
José María Sarabia

Curriculum Vitae. January 2018

1. Personal Data

- **Personal Background:** Birth date: March 21, 1963, male. Citizenship: Spanish.
- **Address:** Department of Economics
University of Cantabria
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- **Phone:** +34 942 201635
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e-mail: sarabiaj@unican.es
- **Rank:**
 - Professor of Quantitative Methods in Business and Economics;
 - Professor of Statistics and Operational Research
- **Citations in Google Scholar:** 3,683 (January 2018)
h index in Google Scholar: 27 (January 2018)

Research Interests: Economic Inequality; Risk Analysis and Actuarial Statistics; Multivariate Analysis; Econophysics; Informetrics; Quantitative methods in Business and Economics.

2. Higher Education

- Ph.D. in Mathematics, “Cum Laude”. University of Cantabria, Spain, 1989. (Doctor en Ciencias Matemáticas).
- B.Sc. and M.Sc. Degree in Mathematics (Statistics). University of Valladolid, Spain, 1981–1986. (Licenciado en Ciencias Matemáticas con la Especialidad de Estadística).

3. Academic

3.1. Academic Positions

- 2001-Present, Professor of Quantitative Methods in Business and Economics, Department of Economics, University of Cantabria, Spain (Catedrático de Universidad en el área de Métodos Cuantitativos en Economía y Empresa)
- 2000-2001, Professor of Statistics, Department of Statistics and Operational Research, University Complutense of Madrid, Spain (Catedrático de Universidad en el área de Estadística e Investigación Operativa. Departamento de Estadística e IO, Universidad Complutense de Madrid).
- 1992-2000, Dept. of Economics, University of Cantabria, Associate Professor.
- 1989-1992, Dept. of Economics, University of Cantabria, Assistant Professor.
- 1986-1989, Dept. of Economics, University of Cantabria, Instructor.
- SubDirector, Department of Economics, University of Cantabria, 1993-1995.
- Years of teaching experience: 30 (Seis quinquenios Docentes).
- Number of research periods officially recognized by CNEAI: 4 (100 %).

3.2. Research Groups and Scientific Networks

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

3.3. Scientific Committees

- President, Comité Asesor 8 (Ciencias Económicas y Empresariales) de la Comisión Nacional Evaluadora de la Actividad Investigadora CNEAI, Agencia Nacional de Evaluación de la Calidad y Acreditación, from February 2017.
- Member, Comité Asesor 8 (Ciencias Económicas y Empresariales), de la Comisión Nacional Evaluadora de la Actividad Investigadora CNEAI, Agencia Nacional de Evaluación de la Calidad y Acreditación, 2016-2017.
- Member of the Research Commission of the University of Cantabria. 2008-2016.
- Member of the Ph.D. Commission of the University of Cantabria: 1993-1997.
- Expert for ANECA, Programm ACADEMIA (Social Sciences), Since 2009-2016.

- Member of the Postgraduate Committee, School of Business and Economics, University of Cantabria, Spain.

4. Visiting Positions

4.1. Visit Invitations

- 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, STI-CERD 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 Visit Invitations

- Université de Lausanne, Switzerland, October 2015; 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 Geneve, 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. Publications

5.1. Publications in Refereed Journals and Chapters in Books

-ECONOMIC INEQUALITY-

1. 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.
2. Sarabia, J.M., Jordá, V., Trueba, C. (2017). The Lamé Class of Lorenz Curves. *Communications in Statistics, Theory and Methods*, 46, 5311-5326.

3. 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.
4. Sarabia, J.M., Prieto, F., Jordá, V. (2015). About the hyperbolic Lorenz curve *Economics Letters*, 136, Pages 42-45.
5. 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.
6. 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.
7. Jordá, V., Sarabia, J.M. (2015). International Convergence in Well-Being Indicators. *Social Indicators Research*, 120, 1-27.
8. 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.
9. 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.
10. 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.
11. Sordo, M.A., Navarro, J., Sarabia, J.M. (2014). Distorted Lorenz Curves: Models and Comparisons. *Social Choice and Welfare*, 42, 761-780.
12. 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.
13. 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.
14. 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.
15. 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.

16. 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.
17. 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.
18. 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.
19. 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.
20. Sarabia, J.M., Prieto, F., Sarabia, M. (2010). Revisiting a functional form for the Lorenz curve. *Economics Letters*, 107, 249-252.
21. 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.
22. Sarabia, J.M., Castillo, E., Pascual, M., Sarabia, M. (2007). "Bivariate Income Distributions with Lognormal Conditionals". *Journal of Economic Inequality*, 5, 371-383.
23. 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.
24. Pascual, M., Sarabia, M. (2006). La Distribución Personal de la Renta en España: Un Estudio de las Principales Fuentes Estadísticas", *Estadística Española*, 48, 401-431.
25. Sarabia, J.M., Castillo, E., Pascual, M., Sarabia, M. (2005). Mixture Lorenz Curves, *Economics Letters*, 89, 89-94.
26. Cantarero, D., Pascual, M., Sarabia, J.M. (2005). Effects of Income Inequality on Population Health: New Evidence from the European Community Household Panel, *Applied Economics*, 37, 87-91.
27. Sarabia, J.M., Castillo, E. (2005). About a Class of Max-Stable Families with Applications to Income Distributions, *Metron*, 63, 505-527.
28. Pascual, M., Cantarero, D., Sarabia, J.M. (2005). Income Inequality and Health: Do the Equivalence Scales Matter". *Atlantic Economic Journal*, 33, 169-178.

