

• **PERSONAL DATA**

- Date of Birth: 20 February 1966.
- Citizenship: Italian.
- Languages: Italian (native), English (fluent).
- Married, one child.

• **EDUCATION**

- PhD, Applied Mathematics to Finance and Economics, University of Palermo, Italy.
- Laurea (Summa cum Laude), Statistics and Economics, University of Palermo, Italy.

• **AWARD AND PRIZES**

- *Excellence in Practice Award* conferred by the Association of the Operational Research Societies within I.F.O.R.S., 2006.

• **ACADEMIC APPOINTMENTS**

- Professor, University of Palermo, Italy, 2006–today.
- Associate Professor, University of Palermo, Italy, 2001–2006.
- Visiting Research Fellow, University of Cyprus, Nicosia, Cyprus, 2001.
- Assistant Professor, University of Calabria, Italy, 1998–2001.
- Research Associate, University of Cyprus, Nicosia, Cyprus, 1996–1998.

• **COURSES TAUGHT**

- Mathematical Finance, Option Pricing.
- Portfolio Management, Risk Management.

• **RESEARCH INTERESTS**

- Computational Finance, Risk Management, Portfolio Management.
- Global Optimization, Stochastic Programming.
- Artificial Markets.

• **CONSULTING ACTIVITIES**

- PetroBras & Pontifical Universidad Catolique, Rio de Janeiro, Brasile: external advisor for the research project “*Asset & liability management for an oil company*”, 2011.

- Prometeia s.r.l., Bologna, Italy, “*Cohorent risk measures to manage portfolios of financial assets*”, 2002.
- Prometeia s.r.l., Bologna, Italy, “*Personal asset allocation models for e-banks*”, 2000.
- Prometeia s.r.l., Bologna, Italy, “*Advanced models to manage insurance products with guarantee*”, 1999.
- Banca della Svizzera Italiana, Lugano, Switzerland, “*Scenario analysis for multi-currency bond portfolios*”, 1998.
- TERRA Computers, Israel, “*High-performance computing for financial applications*”, 1996.
- Scientific Computing Associates, Yale, USA, “*High-performance computing for financial applications*”, 1996

• RESEARCH GRANTS

- Associate investigator, PRIN 2007, (Italian Research Grants for Project of Relevant Interest), two-years project, “*Learning and investment decisions in an artificial automated financial market*”, 15,000 €.
- Associate investigator, FIRB 2005 (Italian Research Grants for Fundamental Research), two-years project, *Managing the public debt*, 22,000 €.
- Principal investigator, PRIN 2004 (Italian Research Grants for Project of Relevant Interest), two-years project, *Models for the price dynamics of financial securities: institutional aspects and behavioral assumptions in a agent-based framework*, 75,000 €.
- Associate investigator, PRIN 2002 (Italian Research Grants for Project of Relevant Interest), two-years project, *Models and Algorithms to Select Insurance and Bank Portfolios*, 31,000 €.
- Principal investigator, Prometeia s.r.l., one-year project, *Portfolio management with coherent risk measure*, 15,000 €.
- Associate investigator, Prometeia s.r.l., one-year project, *Advanced models to manage insurance products with guarantee*, 20,000 €

• REFEREEING

- Reviewer of research papers for: *Annals of Operations Research*, *European Journal of Operations Research*, *Operations Research*, *Journal of Banking and Finance*, *Computational Economics*, *International Journal of Theoretical and Applied Finance*, *Journal of Economics Dynamics and Control*, *Mathematical Programming*, *Insurance: Mathematics & Economics*, *Quantitative Finance*, *Geneva Papers on Risk and Insurance*, *Advances in Complex Systems*.
- Reviewer of research proposal for: *Dutch Social Science Research Council*, *Italian Ministry of Research and Education*.

- **PLENARY TALKS & SEMINARS**

[2011] Mathematics in Finance, Kruger National Park, South Africa:

[2011] Workshop on Longevity, Bergamo, IT:

[2010] NatCor, Brunel University, London, UK:

[2008] STREP Meeting, Cagliari, IT:

- **PUBLICATIONS**

1. **Books**

- (a) A. Consiglio, S. Nielsen, and S.A. Zenios. *Practical Financial Optimization: A Library of GAMS Models*. Wiley, 2009.
- (b) Andrea Consiglio, editor. *Artificial Markets Modeling: Methods and Applications*, volume 599 of *Lecture Notes in Economics and Mathematical Systems*. Springer, 2007.

