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# José María Sarabia. Curriculum Vitae

February 2, 2026

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## 1. Current Position

- Professor of Quantitative Methods for Economics and Business, University of Cantabria, Santander, Spain (from 2001-2020; 2024-present)
- Professor of Statistics and Operational Research, Complutense University of Madrid, 2000 (on leave)
- Address:  
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### 1.1. Summary

- Years of research experience: 30+
- Google Scholar: <https://scholar.google.es/citations?user=-FhChxIAAAAJ&hl=es>  
Citations: **7.231**, h-index: **40**, i10-index: **122** (Feb-2026)
- Researcher ID: **ORCID**: <https://orcid.org/0000-0002-9619-4721>
- Scopus Author ID: <https://www.scopus.com/authid/detail.uri?authorId=6701455820>
- Six-Year Research Periods (Sexenios de Investigación): 6 sexenios (last 2019-2024)
- Six-Year Transfer Period (Sexenio de Transferencia): 1 sexenio
- **Research topics**: Economic inequality; Risk analysis and actuarial statistics; Multivariate data analysis and statistical distribution theory in economics and business; Quantitative methods in economics and business; Data Science

## 2. Education

- University of Valladolid (Spain), BA, MSc Mathematics, 1981–1986, esp. Statistics and Operational Research.
- University of Cantabria (Spain), PhD Mathematics, 1989, “Cum Laude”.

### **3. Academic and Scientific Activity**

#### **3.1. Academic Positions**

- Professor of Quantitative Methods in Economics and Business, University of Cantabria, July 2024- Present.
- Professor of Quantitative Methods in Economics and Business, CUNEF University, Madrid, Spain, from sep 2020 tu july 2024.
- Vice-Rector for Research and Scientific Policy at CUNEF University, Madrid, Spain, from 2021-22 to 2023-24.
- Director of the Official Master's Degree in Data Science at CUNEF University, Madrid, Spain, from 2021-22 to 2023-24.
- Elected Member of the International Statistical Institute (ISI), since January 2022-Present.
- Corresponding Academician of the Royal Academy of Economic and Financial Sciences of Spain, RACEF, from 21 June 2018-Present.
- Professor of Quantitative Methods in Economics and Business, University of Cantabria, July 2001- 2020.
- 2009-2010 Visiting Professor: ICMA Centre, University of Reading, UK, Sep 2009-Nov 2009; London School of Economics Dic. 2009-Enero 2010; Imperial College, London: Feb. 2010-Julio 2010.
- 2000-2001, Professor of Statistics and Operational Research, Department of Statistics and OR, Complutense University of Madrid, 2000 (on leave)
- 1992-2000, Department of Economics, Universidad de Cantabria, Associate Professor.
- 1989-1992, Department of Economics, Universidad de Cantabria, Assistant Professor.
- 1986-1987, Department of Economics, Universidad de Cantabria, Assistant.
- SubDirector, Department of Economics, Universidad de Cantabria, 1993-1995.

#### **3.2. Research Groups**

- Director of the Research Group: “Quantitative Methods in Economics and Business, Department of Economics, University of Cantabria, Spain, from 2010 to 2022.
- Affiliated Researcher: IREA-UB and the Research Group on Risk in Insurance and Finance. University of Barcelona, Spain (from June 2012)

#### **3.3. National Committees**

- President of Advisory Committee 8 (Economics and Business Administration) of the National Commission for the Evaluation of Research Activity, National Agency for Quality Assessment and Accreditation (ANECA), for two years, 2017 and 2018.
- Member of Advisory Committee 8 (Economics and Business Administration) of the National Commission for the Evaluation of Research Activity of the CNEAI, National Agency for Quality Assessment and Accreditation (ANECA), 2016-2017.
- Member of the Research Commission of the University of Cantabria, 2008-2016.

- Member of the Doctoral Committee of the University of Cantabria, 1993-1997.
- ANECA Expert, ACADEMIA Program (Social Sciences, Economics, and Business), 2009-2016.
- Member of the Postgraduate Committee, Faculty of Economics and Business, University of Cantabria.

### 3.4. International Committees

- International Evaluator of the University system of Lithuania, in 2014. Visits in Nov. 2014.
  - Vilnius University. Program: Finance and Insurance Mathematics (612G17001).
  - Vilnius Gediminas Technical University. Program: Applied Statistics (621G31001).
  - Vilnius University Programme: Mathematics and Didactics of Mathematics (621G10002).

## 4. Research Stays

### 4.1. Invitation Stays

- Visiting Professor. Imperial College, Department of Mathematics, Section of Statistics, London, UK. February 2010–July 2010.
- Visiting Professor. London School of Economics and Political Science, STICERD Centre, London, UK. December 2009–January 2010.
- Visiting Professor. ICMA Centre for Financial Markets. University of Reading, Reading, UK. September 2009–November 2009.

### 4.2. Short Research Stays

- Université de Lausanne, Switzerland, October 2017; University of California, Riverside, USA, May 2016; Cochin University of Science and Technology, Cochin, India, December 2015; Université de Lausanne, Switzerland, November 2015; Université de Genève, Switzerland, November 2015; McGill University, Montreal, Canada, May 2015; UQAM, Université de Quebec a Montreal, Quebec, Canada, May 2015; The Institute of Statistical Mathematics, Tokyo, Japan, January 2015; University of las Palmas de Gran Canaria, Spain, March 2015; University of Barcelona, Spain, July 2014; Nottingham Trent University, UK, May 2014; University of Cádiz, June 2013; University of Jaén; University of Málaga; University of Reading, UK; Department of Mathematics and Statistics, McMaster University, Canada; Gottingen University, Germany; University Autónoma de Madrid; University of Granada; University of Alcalá de Henares; University of Murcia.

## 5. Relevant Research Grants

- Erudite Program, The Kerala State Higher Education Council, India, December 2015.
- Salvador de Madariaga Senior Research Fellowship, Government of Spain, Ministry of Education, from September 2009 to July 2010, to visit several universities in the United Kingdom.

## 6. Publications

### 6.1. Papers in Journals and Chapters in Book

1. Gómez-Déniz, E., Sarabia, J.M. (2026). New representations of Catalan's constant obtained from the half hyperbolic secant distribution. *Mathematica Slovaca*
2. Tejería, M., Jordá, V., Sarabia, J.M. (2026). Structural drivers of health inequality in sub-saharan Africa: Evidence and policy implications *Health Policy Open*, 100151.
3. Sarabia, J.M., Jordá, V., Tejería, M. (2025). Estimating Income Inequality Using Single-Parameter Lorenz Curves: A New Proposal", *Empirical Economics*, 1-17.
4. Gómez-Déniz, E., Sarabia, J.M. (2025). Some New Results Connected with Symmetric Random Variables: Generating Skew Distributions. *Symmetry* 17 (5), 670.
5. Shahtahmassebi, G., Sarabia, JM (2024). Bayesian analysis of change point problems using conditionally specified priors. *Annals of Data Science*, Vol. 11 (6), 1899-1918
6. Navarro, J., Sarabia, J.M. (2024). A note on the limiting behaviour of hazard rate functions of generalized mixtures. *Journal of Computational and Applied Mathematics*, <https://doi.org/10.1016/j.cam.2022.114653>
7. Gómez-Déniz, E, Calderín-Ojeda, E. Sarabia, JM (2023). Bimodal and Multimodal Extensions of the Normal and Skew Normal Distributions. *REVSTAT-Statistical Journal*
8. Arnold, B.C., Sarabia, J.M. (2022). Conditional specification of statistical models: Classical models, new developments and challenges, *Journal of Multivariate Analysis*, Volume 188, March 2022, 104801.
9. GómezDéniz, Sarabia, J.M., Jordá, V. (2022). Parametric Lorenz curves based on the beta system of distributions. *Communications in Statistics - Theory and Methods*, Volume 51, 2022 - Issue 23, 8371–8390
10. Prieto, F., Sarabia, J.M., Calderín-Ojeda, E. (2022). *Proceedings of the Royal Society A*, Volume 478, Issue 2263, 20210952.
11. Gómez Déniz, E., Calderín Ojeda, E., Sarabia, J.M. (2022). The arctan family of distributions: new results with applications. *Chilean Journal Of Statistics*
12. Jordá, V., Sarabia, J.M., Jäntti, M. (2021). Inequality measurement with grouped data: Parametric and non-parametric methods, *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, Volume184, Issue3, July 2021, Pages 964-984.
13. Gómez-Déniz, E., Sarabia, J.M., Calderín-Ojeda, E. (2021). Bimodal normal distribution: Extensions and applications. *Journal of Computational and Applied Mathematics*, 388, 113292
14. Navarro, J., Sarabia, J.M. (2021). Copula representations for the sum of dependent risk: models and comparisons. *Probability in the Engineering and Informational Sciences*, In press
15. Sarabia, J.M., Jorda, V., Prieto, F., Guillén, M. (2020). Multivariate Classes of GB2 Distributions with Applications. *Mathematics* 2021, 9, 72.
16. Gómez-Déniz, E., Arnold, B. C., Sarabia, J. M., Gómez, H. W. (2021). Properties and Applications of a New Family of Skew Distributions. *Mathematics*, 9(1), 87.

