

FORMULARIO RESPUESTA PARA LOS ANALES 2016-2017 /REPLY FOR THE ANNALS 2016-2017/FORMULAIRE DE RÉPONSE POUR LES ANNALES 2016-2017

Nombre/Name/Nom: Montserrat Guillén Estany

Libros / Books (published and translated) / Livres (publiés et traduits):

Belles-Sampers, J., Guillén, M., & Santolino, M. (2017) **Risk Quantification and Allocation Methods for Practitioners**. University of Chicago Press Economics Books. Atlantis Studies in Computational Finance and Financial Engineering ISBN: :9789462984059

Capítulos en obras colectivas / Chapters in collective Works / Chapitres en œuvres collectives :

Donnelly, C., Guillen, M., Nielsen, J.P. (2016) “Fundamentals of Cost and Risk that Matter to Pension Savers and Life Annuitants” In **Retirement System Risk Management. Implications of the New Regulatory Order** (Mitchel, O.S, Maurer, R, Orszag, J.M.) pp. 171-185. Oxford University Press ISBN: 978-0-19-878737-2.

Golden, L. L., Brockett, P. L., Betak, J. F., Alpert, M. I., Guillen, M. and Derrig, R. (2016) “Pridit is a Useful Technique for Detecting Consumer Fraud When No Training Sample Is Available” In **Marketing Challenges in a Turbulent Business Environment** (pp. 305-305). Springer International Publishing.

Artículos en revistas / Articles in journals / Articles dans revues :

Piulachs, X., Alemany, R. and Guillen, M. (2017). “Emergency care usage and longevity have opposite effects on health insurance rates”. *Kybernetes*, 46(1), 102-113.

Chuliá, H., Guillen, M., and Uribe, J.M. (2017) “Measuring Uncertainty in Stock Markets” *International Review of Economics and Finance*, 48, 18-33.

Chuliá, H., Guillen, M. and Uribe, J.M. (2017). “Spillovers from the United States to Latin American and G7 Stock Markets: a VAR Quantile Analysis”. *Emerging Markets Review*, 31, 32-46.

Bräutigam, M., Guillen, M. and Nielsen, J.P. (2017) “Facing up to longevity with old actuarial methods: a comparison of pooled funds and income tontines”. *The Geneva Papers on Risk and Insurance: Issues and Practice*, 42, 3, 406-422.

Boucher, J-P., Côté, S. and Guillen, M. (2017) “Exposure as duration and distance in telematics motor insurance using generalized additive models”, *Risks*, 5(4), 54;

- Bolviken, E. and Guillen, M. (2017) "Risk aggregation in Solvency II through recursive log-normals" *Insurance: Mathematics and Economics*, 73, 20-26.
- Piulachs, X., Alemany, R. and Guillen, M. (2016). "Joint modelling of survival and emergency medical care usage in Spanish insureds aged 65+" *PloS ONE*, 11, 4, e0153234.
- Pitt, D., Guillen, M and Bolancé, C. (2016) "Estimation of Parametric and Nonparametric Models for Univariate Loss Distributions in Finance—an approach using R" *Journal of Financial Education*, 42.
- Padilla, A., Bolancé, C. and Guillen M. (2016) "Cuantificación del riesgo para la tarificación en seguros de automóvil" *Anales del Instituto de Actuarios Españoles*, 22, 1-24.
- Guillen, M., Bolancé, C., & Santolino, M. (2016, September). *Fundamentals of Risk Measurement and Aggregation for Insurance Applications*. Lecture Notes in Computer Science, 9880, 15-25.
- Guillen, M. (2016) "Big data en seguros" *Indice: revista de estadística y sociedad*, 67, 28-30.
- Guillen M., Chulià, H., and Llatje, O (2016) "Seasonal and time-trend variation by gender of alcohol-impaired drivers at sobriety checkpoints" *Journal of Studies on Alcohol and Drugs*, 77, 3, 413-420.
- D'Amico, G.; Guillen, M.; Manca, R. (2017) "Multi-state models for evaluating conversion options in life insurance" *Modern Stochastics Theory and Applications*, 4(2), 127-
- Chulià, H., Guillen, M. and Uribe, J.M. (2016) "Modeling longevity risk with generalized dynamic factor models and vine-copulae" *ASTIN Bulletin*, 46,1, 165-190.
- Belles-Sampera, J., Guillén, M., & Santolino, M. (2016) "The use of flexible quantile-based measures in risk assessment". *Communications in Statistics-Theory and Methods* 45(6), 1670-1681.
- Belles-Sampera, J., Guillen, M. and Santolino, M. (2016) "What attitudes to risk underlie distortion risk measure choices?" *Insurance, Mathematics and Economics*, 68,101-109.
- Belles-Sampera, J., Guillen, M. and Santolino, M. (2016) "Compositional methods applied to capital allocation problems" *The Journal of Risk*, 19(2),15-30.
- Ayuso, M., Guillen, M., & Pérez-Marín, A.M. (2016) "Using GPS data to analyse the distance travelled to the first accident at fault in pay-as-you-drive insurance" *Transportation Research Part C: Emerging Technologies*, 68, 160-167
- Ayuso, M., Guillen, M. and Pérez-Marín, A. M. (2016) "Telematics and gender discrimination: some usage-based evidence on whether men's risk of accidents differs from women's" *Risks*, 4, 2, 1-10.

