



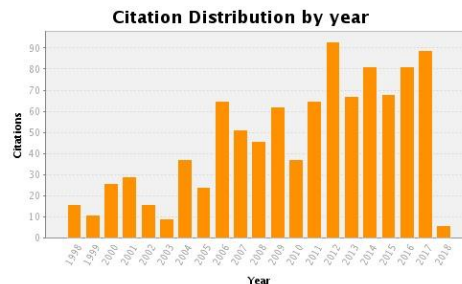
## CV: Esther Ruiz

February, 2018

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Born: 23th July 1961

As of January 2018, RePEc data based (Federal Reserve Bank of St. Louis): 10% top world authors in the fields of Econometrics (position 124 out of 1360); 2.2% top Spanish authors in the field of Economics (49/2170); 2.5% top female word economists (255 out of 9977).

As of February 2018, JCR number of citations: 899 (h-index 12)



As of February 2018, Google Scholar number of citations: 3780 (h-index 21)

## Education

Ph.D., London School of Economics, 1992. Thesis: "Heterocedasticity in financial time series". Supervisor: Professor Andrew C. HARVEY.

M.Sc., London School of Economics, 1988, Statistics.

B.A., Universidad del País Vasco, 1984, Economics and Business.

## Academic Appointments

Full Professor of Econometrics, Statistics Department, Universidad Carlos III de Madrid, 2008-present

Associate Professor of Econometrics, Statistics Department, Universidad Carlos III de Madrid, 1994-2008.

Visiting Professor of Econometrics, Statistics Department, Universidad Carlos III de Madrid, 1992-1994.

Lecturer, Statistics Department, London School of Economics, 1991-1992.

Lecturer, Statistics Department, Universidad del País Vasco, 1985-1987.



## Editorial Activities

Associate Editor, *Computational Statistics & Data Analysis*, 2007-2010

Invited Editor, *Annals of Computational Econometrics (Computational Statistics & Data Analysis)*, 2010-2013

Associate Editor, *Latin America Economic Review*, 2018-present

Co-Editor, *International Journal of Forecasting*, 2009-present

### Editor of Journal Special Issues

4. Flash Indicators, with Dean Croushore and Miriam Scaglione, *International Journal of Forecasting*, 2013, vol. 29.

3. Statistical Signal Extraction and Filtering, with S. Pollock, T. Proietti and H. Weinert, *Computational Statistics and Data Analysis*, 2013, vol. 58.

2. The Predictability of Financial Markets, with N. Crato, *International Journal of Forecasting*, 2012, 28, 1-2.

1. Nonlinearities, Business Cycles and Forecasting, with A. García-Ferrer, J. De Gooijer y P. Poncela, *International Journal of Forecasting*, 2005, vol. 21, 4, 623-808.

**Referee for other journals:** *Biometrika*; *Brazilian Journal of Probability and Statistics*; *Communications in Statistics: Theory and Methods*; *Economía Mexicana. Nueva Epoca*; *Economic Bulletin*; *Economic Modelling*; *Economics Letters*; *Econometric Reviews*; *International Journal of Forecasting*; *Journal of Applied Econometrics*; *Journal of Applied Probability and Statistics*; *Journal of Business & Economic Statistics*; *Journal of Computational Statistics & Data Analysis*; *Journal of Econometrics*; *Journal of Economic Surveys*; *Journal of Empirical Finance*; *Journal of Financial Econometrics*; *Journal of International Money and Finance*; *Journal of Statistical Planning and Inference*; *Journal of the American Statistical Association*; *Journal of the Royal Statistical Society (A)*; *Journal of Time Series Analysis*; *Quantitative Finance*; *Review of Economics and Statistics*; *Studies in Nonlinear Dynamics & Econometrics*; *The Econometrics Journal*; *The Economic Journal*; *The European Journal of Finance*.

## Publications

### Articles in journals

41. MGARCH models: Trade-off between feasibility and flexibility, 2018, *International Journal of Forecasting*, 34, 45-63.