17. Castillo E., Sarabia J.M. (2021) Our Joint Work with Barry Arnold: Conditional Specification and Other Topics. In: Ghosh I., Balakrishnan N., Ng H.K.T. (eds) *Advances in Statistics - Theory and Applications. Emerging Topics in Statistics and Biostatistics*. Springer, Cham.
18. Prieto, F., Sarabia, J.M., Calderín-Ojeda (2012). The nonlinear distribution of employment across municipalities. *Journal of Economic Interaction and Coordination* 16, 287-307
19. Sánchez, L., Leiva, V., Saulo, H., Marchant, C., Sarabia, J.M. (2021). A new quantile regression model and its diagnostic analytics for a Weibull distributed response with applications. *Mathematics*, 9, 21, 2768.
20. Sarabia, J.M., Raja, A.V., Asha, G. (2019). Bivariate distributions with transmuted conditionals: models and applications. *Communications in Statistics, Theory and Methods*, 49, 221-242.
21. Sarabia, J.M., Jorda, V. (2020). Lorenz Surfaces Based on the SarmanovLee Distribution with Applications to Multidimensional Inequality in Well-Being. *Mathematics*, 8(11), 2095.
22. Sarabia, J. M., Prieto, F., Jordá, V., Sperlich, S. (2020). A note on combining machine learning with statistical modeling for financial data analysis. *Risks*, 8, 32.
23. Sarabia, J.M., Guillén, M., Chulia, H., Prieto, F. (2019). Tail Risk Measures using Flexible Parametric Distributions, *SORT, Statistical and Operations Research Transactions*.
24. Sarabia, J.M. Jordá, V., Prieto, F. (2019). On a new Pareto-type distribution with applications in the study of income inequality and risk analysis. *Physica A: Statistical Mechanics and its Applications*, 527.
25. Jordá, V., López-Noval, B., Sarabia, J.M. (2019). Distributional Dynamics of Life Satisfaction in Europe. *Journal of Happiness Studies*.
26. Arnold, B.C., Sarabia, J.M. (2019). Analytic Expressions for Multivariate Lorenz Surfaces. *Sankhya A, The Indian Journal of Statistics*.
27. Sarabia, J.M., Gómez, E., Prieto, F., Jordá, V. (2018). Aggregation of dependent risks in mixtures of exponential distributions and extensions. *ASTIN Bulletin*, 48, 1079-1107.
28. Sarabia, J.M., Calderín, E. (2018). Analytical Expressions of Risk Quantities for Composite Models. *Journal of Risk Model Validation*, 12, 75-101.
29. Gómez-Déniz, E., Calderín-Ojeda, E., Sarabia, J.M. (2018). The Geometric ArcTan distribution with applications to model demand for health services. *Communications in Statistics-Simulation and Computation*.
30. Guillén, M., Sarabia, J.M., Belles-Sampera, J., Prieto, F. (2018). Distortion risk measures for non-negative multiplicative risks. *Journal of Operational Risk*, 13, 35-57.
31. Gómez-Déniz, E., Sarabia, J.M. (2018). "A Family of Generalised Beta Distributions: Properties and Applications", *Annals of Data Science*, 5, pp 401-420.
32. Sarabia, J.M., Guillén, M., Prieto, F., Jordá, V. (2018). *Modelling Dependent Risks with Heavy-Tail Marginals*. Cuadernos de la Fundación MAPFRE 223, 279-289.

33. Sarabia, J.M., Shahtahmassebi, G. (2017). Bayesian Estimation of Incomplete Data Using Conditionally Specified Priors. *Communications in Statistics, Simulation and Computation*, 46, 3419-3435.
34. Sarabia, J.M., Jordá, V., Remuzgo, L. (2017). The Theil Indices in Parametric Families of Income Distributions - A Short Review. *Review of Income and Wealth*, 63, 867-880.
35. Prieto, F., Sarabia, J.M. (2017). A generalization of the power law distribution with nonlinear exponent. *Communications in Nonlinear Science and Numerical Simulation*, 42, 215-228.
36. Sarabia, J.M., Jordá, V., Trueba, C. (2017). The Lamé Class of Lorenz Curves. *Communications in Statistics, Theory and Methods*, 46, 5311-5326.
37. Sarabia, J.M., Gómez, E., Prieto, F., Jordá, V. (2016). Risk aggregation in multivariate dependent Pareto distributions. *Insurance: Mathematics and Economics*, 71, 154-163.
38. Remuzgo, L., Trueba, C., Sarabia, J.M. (2016). Evolution of the global inequality in greenhouse gases emissions using multidimensional generalized entropy measures. *Physica A: Statistical Mechanics and its Applications*, 444, Pages 146-157.
39. Gómez-Déniz, E., Sarabia, J.M. (2016). A discrete distribution including the Poisson. *Communications in Statistics: Theory and Methods*, 45, 2311-2322.
40. Sarabia, J.M., Prieto, F., Jordá, V. (2015). About the hyperbolic Lorenz curve *Economics Letters*, 136, Pages 42-45.
41. Remuzgo, L., Sarabia, J.M. (2015). International inequality in CO2 emissions: a new factorial decomposition based on Kaya factors. *Environmental Science and Policy*, 54, Pages 15-24.
42. Remuzgo, L., Sarabia, J.M. (2015). A general factorial decomposition of the second Theil index of inequality with applications in environmental economics. *Economics Bulletin*, 35, 2, 1-11.
43. Merigó, J.M., Guillén, M., Sarabia, J.M. (2015). The Ordered Weighted Average in the Variance and the Covariance. *International Journal of Intelligent Systems*, 30, 985-1005.
44. Navarro, J., Esna-Ashari, M., Asadi, M., Sarabia, J.M. (2015). Bivariate distributions with conditionals satisfying the proportional generalized odds rate model. *Metrika*, 78, 691-709.
45. Jordá, V., Sarabia, J.M. (2015). International Convergence in Well-Being Indicators. *Social Indicators Research*, 120, 1-27.
46. Jordá, V., Trueba, C., Sarabia, J.M. (2015). Evolution of global inequality in human well-being: a sensitivity analysis. *International Journal of Computational Economics and Econometrics*, 5, 108-125.
47. Sordo, M.A., Navarro, J., Sarabia, J.M. (2014). Distorted Lorenz Curves: Models and Comparisons. *Social Choice and Welfare*, 42, 761-780.
48. Jordá, V., Sarabia, J.M. (2015). Well-being distribution in the globalization era: 30 years of convergence. *Applied Research in Quality of Life*, 10, 123-140.

49. Sarabia, J.M., Jordá, V. (2014). Explicit expressions of the Pietra index for the generalized function for the size distribution of income. *Physica A: Statistical Mechanics and its Applications*, 416, 582-595.
50. Sarabia J.M., Prieto, F., Jordá, V. (2014). Bivariate beta-generated distributions with applications to well-being data. *Journal of Statistical Distributions and Applications* 2014, 1-15.
51. Prieto, F. Gómez-Déniz, E. Sarabia, J.M. (2014). Modelling road accident blackspots data with the discrete generalized Pareto distribution. *Accident Analysis and Prevention*, 71, 38-49.
52. Sarabia, J.M., Jordá, V. (2014). Bivariate Lorenz Curves based on the Sarmanov-Lee Distribution. *Topics in Statistical Simulation*, Springer Proceedings in Mathematics & Statistics Volume 114, 447-455, Springer.
53. Jordá, V., Sarabia, J.M., Prieto, F. (2014). On the Estimation of the Global Income Distribution using a Parsimonious Approach. *Research on Economic Inequality*, vol. 22, J. Bishop and J.G. Rodriguez, Ed., 115-145.
54. Jordá, V., Trueba, C., Sarabia, J.M. (2014). Análisis de la Desigualdad en el Bienestar: Un análisis Multidimensional. *Estudios de Economía Aplicada*, 32, 765-788.
55. Prieto, F., Sarabia, J.M., Sáez, A.J. (2013). Modelling major failures in power grids in the whole range. *International Journal of Electrical Power and Energy Systems*, 54, 10-16.
56. Sarabia, J.M., Jordá, V., Trueba, C. (2014). Estimating the Income Distribution in Latin America Using Limited Information. *International Advances in Economic Research*, 20, 231-232.
57. Castillo, E., Menendez, J.M., Sanchez-Cambronero, S., Calvino, A., Sarabia, J.M. (2014). A hierarchical optimization problem: Estimating traffic flow using Gamma random variables in a Bayesian context. *Computers and Operations Research*, 41, 240-251.
58. Guillén, M., Sarabia, J.M., Prieto, F. (2013). Simple risk measure calculations for sums of positive random variables. *Insurance: Mathematics and Economics*, 53, 273-280.
59. Sarabia, J.M., Prieto, F., Trueba, C. Jordá, V. (2013). About the modified Gaussian family of income distributions with applications to individual incomes. *Physica A: Statistical Mechanics and its Applications*, 392, 1398-1408.
60. Remuzgo, L., Sarabia, J.M. (2013). Desigualdad en la distribución mundial de emisiones de CO2 por sectores: descomposición y estudio de sensibilidad. *Estudios de Economía Aplicada*, 31, 65-92.
61. Navarro, J., Sarabia, J.M. (2013). Reliability properties of bivariate conditional proportional hazard rate models. *Journal of Multivariate Analysis*, 113, 116-127.
62. Gómez-Déniz, E., Calderin, E., Sarabia, J.M. (2013). Gamma-Generalized Inverse Gaussian Class of Distributions with Applications. *Communications in Statistics, Theory and Methods*, 42, 1-15.
63. Merigó, J.M., Guillén, Sarabia, J.M. (2013). A Generalization of the Variance by Using the Ordered Weighted Average. *Lecture Notes in Business Information Processing Volume* 145, 222-231, Springer.

64. Obeso, M., Sarabia, M., Sarabia, J.M. (2013). Gestionando conocimiento en las organizaciones: pasado, presente y futuro. *Omnia Science*, 9, 1042-1067.
65. Gómez-Déniz, E., Sarabia, J.M., Balakrishnan, N. (2012). A Multivariate Discrete Poisson-Lindley Distribution: Extensions and Actuarial Applications. *ASTIN Bulletin*, 42, 655-678.
66. Alexander, C., Sarabia, J.M. (2012). Quantile Uncertainty and Value-at-Risk Model Risk. *Risk Analysis*, 32, 1293-1308.
67. Sáez, A.J., Prieto, F., Sarabia, J.M. (2012). A two-tail version of the PPS distribution with application to current account balance data. *Physica A: Statistical Mechanics and its Applications*, 391, 5160-5171.
68. Sarabia, J.M., Prieto, F., Trueba, C. (2012). The  $n$ -fold convolution of a finite mixture of densities. *Applied Mathematics and Computation*, 218, 9992-9996.
69. Sarabia, J.M., Prieto, F., Trueba, C. (2012). Modeling the probabilistic distribution of the impact factor. *Journal of Informetrics*, 6, 66-79.
70. Alexander, C., Cordeiro, G.M., Ortega, E.M.M., Sarabia, J.M. (2012). Generalized beta-generated distributions. *Computational Statistics and Data Analysis*, 56, Issue 6, 1880-1897.
71. Sarabia, J.M., Azpitarte, F. (2012). "On the relationship between objective and subjective inequality indices and the natural rate of subjective inequality", *ECINEQ Working Paper Series*, 248.
72. Sarabia, M., Obeso, M., Sarabia, J.M. (2012). How do European countries manage their knowledge? A cross analysis of investment and performance. *Innovation: Management, Policy and Practice*, 14, 129-140.
73. Sarabia, J.M., Gómez-Déniz, E. (2011). "Multivariate Poisson-Beta Distributions with Applications". *Communications in Statistics, Theory and Methods*, .
74. Guillén, M., Prieto, F., Sarabia, J.M. (2011). Modelling losses and locating the tail with the Pareto Positive Stable distribution. *Insurance: Mathematics and Economics*, 49, 454-461.
75. Sarabia, J.M., Prieto, F. (2011). Sobre una Clase de Riesgos Dependientes. *Anales del Instituto de Actuarios Españoles*, 17, 31-50.
76. Gómez-Déniz, E., Sarabia, J.M., Calderín-Ojeda, E. (2011). A new discrete distribution with actuarial applications. *Insurance: Mathematics and Economics*, 48, 406-412.
77. Sáez, A.J., Prieto, F., Sarabia, J.M. (2011). Modelización estadística mediante distribuciones PPS de pérdidas por daños debidas a riesgos extremos en función de algún regresor categórico. *Cuadernos Fundación MAPFRE*, 171, 5-16.
78. Alexander, C., Sarabia, J.M. (2010). Endogenizing Model Risk to Quantile Estimates. *ICMA Centre Discussion Papers in Finance DP2010-07*, ICMA Centre, The University of reading, Witheknights, PO Box 242, Reading RG6 6BA, UK.
79. Alexander, C., Sarabia, J.M. (2010). Generalized Beta-Generated Distributions. *ICMA Centre Discussion Papers in Finance DP2010-09*, ICMA Centre, The University of reading, Witheknights, PO Box 242, Reading RG6 6BA, UK.