Alemanya, R., Bolancé, C., Guillen, M. and Padilla-Barreto, A. E. (2016) "Combining Parametric And Non-Parametric Methods To Compute Value-At-Risk" *Economic Computation and Economic Cybernetics Studies and Research*, 50(4), 61-74.

Consejos de redacción y jurados / Editorial boards and juries / Conseils de rédaction et jurys:

Editor SORT (Statistics and Operations Research Transactions). 2015-

Co-editor North American Actuarial Journal. 2015-

Senior editor ASTIN Bulletin – The Journal of the International Actuarial Association. 2009-

Associate editor Journal of Risk and Insurance. 2005-

Associate editor Geneva Risk and Insurance Review 2012-

Associate editor Insurance Markets and Companies: Analyses and Actuarial Computations 2009-

Associate editor Anales del Instituto de Actuarios Españoles. 2008-

Member of the editorial board Risks, 2012-

Member of the editorial board Journal of Financial Risk Management, 2012-

Associate editor Insurance and Risk Management Journal 2011-

Miembro dl jurado de los Premios Fundacion Mapfre 2016, jurado presidido por S:M. la Reina D^a Sofía.

Conferencias y seminarios científicos / Scientific conferences and seminars / Conférences et séminaires scientifiques:

Guillen M. (2017) "Big mistakes of data analytics when applied to risk and insurance" Actuarial Science Seminar, National Bank of Belgium, Brussels (Belgium) [Plenary session] (Sept. 14)

Guillen, M. (2017) "Per què les grans empreses necessiten un Chief Data & Analytics Officer?" Estadística i Data Science: l'evolució o l'extinció dels estadístics. Societat Catalana d'Estadística, Barcelona, (June 1).

Guillen, M. (2016) "Fundamentals of risk measurement and aggregation for insurance applications" University of Andorra. 13th International Conference on Modeling Decisions for Artificial Intelligence. (September, 19-21)- [Plenary session] (joint paper with C. Bolancé and M. Santolino).

