

Luca Regis

Curriculum Vitae

September 2022

📍 Department of Socio-Economic and
Mathematical-Statistical Sciences (ESOMAS), University of
Torino, Italy.
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Education and Qualifications

2022 National Qualification as Full Professor Financial and Actuarial Mathematics, 13/D4
2011 Ph.D. University of Torino
2006 M.Sc.(Hons) University of Torino

Current Positions

2021– **Affiliate**, Collegio Carlo Alberto.
2019– **Associate Professor of Financial and Actuarial Mathematics**, ESOMAS Department, University of
Torino.
2019– **Deputy Director**, LTI@UniTO.

Past Positions

2016– 2019 **Tenure-track Assistant Professor**, Department of Economics and Statistics, University of Siena.
2013– 2016 **Assistant Professor**, AXES Research Unit, IMT Lucca.
2012– 2013 **Post-Doc Fellow**, ESOMAS Department, University of Torino.

Research interests

- Actuarial mathematics;
- Financial Mathematics;
- Corporate Finance.

Publications

Research papers in International Journals

1. De Rosa, C, E Luciano, and L Regis (2021). Geographical diversification and longevity risk mitigation in annuity portfolios. *ASTIN BULLETIN*.
2. Jevtic, P and L Regis (2021). A square-root factor-based multi-population extension of the mortality laws. *Mathematics*.
3. Owadally, I, R Ram, and L Regis (2021). An analysis of the Dutch-style pension plans proposed by UK policy-makers. *Journal of Social Policy*.
4. Menoncin, F and L Regis (2020). Optimal life-cycle labour supply, consumption, and investment: The role of longevity-linked assets. *Journal of Banking & Finance* **120**, 105935.
5. Flori, A, F Pammolli, SV Buldyrev, L Regis, and HE Stanley (2019). Communities and regularities in the behavior of investment fund managers. *Proceedings of the National Academy of Sciences* **116**(14), 6569–6574.
6. Jevtić, P and L Regis (2019). A continuous-time stochastic model for the mortality surface of multiple populations. *Insurance: Mathematics and Economics* **88**, 181–195.
7. Nicodano, G and L Regis (2019). A trade-off theory of ownership and capital structure. *Journal of Financial Economics* **131**(3), 715–735.
8. De Rosa, C, E Luciano, and L Regis (2017). Basis risk in static versus dynamic longevity-risk hedging. *Scandinavian Actuarial Journal* **2017**(4), 343–365.
9. Luciano, E, L Regis, and E Vigna (2017). Single-and Cross-Generation Natural Hedging of Longevity and Financial Risk. *Journal of Risk and Insurance* **84**(3), 961–986.
10. Menoncin, F and L Regis (2017). Longevity-linked assets and pre-retirement consumption/portfolio decisions. *Insurance: Mathematics and Economics* **76**, 75–86.
11. Jevtić, P and L Regis (2015). Assessing the solvency of insurance portfolios via a continuous-time cohort model. *Insurance: mathematics and economics* **61**, 36–47.
12. Luciano, E and L Regis (2014). Efficient versus inefficient hedging strategies in the presence of financial and longevity (value at) risk. *Insurance: Mathematics and Economics* **55**, 68–77.
13. Luciano, E, L Regis, and E Vigna (2012). Delta-gamma hedging of mortality and interest rate risk. *Insurance: Mathematics and Economics* **50**(3), 402–412.

Other Refereed Publications

1. Regis, L and P Jevtic (2022). "Stochastic Mortality Models and Pandemic Shocks". In: *Pandemics: Insurance and Social Protection*.
2. De Rosa, C, E Luciano, and L Regis (2018). "International Longevity Risk Pooling". In: *Mathematical and Statistical Methods for Actuarial Sciences and Finance*. Springer, pp.317–321.
3. Luciano, E and L Regis (2014). Risk-return appraisal of longevity swaps. *Special Issues* **2014**(1), 99–108.
4. Regis, L and F Pammolli (2014). Demography, sustainability and growth. Notes on the sustainability of health and pension systems in Europe.
5. Regis, L (2012). Dynamic hedging of life insurance reserves. In: *ACTUARIAL AND FINANCIAL MATHEMATICS CONFERENCE*, pp.101–108.
6. Regis, L (2012). Good and bad banks. In: *Mathematical and Statistical Methods for Actuarial Sciences and Finance*, pp.359–366.
7. Regis, L et al. (2011). A Bayesian copula model for stochastic claims reserving. In: *Actuarial and Financial Mathematics Conference*, pp.113.