80. Balakrishnan, N., Sarabia, J.M., Kolev, N.. (2010). A Simple Relation Between the Leimkuhler Curve and the Mean Residual Life. *Journal of Informetrics*, 4, 602-607.
81. Sarabia, J.M., Prieto, F., Sarabia, M. (2010). Revisiting a functional form for the Lorenz curve. *Economics Letters*, 107, 249-252.
82. Balakrishnan, N., Castillo, E., Sarabia, J.M. (2010). “Bivariate Continuous Distributions with Specified Conditional Hazard Functions ”. *Communications in Statistics, Theory and Methods*, 39, 2473-2484.
83. Sarabia, J.M., Gómez, E., Prieto, F., Sarabia, M. (2010). A General Method for Generating Parametric Lorenz and Leimkuhler Curves. *Journal of Informetrics*, 4, 524-539.
84. Navarro, J., Sarabia, J.M. (2010). Alternative Definitions of Bivariate Equilibrium Distributions. *Journal of Statistical Planning and Inference*, 140, 2046-2056.
85. Sarabia, J.M., Prieto, F. (2009). “The Pareto-positive stable distribution: A new descriptive model for city size data”. *Physica A*, 388, 4179-4191.
86. Arnold, B.C., Castillo, E., Sarabia, J.M. (2009). “On Multivariate Orders Statistics. Application to Ranked Set Sampling”. *Computational Statistics and Data Analysis*, 53, 4555-4569.
87. Gómez, E., Sarabia, J.M., Vázquez, F. (2009). “Robust Bayesian bonus-malus premiums under the conditional specification model”. *Statistical Papers*, 50, 465-480.
88. Gómez, E., Sarabia, J.M., Prieto, F. (2009). “La distribución Poisson-beta: aplicaciones y propiedades en la teoría del riesgo colectivo”. *Anales del Instituto de Actuarios Españoles*, 15, 141-160.
89. Arnold, B.C., Castillo, E., Sarabia, J.M. (2009). “Multivariate order statistics via multivariate concomitants”. *Journal of Multivariate Analysis*, 100, 946-951.
90. Castillo, E., Castillo, C., Hadi, A.S., Sarabia, J.M. (2009). “Combined Regression Models”. *Computational Statistics*, 24, 37-66.
91. Sarabia, J.M., Guillén, M. (2008). “Joint Modelling of the Total Amount and the Number of Claims by Conditionals”. *Insurance: Mathematics and Economics*, 43, 466-473.
92. Sarabia, J.M. (2008). “Parametric Lorenz Curves: Models and Applications”. In: *Modeling Income Distributions and Lorenz Curves*. Series: Economic Studies in Inequality, Social Exclusion and Well-Being 4, Chotikapanich, D. (Ed.), pp. 167-190, Springer-Verlag.
93. Arnold, B.C., Castillo, E., Sarabia, J.M. (2008). “Some Characterizations involving uniform and powers of uniform random variables”. *Statistics*, 42, 527-534.
94. Sarabia, J.M., Sarabia, M. (2008). “Explicit expressions for the Leimkuhler curve in parametric families”. *Information Processing and Management*, 44, 1808-1818.
95. Sarabia, J.M. (2008). “A general definition of the Leimkuhler curve”. *Journal of Informetrics*, 2, 156-163.
96. Castillo, E., Castillo, C., Hadi, A.S., Sarabia, J.M. (2008). “Local sensitivity analysis in estimation problems”. *Journal of Computational and Graphical Statistics*, 17, 703-725.

97. Sarabia, J.M., Gómez-Déniz, E. (2008). "Construction of Multivariate Distributions: a Review of Some Recent Results". ***SORT, Statistics and Operations Research Transactions***, 32, 3-36. Invited paper with discussion.
98. Gómez-Déniz, E., Sarabia, J.M. (2008). "La distribución binomial-exponencial truncada con aplicaciones en el sector del seguro del automóvil". ***Anales del Instituto de Actuarios Españoles***, 14, 3-22.
99. Arnold, B.C., Castillo, E., Sarabia, J.M. (2008). "Multivariate distributions defined in terms of contours". ***Journal of Statistical Planning and Inference***, In Press.
100. Arnold, B.C., Castillo, E., Sarabia, J.M. (2008). "Bivariate distributions characterized by one family of conditionals and conditional percentile or mode functions". ***Journal of Multivariate Analysis***, 99, 1383-1392
101. Gómez, E., Sarabia, J.M., Calderin, E. (2008). "Univariate and Multivariate Versions of the Negative Binomial-Inverse Gaussian Distributions with Applications". ***Insurance: Mathematics and Economics***, 42, 39-49.
102. Gómez, E., Sarabia, J.M., Pérez, J.M., Vázquez, F. (2008). "Using a Bayesian Hierarchical Model for Fitting Automobile Claim Frequency Data". ***Communications in Statistics, Theory and Methods***, 37, 1425-1435.
103. Sarabia, J.M., Castillo, E., Pascual, M., Sarabia, M. (2007). "Bivariate Income Distributions with Lognormal Conditionals". ***Journal of Economic Inequality***, 5, 371-383.
104. Pascual, M., Sarabia, J.M. (2007). Modelización de la Distribución Personal de la Renta en España: un Análisis Regional, ***Revista de Estudios Regionales***, 80, 13-41.
105. Arnold, B.C., Castillo, E., Sarabia, J.M. (2007). "Conditionally Specified Models", In: ***Encyclopedia of Statistical Sciences***, John Wiley and Sons.
106. Arnold, B.C., Castillo, E., Sarabia, J.M. (2007). "Variations on the Classical Multivariate Normal Theme". ***Journal of Statistical Planning and Inference***, 137, 3249-3260.
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108. Castillo, E., Sarabia, J.M. (2007). Discussion of: "Progressive censoring methodology: an appraisal", by N. Balakrishnan. ***Test***, 16, 265-267.
109. Gómez, E., Sarabia, J.M. (2007). "Soluciones Explícitas para la Función de Probabilidad de Ruina en el Modelo Clásico de Riesgo", In: ***Investigaciones en Seguros y Gestión de Riesgos: RIESGO 2007***, J.M. Sarabia y M. Guillén, Editores, 27-42, Universidad de Cantabria.
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## 6.2. Scientific Software: R Packages

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## 6.3. Scientific International Books as Author

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## 6.4. Scientific Spanish Books as Author

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## 6.5. Scientific Books as Editor

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## 6.6. Textbooks as an author

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3. Sarabia, J.M., Pascual, M. (2012). *Curso Básico de Estadística para los Grados en Economía y Administración y Dirección de Empresas*. Edit: Colección Textos Universitarios, Universidad de Cantabria, Santander.
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## 7. Research Projects

### 7.1. Research Projects as Research Leader

1. MODELIZACION PARAMETRICA Y SEMI-PARAMETRICA DE RIESGOS MULTIVARIANTES: ESPECIFICACION, ESTIMACION Y CONTRASTE. ECO2016-76203-C2-1-P. Programa Estatal de Fomento de la Investigación Científica y Técnica de Excelencia. Investigador Principal 1 del proyecto, (2020-2024).
2. Modelización Paramétrica y Semi-Paramétrica de Riesgos Multivariantes: Especificación, Estimación y Contraste. ECO2016-76203-C2-1-P. Programa Estatal de Fomento de la Investigación Científica y Técnica de Excelencia. IP del proyecto coordinado: JM Sarabia (2016-2019).
3. Modelos Paramétricos y Semi-paramétricos de Riesgos Dependientes: Especificación y Contraste. ECO2013-48326-C2-2-P, Convocatoria 2013 de Proyectos I+D. Programa Estatal de Fomento de la Investigación Científica y Técnica de Excelencia. IPs: JM Sarabia y JM Rodríguez-Poo (2014-2016).
4. Modelos Paramétricos y Semiparamétricos para el estudio de la desigualdad económica: especificación, estimación y contraste. Ministerio de Ciencia e Innovación: ECO2010-15455 (2011-2013).
5. Grant Fundación MAPFRE: “Características sociodemográficas de las personas con doble cobertura sanitaria: un estudio empírico”, 2007-08.
6. “Distribuciones Multivariantes con colas pesadas: dependencias y aplicaciones al análisis de riesgos y a la especificación de distribuciones de renta”. Ministerio de Educación y Ciencia, SEJ2007-65818/ECON, 2007-10, 42.000 euros.
7. “Modelos Estadísticos de Distribuciones Especificadas Condicionalmente: Aplicaciones a la Obtención de Distribuciones de Renta Multivariantes y a la Estadística Actuarial”. Ministerio de Educación y Ciencia. SEJ2004-02810. 2004-2007.
8. “Modelos de Distribuciones Multivariantes Basados en Especificación Condicional”. Ministerio de Ciencia y Tecnología. Dirección General de Investigación. Modalidad P1. BEC2000-1186. 2000-2003.
9. “Análisis de la Desigualdad de Renta con Familias Paramétricas de Curvas de Lorenz Clásicas y Generalizadas”. Instituto de Estudios Fiscales. From 2002 to 2003.
10. “Índices de Concentración en la Economía Española”. Vicerrectorado de Investigación y Desarrollo. Universidad de Cantabria. From XI-2000 to XI-2001.
11. “Análisis Bayesiano Multidimensional usando Distribuciones a Priori Especificadas Condicionalmente”. DGES. Programa Sectorial de Promoción General del Conocimiento, PB96-1261. From XII-1997 to XII-1999.
12. “Modelo Multiecuacional para los Sectores Económicos de la Economía de Cantabria”. Comisión Mixta Caja Cantabria-Universidad de Cantabria. From XII-1998 to XII-1999.
13. “Especificación de Distribuciones Mediante Combinaciones de Distribuciones Marginales y Condicionadas: Estructura e Inferencia”. DGICYT. Programa Sectorial de Promoción General del Conocimiento, PB94-1060. From VIII-1995 to VIII-1997.
14. “Extensiones y Aplicaciones de las Distribuciones Especificadas Condicionalmente. DGICYT. Programa Sectorial de Promoción General del Conocimiento, PB92-0500. From VII-1993 to VII-1994.