- Guillen, M. (2016) "How much risk is too much?" Science and Society Lecture Series. University of Liverpool (March, 15)
- Guillen, M. (2017) "Data Science and the Natural Evolution of Automobile Insurance" Big Data in Applied Economics, UAB, Bellaterra (Barcelona), October, 20, 2017.
- Guillen, M. (2017) "Solvency Requirement in a Unisex Stochastic Mortality Model" (joint with Elena Vigna and An Chen) International Actuarial Association Life Section Colloquium "Long-Term Saving in an Ageing World", Barcelona, October 22-24, 2017.
- Guillen, M. (2017) ("A Non-Homogeneous Semi-Markov Approach for the Calculation of the Balance Sheet of a Health Fund" (joint with Guglielmo D'Amico, Fulvio Gismondi, Jacques Janssen, Raimondo Manca and Ernesto Volpe di Prignano) International Actuarial Association Life Section Colloquium "Long-Term Saving in an Ageing World", Barcelona, October 22-24, 2017.
- Arroyo-Cañada, F.J., Pesantez, J., Argila A.M., Solé, M. and Guillen, M. (2017) "Visualizing web-based evaluation of hotel reputation in Barcelona" 2nd On/Off International Conference in Marketing Decision Making. Barcelona, Octubre 5, 2017.
- Piulachs, X., Rizopoulos, D., Andrinopoulou, E.R. and Guillen M. (2017) "Simultaneous modeling of counts with excess zeroes and left-truncated survival data with time-varying effects" XVI Spanish Biometrics Conference – CEB2017, Sevilla, September 14-16, 2017.
- Guillen, M. (2017) "Telematics and the natural evolution of pricing in motor insurance" Workshop on « Data science in Finance and Insurance » Louvain-la-Neuve (Belgium), September 15, 2017.
- Padilla-Barreto, A., Bolancé, M. and Guillen, M. (2017) "Joint modelling for customer lapses in the insurance sector" 21st Annual APRIA conference, Poznan (Poland), July 31, August 2, 2017.
- Bermúdez, L., Guillen, M. and Karlis, D. (2017) "A bivariate INAR(1) regression model for insurance claim counts" 21st International Congress on Insurance: Mathematics and Economics – IME 2017 Vienna (Austria), July 3–5, 2017.
- Frees, E.W., Valdez, E., Bolancé, C. and Guillen, M. (2017) "Joint Modeling of Customer Loyalty and Risk in Personal Insurance" 21st International Congress on Insurance: Mathematics and Economics – IME 2017 Vienna (Austria), July 3–5, 2017.
- Alemany, R.; Ayuso, M.; Guillen, M. (2017) "Impact of road traffic injuries on disability rates and long-term care costs in Spain". IV Workshop on the evaluation of public policies for sustainability long-term care in Spain. Albacete (Spain), June 29-30.
- Ayuso, M.; Guillen, M.; Valero, D. (2017) "What can determine the decisions in the management of savings after retirement?". VI Congreso Internacional Dependencia y Calidad de Vida. Madrid (Spain), May 23-24.

Bermúdez, L., Guillen, M. and Karlis, D. (2017) “A bivariate INAR(1) regression model for insurance claim counts” Recent Developments in Dependence Modelling with Applications in Finance and Insurance - Fourth Edition, Aegina (Greece), 22-23 May.

Guillen, M. (2017) “Aggregating and disaggregating risks and the role of the tail” [Plenary session] (joint paper with C. Bolancé and M. Santolino). Recent Developments in Dependence Modelling with Applications in Finance and Insurance - Fourth Edition, Aegina (Greece), May, 21-23.

Guillén, M., Nielsen, J.P., Perez-Marin, A.M. (2016) “A methodological overview for quantifying the risk of an accident in usage-based insurance” CFE CFStatistics Conference, Seville, December 9-11.

Santolino, M., Bolance, C., Guillén, M. (2016) “Aggregating and disaggregating risks” CFE CFStatistics Conference, Seville, December 9-11.

Otras conferencias y mesas redondas / Other conferences and round tables / *Autres conférences et tables rondes:*

G.-Actividades de investigación / Research work / *Activités de recherche:*

Investigadora principal 2017-2019 Ministerio de Economía y Competitividad. Programa Estatal de Investigación Científica y Técnica de Excelencia, Subprograma Estatal de Generación de Conocimiento, modalidad 1, Proyectos de I+D. “Cuantificación y análisis de riesgos” ECO2016-76203-C2-2-P Director: Montserrat Guillen Estany (10 members).

Investigadora principal local 2015 European Commission “Network on quality and cost effectiveness in long-term care and dependency prevention” VS/2015/0276 coordinated by The London School of Economics and Political Science. UB team P.I.: Montserrat Guillen Estany total cost Eur: 1200571.32 (grant 950457.15), UB 29.210 FBG code: 401465 (10 members).

Dirección de tesis doctorales / Conducting doctoral thesis/ *Direction de thèses doctorales:*

Piulachs, X. (2017) Joint Modeling of Longitudinal and Time-to-Event Data with Applications in Health Insurance. University of Barcelona,

Distinciones y honores / Awards and Honourable Distinctions / *Distinctions et honneurs:*

SCOR Spain and Portugal joint with Université du Québec à Montréal, prize to best research in insurance, 2016.

Fundación Edad&Vida prize to managing savings after retirement, 2016