

# Riskcenter



***Riskcenter** is a research group that specializes in the field of **risk management, insurance and finance** based at the University of Barcelona.*

*The research group on Risk in Insurance and Finance is attached to the Institute of Applied Economics IREA-UB.*



UNIVERSITAT DE BARCELONA



Welcome by prof. Montserrat Guillén,

**Riskcenter** was founded at the University of Barcelona (UB) in 1992 by academics from the Department of Econometrics. Its main lines of research are the analysis, evaluation, management and control of risk in finance and insurance. Members are specialists in **actuarial statistics, insurance, financial econometrics, and pensions**. Their main contributions include fraud in insurance, longevity, long-term care, pricing and interest rate structure.

**Riskcenter** has about thirty members and affiliates: researchers, PhD students, and administrative staff. Affiliates are academics in top world institutions that have a stable collaborative link.

The UB is leader in post-graduate education with a Master of Science in Actuarial Science and Finance. It also offers, jointly with the Technical University of Catalonia, a Master of Science in Statistics and Operations Research with a field in Economics, Actuarial Science and Finance. The University of Barcelona occupies the most-highly ranked position among Spanish research institutions in national, European and worldwide ranking tables. Members of **Riskcenter** have been the recipients of prizes and distinctions awarded by a variety of institutions for their contributions to higher education, research, and the work conducted in their professional careers.

I invite you to visit our webpage at [www.ub.edu/riskcenter](http://www.ub.edu/riskcenter)



Montserrat Guillén  
Director

# Research contributions

**Riskcenter** members have published over 150 articles in the best scientific journals in the field of insurance and finance including:

- Insurance, Mathematics and Economics
- Journal of Banking and Finance
- Risk Analysis
- Accident Analysis and Prevention
- Information Sciences

In 2012, Riskcenter organized the meeting of the **European Financial Management Association**



And the meeting of the **European Group of Risk and Insurance Economists**



# Barcelona Insurance and Risk Management Summer School



The **Barcelona Insurance and Risk Management Summer School** (BIRMss) is the a yearly event held at Riskcente, which is composed of three courses. In 2013, the main workshop is on long-term care. The **Evaluation for public policies for sustainable Long-Term Care in Spain Workshop** will be held in Barcelona, from July 4th to July 5th 2013. It will be organized by *Riskcenter* in collaboration with the [International Long-Term Care policy Network](#). Among others, its aim is to provide a forum for researchers in the field of Long-Term Care Policy in Spain to discuss their work. Presentations will be given in Spanish by leading experts.

# Post-graduate education and executive programs

The **Master of Science in Actuarial Science and Finance** offers the best option for the specialization in insurance and quantitative finance.

The main objective of the master's degree is to prepare professionals with solid quantitative training (mathematics and statistics) and in business (business management). The master's degree Financial and Actuarial Sciences is an academic degree with a major orientation toward the labour market. However, the strong technical training offered in the program (with the specialization Advanced Financial and Actuarial Models) also provides students with the training needed to begin third-cycle (doctoral) studies.

The master's degree responds to training needs traditionally required in the fields of insurance and finance (pension schemes, financial instruments and markets, etc.), but also, explicitly, to the new demands for training set out in the European Union directive Solvency II (which refers to the actuarial function in article 48, underscoring the knowledge and skills required of actuaries). The master's degree offers specialized training for risk management within companies and to ensure the fulfilment of capital requirements established for organizations in the European Union.

The **Executive Master of Insurance and Financial Management** is a part-time program for professional managers who seek a tailored Master in Business Administration for the Insurance and Financial Sector and who focus their careers to CEO, CFO or CRO positions.



Faculty of Economics and Business,  
Universitat de Barcelona



Mercedes Ayuso,  
*Academic director*

# R&D and Knowledge transfer services

**Riskcenter** is located at the Barcelona Knowledge Campus (BKC). Barcelona Knowledge Campus is a cluster of research units devoted to research and to offer knowledge transfer to the industry.