15. “Dinámicas no Lineales y Caóticas en los Mercados Financieros”. Comisión Mixta Caja Cantabria-Universidad de Cantabria. From XII-1994 to XII-1995.
16. “Indicadores Sintéticos de Bienestar Social en Cantabria”. Comisión Mixta Caja Cantabria-Universidad de Cantabria. From I-1990 to I-1991.

## 7.2. Research Projects as Researcher

1. Proyecto de Investigación APIE 1/2015-17: “*New methods for the empirical analysis of financial markets*”, Santander Financial Institute (SANFI) of UCEIF, Foundation resolved by the University of Cantabria and funded with sponsorship from Fundación Banco Santander.
2. “Compatibilidad Exacta y Aproximada de Distribuciones Especificadas Condicionamente”. DGES. Programa sectorial de Promoción General del Conocimiento, PB98-0421. From XII-1999 to XII-2000.
3. “Proyecto Hispalink”. Consejo Superior de Cámaras de Comercio e Instituto L. Klein. From 1997.
4. “Determinantes de los Tipos de Interés”. DGICYT. Programa sectorial de Promoción General del Conocimiento, PS93-9115. From VII-1994 to VII-1995.
5. “Ecuaciones Funcionales en Economía e Ingeniería”. DGICYT. Programa sectorial de Promoción General del Conocimiento, PB90-0339. From VIII-1991 to VIII-1992.
6. “Estructura de Propiedad y Control en la Economía Cántabra”. Comisión Mixta Gobierno Regional de Cantabria, Universidad de Cantabria. From V-1989 to V-1990.
7. “Predicción y análisis de dependencias de la variable ingresos por turismo en Cantabria”. Comisión Mixta Gobierno Regional de Cantabria, Universidad de Cantabria. From V-1988 to V-1989.

## 7.3. Research Contracts

1. EON España, “Estudio sobre Eficiencia Energética”, contrato (Desde Enero 2012 hasta Febrero 2013)
2. “Estadística y Coyuntura Turística. Gobierno de Cantabria”. Consejería de Industria, Turismo, Trabajo y Comunicaciones. From Octubre 2000 to Octubre 2002.
3. “Impacto Sobre la Economía Regional Canaria de la Implantación de una Línea Regular Entre Canarias, Madeira y África Occidental”. Gobierno de Canarias. Consejería de Industria y Comercio. Viceconsejería de Industria y Comercio. From Enero 2000 hasta Abril de 2001.
4. “Análisis Estadístico del Transporte Público de Mercancías por Carretera en Cantabria”. Gobierno de Cantabria. Consejería de Industria, Turismo, Trabajo y Comunicaciones. From Enero 1999 to Junio 1999.
5. “Plan Estratégico para la Ciudad de Santander. Ayuntamiento de Santander. From 1999 to 2000.
6. “La Flota de Embarcaciones Nauticas y de Recreo en Cantabria: Estructura, Tendencia e Importancia Económica. Gobierno de Cantabria”. Consejería de Obras Públicas y Urbanismo. From Enero 1999 to Septiembre 1999.

7. “Evaluación Estadística de las Capacidades Productivas del Prado en Cantabria”. Gobierno de Cantabria. Consejería de Ganadería, Agricultura y Pesca. 1998 –1999.
8. “Evaluación del PIB del Subsector Turístico en Cantabria”. Gobierno de Cantabria. Consejería de Industria, Turismo, Trabajo y Comunicaciones. Dirección General de Turismo. 1997–1998.
9. “La Evaluación y Seguimiento de las Acciones del Programa Operativo de Cantabria del Fondo Social Europeo y del Plan de Empleo y Formación”. Gobierno de Cantabria. 1998-2001.
10. “Probabilistic Risk Analysis. Nuclenor. Nuclear Power Plant. Sta. Mara de Garoña, Spain”. Apoyo Estadístico al APS de la Central Nuclear de Santa María de Garoña. NUCLENOR. From VI-1996 to VIII-1997.
11. “Transferencia Tecnológica de Métodos Estadísticos Avanzados. Valores Extremos. CEDEX. 1992.
12. “Investigación Sociológica. Junta del Puerto de Santander. 1992.

## 8. Editorial Work

At the present

- Associate Editor “*Communications in Statistics*” (in all 3 series of Communications in Statistics: Theory and Methods (LSTA), Simulation and Computation (LSSP) and Case Studies and Data Analysis (UCAS)), Taylor & Francis from Junio 2017-Present, JCR.
- Member of the Editorial Advisory Committee “*SORT, Statistics and Operations Research Transactions*”, from 2017-present, JCR.
- Associate Editor “*Journal of the Turkish Statistical Association*”, from Feb. 2013-Present.
- Member of the Scientific Committee “*Anales del Instituto de Actuarios Españoles*”, from 2007-presents.
- Associate Editor “*Stats*”, MDPI Journals, from 2018.
- Associate Editor “*Chilean Journal of Statistics*”, 2021-present
- Member of the Editorial Committee “*International Journal of Multivariate Data Analysis*”, from 2016-present.

Previous,

- Editor in Chief: “*Spanish Journal of Statistics*”, INE, Instituto Nacional de Estadística, from 2018-2025
- Associate Editor “*Journal of Statistical Distributions and Applications*”, Springer, from Feb. 2013-2021
- Associate Editor “*Journal of Banking and Finance*”, Elsevier, desde Feb. 2013 a June 2017, JCR.
- Associate Editor “*TEST*”, (Springer-Verlag y SEIO), desde 2010-2021 JCR.
- Associate Editor “*Statistical Methodology*”, (Elsevier North-Holland), 2005-2016, JCR.

- Associate Editor “*Journal of Statistical Planning and Inference*”, (Elsevier North-Holland), 2007-2011, JCR.
- Associate Editoro “*Estudios de Economía Aplicada*”, 2006-2008.
- Member of the Editorial Committee “*Journal of Probability and Statistics*”, from 2008-2021.

## 9. Activities as a Reviewer

### 9.1. Spanish Agencies

- Reviewer for DEVA, Andalusian Knowledge Agency, since 2017.
- Reviewer for the National Science Foundation (NSF) in 2003 and 2004.
- Reviewer for the National Agency for Evaluation and Prospective Studies, since 1991.
- Reviewer: John Wiley and Sons, New York, and John Wiley and Sons in Europe.
- Reviewer for Springer-Verlag.
- Reviewer for the Agency for the Management of University and Research Grants, Catalonia, Spain.
- Reviewer for the Galician Quality Agency, Galicia, Spain.
- Reviewer for the Complutense University of Madrid, Spain.
- Reviewer for the “Applied Economics Meeting”

### 9.2. Member of the Awards jury

- Member of the Jury for the National Statistics Award, INE (since 2020-2025, 5 editions).
- Jury for the Enrique Fuentes Quintana Prize for Social Sciences, FUNCAS, 2019.
- Jury for the International Julio Castelo Matrán Prize, MAPFRE Foundation, 2011.

### 9.3. Reviewer for the following journals

- During the period 2021-2025: American Economic Review; International Journal of Forecasting; Economics Letters; Statistics and Probability Letters; Journal of Multivariate Analysis; Journal of Informetrics; Risks; Communications in Statistics; Malaysian Journal of Mathematical Statistics; Variance; Journal of Classification (Springer Nature)
- Period before 2021: The Annals of Statistics; Annals of the Institute of Statistical Mathematics; Applied Mathematics and Computation; Astin Bulletin; Biometrika; Computational Statistics and Data Analysis; Journal of Multivariate Analysis; Journal of Multivariate Analysis, special issue; Insurance Mathematics & Economics; International Economic Review; Chaos Solitons and Fractals; Communications in Statistics, Theory and Methods; Communications in Statistics, Simulation and Computation; Communications in Statistics, Theory and Methods, special issue on the Skew Elliptical Distributions; Journal of Economic Inequality; Test; Journal of the American Statistical Association; Journal of Statistical Planning and Inference; Journal of Probability and Statistics; Statistical Methodology; Estadística Española; Metron;

Statistics; Questiió; Estudios de Economía Aplicada; Revista de Estudios Regionales; Int. J. Environ. Res. Public Health; Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales (sec. Matemáticas); Brazilian Journal of Probability and Statistics; Estudios Económicos (México); Computational Statistics; Review of Income and Wealth; Statistics and Probability Letters; Physica A: Statistical Mechanics and its Applications; Sankhya A, The Indian Journal of Statistics; Research on Economic Inequality Series; Journal of Banking and Finance; Journal of King Saud University - Science; Journal of Statistical Distributions and Applications; Economics Bulletin; Hacettepe Journal of Mathematics and Statistics; Social Indicators Research; Journal of Informetrics; Economics Letters; Methodology and Computing in Applied Probability; Journal of Economic Policy Reform; SORT; Metrika; Entropy; Axioms; Probability in the Engineering and Informational Sciences; Journal of Applied Econometrics; Journal of Economic Interaction and Coordination; Mathematical Problems in Engineering; Japanese Journal of Statistics and Data Science.