29. Pascual, M., Cantarero, D., Sarabia, J.M. (2005). Health Policies and Income Inequality using the European Community Household Panel, *International Advances in Economic Research*, 11, 122.
30. Pascual, M., Sarabia, J.M. (2004). “Factores Determinantes de la Distribución Personal de la Renta: Un estudio Empírico a partir del PHOGUE”. *Papeles de Trabajo del Instituto de Estudios Fiscales*, Serie Economía, 15, 56 pages.
31. Sarabia, J.M., Pascual, M., Sarabia, M. (2003). “Modelling Inequality Using The Generalized Gupta Lorenz Curve”. *Bulletin of the International Statistical Institute*, Vol. 60, 365-366.
32. Pascual, M., Sarabia, J.M. (2003). “La Medición de la Equidad en la Implementación de los Sistemas Impositivos”. *Documentos del Instituto de Estudios Fiscales*, 30 pages. Madrid: Instituto de Estudios Fiscales.
33. Pascual, M., Sarabia, J.M. (2002). “Análisis de la Distribución de la Renta a Partir de Funciones de Percentiles: Robustez y Sensibilidad de los Resultados Frente a Escalas de Equivalencia”. *Papeles de Trabajo del Instituto de Estudios Fiscales*, 1, 56 pages.
34. Sarabia, J.M., Castillo, E., Slottje, D.J. (2002). “Lorenz Ordering Between McDonald’s Generalized Functions of the Income Size Distributions”. *Economics Letters*, 75, 265-270.
35. Sarabia, J.M., Pascual, M. (2002). “A Class of Lorenz Curves Based on Linear Exponential Loss Functions”. *Communications in Statistics, Theory and Methods*, 31, 925-942.
36. Sarabia, J.M., Pascual, M. (2002). “Un Sistema Generador de Curvas de Lorenz Jerárquicas”. In: *Modelos de Generación de Distribuciones*. Propiedades y Aplicaciones, Chapter 5, (2002), 41-107. Edit. University of Granada.
37. Sarabia, J.M., Castillo, E., Slottje, D. (2001). “An Exponential Family of Lorenz Curves”. *Southern Economic Journal*, 67, 748-756
38. Sarabia, J.M., Castillo, E., Slottje, D. (1999). “An Ordered Family of Lorenz Curves”. *Journal of Econometrics*, 91, 43-60.
39. Sarabia, J.M., Pascual, M. (2001). “Rankings de Distribuciones de Renta Basados en Curvas de Lorenz Ordenadas: Un Estudio Empírico”. *Estudios de Economía Aplicada*, 19, 151-169.
40. Sarabia, J.M., Pascual, M. (2000). “Análisis de la Desigualdad de Renta en España (1973-1990) mediante Curvas de Lorenz de Pareto Generalizadas: Un Estudio Empírico”. *Anales de Economía y Administración de Empresas*, 8, 123-143.

41. Castillo, E., Hadi, A.S., Sarabia, J.M. (1998). "A Method for Estimating Lorenz Curves". *Communications in Statistics, Theory and Methods*, 27, 2037-2063.
42. Sarabia, J.M. (1997). "A Hierarchy of Lorenz Curves Based on the Generalized Tukey's Lambda Distribution". *Econometric Reviews*, 16, 305-320.
43. Sarabia, J.M. (1994). "Cantabria Zona de Bienestar Social: un Análisis de Indicadores Sociales". *Papeles de Economía Española*, Economía de las Comunidades Autónomas: Cantabria, 383-403.
44. Arnold, B.C., Castillo, E., Sarabia, J.M. (1994). "Conditional Characterization of the Mardia Multivariate Pareto Distribution". *Pakistan Journal of Statistics*, 10, 143-145.
45. Arnold, B.C., Castillo, E., Sarabia, J.M. (1993). "Multivariate Distributions with Generalized Pareto Conditionals". *Statistics and Probability Letters*, 17, 361-368.

-RISK ANALYSIS-

46. Sarabia, J.M., Calderín, E. (2018). Analytical Expressions of Risk Quantities for Composite Models. *Journal of Risk Model Validation*, accepted.
47. Guillén, M., Sarabia, J.M., Belles-Sampera, J., Prieto, F. (2018). Distortion risk measures for non-negative multiplicative risks. *Journal of Operational Risk*, accepted.
48. Sarabia, J.M., Gómez, E., Prieto, F., Jordá, V. (2016). Risk aggregation in multivariate dependent Pareto distributions. *Insurance: Mathematics and Economics*, 71, 154-163.
49. Gómez-Déniz, E., Sarabia, J.M. (2016). A discrete distribution including the Poisson. *Communications in Statistics: Theory and Methods*, 45, 2311-2322.
50. Remuzgo, L., Sarabia, J.M., Trueba, C. (2015). "Capital allocation under dependent risks: an application to GHG emissions". *Cuadernos Fundación MAPFRE*, 205, 663-670.
51. Sarabia, J.M., Prieto, F., Jordá, V. (2015). "Risk aggregation in a class of dependent heavy-tailed distributions". *Cuadernos Fundación MAPFRE*, 205, 695-702.
52. Sáez-Castillo, A.J., Sarabia, J.M., Prieto, F. (2015). "la distribución Pareto positive stable, un modelo estocástico para eventos extremos". *Cuadernos Fundación MAPFRE*, 205, 687-694.

53. 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.
54. 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.
55. 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.
56. 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.
57. Gómez-Déniz, E., Sarabia, J.M., Balakrishnan, N. (2012). A Multivariate Discrete Poisson-Lindley Distribution: Extensions and Actuarial Applications. *ASTIN Bulletin*, 42, 655-678.
58. 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.
59. Alexander, C., Sarabia, J.M. (2012). Quantile Uncertainty and Value-at-Risk Model Risk. *Risk Analysis*, 32, 1293-1308.
60. Sarabia, J.M., Gómez-Déniz, E. (2011). "Multivariate Poisson-Beta Distributions with Applications". *Communications in Statistics, Theory and Methods*, .
61. 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.
62. Sarabia, J.M., Prieto, F. (2011). Sobre una Clase de Riesgos Dependientes. *Anales del Instituto de Actuarios Españoles*, 17, 31-50.
63. Gómez-Déniz, E., Sarabia, J.M., Calderín-Ojeda, E. (2011). A new discrete distribution with actuarial applications. *Insurance: Mathematics and Economics*, 48, 406-412.
64. 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.
65. 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, Whiteknights, PO Box 242, Reading RG6 6BA, UK.