**Riskcenter** is formed by members of the Research Group on Risk in Finance and Insurance who also participate in the BKC. We manage the process of transferring statistical, risk management, actuarial and computing technology, know-how, expertise and skills to our partners. Our knowledge and wide experience in research and statistical methodologies together with our command of legal, accounting and economic topics related to the insurance or financial sector guarantee the quality and accuracy of our services.

**Riskcenter** offers services of research and development, knowledge transfer as well as personalized academic programs.

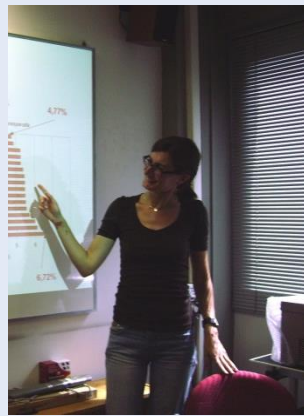


Lluís Bermúdez  
Riskcenter

## Collaborative projects

Company - Institute		Year	Project Title	Keywords
	Institut d'Estadística de Catalunya	2010	<i>Assessment and advice on the application of calibration techniques applied to regional ICT Household Survey of the Statistical Institute of Catalonia</i>	Income Distribution, Inequality, Complex Surveys
	Seguros Catalana Occidente, S.A.	2010	<i>The derivation of hypotheses for life insurance in the development of Solvency II</i>	Solvency II, Internal Models, Mortality Risk, Lapse Risk
	Institut d'Estadística de Catalunya	2006-2011	<i>Scientific advice and coordinating publishing the journal Statistics and Operations Research Transactions (SORT)</i>	Scientific publication, Editorship
	Seguros Catalana Occidente, S.A.	2010	<i>Implementation of a Solvency II internal model for the solvency non life underwriting requirement</i>	Solvency II, Internal Models, Underwriting Risk
	Generalitat de Catalunya. Departament de Salut	2008-2010	<i>Advice and design of continuous health survey of Catalonia</i>	Health Surveys, Public Health Planning, Survey Design
	Empresa de Promoció i Localització Industrial de Catalunya, S.A.	2006-2010	<i>Upgrading the system for measuring the business risk with current data</i>	Statistical Analysis, Risk of Corporate Bankruptcy

	Institut d'Estadística de Catalunya	2010	<i>Statistics on capital and savings of Catalan households</i>	Income, Wealth, Probability distributions, Quantiles
	Generalitat de Catalunya. Departament de Salut	2009	<i>Conducting a study on the health examination of Catalonia 2006: Draft analysis results</i>	Self-reported Health, Public Health
	Obra Social "La Caixa", Caixa d'Estalvis i Pensions de Barcelona	2009-2010	<i>White Paper on Mediation in Catalonia. ET14 Team: Econometrics and the cost of processes</i>	Alternative Dispute Resolution, Cost of Justice
	Agrupació Mútua del Comerç i la Indústria, Mútua d'Assegurances i Reassegurances a Prima Fixa	2007	<i>Preparation of tables of mortality / survival and disability in an insurance portfolio</i>	Life Tables, Mortality Risk, Disability Tables, Life Insurance
	Institut d'Estadística de Catalunya	2005	<i>Calculation of variances in economic climate surveys</i>	Variance Estimation, Complex Surveys, Qualitative Indicators
	Royal & Sun Alliance Emea	2001-2005	<i>Multiline credibility</i>	Insurance, Multivariate Models, Pricing
	Codan insurance	2004	<i>Statistical methods for the insurance industry</i>	Lapse Behaviour, Value of Policyholder
	Novartis Farmacèutica, S.A.	2004	<i>Assessing the demand for training in the field of family medicine</i>	Survey design, Social Perceptions





## Impact and International scope

**Mercedes Ayuso** is a member of the Committee of Experts for Pension Sustainability created by the Spanish Government in April 2013



**Recercaixa 2012 Award to Riskcenter** "Cost-benefit analysis of home functional adaptation for elderly people"



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- International Actuarial Association
  - The Geneva Association meetings
  - *Predictive modelling* book  
Society of Actuaries (USA)



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