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Personal information

Born in Foligno (Perugia), Italy, on July 7th, 1970.

Academic training

- High School – Raffaele Casimiri School (Gualdo Tadino – PG) 57/60 (1989).
- Math Degree – Perugia University 110/110 laud, (1995-04-21) (Master thesis: “Integrazione e teoremi di Radon-Nykodim su spazi nucleari”).

Current position

From 2000 November 1th, she is Professor (permanent researcher) in the Department of Statistical Sciences, Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome.

Teaching experience

- Financial Math (2000-2006) – support activity, Undergraduate Curricula of Statistics, Economics, Finance and Insurance.
- Maths models for financial markets (2000-2008) – support activity, Undergraduate Curricula of Statistics, Economics, Finance and Insurance.
- Laboratory of Financial and actuarial maths (2008-2011) – Teacher, Undergraduate Curricula of Statistics, Economics, Finance and Insurance.
- Portfolio Theory (2011-2012, 2020-2025) – Teacher, Undergraduate Curricula of Statistics, Economics, Finance and Insurance.
- Valuation and control of insurance companies (2011-2015) – Teacher, Graduate Curricula of Actuarial and Financial Sciences.
- Economics and finance of insurance companies (2016-2019) – Teacher, Graduate Curricula of Actuarial and Financial Sciences.
- Laboratory of financial maths (2016-2018, 2020-2025) – Teacher, Undergraduate Curricula of Statistics, Economics, Finance and Insurance.
- Models for financial markets (2025) – Teacher, Undergraduate Curricula of Statistics, Finance and Actuarial Sciences.

Other activities

- April 1999 Teacher, “I mutui della Cassa depositi e prestiti per gli enti locali. Scegliere e gestire l’indebitamento”, Cassa depositi e prestiti, valuation and structuring of investment for local societies.

- September 1999 – March 2000 Teacher, Educational project “Fare Finanza”, (Istituto degli Studi Bancari di Lucca) 6 courses: “Tassi di interesse, strutture dei rendimenti. Modelli e tecniche per l'azione sul mercato.”; “Contratti a tasso fisso, contratti indicizzati, interest rate swap. Schemi di valutazione.”; “Valutare le opzioni.”; “Il Value-at-Risk. Misure di rischiosità; problemi di calcolo e di utilizzazione.”; “La valutazione di contratti strutturati.”; “L’asset-liability management nella banca. Controllo dei valori e dei margini; il controllo dei rischi.”
- September 2000 – December 2000 Teacher, “Software e modelli per la Finanza”, (Banca di Roma).
- January 2001 – dicembre 2006 Teacher, “Master in finanza per la banca e per l’assicurazione”, (Faculty of Statistical Sciences and Capitalia Group).
- 2002 Member of Reaserch Group, “Imprese di assicurazioni e fondi pensione. Modelli per la valutazione, la gestione e il controllo”, (PRIN Project funded by MIUR).
- May 2007 Teacher, “Principi di asset e risk management in riferimento a QIS3”, (ANIA/IRSA).
- 2011 Member of Reaserch Group “Catene di Markov”, Sapienza University Research Project.
- 2020 Member of Reaserch Group “Sustainability and ESG: risk drivers and corporate profitability”, Sapienza University Research Project.
- 2024 Member of Reaserch Group “Process management method in head and neck cancer patient care”, Sapienza University Research Project.

Publications and Research works

- Rogo Barbara, Garrido José and Demartis Stefano (2025). *The Italian Actuarial Climate Index: A National Implementation Within the Emerging European Framework*, Risks 13(10): 192. <https://doi.org/10.3390/risks13100192>
- Demartis Stefano and Rogo Barbara Rogo (2024). *The Relationship Between ESG Scores and Value-at-Risk: A Vine-Copula-GARCH Based Approach*, Journal of Risk and Financial Management 17: 517. <https://doi.org/10.3390/jrfm17110517>
- José A. Vilar-Zanon and Barbara Rogo (2024). *Pricing and hedging contingent claims by entropy segmentation and Fenchel duality*, Methodology and Computing in Applied Probability 26: 37. <https://doi.org/10.1007/s11009-024-10099-6>
- Marisa Cenci, Maria Alessandra Congedo, Antonio Luciano Martire and Barbara Rogo (2022). *Fractional Volterra integral equation: a neural network approach*, WORKING PAPER SERIES DEPARTMENT OF BUSINESS STUDIES ROMA TRE – “BS RM3”, Roma TrE-Press, 2022.
- Rogo, B. (2019). Measurement of solvency capital requirement for the interest rate risk using Standard Formula: a stochastic model to evaluate a participating life insurance contract, Rapporto tecnico n. 1, Dipartimento di Scienze Statistiche.
- Rogo, B. (2016). La simulazione storica per il calcolo del VaR di un prodotto strutturato. Tecniche di backtesting, Rapporto tecnico n. 1, Dipartimento di Scienze Statistiche.
- Rogo, B. (2014). *Valutazione e controllo del rischio dei fondi d'investimento. I principi nella Direttiva UCITS IV. L'informativa di trasparenza su rischi e rendimenti*. ISBN: 9783639656909.
- Rogo, B. (2013). *I principi per la valutazione e il controllo del rischio dei fondi d'investimenti nella Direttiva UCITS IV*, Rapporto tecnico n. 13, Dipartimento di Scienze Statistiche.
- Rogo, B. (2012). *La misurazione del rischio di performance di un investimento in polizze di ramo III secondo la normativa Consob*, Rapporto tecnico n. 9 2012, Dipartimento di Scienze Statistiche.
- Rogo, B. (2007). *Il controllo di un investimento in obbligazioni a indicizzazione reale nei fondi pensione negoziali*, Assicurazioni, n. 1.