66. Gómez, E., Sarabia, J.M., Vázquez, F. (2009). “Robust Bayesian bonus-malus premiums under the conditional specification model”. *Statistical Papers*, 50, 465–480.
67. 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.
68. 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.
69. 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.
70. 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.
71. 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.
72. Sarabia, J.M., Gómez, E. (2007). “Distribuciones Multivariantes Poisson-Beta con Aplicaciones a Datos de Seguros”, In: *Investigaciones en Seguros y Gestión de Riesgos: RIESGO 2007*, J.M. Sarabia y M. Guillén, Editores, 15-26, Universidad de Cantabria.
73. 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.
74. Sánchez, J.M., Gómez, E., Sarabia, J.M., Vázquez, F. (2006). “Applying a Bayesian Hierarchical Model in Actuarial Science: Inference and Ratemaking”. In: *Distribution Models Theory*, Chapter 13, 233-242, (2006). World Scientific Publishing Co., Singapur.
75. Sarabia, J.M., Castillo, E., Gómez, E., Vázquez, F. (2005). A Class of Conjugate Priors for Log-Normal Claims Based on Conditional Specification. *Journal of Risk and Insurance*, 72, 479-495.
76. Sarabia, J.M., Gómez-Déniz, E., Vázquez, F. (2004). “On the use of Conditional Specification Models in Claim Count Distributions: An Application to Bonus-Malus Systems”. *ASTIN Bulletin*, 34, 85-98.

77. Alexander, C., Sarabia, J.M. (2010). Generalized Beta-Generated Distributions. *ICMA Centre Discussion Papers in Finance DP2010-09*, ICMA Centre, The University of reading, Witheknight, PO Box 242, Reading RG6 6BA, UK.

-INFORMATION AND DATA SCIENCES-

78. Gómez-Déniz, E., Sarabia, J.M. (2018). “A Family of Generalised Beta Distributions: Properties and Applications”, *Annals of Data Science*, forthcoming.
79. 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.
80. 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.
81. Sarabia, J.M., Prieto, F., Trueba, C. (2012). Modeling the probabilistic distribution of the impact factor. *Journal of Informetrics*, 6, 66-79.
82. 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.
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. Sarabia, J.M., Sarabia, M. (2008). “Explicit expressions for the Leimkuhler curve in parametric families”. *Information Processing and Management*, 44, 1808-1818.
85. Sarabia, J.M. (2008). “A general definition of the Leimkuhler curve”. *Journal of Informetrics*, 2, 156-163.
86. Arnold, B.C., Castillo, E., Sarabia, J.M. (2002). “Compatibility and Near Compatibility in Multiple Assessment of Bayesian Networks”. *Journal of Propagations in Probability and Statistics*, 2, 161-176.
87. Castillo, E., Sarabia, J.M., Solares, C., Gómez P. (1999). “Uncertainty Analyses in Fault Trees and Bayesian Networks Using FORM/ SORM Methods”. *Reliability Engineering and System Safety*, 65, 29-40.
88. Castillo, E., Bouckaer, R., Sarabia, J.M., Solares, C. (1995). “Error Estimation in Approximate Bayesian Belief Network Inference”. In: *Uncertainty in Artificial Intelligence*, Philippe Besnard y Steve Hanks Edit., 55-62. Morgan Kaufmann Publishers. San Francisco, California.

89. Castillo, E., Alvarez, E., Benczur, E., Sarabia, J.M. (1992). "The Problem of Learning Concepts. A Probabilistic View". *Annales Univ. Sci. Budapest. Sect. Comp.*, 179-194.

-ECONOPHYSICS AND NON-LINEAR SYSTEMS-

90. 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
91. 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.
92. Sarabia, J.M., Prieto, F. (2009). "The Pareto-positive stable distribution: A new descriptive model for city size data". *Physica A*, 388, 4179-4191.

-MULTIVARIATE ANALYSIS-

93. 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.
94. Navarro, J., Sarabia, J.M. (2013). Reliability properties of bivariate conditional proportional hazard rate models. *Journal of Multivariate Analysis*, 113, 116-127.
95. 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.
96. Navarro, J., Sarabia, J.M. (2010). Alternative Definitions of Bivariate Equilibrium Distributions. *Journal of Statistical Planning and Inference*, 140, 2046-2056.
97. 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.
98. Arnold, B.C., Castillo, E., Sarabia, J.M. (2009). "Multivariate order statistics via multivariate concomitants". *Journal of Multivariate Analysis*, 100, 946-951.
99. 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.