#### 9.4. Member of Academic Selection Committees

- Member: First National Qualification Tribunal for Applied Economics (University of Alcalá de Henares)
- Member of various committees for promotion to University Professor, Full Professor, Associate Professor, Assistant Professor, and Assistant Professor.
- President, University Entrance Examination Tribunals (2002 and 2003), University of Cantabria.
- President, Tribunal for obtaining the researcher’s permit for the Interdepartmental Doctoral Program with Distinction of Quality ”Mathematics and its Applications”, University of Cantabria.

### 10. Participation in Scientific Meetings

#### 10.1. Recent Participation as Speaker or Invited Speaker

1. Sarabia, J.M. (2026). Discussant of the talk, “Homoploutia: Top Labor and Capital Incomes in the United States, 1950-2020”, by Branko Milanovic (City University of New York). Workshop, *Advances in the Analysis of Economic Inequality*, University of Cantabria, Spain, 28-29 January 2026.
2. Sarabia, J.M. (2025). Multivariate Lorenz surfaces: some recent proposals. *2025 IMS (Institute of Mathematical Statistics) International Conference on Statistics and Data Science*, Seville, Dec 2025, Invited Speaker.
3. Sarabia, J.M., Guillén, M. (2022). Aggregation of Dependent Risks: A brief Survey. *RISK 2022*, Barcelona, pages 179-194.

#### 10.2. Participation as Keynote Speaker

1. Sarabia, J.M. (2018). Aggregation of Dependence Risks: A Survey of Some Recent Results. Fifth Workshop on “*Recent Developments in Dependence Modelling with Applications in Finance and Insurance*”, Aegina, Greece, 13-14 September 2018.
2. Sarabia, J.M. (2015). Bivariate classes of distributions based on conditional specification. *Workshop on Distribution Theory and Applications*, The Institute of Statistical Mathematics, Tachikawa, Tokyo, Jan. 28 and 29, 2015

3. Sarabia, J.M. (2015). Bivariate and Multivariate Beta-Generated Distributions with Applications to Model Well-Being Data. Invited Conference. Department of Statistics, Maharajah's College, Ernakulam, India, December 2015.
4. Sarabia, J.M. (2011). A General Methodology for Enriching a Family of Distributions with Applications in Insurance. *ASTIN 2011 Conference*, 19–22 June, Madrid, Spain. Keynote Speaker.
5. Sarabia, J.M. (2011). A New Method for Enriching a Family of Distributions with Applications in Finance and Insurance. *Fifth Brazilian Conference on Statistical Modelling in Insurance and Finance*. Maresias, April 10-15, 2011, Brazil. Keynote Speaker.
6. Sarabia, J.M. (2009). *Teoría de la Credibilidad: Desarrollo y Aplicaciones en Primas de Seguros y Riesgos Operacionales*. Fundación MAPFRE, Conferencia Invitada. Madrid, Junio 2009.
7. Sarabia, J.M. (2008). Especificación y Estimación de Curvas de Lorenz: Nuevos avances y Desarrollos Recientes. XVI Jornadas de Estadística de las Comunidades Autónomas (JECAS, 2008). Key Note (Plenary and Opening talk).

### 10.3. Participation as Speaker or Invited Speaker

1. Castillo, E., Sarabia, J.M. (2021). Our joint work with Barry Arnold: Conditional Specification and other topics. Virtual conference honoring Prof. Arnold's 80th birthday. Online.
2. Sarabia, J.M. (2021). Aggregation of Dependent Risks: A Short Review of Some Recent Results. 7th International Conference on Advances in Statistics, ICAS 2021, which will be held virtually on October 15-17, 2021
3. Jordá, V., Sarabia, J.M., Jantti, M. (2018). Estimation of Income Inequality from Grouped Data. Sustainability and Development Conference University of Michigan, Ann Arbor, MI, USA, Nov. 9-11, 2018.
4. Sarabia, J.M. (2018). "Aggregation of risks for lifetimes with mixture exponential distributions". International Society for Business and Industrial Statistics ISBIS and International Statistics Institute ISI, University of Piraeus, Greece, 4-6 July, 2018.
5. Sarabia, J.M., Jordá, V., Prieto, F., Guillén, M. (2018). Aggregation of dependent risks with heavy-tail distributions. XXVI Jornadas Asepuma, XIV Encuentro Internacional, Sevilla, 7 y 8 de Junio de 2018.
6. Sarabia, J.M., Gómez, E., Prieto, F., Jordá, V. (2017). Aggregation of dependent risks in mixtures of exponential distributions and extension. Recent Developments in Dependence Modelling with Applications in Finance and Insurance, to be held at the 22-23 May 2017, Aegina, Greece.
7. Sarabia, J.M., Prieto, F., Jordá, V. (2016). "Some classes of univariate and multivariate beta-generated distributions to model financial data". 10th International Conference on Computational and Financial Econometrics, CFE 2016, Sevilla.
8. Sarabia, J.M., Prieto, F. (2016). "A Hierarchy of Multivariate Pareto Distributions with Applications in Risks Analysis". International conference on statistical distributions and applications, ICOSDA 2016, Toronto, Canada.

9. Prieto, F., Sarabia, J.M. (2016). "Family of generalized power law GPL distributions: properties and applications". International conference on statistical distributions and applications, ICOSDA 2016, Toronto, Canada.
10. Sarabia, J.M. Jorda, V., Prieto, F., Remuzgo, L. (2016). "Some models of beta-generated distributions with applications in finance". XXIV Jornadas Asepuma, XII Encuentro Internacional, Granada.
11. Prieto, F., Sarabia, J.M. (2016). "Risk modelling in Spanish indebted municipalities using Generalized Power Law distributions". Deutsche Physikalische Gesellschaft E.V (DPG Spring Meeting), Regensburg, Alemania.
12. Prieto, F., Sarabia, J.M., Jordá, V. (2016). "La familia de distribuciones Leyes de Potencia Generalizadas (GPL): aplicaciones en Finanzas". Workshop on Complex Sociotechnical Systems A COMSOTEC & SocioComplex meeting, Valencia.
13. Remuzgo, L., Trueba, C., Sarabia, J.M. (2016). "Multidimensional Polarization in the global level of GHG Emissions en VII Conference of the Spanish-Portuguese Association of Resource and Environmental Economics, AERNA, University of Aveiro (Portugal), 5-7 de septiembre de 2016.
14. Remuzgo, L., Trueba, C., Sarabia, J.M. (2016). An application of capital allocation methods to GHG emissions en XXIII Symposium on Public Economics, Universidad de Vigo, Febrero 2016.
15. Sarabia, J.M., Jordá, V., Prieto, F. (2015). Inequality of opportunity in Spain: a parametric approach. *Sixth ECINEQ Meeting*, Luxembourg, July 2015.
16. Sarabia, J.M., Prieto, F., Jordá, V., Remuzgo, L. (2015). Modelización de riesgos dependientes con marginales Lomax inversa. *XXIII Jornada ASEPUMA-XI Encuentro Internacional*, Gijón, Julio 2015.
17. Sarabia, J.M., Gómez-Déniz, E., Prieto, F., Jordá, V.(2015). Risks aggregation in multivariate dependent Pareto distributions. *19th International Congress on Insurance: Mathematics and Economics IME*, Liverpool, UK, June 2015.
18. Sarabia, J.M., Prieto, F., Jordá, V.(2015). Risk aggregation in a class of dependent heavy-tailed distributions. *International Conference on Risk Analysis ICRA 6/RISK 2015*, Barcelona, May 26-29 2015.
19. Remuzgo, L., Sarabia, J.M., Trueba, C.(2015). Capital allocation under dependent risks: an application to GHG emissions. *International Conference on Risk Analysis ICRA 6/RISK 2015*, Barcelona, May 26-29 2015.
20. Remuzgo, Trueba, C., Sarabia, J.M. (2015). Análisis multidimensional de la desigualdad mundial de las emisiones GEI. *XXII Encuentro de Economía Pública*, Santander, Enero de 2015.
21. Jordá, V., López-Noval, B., Sarabia, J.M. (2015). Distributional dynamics of life satisfaction in Europe (1990-2013). *XXII Encuentro de Economía Pública*, Santander, Enero de 2015.
22. Sarabia, J.M., Gómez-Déniz, E., Prieto, F., Jordá, V.(2014). Explicit expressions for premiums and risk measures for the Gompertz distribution. *XV Iberian-Italian Congress of Financial and Actuarial Mathematics*, Seville, October 2014.
23. Trueba, C., Remuzgo, L., Jordá, V., Sarabia, J.M. (2014). Evolución de las emisiones de GEI a nivel mundial: análisis multidimensional de desigualdad y polarización. *XXI Encuentro de Economía Pública*, Girona, Enero de 2014.