Grants

- 2021 – 2022 **Matrix Variate Distributions as a Tool for Insurers and their Application to Natural Hazard Loss Modeling**, (Co-PI), Individual Grants Competition, Casualty Actuarial Society, 17500 USD.
- 2021 – 2023 **Spatial modelling of longevity risk**, PI, University of Torino, 2800 euros.
- 2020 – 2022 **Financing and payout policies choices**, PI, University of Torino, 2000 euros.
- 2017 – 2018 **FFABR 2017** grant for the top Italian researchers, Ministry of Education and University, 3000 euros.
- 2014 – 2016 **Hedging and risk-return frontier in insurance: an ALM perspective**, Co-Investigator, Global Risk Institute, Canada, 194000 euros.
- 2012 – 2014 **Taxation, organizational and financial choices and start-up firm growth: theoretical aspects and empirical evidence**, University of Torino, Co-Investigator, 5000 euros.

Journal Service

- 2016 – **Editorial Board Member**, *Risks*.
- 2019 **Guest Editor** (together with S. Federico and G. Ferrari) of the Special Issue "Applications of Stochastic Optimal Control to Economics and Finance" of *Risks*.
- 2017 **Guest Editor** of the Special Issue "Actuarial and Financial Risks in Life Insurance, Pensions and Household Finance" of *Risks*.

Ad hoc referee for: *Applied Mathematics and Computation*, *Economic Research*, *Insurance: Mathematics and Economics*, *Risks*, *International Journal of Theoretical and Applied Finance*, *Scandinavian Actuarial Journal*, *Acta Mathematica Scientia*, *Quantitative Finance*, *Communications in Statistics: Theory and Methods*, *Economic Notes*, *Bulletin of the Malaysian Mathematical Society*, *Journal of Risk and Insurance*, *Journal of Computational and Applied Mathematics*, *Computers and Mathematics with Applications*, *Decisions in Economics and Finance*, *Routledge*, *Computational and Applied Mathematics*, *Journal of Regulatory Economics*, *Probability Uncertainty and Quantitative Risk*, *North American Actuarial Journal*, *Mathematics*, *Journal of Behavioral and Experimental Finance*, *Sustainability*, *Computational Management Science*, *Journal of Futures Markets*, *Journal of Banking and Finance*, *PLOS One*.

Reviewer for *Mathematical Reviews/MathSciNet*.

Conference Organization

- 2022 3rd LTI@UniTO/Bank of Italy Workshop on Long-term investors' trends: theory and practice; LTI@UniTO Seminars in Finance.
- 2021 2nd LTI@UniTO/Bank of Italy Workshop on Long-term investors' trends: theory and practice; LTI@UniTO Webinars in Finance.
- 2020 LTI@UniTO Webinars in Finance; Online Workshop "Climate Change, Credit Risk and Covid-19".
- 2019 Workshop "New Frontiers in Stochastics for Economics and Finance", 30 May - 1 June 2019, University of Siena.
- 2018 UNISA Actuarial School 2018, Paestum, September 2018; Workshop on "Longevity Risk Management, Differential Mortality and Lifetime Inequality", 28-29 September 2018, University of Brescia.

Conference and Seminar Presentations

- 2016 – 2022 38th GDRE Conference (Strasbourg), Workshop in Quantitative Finance 2022 (Rome), XXXIV AMASES Conference (online), University of Brescia (seminar), Cass Business School (seminar), MAF 2018 Conference (Madrid, ES), XLII AMASES Conference (Napoli, IT), Unisacturial School 2018 (Paestum, IT), Workshop on Longevity Risk, Differential Mortality and Lifetime inequality (Brescia, IT), LTI Conference on "Evolving Landscape on Bank and Non-Bank Finance" (Bank of Italy, Rome), University of Trieste (seminar), University of Siena (seminar), University of Modena and Reggio Emilia (seminar), XLI AMASES Conference (Cagliari, IT), Workshop on Household Finance and Retirement Savings (Torino, IT), 14th International Pension Workshop (Paris, FR), 16th Iberian Italian Actuarial Conference (Paestum, IT), University of Rome La Sapienza (seminar).
- 2010 – 2015 PARTY 2015 Conference (Liverpool, UK), XVI Workshop on Quantitative Finance (Parma, IT), 19th IME Conference 2015 (Liverpool, UK); Longevity 11 Conference (Lyon, FR), 3rd Money, Banking and Finance Workshop (Pavia, IT), Prometeia Spa (seminar, Bologna, IT), International Netspar Pension Workshop (Venice, IT), IRMC Conference 2014 (Warsaw, PL), 2nd EAJ Conference (Wien, AU), XIII Money, Banking and Finance Society Conference (Rome, IT), CISA Young Researchers' Workshop (Firenze, IT), XXXVII AMASES Conference (Stresa, IT), IMT Lucca (seminar, Lucca, IT), XXX AFFI Conference (Lyon, FR), Afmath Conference 2013 (Brussels, BE), XIV Workshop in Quantitative Finance (Rimini, IT), PARTY 2013 (Ascona, CH), Collegio Carlo Alberto (seminar, Moncalieri, IT), Netspar International Pension Workshop (Paris, FR), XXXVI AMASES Conference (Vieste, IT), VIII Longevity Conference (Toronto, CA), V MAF Conference (Venezia, IT), Afmath Conference 2012 (Brussels, BE), XXXV AMASES Conference (Pisa, IT), XV IME Conference (Trieste, IT), IV International Risk Forum (Paris, FR), Afmath Conference 2011 (Brussels, BE), XII Workshop in Quantitative Finance (Padova, IT), IRMC 2010 (Firenze, IT), IV MAF Conference (Ravello, IT).