100. Arnold, B.C., Castillo, E., Sarabia, J.M. (2008). "Multivariate distributions defined in terms of contours". *Journal of Statistical Planning and Inference*, In Press.
101. 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
102. Arnold, B.C., Castillo, E., Sarabia, J.M. (2007). "Conditionally Specified Models", In: *Encyclopedia of Statistical Sciences*, John Wiley and Sons.
103. 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.
104. Arnold, B.C., Castillo, E., Sarabia, J.M. (2007). "Distributions with Generalized Skewed Conditionals and Mixtures of such Distributions". *Communications in Statistics, Theory and Methods*, 36, 1493-1504.
105. Arnold, B.C., Castillo, E., Sarabia, J.M. (2006). "Families of Multivariate Distributions Involving the Rosenblatt Construction". *Journal of the American Statistical Association*, 101, 1652-1662.
106. Sarabia, J.M., Castillo, E., Pascual, M., Sarabia, M. (2006). "Classes of Bivariate Distributions with Normal and Lognormal Conditionals: A Brief Revision". In: *Distribution Models Theory*, Chapter 10, 173-188. World Scientific Publishing Co., Singapur.
107. Sarabia, J.M., Castillo, E. (2006). "Bivariate Distributions Based on the Generalized Three-Parameter Beta Distribution", In: *Advances on Distribution Theory, Order Statistics and Inference*, Birkhäuser, Boston., N. Balakrishnan, E. Castillo, J.M. Sarabia Edit., 85-110.
108. Arnold, B.C., Castillo, E., Sarabia, J.M. (2005). Distributions with Conditionals in Truncated Weighted Families, *Statistics*, 39, 133-147.
109. Arnold, B.C., Castillo, E., Sarabia, J.M. (2004). "Distributions with Beta Conditionals". In: *Handbook of Beta Distribution and Its Applications*, edited by A.K. Gupta and S. Nadarajah, Marcell Dekker, New York, pp. 255-281
110. Arnold, B.C., Castillo, E., Sarabia, J.M. (2004). "Compatibility of Partial or Complete Conditional Probability Specifications". *Journal of Statistical Planning and Inference*, 123, 133-159.
111. Arnold, B.C., Castillo, E., Sarabia, J.M. (2002). "Exact and Near Compatibility of Discrete Conditional Distributions". *Computational Statistics and Data Analysis*, 40, 231-252.

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113. Sarabia, J.M. (2002). Discussion of: "Skewed Multivariate Models Related to Hidden Truncation and/or Selective Reporting", by B.C. Arnold and R.J. Beaver. *Test*, 11, 49-52.
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-STATISTICAL MODELING-

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5.2. Books as Editor

1. Arnold, B.C., Balakrishnan, N., Sarabia, J.M., Mínguez, R. (Eds) (2008). *Advances in Mathematical and Statistical Modelling*. Series on Statistics for Industry and Technology. Ed. Birkhäuser, Boston, USA.
2. Sarabia, J.M., Guillén, M. (Eds) (2007). *Investigaciones en Seguros y Gestión de Riesgos: RIESGO 2007*, TGD and Universidad de Cantabria.
3. Balakrishnan, N., Castillo, E., Sarabia, J.M. (Eds) (2006). *Advances on Distribution Theory, Order Statistics and Inference*. Birkhäuser, Boston, USA.

5.3. Books as Author: Textbooks

1. Sarabia, J.M., Jordá, V., Prieto, F. (2018). *Prácticas de Estadística con R*. Editorial Pirámide, Madrid.
2. Sarabia, J.M., Trueba, C., Remuzgo, L., Jordá, V., Prieto, F. (2014). *Problemas resueltos de estadística para las ciencias sociales*. Editorial Pirámide, Madrid.
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.
4. Prieto, F., Sarabia, J.M. (2012). *Matemáticas para Economistas*. Edit: Ediciones TGD, Santander.
5. Sarabia, J.M., Gómez, E., Vázquez, F. (2006). *Estadística Actuarial: Teoría y Aplicaciones*. Pearson-Prentice Hall, Madrid. 580 pages.
6. Sarabia, J.M., Pascual, M. (2005). *Curso Básico de Estadística para Economía y Administración de Empresas*. Colección Textos Universitarios, Universidad de Cantabria, Santander. 378 pages, Second Edition.

7. Sarabia, J.M. (2000). *Curso Práctico de Estadística*. Editorial Civitas, Madrid. Second Edition. Biblioteca Civitas de Economía y Empresa. Colección Economía, Tratados y Manuales. 398 pages.
8. Sarabia, J.M. (1993). *Curso Práctico de Estadística*. Editorial Civitas, Madrid, (1993). Primera Edición. Biblioteca Civitas de Economía y Empresa. Colección Economía. 484 pages.

5.4. Books as Author: Research

1. Arnold, B.C., Sarabia, J.M. (2018). *Majorization and the Lorenz Order with Applications in Applied Mathematics and Economics*. Springer, forthcoming
2. Sarabia, J.M., Pascual, M. (2010). *Características sociodemográficas de las personas con doble cobertura sanitaria. Un estudio empírico*. Edit. Fundación MAPFRE, Madrid, 161 pages.
3. Gómez, E., Sarabia, J.M. (2008). *Teoría de la Credibilidad: Desarrollo y Aplicaciones en Primas de Seguros y Riesgos Operacionales*. Edit. MAPFRE, Madrid, 240 pages.
4. Castillo, E., Hadi, A.S., Balakrishnan, N., Sarabia, J.M. (2004). *Extreme Value and Related Models in Engineering and Science Applications*. John Wiley, New York. 362 pages.
5. Arnold, B.C., Castillo, E., Sarabia, J.M. (1999). *Conditional Specification of Statistical Models*. Springer Series in Statistics, Springer Verlag, New York. 411 pages.
 - Reviews in: *Journal of the American Statistical Association*, 97, (2002), 1204–5, *Mathematical Reviews*, 2000j:60015, *Metrika*, 52, (2000), 271–273, *Sankhya*, B, 62, (2000), 347–348, *Short Book Reviews*, 20, 3, (2000), *Technometrics*, 43, (2002), 490, *Journal of the Royal Statistical Society*, D.
6. Sarabia, J.M., Pérez, C., Sarabia, J.M., López, C. (1999). *Evaluación del PIB del Subsector Turístico en Cantabria, 1998*. Gobierno de Cantabria. Consejería de Industria, Turismo, Trabajo y Comunicaciones. Dirección General de Turismo, Santander, (1999). 122 pages.
7. Arnold, B.C., Castillo, E., Sarabia, J.M. (1992). *Conditionally Specified Distributions*. Lecture Notes in Statistics, Vol. 73. Springer Verlag, New York, (1992). 151 pages
 - Review in: *Mathematical Reviews*, 93h:60018.
8. P. Urigoitia, P., Sarabia, J.M., Barrón, J. (1992). *Estudio de Satisfacción de los Internos de la Residencia para la Tercera Edad de Laredo (Cantabria)*. Edita: P. Urigoitia, (1992). 149 pages.