24. Sarabia, J.M., Jordá, V. (2014). Curvas de Lorenz bidimensionales: una revisión de propuestas recientes. *XXII Jornada ASEPUMA-X Encuentro Internacional*, Málaga, Julio 2014.
25. Sarabia, J.M., Jordá, V. (2014). Modeling multidimensional inequality in well-being: the case of Spain. *International Conference on Advances in Management, Economics and Social Science MES' 14*, Roma, Junio 2014.
26. Sarabia, J.M., Jordá, V. (2013). Modeling Bivariate Lorenz Curves with Applications to Multidimensional Inequality in Well-Being. *Fifth ECINEQ Meeting*, Bari, Italy, 2013
27. Sarabia, J.M., Jordá, V. (2013). Bivariate Lorenz Curves based on the Sarmanov-Lee Distribution. *Seventh International Workshop on Simulation*, Department of Statistical Sciences, Unit of Rimini, University of Bologna 21-25 May, 2013, Rimini, Italy.
28. Jordá, V., Trueba, C., Sarabia, J.M. (2013). Desigualdad multidimensional en el bienestar a nivel mundial mediante índices de entropía generalizada. *XX Encuentro de Economía Pública*, Sevilla, Enero de 2013.
29. Sarabia, J.M., Prieto, F., Trueba, C. Jordá, V. (2012). Reliability Properties in two Classes of Bivariate Distributions with Fisk Conditionals. *10th International Conference on Ordered Statistical Data and Their Applications*, Murcia, 23–25 May 2012.
30. Sarabia, J.M., Prieto, F., Trueba, C. (2012). Classes of Bivariate Distributions with Fisk Conditionals. *SEIO Meeting*, Madrid, April 2012.
31. Prieto, F., Sarabia, J.M. (2012). A comparison of probabilistic distributions for fitting the degree distribution of real-world social networks. *DPG Spring Meeting Berlin 2012*, The Technische Universität Berlin, Germany, March 25-30, 2012.
32. Sarabia, J.M. (2011). Reliability Properties in Some Classes of Conditionally Specified Models. *ICAPS 2011*, Hong Kong, December 28–31, 2011, China. Invited Speaker
33. Sarabia, J.M. (2010). Técnicas cuantitativas para el Análisis de Riesgos Financieros y Actuariales. *Métodos de Investigación en Economía*, University of Granada, Spain, Sep. 2010. Invited Speaker.
34. Sarabia, J.M., Prieto, F. (2010). Multivariate GB2 distributions based on the Rosenblatt construction. Sesión invitada: Skewing Symmetry 25 Years On. *XXXII Congreso SEIO*, A Coruña, Spain, Sep. 21010, Invited Speaker.
35. Sarabia, J.M. (2010). Bivariate Income Distributions Based on Conditional Specification. *The 7th Conference on Multivariate Distributions with Applications*. Maresias, August 8 - 13, 2010, Brazil. Session 2: “Conditionally Specified Models”. Organizer of the session.
36. Sarabia, J.M. (2009). Multivariate GB2 Distributions. *Sixth St. Petersburg Workshop on Simulation*, June 27-July 3. St. Petersburg State University, St. Petersburg, Russia. Invited Speaker.
37. Sarabia, J.M. (2009). *Teoría de la Credibilidad: Desarrollo y Aplicaciones en Primas de Seguros y Riesgos Operacionales*. Fundación MAPFRE, Conferencia Invitada. Madrid, Junio 2009.
38. J.M. Sarabia, F. Prieto, E. Gómez-Déniz (2009). *Análisis de Riesgos con la distribución Pareto estable positiva*. Ponencia. RIESGO 2009, Univ. Complutense y Fundación MAPFRE, Madrid.

39. E. Gómez-Déniz, E. Calderín, J.M. Sarabia (2009). *La clase de distribuciones continuas gamma-generalizada inversa Gaussiana y su aplicación en problemas de tarificación*. Ponencia, RIESGO 2009, Univ. Complutense y Fundación MAPFRE, Madrid.
40. L. Bermúdez, F. Prieto, J.M. Sarabia (2009). *Valoración de derivados de crédito mediante distribuciones multivariantes tipo Mashall-Olkin*. Ponencia, RIESGO 2009, Univ. Complutense y Fundación MAPFRE, Madrid.
41. J.M. Sarabia, F. Prieto (2009). *The Pareto-positive stable distribution: a descriptive model for city size data*. Ponencia, Working Group of Socio-Economic Systems AG-SOE: Traffic Dynamics, Urban and Regional Systems, Dresden, Germany.
42. Sarabia, J.M., Prieto, F. (2009). Mixture Zipf Distributions with Applications in Modelling Income Distributions. Sociedad Española de Estadística e Investigación Operativa, Murcia, Febrero 2009.
43. “Multivariate Poisson-Beta Distributions with Applications to Insurance Data”. *11th International Congress on Insurance: Mathematics and Economics IME2007*. July 10-12, 2007. University of Piraeus, Piraeus, Greece (with E. Gómez).
44. “Some explicit expressions for ruin probability function in the classical risk model”. *11th International Congress on Insurance: Mathematics and Economics IME2007*. July 10-12, 2007. University of Piraeus, Piraeus, Greece (with E. Gómez).
45. “Distribuciones Multivariantes Poisson-Beta con Aplicaciones a Datos de Seguros”. *RIESGO-2007: 2ª Reunión de Investigación en Seguros y Gestión de Riesgos*. Castro Urdiales, Abril de 2007. (with E. Gómez and M. Sarabia).
46. “Soluciones Explícitas para la Función de Probabilidad de Ruina en el Modelo Clásico de Riesgo”. *RIESGO-2007: 2ª Reunión de Investigación en Seguros y Gestión de Riesgos*. Castro Urdiales, Abril de 2007. (with E. Gómez).
47. “Una Nueva Clase de Distribuciones Multivariantes”. VI Seminario ASEPELT Modelos de Generación de Distribuciones, Universidad de Alcalá de Henares, Septiembre de 2006. Invited Speaker.
48. “Conditionally Specified Models: New Developments and Applications”. *International Conference On Mathematical and Statistical Modeling In Honor of Enrique Castillo*. Universidad de Castilla la Mancha, Spain June 28-30, 2006. Invited Speaker.
49. “Corporate Governance Behaviour: An Empirical Study from European Firms”. *International Conference On Mathematical and Statistical Modeling In Honor of Enrique Castillo*. Universidad de Castilla la Mancha, Spain June 28-30, 2006. (with M. Sarabia and J.L. Fanjul).
50. “A Hamiltonian Model in Non-Overlapping Generations: Family Business Behaviour”. *Sixty-First International Atlantic Economic Conference*. Berlin, Germany, 15-19 Marzo de 2006. (with M. Sarabia).
51. “Joint Modelling of the Total Amount and the Number of Claims by Conditionals”. *10th International Congress on Insurance: Mathematics and Economics: IME 2006*, Leuven Katholieke Universiteit Leuven July 18-20, 2006 Belgium (with M. Guillén).
52. “A mixed family of loss distributions obtained from a gamma distribution”. *10th International Congress on Insurance: Mathematics and Economics: IME 2006*, Leuven Katholieke Universiteit Leuven July 18-20, 2006 Belgium (with E. Calderín and E. Gómez).

53. "Modelos de Distribuciones de Pérdida Bidimensionales basados en Especificación Condicional". RIESGO-2005: 1ª Reunión de Investigación en Seguros y Gestión de Riesgos. Barcelona, 6-7 de Octubre de 2005. Invited Speaker.
54. "Clases de Distribuciones Bidimensionales con Distribuciones Condicionadas Normales y Log-Normales". *V Seminario ASEPELT Modelos de Generación de Distribuciones*, Universidad de Granada, 23-24 de Septiembre de 2005. Invited Speaker.
55. "Univariate and Multivariate Versions of the Negative Binomial-Inverse Gaussian Distributions with Applications". *9th International Congress on Insurance: Mathematics & Economics*, Quebec, Canada, Julio de 2005 (with E. Gómez-Déniz and E. Calderín).
56. "Bivariate Income Distributions with Lognormal Conditionals". *International Conference in Memory of Two Eminent Social Scientists: C. Gini and M.O. Lorenz*, 23-26 May 2005, University of Siena, Italy. (with E. Castillo, M. Pascual and M. Sarabia)
57. "Knowledge Management- A Model for the Valuation of Intellectual Capital". Proceedings of *International Conference On Intellectual Capital, Knowledge Management and Organizational Learning*, Toronto, Canada, (2004). (with M. Sarabia).
58. "Missing Fundamental Illusion. A New Theory Based on Japanese Knowledge Management". *International Conference on Knowledge Management*, Singapore, December 2004 (with M. Sarabia and J. Corro).
59. "Bivariate Distributions Based on the Generalized Three-Parameter Beta Distribution", (2004). International conference on distribution theory, order statistics and inference in honor of Barry C. Arnold. Invited Speaker.
60. "Some New Methods for Local Sensitivity Analysis in Statistics", (2004). International conference on distribution theory, order statistics and inference in honor of Barry C. Arnold. (with E. Castillo et al)
61. "Trends in Income Inequality in the European Union: Implications for Health Inequalities", *European Regional Science Association*, Oporto (2004). (with M. Pascual and D. Cantarero)
62. "Computing BMP Using Conditional Specification Model". Compstat'2004 Symposium. Praga, Agosto 2004. (with E. Gómez and F. Vázquez).
63. "Can Income Inequality Contribute to Understand Inequalities in Health? An Empirical Approach Based on the European Community Household Panel", *European Regional Science Association*, Oporto (2004). (with D. Cantarero and M. Pascual)
64. Health policies and income inequality: testing their relationship using the European Community Household Panel. *57th International Atlantic Economic Conference*, Lisboa (2004). (with M. Pascual and D. Cantarero)
65. Factores Determinantes de la Distribución Personal de la Renta: Un Estudio Empírico. *XI Encuentro de Economía Pública*, Barcelona, 2004. (with M. Pascual)
66. La salud desde la relación con la renta y su grado de desigualdad en la Unión Europea. *XXIV Jornadas de la Asociación de Economía de la Salud*, Madrid, 2004. (with M. Pascual and D. Cantarero)
67. La distribución personal de la renta: Factores condicionante y evidencia empírica. *VII Encuentro de Economía Aplicada*, Vigo, 2004. (with M. Pascual)
68. Impacto de la desigualdad de la renta sobre los indicadores de salud: un estudio empírico. *VII Encuentro de Economía Aplicada*, Vigo (with M. Pascual and D. Cantarero)