- Rogo, B. (2005). *Un'analisi empirica del mercato dei titoli italiani indicizzati all'inflazione europea: un modello bivariato per la valutazione*, Gruppo di ricerca su “Assicurazioni e Fondi Pensione. Modelli di la valutazione, per la gestione e per il controllo”, Working paper n. 8.
- Rogo, B. (2004). *La valutazione di polizze unit e index linked*, Gruppo di ricerca su “Assicurazioni e Fondi Pensione. Modelli di Valutazione e Asset-Liability Mangement”, Working paper n. 5.
- Rogo, B. (2003). *La misurazione della struttura per scadenza dei tassi di interesse: alcuni modelli di stima*, Gruppo di ricerca su “Assicurazioni e Fondi Pensione. Modelli di Valutazione e Asset-Liability Mangement”, Working paper n. 2, dicembre 2003.
- Rogo, B. (1999). *La valutazione di una polizza vita “index linked” con minimo garantito*, Gruppo di ricerca su “Modelli per la finanza matematica”, Working paper.

Congresses e workshops

- Rogo B. (2025). Invited participant in the scientific event “MLISTRAL 2: Climate change and Insurability”. 26-28 November, Marseille.
- Rogo B. (2025). Performance Profiles of Profit Sharing Insurance Contracts with Corridor-Based Financial Strategy under IFRS 17. 3rd Edition DSS Workshop Methods for Human Health and Life Sciences, 13-14 February, Rome.
- Rogo B. (2024). Performance Profiles of Profit Sharing Insurance Contracts with Return Target Financial Strategy under IFRS 17. European Actuarial Journal Conference, 9-11 September, Lisbon.
- Rogo B. (2024). Pricing and hedging contingent claims by entropy segmentation, Fenchel duality and linear programming. Workshop, New Frontiers in Risk Management, 12 April (Rome).
- Rogo B., Vilar-Zanón J.L. (2022): With-profit insurance contracts. The problem of pricing and hedging. 4^o Jornadas Ingenieria Estadística UBB (Facultad de Ciencias, Univesidad del Bio-Bio), 20 January. (Virtual Conference).
- Rogo B., Vilar-Zanón J.L. (2021): Pricing and Hedging in incomplete markets by maximum entropy and convex duality. International IME 2021 Conference, 5-9 July. (Virtual Conference)
- Rogo B. (2019): Insurance contracts with cliquet guarantee. How to price and hedge. Complutense Doctoral Roundtable, 21 November (Madrid).

Teaching delivered at foreign universities

- 17-18 December 2024. *A Market-Consistent Framework: Solvency and Accounting. Profit-Sharing Insurance Contracts: the Italian Case*. Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics.
- 18-19 December 2023. *Models for the insurance Solvency. The case of with-profit insurance contracts*. Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics.
- 13-14 December 2022. *Models for the insurance Solvency. The case of with-profit insurance contracts*. Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics.
- 14-15 December 2021. *Interest rate risk. Measurement techniques and models for the Insurance solvency*. Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics.
- 13-15 May 2019. *Measurement of Solvency Capital Requirement for the interest rate risk using Standard Formula. The case of a participating life (unit-linked) insurance contract*. Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics.

Other

- 1-16 December 2021. **Visitor researcher** to Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics. Research on “**With-profit insurance contracts**” under the research project directed by Professor José Luis Vilar Zanón “**Pricing and hedging in incomplete markets by maximum entropy and convex duality**”.
- 13-18 May 2019. **Teaching and Training Erasmus+**, to Complutense University of Madrid, Faculty of Economics and Business Administration, Department of Financial & Actuarial Economics and Statistics.

October 3, 2025