

## CURRICULUM VITAE

Name and Surname Elena Vigna  
Ort and date birthday Torino, 13.05.1970  
Telephone 0039 011 670 5754 or 670 5014  
Fax 0039 011 670 5783  
Email address [elena.vigna@econ.unito.it](mailto:elena.vigna@econ.unito.it)

### CURRENT POSITION

From 1/3/2000: Assistant Professor in “Mathematical Methods for Economics and Actuarial and Financial Sciences” at the Dipartimento di Statistica e Matematica Applicata, University of Torino.

### EDUCATION

1996: Laurea cum laude in Mathematics, University of Torino (Italy).  
1999: Postgraduate Certificate in Actuarial Management, City University, London (UK).  
2000: PhD in “Matematica per le Decisioni Economiche”, University of Trieste (Italy).

### RESEARCH AND TEACHING GRANTS

10/96-2/97: research and teaching grant by IMQ, Bocconi University.  
11/99-2/00: research grant by University of Torino.

### AFFILIATIONS

2002-current Honorary Visiting Fellow of the Faculty of Actuarial Science, Cass Business School, London  
2003-current Member of the Steering Committee of the PhD in “Decisions in Insurance and Finance” of the University of Turin  
2009-current Research Fellow at CeRP  
2010-current Carlo Alberto Affiliate

### AWARDS

2002 “Edward A. Lew Award” by American Society of Actuaries for the research project “Management of De-Accumulation Risks in a Defined Contribution Environment modeling project”.

### VISITING POSITIONS

June 2005 Department of Mathematical Sciences, Aalborg University, Denmark.

### PARTICIPATION TO FINANCED RESEARCH PROJECTS

2000-current she participates to Italian local and national research projects.  
2000 she wins, together with S. Haberman, a research grant on the project “New Approaches to Annuityization”. Sponsor: Institute of Actuaries Research Committee.  
2008 she wins, together with M. Di Giacinto and B. Højgaard, a grant for the research project “Optimal time of annuityization in the decumulation phase of a defined contribution pension scheme”, financed by CAREFIN (Centre for Applied Research in Finance); Università Bocconi, Milano.  
2009 she wins, together with P. De Blasi, S. Favaro, R. Ignaccolo and I. Pruenster a research project called “Bando Scienze Umane e Sociali”, financed by Regione Piemonte.

## ORGANIZATIONAL ACTIVITIES

- 2009-current Organizer of the series of Workshops in Capital Markets, CeRP and Collegio Carlo Alberto  
2010 Organizer and chairman of the Session “Pension funds” in the Stream of Actuarial Science and Stochastic Methods at 24th European Conference on Operational Research (EURO XXIV), Lisbon.

## EDITORIAL ACTIVITY

Referee for: *Insurance: Mathematics and Economics*, *Mathematical Finance*, *Quantitative Finance*, *Journal of Economics Dynamics and Control*, *ASTIN Bulletin*, *International Journal of Theoretical and Applied Finance*, *The European Journal of Finance*, *North American Actuarial Journal*, *Annals of Operations Research*, *Macroeconomic Dynamics*, *Journal of Pension Economics and Finance*, *International Journal of Managerial Finance*.

## INVITED TALKS AND SEMINARS

- 2003 Faculty of Economics, Università del Piemonte Orientale, Italy.  
2005 Department of Mathematical Sciences, University of Aalborg, Denmark.  
2005 Conference PARC (conference on Actuarial Topics), Institut de Sciences Actuarielles, Louvain-la-Neuve, Belgium.  
2008 Workshop on “Prospective Mortality Tables, Longevity and Mortality Linked Securities”, org. by CREST-AXA, Paris.  
2008 Faculty of Actuarial Sciences, Cass Business School, City University, London.  
2009 Workshop on “Gli schemi pensionistici a contribuzioni definite per la previdenza obbligatoria e complementare: problemi e prospettive”, Università di Cassino.  
2009 Dipartimento di Matematica per le Decisioni Economiche, Finanziarie e Assicurative, Università Sapienza di Roma.  
2010 24th European Conference on Operational Research, Lisbon, Stream of Optimization and Control.  
2011 Short course on Stochastic Mortality, Institut des Sciences Actuarielles, UCL, Louvain-la-Neuve.  
2011 Dipartimento di Scienze Economiche, Università degli Studi di Brescia.