9. Sarabia, J.M., Sarabia, J.M., López, C. (1989). *Turismo y Municipios. Una modelización en Cantabria*. Edita: Ilustre Colegio de Economistas de Cantabria, (1989). 171 pages.

6. Research Projects

6.1. Research Projects as Director

1. 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).
2. 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).
3. Modelos Paramétricos y Semiparamétricos para el estudio de la desigualdad económica: especificación, estimación y contraste. Ministerio de Ciencia e Innovación: ECO2010-15455 (2011-2013).
4. Grant Fundación MAPFRE: “Características sociodemográficas de las personas con doble cobertura sanitaria: un estudio empírico”, 2007-08.
5. “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.
6. “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.
7. “Modelos de Distribuciones Multivariantes Basados en Especificación Condicional”. Ministerio de Ciencia y Tecnología. Dirección General de Investigación. Modalidad P1. BEC2000-1186. 2000-2003.
8. “Análisis de la Desigualdad de Renta con Familias Paramétricas de Curvas de Lorenz Clásicas y Generalizadas”. Instituto de Estudios Fiscales. From 2002 to 2003.
9. “Índices de Concentración en la Economía Española”. Vicerrectorado de Investigación y Desarrollo. Universidad de Cantabria. From XI-2000 to XI-2001.
10. “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.

11. “Modelo Multiecuacional para los Sectores Económicos de la Economía de Cantabria”. Comisión Mixta Caja Cantabria-Universidad de Cantabria. From XII-1998 to XII-1999.
12. “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.
13. “Extensiones y Aplicaciones de las Distribuciones Especificadas Condicionalmente. DGICYT. Programa Sectorial de Promoción General del Conocimiento, PB92-0500. From VII-1993 to VII-1994.
14. “Dinámicas no Lineales y Caóticas en los Mercados Financieros”. Comisión Mixta Caja Cantabria-Universidad de Cantabria. From XII-1994 to XII-1995.
15. “Indicadores Sintéticos de Bienestar Social en Cantabria”. Comisión Mixta Caja Cantabria-Universidad de Cantabria. From I-1990 to I-1991.

6.2. Other Projects

1. Research Project 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 Condicionalmente”. 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.

6.3. Participation in Research Contracts

1. EON España, 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.

7. Editorial Work

At the Present,

- Associate Editor for, “*Stats*”, MDPI Journals, from 2018.

- Associate Editor for, “*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 June 2017.
- Associate Editor for, “*SORT, Statistics and Operations Research Transactions*”, from 2017.
- Associate Editor for “*Journal of Statistical Distributions and Applications*”, Springer, from Feb. 2013.
- Associate Editor for “*Journal of the Turkish Statistical Association*”, from Feb. 2013.
- Associate Editor for *Test*, (Springer-Verlag), Since 2010.
- Member of the Editorial Board of *International Journal of Multivariate Data Analysis*, Since 2016.
- Member of the Editorial Board of *Journal of Probability and Statistics*, since 2008.
- Member of the Editorial Board of editors *Anales del Instituto de Actuarios Españoles*. Since 2007.

In the Past,

- Associate Editor for, “*Journal of Banking and Finance*”, Elsevier, from Feb. 2013 to June 2017.
- Associate Editor for *Statistical Methodology*, (Elsevier North-Holland), from 2005 to 2017.
- Associate Editor for *Journal of Statistical Planning and Inference*, (Elsevier North-Holland). 2007-2011 (JCR: 0,559 in 2007).
- Associate Editor for *Test*, (SEIO and Springer-Verlag): 2002-2008 (JCR: 0,634 in 2007)
- Associate Editor for *Estudios de Economía Aplicada*: 2006-2008.
- Associate Editor for *Chilean Journal of Statistics*. Since 2009.

8. Reviewing Activities

- Reviewer for the National Science Foundation (NSF) in 2003 and 2004.
- Referee for the Agencia Nacional de Evaluación y Prospectiva, since 1991.
- Reviewer: John Wiley and Sons, New York and John Wiley and Sons in Europe.

- Reviewer for Springer-Verlag.
- Reviewer Agencia de Gestio d'Ajuts' Universitaris i de Recerca, Catalonia, Spain.
- Reviewer Agencia Gallega de Calidad, Galicia, Spain.
- Reviewer Universidad Complutense de Madrid, Spain.

8.1. Referee for the next Journals

- 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

8.2. Other

- Member: primer Tribunal Nacional de Habilitación de Economía Aplicada (Universidad de Alcalá de Henares)
- Member is several Committees: Catedrático de Universidad, Titular de Universidad, Contratado Doctor, Ayudante Doctor y Ayudante.
- President, Tribunales de Pruebas de Acceso a la Universidad (2002 y 2003), University of Cantabria.

- President, Tribunal para la obtención de la venia investigadora del Programa de Doctorado Inter-departamental con Mención de Calidad "Matemáticas y sus Aplicaciones", University of Cantabria.

9. Participation in Meetings

9.1. Participation as Key Note Speaker

1. 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
2. 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.
3. 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.
4. 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.
5. 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.
6. 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).