Teaching Experience

- 2021 – Optimization for Economics, Ph.D. in Economics and Allievi Program, CCA and University of Torino.
 2020 – Financial and Actuarial Mathematics, Undergraduate, University of Torino.
 2020 – Quantitative Risk Management, M.Sc., University of Torino.
 2020 – 2022 Additional IT Training, M.Sc., University of Torino.
 2018 – 2019 Probability, Ph.D. in Economics, University of Siena.
 2017 – 2020 Financial Mathematics, Undergraduate, University of Siena.
 2017 – 2019 Credit Risk Modeling, M.Sc., University of Siena.
 2016 Corporate Finance, Ph.D., IMT Lucca.
 2015 – 2016 Additional Statistical Training, M.Sc., University of Torino, 2015 and 2016.
 2012 – 2013 Financial Economics, University of Torino, Undergraduate.
 2010 Mathematics II, Undergraduate, Polytechnic University of Torino.

Other academic services and qualifications

► Scientific Committees:

- Master in Finance, Insurance and Risk Management, Collegio Carlo Alberto and University of Torino, 2019 - present.
- Master in Insurance and Digital Innovation, Collegio Carlo Alberto and University of Torino, 2019 - 2021.

► Administrative roles:

- Member, Department Council, ESOMAS Department, University of Torino, 2021-.
- Member, Didactic Committee, School of Management and Economics, University of Torino, 2021-.
- Director's Delegate for Quality Assurance, Department of Economics and Statistics, University of Siena, 2017 - 2019.
- Deputy Director, Master in Insurance and Risk Management, Collegio Carlo Alberto, 2011 - 2013.
- Postdoc Representative in the Department Council, University of Torino, 2012 - 2013.
- Assistant Professors and Post-Doc Representative, Academic Council, IMT Lucca, 2015.

► Students:

- Co-Supervisor, Ph.D. Thesis of Anastasia Novokreschenova, DSE Ph.D. program, Vilfredo Pareto Doctoral School, University of Torino.
- Member of the Ph.D. Defense Committee, University of Rome 1 Ph.D. School, 2022.

- Chair of Ph.D. Committee, Emi Ferra and Laura Gianfagna, EMDS Ph.D. IMT Lucca, 2017.
- Member of the Ph.D. Committee, Benedetta Frassi, EMDS Ph.D. IMT Lucca, 2017.
- External Referee for 2 Ph.D. Thesis, SAFD Ph.D. School, University of Bergamo, 1 Ph.D. Thesis, Arizona State University, 1 Ph.D. Thesis, University of Rome La Sapienza, 1 Ph.D. Thesis, University of Udine.

➤ Hiring Committees and grants evaluation:

- Member of the Selection Committee for 1 Assistant Professor Position (2013), 1 Research Collaborator Position (2016), 1 Post-Doc Position (2017), IMT Lucca.
- Member of the Selection Committee for 2 Tenure-Track Assistant Professor (Rtd-B) positions, University of Siena (2020,2022).
- Research Proposal evaluator for the National Science Centre Poland, PSL School, ANVUR VQR 2015-19.

Other professional activities

- Board member, A.C.E.M., December 2020 - present.
- Member of the Financial and Actuarial Committee, Reale Mutua Assicurazioni, 2019 - present.
- Consultant for several Italian insurance companies and banks on risk management and asset management.