## PUBLICATIONS IN REFEREED JOURNALS

- “Optimal Investment Strategy for Defined Contribution Pension Schemes” with S.Haberman, *Insurance: Mathematics and Economics* **28**, 233-262, 2001.
- “Optimal Investment Strategies and Risk Measures in Defined Contribution Pension Schemes” with S. Haberman, *Insurance: Mathematics and Economics* **31**, 35-69, 2002.
- “Optimal investment choices post retirement in a defined contribution pension scheme”, with R. Gerrard and S. Haberman, *Insurance: Mathematics and Economics* **35**, 321-342, 2004.
- “The Management of De-cumulation Risks in a Defined Contribution Pension Scheme”, with R. Gerrard and S. Haberman, *North American Actuarial Journal* **10** (1), 84-110, 2006.
- “Modelling stochastic mortality for dependent lives”, with E. Luciano and J. Spreeuw, *Insurance: Mathematics and Economics* **43**, 234-244, 2008.
- “Mortality risk via affine stochastic intensities: calibration and empirical relevance”, with E. Luciano, *Belgian Actuarial Bulletin* **8**, 5-16, 2008.
- “Choosing the optimal annuitization time post retirement” with R. Gerrard and B. Højgaard, to appear in *Quantitative Finance*, 2011.
- “On the sub-optimality cost of immediate annuitization in DC pension funds” with M. Di Giacinto, to appear in *Central European Journal of Operations Research*, 2011.

## CONFERENCE PROCEEDINGS AND OTHER PUBLICATIONS

- “Convenienza finanziaria dei fondi pensione: confronto tra lavoratore aderente e lavoratore non aderente a un fondo aziendale”, *INPDAP – Rivista bimestrale dell’Istituto Nazionale di Previdenza per i dipendenti dell’Amministrazione Pubblica – N: 4/98, pag. 121-132, luglio/agosto 1998*.

- “A switch criterion for defined contribution pension schemes”, with B. Arts, *Proceedings of the 13th International AFIR Colloquium*, 261-290, 2003.

#### WORKING PAPERS

- “The income drawdown option: quadratic loss”, with R. Gerrard, S. Haberman and B. Højgaard, *Actuarial Research Paper No. 155, Cass Business School, City University, London, 2004*.
- “Non mean reverting affine processes for stochastic mortality”, with E. Luciano, 2005, *Collegio Carlo Alberto Notebook* 30/2006.
- “Mean-variance portfolio selection and efficient frontier for defined contribution pension schemes” with B. Højgaard, 2007, *Technical report R-2007-13. Department of Mathematical Sciences. Aalborg University*.
- “Mean-variance inefficiency of CRRA and CARA utility functions for portfolio selection in defined contribution pension schemes”, *Carlo Alberto Notebook* 108/2009 and *CeRP WP* 89/09.
- “Constrained portfolio choices in the de-cumulation phase of a pension plan”, with M. Di Giacinto, S. Federico and F. Gozzi, *Carlo Alberto Notebook* 155/2010, preprint of SSRN, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1600130](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1600130).
- “On efficiency of mean-variance based portfolio selection in DC pension schemes”, *Carlo Alberto Notebook* 154/2010.
- “Cross-generational comparison of stochastic mortality of coupled lives”, with E. Luciano and J. Spreeuw, *Carlo Alberto Notebook* 187/2010.
- Delta and Gamma hedging of mortality and interest rate risk, with E. Luciano and L. Regis, *ICER wp* 01/2011.

Torino, August 2011