

# Nico Rosamilia

Legally authorized to work in Canada, EU, US

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I possess a strong aptitude for analysis, modeling, and critical thinking combined with a passion for teaching and mentoring. I efficiently communicate concepts orally and in writing, valuing collaboration with team members. My research focuses on portfolio optimization, price forecasting, risk management, and the secondary market for private equity investments

**Ph.D. in Finance**, *Politecnico di Milano School of Management* 2024

## Awards

Recipient of the EU grant *National Operational Programme on Research and Innovation* 2021/24

## Visiting Researcher

ALBA Graduate Business School, The American College of Greece Athens, GR - 2024  
University of Queensland Brisbane, AU - 2023

## References

Professor *Saša Drezgić*, University of Rijeka Professor *Giancarlo Giudici*, Politecnico di Milano SoM  
Professor *Paolo Zacchia*, CERGE-EI Professor *David Hillier*, Strathclyde Business School

## Teaching and Mentoring

**Corporate Finance**, Lecturer and TA, Politecnico di Milano IT - 2021/24

**Graduate Student Supervisor**, Politecnico di Milano IT - 2021/24

- Department of Mathematics: guide research topics, methodologies, and timelines. Manage the progress of students' work, offer feedback, and assist in preparing thesis documents (joint with *Daniele Marazzina*)
- Department of Management Engineering: mentoring and supervising master thesis students, creating research ideas, and implementing empirical strategies

**Business Administration and ESG**, Lecturer, Graduate School of Management MBAs IT - 2022/23

**Sustainable Finance**, Case Studies, Unicredit Bank employees IT - 2021/23

**Economics and Policy of Investments**, Lecturer and TA, University of Rijeka HR - 2020/21

**Microeconomics**, TA, CERGE-EI CZ - 2020

**Economics and International Trade Policy**, Lecturer and TA, University of Rijeka HR - 2019/20

**Public Finance**, Lecturer and TA (undergraduate), University of Rijeka HR - 2018/19

## Education

**M.A. in Economics**, *CERGE-EI*, Chartered by The University of the State of New York CZ - 2019/21

**Researcher**, University of Rijeka, References: Drezgić, S., Cvečić, I., Blažić, H. HR - 2018/19

**M.Sc. in Management Engineering**, Politecnico di Milano IT - 2013/15

**B.Sc. in Management Engineering**, University of Naples Federico II IT - 2010/13

## Research papers

### Secondary Market for Private Equity and Venture Capital

Short Abstract: discussing the role of PE and VC secondary markets, the type of assets (trophy or trouble) traded, the information asymmetries, and the pricing challenges

### Climate Risk and Brand Capital (joint work with Giudici, G., Konstantios, D.)

Short Abstract: we find that the value of a marginal dollar of cash on brand value is significantly lower in firms with high climate risk exposure compared to those with low exposure

### What's News with You: Price Forecasting and Sentiment Scores (joint work with Leone, F., Marazzina, D.)

Short Abstract: we show that deep learning models (N-HiTS), when trained on sentiment data from news (with sentiment scores computed using RoBERTa), significantly outperform the baseline model in forecasting stock prices

### Profit or Planet? Both! ESG Drivers of Efficient Portfolios and the Costs of Disclosure

Short Abstract: customizing a Random Forest algo, I create efficient sustainable portfolios through best-performing firms selection and identify material ESG indicators in 5 global markets

### No Gambling Here! A New Comprehensive Risk Index

Short Abstract: I combine financial, macroeconomic, and ESG variables into a synthetic measure representing risk with an unsupervised neural network that overcomes linearity

#### **Climate Shocks and Corporate Resilience: Extreme Weather Events and EU Solidarity Funds for Adaptation and Mitigation**

Short Abstract: the effect of various extreme weather events on firms' financial performance is comparable in magnitude. The European solidarity funds help in the first aftermath, not necessarily in resilience for future events

#### **Forecasting and Prediction: Bayesian Econometrics and Machine Learning**

Short Abstract: Bayesian updating info and Machine Learning for prediction and forecasting in the equity market

#### **Should I Stay or Should I go? Transfers, Trade Gains, and Capital Accumulation in a Fiscal Union**

Short Abstract: the incentive compatibility of the optimal fiscal union model for countries in the European Monetary Union, comparing the trade gains in the currency union with the transfers in the fiscal union

#### **Fiscal stimulus for EMU countries not meeting SGP criteria** (joint work with Cvečić, I., Drezgić, S.)

Short Abstract: the effects of the 2010 dry-up in the credit supply for Italian non-financial firms on unemployment

## **Courses**

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**Macroeconomic Forecasting and Analysis in the Machine Learning Era**, Bank of Italy

**Advanced Bayesian Econometrics: Bayesian Multivariate Models and Forecasting**, Università Ca' Foscari

**Panel Data Econometrics: Theory and Applications**, Università di Bologna

**Striving for Research Quality**, Alma Mater Studiorum Bologna

**Knowledge Dynamics, Industry Evolution, Economic Development**, Université Cote D'Azur

**It's Not About Teaching, It's About Learning**, Università degli Studi di Bergamo

## **Experience**

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**Investment Manager**, GMA International Services, Inc.