9.2. Participation as Speaker or Invited Speaker

1. Sarabia, J.M., Gómez-Déniz, E., Prieto, F., Jordá, V.(2015). Aggregation of Dependent Risks in Mixtures of Exponential Distributions. *21st International Congress on Insurance: Mathematics and Economics IME*, Vienna, July 2017.
2. 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*, 22-23 May 2017, Aegina, Greece.
3. 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.

4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. Sarabia, J.M., Jordá, V., Prieto, F. (2015). Inequality of opportunity in Spain: a parametric approach. *Sixth ECINEQ Meeting*, Luxembourg, July 2015.
12. 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.
13. 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.
14. 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.
15. 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.

16. 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.
17. 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.
18. 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.
19. 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.
20. Sarabia, J.M., Jordá, V. (2014). Curvas de Lorenz bidimensionales: una revisión de propuestas recientes. *XXII Jornada ASEPUMA-X Encuentro Internacional*, Málaga, Julio 2014.
21. 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.
22. Sarabia, J.M., Jordá, V. (2013). Modeling Bivariate Lorenz Curves with Applications to Multidimensional Inequality in Well-Being. *Fifth ECINEQ Meeting*, Bari, Italy, 2013
23. 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.
24. 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.
25. 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.
26. Sarabia, J.M., Prieto, F., Trueba, C. (2012). Classes of Bivariate Distributions with Fisk Conditionals. *SEIO Meeting*, Madrid, April 2012.
27. 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.

28. Sarabia, J.M. (2011). Reliability Properties in Some Classes of Conditionally Specified Models. *ICAPS 2011*, Hong Kong, December 28–31, 2011, China. Invited Speaker
29. 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.
30. 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.
31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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 AGSOE: Traffic Dynamics, Urban and Regional Systems, Dresden, Germany.
37. 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.
38. Sarabia, J.M., Gómez-Déniz, E. (2007). “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.

39. Gómez-Déniz, E., Sarabia, J.M. (2007). "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.
40. Sarabia, J.M., Gómez-Déniz, E., Sarabia, M. (2007). "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.
41. Gómez-Déniz, E., Sarabia, J.M. (2007). "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.
42. Sarabia, J.M. (2006). "Una Nueva Clase de Distribuciones Multivariantes". VI Seminario ASEPELT Modelos de Generación de Distribuciones, Universidad de Alcalá de Henares, Septiembre de 2006. Invited Speaker.
43. Sarabia, J.M. (2006). "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.
44. Sarabia, M., Fanjul, J.L., Sarabia, J.M. (2006). "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.
45. Sarabia, M., Sarabia, J.M. (2006). "A Hamiltonian Model in Non-Overlapping Generations: Family Business Behaviour". *Sixty-First International Atlantic Economic Conference*. Berlin, Germany, 15-19 Marzo de 2006.
46. Sarabia, J.M., Guillén, M. (2006). "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.
47. Gómez-Déniz, E., Calderín, E., Sarabia, J.M. (2006). "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.
48. Sarabia, J.M. (2005). "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.

49. Sarabia, J.M. (2005). ‘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.
50. Gómez-Déniz, E., Calderín, E., Sarabia, J.M. (2005). “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.
51. Sarabia, J.M., Castillo, E., Pascual, M., Sarabia, M. (2005). “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.
52. Sarabia, M., Sarabia, J.M., (2004). “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).
53. Sarabia, M., Corro, J. Sarabia, J.M., (2004). “Missing Fundamental Illusion. A New Theory Based on Japanese Knowledge Management”. *International Conference on Knowledge Management*, Singapore, December 2004.
54. Sarabia, J.M., Castillo, E. (2004). “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.
55. Castillo, E., Hadi, A.S., Castillo, C., Sarabia, J.M. (2004). “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.
56. Pascual, M., Cantarero, D., Sarabia, J.M. (2004). “Trends in Income Inequality in the European Union: Implications for Health Inequalities”, *European Regional Science Association*, Oporto (2004).
57. Gómez, E., Sarabia, J.M., Vázquez, F.J. (2004). “Computing BMP Using Conditional Specification Model”. *Compstat’2004 Symposium*. Praga, Agosto 2004.
58. Pascual, M., Cantarero, D., Sarabia, J.M. (2004). “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).

59. Pascual, M., Cantarero, D., Sarabia, J.M. (2004). 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)
60. Pascual, M., Sarabia, J.M. (2004). Factores Determinantes de la Distribución Personal de la Renta: Un Estudio Empírico. *XI Encuentro de Economía Pública*, Barcelona, 2004. (with M. Pascual)
61. Pascual, M., Cantarero, D., Sarabia, J.M. (2004). 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.
62. Pascual, M., Sarabia, J.M. (2004). La distribución personal de la renta: Factores condicionantes y evidencia empírica. *VII Encuentro de Economía Aplicada*, Vigo, 2004.
63. Pascual, M., Cantarero, D., Sarabia, J.M. (2004). Impacto de la desigualdad de la renta sobre los indicadores de salud: un estudio empírico. *VII Encuentro de Economía Aplicada*, Vigo.
64. Sarabia, J.M., Pascual, M. (2003). "Modelling Inequality using the Generalized Gupta Lorenz Curve", *54th Session of the International Statistical Institute (ISI)* in Berlin, (2003).
65. Gómez, E., Sarabia, J.M., Vázquez, F.J., Martél, M. (2003). "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).
66. Pascual, M., Cantarero, D., Sarabia, J.M. (2003). "Income Inequality and Population Health: Could a Suitable Relation be Established Between Income and Health?", *Xth Meeting of APDR* held in Evora (2003).
67. Sarabia, J.M., Castillo, E. (2003). "Extensiones Multivariantes de la Distribución de Waring Generalizada". *Actas del XXVII Congreso Nacional de Estadística e Investigación Operativa*, Lleida, 2003.
68. Sarabia, J.M., Pascual, M. (2001). "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.
69. Pascual, M., Sarabia, J.M. (2001). "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, 2001.