69. "Modelling Inequality using the Generalized Gupta Lorenz Curve", *54th Session of the International Statistical Institute (ISI)* in Berlin, (2003). (with M. Pascual and M. Sarabia).
70. "Conditionally Specified Prior Distributions and their Applications in Economics: Special Emphasis in Auditing and Actuarial Practice", *54th Session of the International Statistical Institute (ISI)* in Berlin, (2003). (with E. Gómez, M. Martél and F. Vázquez)
71. "Income Inequality and Population Health: Could a Suitable Relation be Established Between Income and Health?", *Xth Meeting of APDR* held in Evora (2003). (with M. Pascual and D. Cantarero)
72. "Extensiones Multivariantes de la Distribución de Waring Generalizada". *Actas del XXVII Congreso Nacional de Estadística e Investigación Operativa*, Lleida, 2003. (with E. Castillo).
73. "Análisis de la Distribución de la Renta en España (1973-1990) con Datos Corregidos de las Encuestas Básicas de Presupuestos Familiares mediante Curvas de Lorenz de Pareto Generalizadas". *Anales de Economía Aplicada*, Actas XV Reunión Anual de Asepelt España, 2001. (with M. Pascual and M. Sarabia).
74. "Análisis de la Distribución de la Renta y la Riqueza en España (1973-1990) con datos Corregidos de las Encuestas Básicas de Presupuestos Familiares". *VIII Encuentro de Economía Pública*. Publicación en CD, Ponencia de 20 páginas, 2001. (with M. Pascual).
75. "Análisis de la Desigualdad de Renta en España (1973-1990) con datos Corregidos de las EBPF y Curvas de Lorenz de Pareto Generalizadas". *IV Jornadas de Política Económica*, 349-353, 2000. (with M. Pascual).
76. "Economic Impact of the Recreational Fleet on the Community of Cantabria". *Second International Congress on Maritime Technological Innovations and Research*, Proceedings, Vol. 1, 653-663, 2000. (with Pérez-Labajos, C., Cristóbal, J.R., Sarabia, J.M. et al.)
77. "Rankings de Distribuciones de la Renta Basados en Curvas de Lorenz Ordenadas". *Anales de Economía Aplicada*, Actas XIV Reunión Anual de Asepelt-España. Publicación en CD, Ponencia de 25 páginas, 2000. (with M. Pascual).
78. "Impactos Sectoriales en la Economía de Cantabria". *Actas XXIII Jornadas HISPALINK*, Publicación en CD, Ponencia de 30 páginas, 2000. (with Pérez-Labajos, C., Sarabia, J.M., Blanco, B., López, C., San Cristobal, J.R.)
79. "Una Versión Multivariante de la Distribución Normal Asimétrica Basada en Especificación Condicional". *Actas del XXV Congreso Nacional de Estadística e Investigación Operativa*, Métodos Multivariantes, 309-310, 2000. (with E. Castillo).
80. "Una Nueva Clase de Curvas de Lorenz". *Actas del XXV Congreso Nacional de Estadística e Investigación Operativa*, Métodos Económicos, 409-410, 2000. (with M. Pascual).
81. "An Exponential Family of Lorenz Curves". American Statistical Association Meeting, Dallas, Texas, USA, (1998). (with E. Castillo and D.J. Slottje)
82. "Comparación de dos Distribuciones Exponenciales: una Solución Bayesiana. *Actas del XXIV Congreso Nacional de Estadística e Investigación Operativa*, Métodos Bayesianos, 239-240, 1998. (with E. Castillo).

83. "The Generalized Autodistributy Functional Network. Applications to Statistical Problems". *Proceeding of the IASTED International Conference on Artificial Intelligence and Soft Computing, 1998*, Cancún, Mexico, 443-446, 1998. (with Castillo, E., Cobo, A., Pruneda, E.)
84. "Curvas de Lorenz de Pareto Generalizadas. Aplicación al estudio de la Desigualdad y la Pobreza e España. *Actas XII Reunión Anual de Asepelt-España*, Publicación en CD, 10 páginas, 1998. (with E. Castillo).
85. "Uncertainty Analyses in Fault Trees and Bayesian Networks Using FORM/ SORM. Environmetrics Society, Insbruck, (1997) (with Castillo, E., Gómez, P., Solares, C.)
86. "Some Alternative Bivariate Extreme Models". Environmetrics Society, Insbruck, (1997). (with B.C. Arnold and E. Castillo).
87. "Extensiones Bivariantes y Caracterización de las Distribuciones de Ingresos. *Anales de Economía Aplicada*, Actas IV Reunión Anual de Asepelt-España. Universidad de Murcia, 745-753, 1997.
88. "Una Jerarquía de Curvas de Lorenz de Pareto Basada en la Distribución de Wakeby. *Actas XI Reunión Anual de Asepelt-España*. Publicación en CD, 1997. (with E. Castillo).
89. "Análisis Bayesiano Multidimensional usando Distribuciones a Priori Especificadas Condicionalmente. *Actas del XXIII Congreso Nacional de Estadística e Investigación Operativa*, Métodos Bayesianos, 37.3-37.4, 1997. (with E. Castillo).
90. "Priors of Convenience". International Society For Bayesian Analysis. Third World Meeting, Oaxaca, Mexico, (1995). (with B.C. Arnold and E. Castillo).
91. "A Method for Estimating Lorenz Curves". *Actas del XXII Congreso Nacional de Estadística e Investigación Operativa*, 131-132, 1995. (with Castillo, E., Hadi, A.S.)
92. "Estimación de la Distribución de Durling-Pareto con Medidas Repetidas". *Actas del XXII Congreso Nacional de Estadística e Investigación Operativa*, 255-256, 1995. (with E. Castillo).
93. "Evolución Reciente de los Tipos de Interés Nominales: un Análisis de sus Determinantes". *Actas del V Congreso Nacional de Economía*, 585-594, 1995. (with P. Coto).
94. "Distribuciones Multivariantes con Distribuciones Condicionadas  $t$  de Student". *Actas del XXI Congreso Nacional de Estadística e Investigación Operativa*, 37-38, 1994.
95. "Análisis del Mercado de Servicios de Transporte Marítimo en España: Demanda, Precios, Renta y Series Temporales". *Actas de las IX Jornadas de Economía Industrial*, Fundación Empresa Pública, pp. 201-213, 1994. (with P. Coto).
96. "Análisis del Mercado de Servicios de Transportes de Viajeros en España: Demanda, Precios, Renta y Series Temporales". *Actas VIII Reunión ASEPELT España*, 445-452, 1994. (with P. Coto).
97. "Indications of Temporal Artery Biopsy in Patiens con Polymyalgia Rheumatica Based on the Clinical ACR Criteria for Classification of GCA". *Abstracts 58th Annual Scientific Meeting American College of Rheumatology*, 1994. (with Rodríguez-Valverde, V. et al.)
98. "Algunas Propiedades del Modelo Condicional Normal Centrado". *Actas del XIX Congreso Nacional de Estadística e Investigación Operativa*, 55-57, 1991.

99. “Extensiones Bivariantes de la Familia Logaritmo-Exponencial”. *Actas de las XV Jornadas Hispano-Lusas de Matemáticas*, Sección de Estadística, 127-132, 1991. (with E. Castillo).
100. “Caracterización de Distribuciones Bivariantes con Condicionadas Tipo Beta”. *Actas de las XV Jornadas Hispano-Lusas de Matemáticas*, Sección de Estadística, 121-126, 1991. (with E. Castillo).
101. “Sobre los Requerimientos de la Empresa”. *Actas de las II Jornadas sobre Economía de la Educación*, 56-71, 1990. (with Sarabia, J.M., and López, C.)
102. “Núcleos Poblacionales: Factores Explicativos a Partir de Estadísticas Coyunturales del Sector Servicios y en particular de la Actividad Turística. El caso de Cantabria”. *Proceedings International Meeting of Official Statistics*, Eustat, 175-181, 1989. (with Sarabia, J.M., and López, C.)
103. “El Fenómeno Turístico: Influencia en la Configuración de Municipios”. *Actas del II Encuentro Regional de Investigación Educativa*, ICE, Universidad de Cantabria, Sección Geografía, 15 páginas, 1989. (with Sarabia, J.M., and López, C.)
104. “Una Familia Triparamétrica para Aproximar Distribuciones de Extremos”. *Actas de las XIV Jornadas Hispano-Lusas de Matemáticas*, Sección de Estadística, 235-239, 1989. (with E. Castillo).
105. “Aplicaciones de la Distribución Lambda de Tukey Generalizada a Problemas de Valores Extremos”. *Actas de la XVIII Reunión Nacional de Estadística, Investigación Operativa e Informática*, 478-482, 1989. (with E. Castillo).
106. “Consolidación del Turismo en Cantabria: una Modelización”. *Actas de la XV Reunión de Estudios Regionales*, 539-547, 1989. (with Sarabia, J.M. and López, C.)
107. “Aproximación Penúltima de Extremos”. *Abstracts de las XIII Jornadas Hispano Lusas de Matemáticas*, Sección de Estadística, 1988. (with E. Castillo).
108. “Modelo Markoviano para el Análisis de Fatiga en Elementos Longitudinales”. *Abstracts de las XIII Jornadas Hispano Lusas de Matemáticas*, Sección de Estadística, 1988. (with Castillo, E., Ruiz, J., Fernández, A.)
109. “Información Estadística de Valores Extremos”. *Actas del congreso Empresa Eficiente con Libertad de Intercambios*, Centenario Escuela Universitaria de Estudios Empresariales. Universidad de Valladolid, 555-571, 1987.

#### 10.4. Invited Research Seminars

- Universidad de Las Palmas, Febrero 2019.
- University of La Laguna, Santa Cruz de Tenerife, November 2017.
- University of Murcia, November 2017.
- Université de Lausanne, Switzerland, October 2017.
- Université de Geneve, Switzerland, November 2015.
- Université de Lausanne, Switzerland, November 2015.
- Universidad de las Palmas de Gran Canaria, Marzo 2015.
- Department of Statistics, Maharajah’s College, Ernakulam, India, December 2015.

- Cochin University of Science and Technology, Cochin, India, December 2015.
- UQAM, Université de Quebec a Montreal, Quebec, Canada, May 2015.
- McGill University, Quebec, Canada, May 2015.
- The Institute of Statistical Mathematics ISM, Tachikawa, Japan, January 2015.
- Nottingham Trent University, UK, May 2014.
- University of Jaén, Facultad CC Económicas y Empresariales y Dep. de Estadística.
- University of Reading, ICMA Centre, UK.
- University of Gottingen, Germany.
- Universidad de Barcelona (varios años).
- Universidad de Málaga.
- Universidad Autónoma de Madrid.
- McMaster University, Hamilton, Canada;
- Universidad de Granada.
- Universidad de las Palmas de Gran Canaria.
- Universidad de Alcalá de Henares.
- Universidad de Murcia.

## 11. Teaching

### 11.1. University of Cantabria

#### 11.1.1. Undergraduate Studies

- Grado: Estadística I y II (Grados en Economía y en Administración y Dirección de Empresas). Métodos Estadísticos (Grado en Economía). Análisis Multivariante de Datos (Grado en Economía). Matemáticas para Economistas (Grados en Economía y en Administración y Dirección de Empresas). Dobles Grados
- Licenciatura: Estadística e Introducción a la Econometría; Predicción Económica; Estadística Económica y Empresarial; Econometría Empresarial.

#### 11.1.2. Master and PhD

- “Inter-University Master’s Degree in Economics”, Universities of Oviedo, Cantabria, and the Basque Country. Program with a “Quality Mention” and “Towards Excellence”. Course: Statistical Techniques in Social Sciences, from 2007-08 to 2025.
- PhD. Taught courses on: Time Series; Multivariate Data Analysis; Bayesian Statistics in Economics and Business.