Davie FL, US - 2024

- DCF, comparable company, and precedent transaction evaluations for over 20 companies, leading to a 150% increase in strategic M&A recommendations in the target sector
- Achieved a 50% faster decision-making and saved 25% in costs
- Leveraged GDP lag correlations to identify alpha opportunities implementing a beta hedging strategy and within a fixed-income and equity portfolio

**AMBassadors for sustainable transITION**

Kenya & The Netherlands - 2023/24

- *AMBITION*: towards the sustainable transition in Europe and Africa
- In two international group-focused initiatives, across seven universities in Europe and Africa, we studied and developed solutions for integrated energy and cross-sectoral modeling, sustainable and resilient transitions, and life cycle sustainability assessment
- Delivered workshops and seminars at schools and private companies, enhancing awareness and understanding of sustainable transition practices among diverse audiences

**External Associate**, Intellico

Milan, IT - 2021/24

- Boosted financial performance by an average of 20% for 50+ clients through strategic enhancements in ESG disclosures, optimizing investment attractiveness, risk management, and capital efficiency
- Engaged with managers of private firms to provide insights and guidance on financial and non-financial disclosure practices that increased transparency by 12%
- Published article: *AI and ESG*

**Equity Researcher**, European Regional Development Fund

EU & Italy - 2021/24

- Developed and implemented advanced methodologies with a dataset of 2.5M firms to assess the relation between financial performances and sustainable disclosure, sentiment scores, and climate risk
- Utilized quantitative models to evaluate risk and performance metrics with 200+ variables in the panel
- Produced three working papers currently under review

**Graduate Student Supervisor**, Politecnico di Milano

Milan, IT - 2021/24

- Guided research topics, methodologies, and timelines for over 30 students across the Department of Mathematics (jointly with Marazzina, D.) and of Management Engineering, achieving a 100% project completion rate
- Managed students' work closely, providing continuous feedback and implementing empirical strategies to support high-quality research outcomes that led to 5 published papers

**Management Consultant**, SVS Marketing

Toronto, CA - 2017/18

- Analyzed financial performance and investment potential for 10+ marketing initiatives, focusing on optimizing client acquisition costs and maximizing ROI
- Conducted detailed market research and competitive analysis to assess business valuation opportunities, supporting strategic investment decisions and campaign execution

**Sales Manager**, David Youngson and Associates

Toronto, CA - 2016/17

- Led and managed a team of 7 salespeople at trade shows and sales events, achieving the highest single-day sales record for the 2017 trade show
- Oversaw sales strategies, coordinated team activities, and ensured impactful product presentations. Supported team members, monitored performance, and drove efforts to consistently meet and exceed sales targets

**Trading Desk Analyst**, *IMI Corporate & Investment Banking* - Be Shaping the Future

Milan, IT - 2015/16

- Analyzed asset returns, OHLC, and implied volatility, utilizing top-down and bottom-up approaches for sector and stock selection
- Incorporated GDP correlations (lag effects) with asset prices, and conducted industry sector (value chain) and stock analysis through fundamental, technical, and price action perspectives
- Trade idea generation focused on alpha with robust risk management strategies

## Professional experience

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**Member of the European Economic Association**

**Member of the AiIG - Italian Association of Management Engineering**

**Canadian Securities Institute, Moody's Analytics Training Certification Services**

Regulatory requirements to perform securities and mutual fund transactions in many financial services positions

**Trading and Portfolio Management**

Asset returns, OHLC, and implied volatility. Forex market infrastructure, fixed, floating, managed (dirty) float regimes. Directional options trading strategies and usefulness filtering. Marginal benefits of options positioning

## International conferences

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**2023**

- XXXIV AiIG - Humanizing technologies for a better society
- IAFDS - International Accounting & Finance Doctoral Symposium
- ICEE - Tenth Italian Congress of Econometrics and Empirical Economics

**2022**

- EEA-ESEM - 37th European Economic Association and 74th European Econometric Society meetings
- XXXIII AiIG - Redesigning networks and supply chains in times of transition
- IAFDS - International Accounting & Finance Doctoral Symposium

**2019**

- DIGITOMICS - International Scientific Conference Economics of Digital Transformation

## Academic Skills

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- Faculty and student mentorship with an emphasis on team development and academic leadership
- Proficiency in statistical testing and advanced econometric methods, tailored for applied research and instruction
- Expertise in quantitative analysis with a focus on practical interpretation and academic rigor
- Curriculum design and enhancement of academic programs in finance and related disciplines
- Development of academic-industry partnerships and collaborative research opportunities
- Effective course planning, independent project management, and multitasking in dynamic academic environments
- Strategic communication for academic publishing and conference presentations
- Analytical problem-solving and academic decision-making aligned with educational objectives
- Continuous process improvement in teaching methodologies, using student feedback and evaluation
- Cross-disciplinary collaboration and active engagement with academic and industry stakeholders
- Research project management and academic publication planning, from initial proposal to dissemination

**Programming languages**

Python, R, Matlab, Stata, Office, LaTeX. Electronic trading platforms

**Languages**

English, Italian: Fluent  
Croatian, Spanish: Basic

## Volunteer experience

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**Forum dei Giovani**, Youth association that organizes entertainment and cultural events

2010/16

**ACR**, Association for children and teenagers organizing social events and charity initiatives

2005/10