2. **Journal Articles**

- (a) A. Consiglio and S. Guirrieri. Simulating term structure of interest rates with arbitrary marginals. *International Journal of Risk Assessment And Management*, 15(4):299–313, 2011.
- (b) A. Consiglio and A. Staino. A Stochastic Programming Model for the Optimal Issuance of Government Bonds. *Annals of Operations Research*. Forthcoming .
- (c) A. Consiglio and D. De Giovanni. Pricing the option to surrender in incomplete markets. *The Journal of Risk and Insurance*, 77(4):935–957, 2010.
- (d) A. Consiglio, A. Pecorella, and S.A. Zenios. A conditional Value-At-Risk model for insurance products with guarantee. *International Journal of Risk Assessment And Management*, 11(1/2):122–137, 2009.
- (e) A. Consiglio and D. De Giovanni. Evaluation of insurance products with guarantee in incomplete markets. *Insurance: Mathematics & Economics*, 42(1):332–342, 2008.
- (f) A. Consiglio and A. Russino. How does learning affect market liquidity? A simulation analysis of a double-auction financial market with portfolio traders. *Journal of Economics Dynamics and Control*, 31(6):1910–1937, 2007.
- (g) A. Consiglio, F. Cocco, and S.A. Zenios. Asset and liability modelling for participating policies with guarantees. *European Journal of Operational Research*, 186(1):380–404, 2007.
- (h) A. Consiglio, F. Cocco, and S.A. Zenios. Scenario optimization asset and liability modelling for individual investors. *Annals of Operations Research*, 152:167–191, 2007.

- (i) A. Consiglio, D. Saunders, and S.A. Zenios. Asset and liability management for insurance products with minimum guarantees: The UK case. *Journal of Banking and Finance*, 30:645–667, 2006.
- (j) A. Consiglio, V. Lacagnina, and A. Russino. A Simulation Analysis of the Microstructure of an Order Driven Financial Market with Multiple Securities and Portfolio Choices. *Quantitative Finance*, 5(1):71–87, February 2005.
- (k) A. Consiglio, F. Cocco, and S.A. Zenios. www.Personal_Asset_Allocation. *Interface*, 34(4):287–302, July–August 2004. **Winner of the 2006 EURO Excellence in Practice Award.**
- (l) A. Consiglio, D. Saunders, and S.A. Zenios. Insurance League: Italy vs. UK. *Journal of Risk Finance*, 4(4):47–54, Summer 2003.
- (m) A. Consiglio, F. Cocco, and S.A. Zenios. The Value of Integrative Risk Management for Insurance Products with Minimum Guarantees. *Journal of Risk Finance*, pages 1–11, Spring 2001.
- (n) A. Consiglio and S.A. Zenios. Integrated Simulation and Optimization Models for Tracking International Fixed Income Indices. *Mathematical Programming*, 89(2):311–339, 2000.
- (o) A. Beltratti, A. Consiglio, and S.A. Zenios. Scenario Modeling for the Management of International Bond Portfolios. In R.J. Wets and W.T. Ziemba, editors, *Stochastic Programming. State of the Art, 1998*, volume 85 of *Annals of Operations Research*, pages 227–247. Baltzer Science Publishers, March 1999.
- (p) A. Consiglio and S.A. Zenios. Designing Portfolios of Financial Products via Integrated Simulation and Optimization Models. *Operations Research*, 47(2):195–208, March–April 1999.
- (q) A. Consiglio and S.A. Zenios. A Model for Designing Callable Bonds and its Solution Using Tabu Search. *Journal of Economics Dynamics and Control*, 21:1445–1470, 1997.
- (r) A. Consiglio. How to Control Stock Market. *International Journal of Systems Science*, 25(12):2245–2253, 1994.

3. Refereed Chapters in Books

- (a) A. Consiglio and D. De Giovanni. Pricing reinsurance contracts. In M. Bertocchi, G. Consigli, and M. Dempster, editors, *Stochastic Optimization Methods in Finance and Energy*, volume 163 of *International Series in Operations Research & Management Science*, pages 125–139. Springer New York, 2011.
- (b) E. Catanese, A. Consiglio, V. Lacagnina, and A. Russino. Asset return dynamics under alternative learning schemes. In C. Hernandez, M. Posada, and A. Lopez-Parades, editors, *Artificial Economics, The Generative Method in Economics*, volume 631 of *Lecture Notes in Economics and Mathematical Systems*, pages 211–222. Springer, 2009.