#### 11.1.3. Master with Bank of Santander

- Master’s Degree in Banking and Finance: UC Banco Santander. Courses: Applications in Banking and Finance with the SPSS package; Credit Scoring Models; R Course for Banking and Finance. From 1996-97 to 2016-2027.
- Master’s Degree and University Expert in Healthcare Services Management, University of Cantabria, 2007-2012.

## 11.2. CUNEF University, 2020-2024

### 11.2.1. Undergraduate Studies

- Doble grado Ingeniería Matemática-Economía, Estadística. (2021-22 y 2022-23)
- Grado en ADE: Estadística Empresarial II (en español e inglés) (2020-21 y 2021-22)
- Grado en Economía: Estadística II (2022-23))

### 11.2.2. Master in Data Science

- Master's Degree in Data Science: Fundamentals of Data Analysis and Research (2021-22 and 2022-23)
- Master's Degree in Data Science in Finance: Fundamentals of Data Analysis and Research (2020-21)
- Master's Degree in Data Science in Finance: Classification Techniques (2020-21)

## 11.3. Teaching in English

- Business Statistics, CUNEF University, 2020-2022
- Diploma in European Business and Economics: Statistical Methods in Business and Economics, 2007-2011, University of Cantabria.
- Cochin University of Science and Technology, Cochin, India, December 2015.

## 11.4. Teacher training at the University of Cantabria

- Courses: Statistics with R. Basic Level; Statistics with R. Intermediate Level; Statistics with R. Advanced Level, from 2015 to present. In some years, some of the courses have been taught multiple times.

## 12. Other Activities

### 12.1. PhD as Director

- Mendoza Mejía, José Alejandro (2022). “Aportaciones a la Economía de la Innovación y del Cambio Tecnológico: el proceso inventivo desde la Ciencia de Redes”. PhD. in Economics, Sep. 2022, Departament of Economics, University of Cantabria. “Cum Laude”. Co-dirigida con F. Prieto
- Remuzgo, Lorena (2017). “Ensayos sobre energía y economía sostenible: un enfoque metodológico basado en el análisis de la desigualdad”, PhD. in Economics, March 2017, Departament of Economics, University of Cantabria. “Cum Laude”. Tesis internacional en programa con mención de calidad y hacia la excelencia. Durante la tesis Contratada FPU. **Extraordinary Doctoral Award. University of Cantabria Award** for the best Doctoral Thesis in Social Sciences.
- Jordá, Vanesa (2014). “Distribuciones de renta y curvas de Lorenz multivariantes: Aspectos probabilísticos e Inferencia con información completa y limitada, PhD. in Economics, January 2014, “Cum Laude”. Tesis internacional en programa con mención de calidad y hacia la excelencia (durante la tesis Contratada FPU.). **Extraordinary Doctoral Award. University of Cantabria Award** for the best Doctoral Thesis in Social Sciences.

- Prieto, Faustino, (2009). “Aportaciones en Teoría de la Complejidad Económica”, PhD. in Economics, December 2009, “Cum Laude” honor. Programa de Doctorado con Mención de Calidad. **University of Cantabria Award** for the best Doctoral Thesis in Social Sciences.
- Obeso, M. (2011). “Geoestrategia del Conocimiento: Análisis del Comportamiento Estratégico para la Obtención de Parámetros de Éxito Organizacionales”, PhD. in Business Administration, 2011. Mención de doctorado internacional, “Cum Laude”. Co-direction.
- Pascual, M. (2003). “Ordenaciones Estocásticas y Curvas de Lorenz en Familias Paramétricas de Distribuciones”, PhD. in Economics, 2003, “Cum Laude”.

## 12.2. Conference Organization

- Organizer: Asociación Española de Profesores Universitarios de Matemáticas para la Economía y la Empresa, XXVII Jornadas de ASEPUMA y el XV Encuentro Internacional, Santander Junio 2019.
- Organizer of the International Meeting “RISK 2018, Reunión de Investigación en Seguros y Gestión de Riesgos”, Santander, Abril 2018.
- Internacional Conference: New Methods for the Empirical Analysis of Financial Markets. Lugar de celebración: CIESE. Fundación Comillas (Comillas, Cantabria). Fechas: 9 y 10 de junio de 2016. Organizadores: Oliver Linton, Juan M. Rodríguez-Poo, Jose M. Sarabia y Francisco Peñaranda. Participantes (invited speakers): Yacine Ait-Sahalia (Princeton University); Dante Amengual (CEMFI); Federico M. Bandi (Johns Hopkins University); Jean-Philippe Boucher (Université du Quebec a Montreal); Valentina Corradi (University of Surrey); Julio Crego (CEMFI); Miguel A. Delgado (Universidad Carlos III de Madrid); Christian Hafner (Université Catholique de Louvain); Wolfgang K. Härdle (Humboldt Universität zu Berlin); Enkelejd Hashorva (Université de Lausanne); Yongmiao Hong (Cornell University); Ai Jun Hou (University of Stockholm); Chen Huang (Humboldt Universität zu Berlin); Oliver Linton (Cambridge University); Alberto Martín-Utrera (University of Lancaster); Francisco Peñaranda (City University of New York); Cesare Robotti (University of Georgia); Enrique Sentana (CEMFI); Stefan Sperlich (Université de Geneve); Steven Vanduffel (Free University of Brussels); Weining Wang (City University of London); Carlos Velasco (Universidad Carlos III de Madrid); Paolo Zaffaroni (Imperial College of London). Patrocinado por SANFI.
- Organizer: Curso monográfico: Risk Management. Fecha: 12 al 14 de septiembre de 2016. Profesor invitado: Carol Alexander (Prof. of Finance, University of Surrey, UK). Patrocinado por SANFI.
- Organizer of the Local Meeting “RIESGO-2007: RISK-2007, 2ª Reunión de Investigación en Seguros y Gestión de Riesgos”, celebrado en Castro Urdiales, 18-19 de Abril de 2007.
- Organizer of the International Conference: “International Conference on Modeling in Mathematics and Statistics in Honor of Enrique Castillo” (with B.C. Arnold, N. Balakrishnan, A. Conejo, A.S. Hadi, A. Fernández-Canteli and J.M. Gutiérrez), celebrado en Ciudad Real, Universidad de Castilla la Mancha en Junio de 2006.
- Member of the Scientific Committees: “RIESGO-2005: 1ª Reunión de Investigación en Seguros y Gestión de Riesgos”. Barcelona, 6-7 de Octubre de 2005.

- Member of the Scientific Committees: “V Seminario ASEPELT Modelos de Generación de Distribuciones”, Universidad de Granada, 23-24 de Septiembre de 2005.
- Organizer of the International Conference: “International Conference on Distribution Theory, Order Statistics and Inference in Honor of Barry C. Arnold”, del 16 al 18 de Junio de 2004 en la Universidad de Cantabria. (with N. Balakrishnan and E. Castillo):
- Organizer of the International Conference: “Modelos de Generación de Distribuciones. Propiedades y Aplicaciones”, en Santander, Mayo 2002. Entidades Patrocinadoras: Ministerio de Ciencia y Tecnología, Asepelt, Universidad de Cantabria.

### 12.3. Member of PhD Tribunals

- UNED: Facultad de Ciencias Económicas y Empresariales, junio 2023
- Universidad Complutense de Madrid: Facultad de Informática, 2022
- Universidad Complutense de Madrid: Economía Cuantitativa, 2019
- Universidad de Barcelona: Economía (2)
- Universidad de Cádiz: Matemáticas (1)
- Universidad de Cantabria: Economía (3), Administración de Empresas (2), Matemáticas (5)
- Universidad de Extremadura: Matemáticas (1)
- Universidad de Las Palmas de Gran Canaria: Economía (2)
- Universidad de Murcia: Matemáticas (1)
- Universidad Nacional de Educación a Distancia UNED: Economía (1)
- Universidad de Oviedo: Ingeniería Industrial (3)

### 12.4. Scientific Societies

- Member del ISI
- Member of ASA, American Statistical Association (1993-2010).
- Member of SEIO, Spanish Society of Statistics and Operational Research.
- Member of ASEPELT, Asociación Española de Applied Economics (2005-2020).
- Member of the DGP, EconoPhysics (2105-2020).

## 13. Awards

- Senior Research Award: Social Council, University of Cantabria, Spain, 2010.
- International Insurance Research Award “Julio Castelo Matrán”. Fundación MAPFRE, 2008.
- Excellence in Teaching Award 2007, University of Cantabria.

## 14. Citations in Relevant Books

1. *Inequalities: Theory of Majorization and Its Applications* (2011), by Albert W. Marshall, Ingram Olkin, Barry C. Arnold. Second Edition, Springer, New York.
2. *Measuring Inequality* (2011), by Frank A. Cowell. July 2008, Third Edition, <http://darp.lse.uk/MI3>
3. *Life Distributions*. (2007), by A.W. Marshall and I. Olkin. Springer Series in Statistics, New York.
4. *Statistical Size Distributions in Economics and Actuarial Sciences*, by C. Kleiber and S. Kotz (2003). John Wiley, New York.
5. *Encyclopedia of Actuarial Science*. Multivariate Distributions (2004). John Wiley, New York.
6. *Encyclopedia of Statistical Science*. Multivariate Distributions and the Castillo-Galambos Functional Equation. John Wiley, New York.
7. *Statistical Modelling with Quantiles functions*, by Gilchrist, W.G. (2000). Chapman and Hall, London.
8. *A Primer on Statistical Distributions*, by N. Balakrishnan y V.B. Nevzorov (2003). Second Edition. John Wiley, New York.
9. *Probability Theory and Statistical Inference. Econometric Modeling with Observational Data*, by A. Spanos (1999). Cambridge University Press, Cambridge, UK.
10. *Multivariate Models and Dependence Concepts* by H. Joe (1997). Chapman and Hall, London.
11. *Continuous Multivariate Distributions. Volume 1: Models and Applications*, por Kotz, S., Balakrishnan, N., Johnson, N.L. (2000). Second Edition. John Wiley, New York.
12. *Subjective and Objective Bayesian Statistics: Principles, Models, and Applications*, by S.J. Press. John Wiley & Sons, 2003, New York.
13. *Handbook on Income Inequality Measurements, Parametric Approximations of the Lorenz Curves*, by H.K. Ryu and D.J. Slottje (1999). Edited by J. Silver with a foreword by Amartya Sen. Kluwer Academic Publishers, Boston, 291-312.