70. Pascual, M., Sarabia, J.M. (2000). "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.
71. "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.)
72. Sarabia, J.M., Pascual, M. (2000). "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.
73. "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.)
74. Sarabia, J.M., Castillo, E. (2000). "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..
75. Sarabia, J.M., Pascual, M. (2000). "Una Nueva Clase de Curvas de Lorenz". *Actas del XXV Congreso Nacional de Estadística e Investigación Operativa*, Métodos Econométricos, 409-410, 2000.
76. Sarabia, J.M., Castillo, E., Slottje, D.J. (1998). "An Exponential Family of Lorenz Curves". American Statistical Association Meeting, Dallas, Texas, USA, (1998).
77. Sarabia, J.M., Castillo, E. (1998). "Comparación de dos Distribuciones Exponenciales: una Solución Bayesiana. *Actas del XXIV Congreso Nacional de Estadística e Investigación Operativa*, Métodos Bayesianos, 239-240, 1998.
78. Castillo, E., Sarabia, J.M., Cobo, A., Pruneda, E. (1998). "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.
79. Sarabia, J.M., Castillo, E. (1998). "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, 1998.
80. Castillo, E., Sarabia, J.M., Gómez, P., Solares, C. (1997). "Uncertainty Analyses in Fault Trees and Bayesian Networks Using FORM/ SORM. *Environmetrics Society*, Insbruck, (1997).

81. Arnold, B.C., Castillo, E., Sarabia, J.M. (1997). "Some Alternative Bivariate Extreme Models". *Environmetrics Society, Insbruck, (1997)*. (with B.C. Arnold and E. Castillo).
82. Sarabia, J.M. (1997). "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.
83. Sarabia, J.M., Castillo, E. (1997). "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.
84. Sarabia, J.M., Castillo, E. (1997). "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).
85. Arnold, B.C., Castillo, E., Sarabia, J.M. (1995). "Priors of Convenience". *International Society For Bayesian Analysis. Third World Meeting, Oaxaca, Mexico, (1995)*.
86. Castillo, E., Hadi, A.S., Sarabia, J.M. (1995). "A Method for Estimating Lorenz Curves". *Actas del XXII Congreso Nacional de Estadística e Investigación Operativa*, 131-132, 1995.
87. Sarabia, J.M., Castillo, E. (1995). "Estimación de la Distribución de Durling-Pareto con Medidas Repetidas". *Actas del XXII Congreso Nacional de Estadística e Investigación Operativa*, 255-256, 1995.
88. Coto, P., Sarabia, J.M. (1995). "Evolución Reciente de los Tipos de Interés Nominales: un Análisis de sus Determinantes". *Actas del V Congreso Nacional de Economía*, 585-594, 1995.
89. Sarabia, J.M. (1994). "Distribuciones Multivariantes con Distribuciones Condicionadas t de Student". *Actas del XXI Congreso Nacional de Estadística e Investigación Operativa*, 37-38, 1994.
90. Coto, P., Sarabia, J.M. (1994). "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.
91. Coto, P., Sarabia, J.M. (1994). "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.
92. Rodríguez-Valverde, V., Sarabia, J.M., et al. (1994). "Indications of Temporal Artery Biopsy in Patients with Polymyalgia Rheumatica Based on the Clinical ACR Criteria for Classification of GCA". *Abstracts 58th Annual Scientific Meeting American College of Rheumatology*, 1994.

93. Sarabia, J.M. (1991). "Algunas Propiedades del Modelo Condicional Normal Centrado". *Actas del XIX Congreso Nacional de Estadística e Investigación Operativa*, 55-57, 1991.
94. Sarabia, J.M., Castillo, E. (1991). "Extensiones Bivariantes de la Familia Logaritmo-Exponencial". *Actas de las XV Jornadas Hispano-Lusas de Matemáticas*, Sección de Estadística, 127-132, 1991.
95. Sarabia, J.M., Castillo, E. (1991). "Caracterización de Distribuciones Bivariantes con Condicionadas Tipo Beta". *Actas de las XV Jornadas Hispano-Lusas de Matemáticas*, Sección de Estadística, 121-126, 1991.
96. Sarabia, J.M., Sarabia, J.M., and López, C. (1990). "Sobre los Requerimientos de la Empresa". *Actas de las II Jornadas sobre Economía de la Educación*, 56-71, 1990.
97. Sarabia, J.M., Sarabia, J.M., and López, C. (1989). "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.
98. Sarabia, J.M., Sarabia, J.M., and López, C. (1989). "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.
99. Sarabia, J.M., Castillo, E. (1989). "Una Familia Triparamétrica para Aproximar Distribuciones de Extremos". *Actas de las XIV Jornadas Hispano-Lusas de Matemáticas*, Sección de Estadística, 235-239, 1989.
100. Sarabia, J.M., Castillo, E. (1989). "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.
101. Sarabia, J.M., Sarabia, J.M., and López, C. "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.)
102. Sarabia, J.M., Castillo, E. (1988). "Aproximación Penúltima de Extremos". *XIII Jornadas Hispano Lusas de Matemáticas*, Sección de Estadística, 1988.
103. Castillo, E., Ruiz, J., Fernández, A., Sarabia, J.M. (1988). "Modelo Markoviano para el Análisis de Fatiga en Elementos Longitudinales". *Abstracts de las XIII Jornadas Hispano Lusas de Matemáticas*, Sección de Estadística, 1988.
104. Sarabia, J.M. (1987). "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.