- (c) A. Consiglio, V. Lacagnina, and A. Russino. The dynamics of quote prices in an artificial financial market with learning effect. In C. Bruun, editor, *Advances in Artificial Economics*, volume 584 of *Lecture Notes in Economics and Mathematical Systems*, pages 63–75. Springer, 2006. 3-540-37247-4.
- (d) A. Consiglio, V. Lacagnina, and A. Russino. Learning and the price dynamics of a double-auction financial market with portfolio traders. In P. Mathieu, B. Beaufils, and O. Brandouy, editors, *Artificial Economics, Agent-Based Methods in Finance, Game Theory and Their Applications*, volume 564 of *Lecture Notes in Economics and Mathematical Systems*, pages 215–227. Springer, 2005.
- (e) A. Consiglio, F. Cocco, and S.A. Zenios. The Prometeia model for managing insurance policies with guarantees. In W.T. Ziemba and S.A. Zenios, editors, *Handbook of Asset and Liability Management 2. Applications and Case Studies*, Handbooks of Finance, chapter 15, pages 664–705. Elsevier, The Netherlands, 2007.
- (f) A. Consiglio and S.A. Zenios. Model Error in Enterprise Wide Risk Management: Insurance Policies with Guarantees. In *Operational Risk and Financial Institutions*. In *Advances in Operational Risk*, pages 199–214. Risk Books, London, 2001.

4. Chapters in Books

- (a) A. Consiglio and S.A. Zenios. High-Performance Computing for Computer Aided Design of Financial Products. In L. Grandinetti, J.S. Kowalik, and M. Vajtersic, editors, *Advance in High Performance Computing*, NATO ASI, pages 273–301. Kluwer Academic Publisher, 1997.
- (b) A. Consiglio, F. Cocco, S. Mazzoni Perelli, and S.A. Zenios. Internet, Tecnologie Web-Based e Financial Planning. In A. Resti, editor, *Il Private Banking Gestione del Risparmio e della Clientela: Strategie, Strumenti ed Esperienze*, chapter 6, pages 185–207. EDIBANK, Milano, 2003.
- (c) A. Consiglio, I. Massabó, and S. Ortobelli. Value-At-Risk: “Oltre la Normale”. In D. Drago, editor, *La Tutela dell’Investitore nella Gestione del Risparmio*, volume 38 of *Banca e Mercati*, pages 175–199. Bancaria Editrice, Milano, Ottobre 2002.
- (d) A. Consiglio and C. Mari. Sul Rischio di Credito nei Mutui Bancari A cura di D. Drago, *Nuove Tendenze dell’ Asset & Liability Management in Banca*. Bancaria Editrice, Roma, 2001.
- (e) A. Consiglio, M. Costabile, C. Mari, and I. Massabò. La Valutazione di Opzioni Implicite nei Mutui Bancari. A cura di D. Drago, *Nuove Tendenze dell’ Asset & Liability Management in Banca*. Bancaria Editrice, Roma, 2001.

5. International Proceedings

- (a) A. Consiglio, S. Ortobelli, and I. Massabò. Non Gaussian Distribution for VaR Calculation: An Assessment for the Italian Market. In *Proceeding IFAC SME 2001*, 2001.
- (b) A. Consiglio, S. Genco, and A. Pecorella. Implementing Simulated Annealing in Hypercube Systems. In G.R. Joubert, D. Trystram, F.J. Peters, and D.J. Evans, editors, *Parallel Computing: Trends and Applications*, London, 1993. Elsevier Science B.V.
- (c) A. Consiglio, S. Genco, A. Pecorella, and G. Pecorella. Parallel Implementation of Simulated Annealing by Distributed Memory Systems. In C.A. Brebbia and H. Power, editors, *Application of Supercomputers in Engineering*, pages 21–33. Elsevier Applied Science, 1993.

6. Textbooks

- (a) A. Consiglio. *Matematica Finanziaria* (Italian only). Freely Available. Downloadable from <http://www.unipa.it/consiglio/>, 2003.