advisory Firm
Position	**Audit Associate and Research Assistant**
Main activities	Review, asses and recommend changes in accounting systems Ensure compliance of regulatory guidelines and generally accepted auditing standards Preparing audit reports and statements by suggesting the appropriate estimates Interacting with the clients and assisting or solving their queries in a timely manner Qualitative and Quantitative Research Methodology of provisioning under IFRS9 Training and mentoring Audit Interns. Assigned to various industries including Banking, Insurance and Healthcare.

Dates (from – to)	February 2017 – November 2017
Employer	**Albanian Embassy in Slovenia,** Ljubljana (SLO)
Type of business	Diplomatic services
Position	**Diplomatic Service Internship**
Main activities	Research on Diplomatic Services, Drafting reports, speaking points; Expanding the Embassy's social media outreach; Preparations for cultural and other events, as well as high-level visits.

Dates (from-to)	May 2015 – July 2015
Employer	**Central Bank of Albania**
Position	Internship
Main activities	Research, drawing up draft reports, compiling statistical data. Assigned to Monetary Policy Department, Research Department and Payments System.

Courses, Certifications and Events

- **The School of ``Machine Learning of Dynamic Processes and Time Series Analysis''**
  Scuola Normale Superiore Pisa, November 2020
  Core topics: Recent developments in Machine Learning & the forecasting of financial time series.
- **Woman in Quant Finance Event**
  G-Research, November 2020
  Core topics: Talks from some of G-Research quant researchers, interactive case study, focus on the financial industry.
- **Modelling with Big Data & Machine Learning: Measuring Economic Instability**
  Bank of England and King's Business School, November 2020, virtual.
  Core topics: Recent academic research on Big Data and Modelling Techniques from Machine learning.
- **Machine Learning A-Z™ : Hands-on Python & R In Data Science**
  Udemy Online Certificate, Credential ID: UC-a7a27649-357f-4e1d-92fa-8938a4c03f87, August 2020
  Core topics: Data Preprocessing, Evaluating Regression and Classification Models Performance, Classification, Clustering, Association Rule Learning, Reinforcement Learning, Natural Language Processing, Deep Learning, Artificial and Convolutional Neural Networks, Linear Discriminant Analysis.

- **Summer School on Principles, ideas and theory in econometric time series:**
  With examples from cointegration, bootstrap, ARCH, state space and big data models.
  SidE, Societa Italiana di Econometria, Italian Society of Econometrics, June 2019
  Core topics: Cointegration and adjustment in a common trends causal model and the role of weak exogeneity.,
  Optimal hedging and cointegration in the presence of heteroscedastic errors,
  Bootstrap based inference in stationary and non-stationary autoregressive models.
  Models, Methods and Big Data.

- **Advanced Course 2019, 14th Edition**
  Innovation, Growth and International Production. Models and Data Analysis
  Faculty of Economics, Sapienza University of Rome, 13-17 May 2019
  Core topics: Innovation and economic performance, firm level analysis, wage regimes and macroeconomic policy in Europe, STATA class on micro-data and sectoral data analysis.

- **Quantitative Finance at Work 2019**
  University of Rome Tor Vergata, May 2019
  Core Topics: The practical use of quantitative methods in Finance and related fields.

- **General Data Protection Regulation (GDPR) Training**
  Grant Thornton Albania, September 2018
  Core topics: Private user data, EU law on data protection, regulatory environment for international business.

- **International Standards on Auditing (ISAs)**
  Grant Thornton International, August 2018
  Core topics: Quality Control for an Audit of Financial Statements, Audit Documentation, Planning an Audit of Financial Statements, The Auditor's Responses to Assessed Risks, Analytical Procedures, Forming an Opinion and Reporting on Financial Statement.

- **International Accounting Standards**
  World Bank Project, December 2017
  Core topics: International Financial Reporting Standards, IFRS 9, Financial Statements, Inventories.

- **BioAgbal Project**
  Justus Liebig University of Giessen, Germany, September 2015
  Core topics: Environmental Economy, ecotoxicology, weed and landscape ecology.

Conferences and Articles

- "New Insights on Loss Given Default in Shipping Finance: Parametric and Non-Parametric Estimations" (June, 2021). FEB Zagreb 2021, 12th International Odyssey Conference on Economics and Business.
- "Tree-based Ensemble Strategies for Predicting Loss Given Default of Bank Loans". (May, 2021) XVIII International Conference on Finance and Banking FI BA 2021, Romania
- Co-author (November, 2020) "A wavelet coherence analysis of COVID-19 and Exchange Rates.". International Conference on Social Science, 2020.
- International Conference on Social Sciences. October 2017, Vienna, Austria.
- Salko A. and Gjeci A. (2017) "Analysis of Monetary Policy Shock by using Vector Autoregressive Model (VAR)." Social and Economic challenges in Europe 2016 – 2020. 13th International Conference of ASECU.
- Salko A. and Gjeci A. (2017) "Exchange Rate Pass through Effect in Albania: A Structural VAR Approach (SVAR)". Proceedings of the First International Conference in Applied Statistics and Econometrics (ICASE)
- Salko A. and Doci E. (2017). "The role and the impact of microfinance in the financing of rural areas in Albania." European Journal of Economics and Management Sciences, Vol III,Pages 40-44, 15th International Conference on Economic Sciences. Vienna, Austria.

Language skills

- Albanian – Native
- English – Advanced
- Italian – Intermediate

Core topics: Job Related Skills/ Competencies

- Data Analysis and Research
- Critical Thinking
- Presentation Skills
- Advanced interpersonal and intercultural skills
- Organized
- Advanced team working skills

Computer skills

- Advanced in Microsoft Office (**Word, Excel** and **Power Point**).
- Excellent knowledge of **R language, JMulTi** and **EViews.**
- Modelling Packages and Visualization (dplyr, purrr, tidyr, ggplot2, ggthemes, Hmisc, caret, rpart, mlr, ctree, tidyverselme4/nlme, randomforest, zoo, ALEPlot)
- Basic knowledge in **Python** and **STATA**.

Scholarships

- Three-year-full-time postgraduate PhD position with fellowship for attaining the degree of "Dottore di Ricerca" (PhD) in the Doctoral School of Economics and Finance, Sapienza University of Rome.
- SUNBEAM two-year-full-time Master scholarship granted by ERASMUS MUNDUS program

Honors and Awards

- Master Thesis Prešeren Award for High Quality of Scientific Research granted by University of Ljubljana.
- Diploma of Honor for high academic qualification of the author granted by European Journal of Economics and Management Sciences.
- Golden Medal Student Award granted by Agricultural University of Tirana, Albania.

References

Prof.Dr. Rita Laura D'Ecclesia
e-mail: rita.decclesia@uniroma1.it
Professor in Quantitative Methods in Economics and Finance
Director of the PhD program in Finance and Economics
Sapienza University of Rome, Italy.

Prof.Dr.Igor Masten
e-mail: igor.masten@ef.uni-lj.si
Academic Unit for Money and Finance
Faculty of Economics, University of Ljubljana, Slovenia.

Kledian Kodra, FCCA
e-mail:Kledi.Kodra@al.gt.com
Managing Partner
Grant Thornton Albania.