9.3. Recent Invited Seminars

- University of La Laguna, Santa Cruz de Tenerife, November 2017, Spain; 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, Japan, January 2015; Nottingham Trent University, UK, May 2014; University of Jaén; University of Reading, UK; University of Gottingen, Germany; Universidad de Barcelona; 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.

10. Other Activities

10.1. Ph.D. Supervision Finished

- 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. At the present: acreditada como Prof. Contratada Doctor.
- 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.). **Premio Extraordinario de Doctorado. Premio Universidad de Cantabria** a la mejor Tesis Doctoral en Ciencias Sociales. At the present: Prof. Ayudante Doctor acreditada como Contratada Doctor.
- 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. **Premio Universidad de Cantabria** a la mejor Tesis Doctoral en Ciencias Sociales. At the present: Prof. Titular de Universidad.
- 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-dirigida con M. Sarabia. At the present: Prof. Contratada Doctor.

- Pascual, M. (2003). “Ordenaciones Estocásticas y Curvas de Lorenz en Familias Paramétricas de Distribuciones”, PhD. in Economics, 2003, “Cum Laude”. At the present: Prof. Titular de Universidad.

10.2. Conference Organization Activities

- Co-Organizer of the International Meeting “RISK 2018, Reunión de Investigación en Seguros y Gestión de Riesgos”, Santander, Abril 2018.
- Organizer of the Local Meeting “RIESGO-2007: RISK-2007, 2^a 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 Committee: “RIESGO-2005: 1^a Reunión de Investigación en Seguros y Gestión de Riesgos”. Barcelona, 6-7 de Octubre de 2005.
- Member of the Scientific Committee: “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 Local Conference: “Modelos de Generación de Distribuciones. Propiedades y Aplicaciones”, en Santander, Mayo 2002. Entidades Patrocinadoras: Ministerio de Ciencia y Tecnología, Asepelt, Universidad de Cantabria.

10.3. Member in Ph.D. Committees

- University of Barcelona: Economics (2)
- University of Cádiz: Mathematics (1)
- University of Cantabria: Economics (3), Business Administration (2), Mathematics (5)
- University of Extremadura: Mathematics (1)
- University of Las Palmas de Gran Canaria: Economics (2)
- University of Murcia: Mathematics (1)

- Universidad Nacional de Educación a Distancia UNED: Economics (1)
- University of Oviedo: Engineering (3)

10.4. Memberships

- Member of ASA, American Statistical Association (1993-2010).
- Member of SEIO, Sociedad Española de Estadística e Investigación Operativa.
- Member of ASEPELT, Asociación Española de Economía Aplicada.
- Miembro de la DGP, sección EconoPhysics.

11. Awards and Grants

11.1. Awards

- **Senior Research Award “Consejo Social, University of Cantabria”, 2010.**
- **International Award in Research in Insurance “Julio Castelo Matrán”. Fundación MAPFRE, 2008.**
- Excellency in Teaching 2007. University of Cantabria

11.2. Grants

- **Erudite Program, The Kerala State Higher Education Council, India, December 2015.**
- **Grant for Senior Researchers, Programa: “Salvador de Madariaga”, Spanish Government, Education Ministry, from Sep. 2009 to July 2010, to visit several Universities at UK.**

12. Courses Taught

- Degree: Statistics (all levels), Econometrics, Economic Forecasting.
- Diploma in European Business and Economics: Statistical Methods in Business and Economics, Since 2007, University of Cantabria.
- Courses about software R: Elementary, Basic and Advanced.
- Ph.D.: Multivariate analysis; Time series; Bayesian statistics.
- Master: “Master Universitario en Economía”, Universities of Oviedo, Cantabria y País Vasco. Program with “Mención de Calidad”. Course: Técnicas Estadísticas en Ciencias Sociales, desde 2007-08.

- Master in Banking and Finance: Statistical Applications with SPSS and Credit Scoring. Bank of Santander and University of Cantabria. Since 1997

13. Prominent Citations of Work:

1. *Handbook of Income Distribution*, (2015), Edited by Anthony B. Atkinson and Francois Bourguignon, Elsevier.
2. *Inequalities: Theory of Majorization and Its Applications* (2011), by Albert W. Marshall, Ingram Olkin, Barry C. Arnold. Second Edition, Springer, New York.
3. *Measuring Inequality* (2011), by Frank A. Cowell. July 2008, Third Edition, <http://darp.lse.uk/MI3>
4. *Life Distributions*. (2007), by A.W. Marshall and I. Olkin. Springer Series in Statistics, New York.
5. *Statistical Size Distributions in Economics and Actuarial Sciences*, by C. Kleiber and S. Kotz (2003). John Wiley, New York.
6. *Encyclopedia of Actuarial Science*. Multivariate Distributions (2004). John Wiley, New York.
7. *Encyclopedia of Statistical Science*. Multivariate Distributions and the Castillo-Galambos Functional Equation. John Wiley, New York.
8. *Statistical Modelling with Quantiles functions*, by Gilchrist, W.G. (2000). Chapman and Hall, London.
9. *A Primer on Statistical Distributions*, by N. Balakrishnan y V.B. Nevzorov (2003). Second Edition. John Wiley, New York.
10. *Probability Theory and Statistical Inference. Econometric Modeling with Observational Data*, by A. Spanos (1999). Cambridge University Press, Cambridge, UK.
11. *Multivariate Models and Dependence Concepts* by H. Joe (1997). Chapman and Hall, London.
12. *Continuous Multivariate Distributions. Volume 1: Models and Applications*, por Kotz, S., Balakrishnan, N., Johnson, N.L. (2000). Second Edition. John Wiley, New York.
13. *Subjective and Objective Bayesian Statistics: Principles, Models, and Applications*, by S.J. Press. John Wiley & Sons, 2003, New York.

14. *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.