40. Robust bootstrap forecast densities for GARCH returns and volatilities, 2017, with C. Trucíos and L.K. Hotta, *Journal of Statistical Computation and Simulation*, 87(16), 3152-3174

39. Threshold stochastic volatility models, 2017, with X. Mao and M.H. Veiga, *International Journal of Forecasting*, 33(4), 1105-1123

38. Model uncertainty and the forecast accuracy of ARMA models: A survey, in press, with J.H.G. Mazzeu and M.H. Veiga, *Journal of Economic Surveys*



37. Determining the number of factors after stationary univariate transformations, 2017 with F. Corona and P. Poncela, *Empirical Economics*, 53, 351-372
36. Identification of asymmetric conditional heteroscedasticity in the presence of outliers, 2016, with Carnero, M.A. and A. Pérez, *SERIEs*, 7, 179-201
35. Frontiers in VaR forecasting and backtesting, 2016, with Nieto, M.R., *International Journal of Forecasting*, 32, 475-501.
34. The uncertainty of conditional returns, volatilities and correlations in DCC models, 2016, with Fresoli, D., *Computational Statistics & Data Analysis*, 100, 170-185.
33. Bootstrap Multi-step Forecasts of Non-Gaussian VAR Models, 2015, joint with D. Fresoli and L. Pascual, *International Journal of Forecasting*, 31(3), 834-848.
32. Comparing univariate and multivariate models to forecast portfolio Value-at-Risk, 2013, joint with Santos, A.A.P. and F.J. Nogales, *Journal of Financial Econometrics*, 11(2), 400-441.
31. Optimal portfolios with minimum capital requirements, 2012, joint with Santos, A.A.P., F.J. Nogales and D. van Dijk, *Journal of Banking and Finance*, 36(7), 1928-1942.
30. GARCH models with leverage effect: differences and similarities, 2012, joint with Rodríguez, M.J., *Journal of Financial Econometrics*, 10(4), 637-668.
29. Estimating and forecasting GARCH volatility in the presence of outliers, 2012, joint with Carnero, M.A. and D. Peña, *Economics Letters*, 114, 86-90
28. Bootstrap prediction mean squared errors of unobserved states based on the Kalman filter with estimated parameters, 2012, joint with Rodríguez, A., *Computational Statistics & Data Analysis*, 56, 62-74
27. Maximally autocorrelated power transformations: a closer look at the properties of stochastic volatility models, 2012, joint with Pérez, A., *Studies in Nonlinear Dynamics & Econometrics*, 16.2
26. Prediction intervals in conditionally heteroscedastic time series with stochastic components, 2011, joint with Pellegrini, S. and A. Espasa, *International Journal of Forecasting*, 27, 308-319.
25. Conditionally heteroscedastic unobserved component models and their reduced form, 2010, with Pellegrini, S. and A. Espasa, *Economics Letters*, 107(2), 88-90.
24. A note on the properties of power-transformed returns in long-memory stochastic volatility models with leverage effect, 2009, with Pérez, A. and Veiga, H., *Computational Statistics & Data Analysis*
23. Testing for conditional heteroscedasticity in the components of inflation, 2009, with C. Broto, *Studies in Nonlinear Dynamics & Econometrics*, 13.2
22. Bootstrap Prediction Intervals in State Space Models, 2009, with A. Rodríguez, *Journal of Time Series Analysis*, 30(2), 167-178.
21. Modelling long-memory volatilities with leverage effect: A-LMSV versus FIEGARCH,



- 2008, with H. Veiga, *Computational Statistics & Data Analysis*, 52(6), 2846-2862.
20. Effects of outliers on the identification and estimation of GARCH models, 2006, with M.A. Carnero and D. Peña, *Journal of Time Series Analysis*, 28(4), 471-497.
19. Bootstrap prediction for returns and volatilities in GARCH models, 2006, with L. Pascual and J. Romo, *Computational Statistics & Data Analysis*, 50(9), 2293-2312.
18. Unobserved component models with asymmetric conditional variances, 2006, with C. Broto, *Computational Statistics & Data Analysis*, 50(9), 2146-2166.
17. A powerful test for conditional heteroscedasticity for financial time series with highly persistent volatilities, 2005, with J. Rodríguez, J., *Statistica Sinica*, 15, 505-526.
16. Bootstrap prediction intervals for power-transformed time series, 2004, with L. Pascual and J. Romo, *International Journal of Forecasting*, 21, 219-23.
15. Estimation methods for Stochastic Volatility models: A survey, 2004, with C. Broto, *Journal of Economic Surveys*, 18, 613-649
14. Bootstrap predictive inference for ARIMA processes, 2004, with L. Pascual, L. and J. Romo, *Journal of Time Series Analysis*, 25, 449-465
13. Persistence and kurtosis in GARCH and Stochastic Volatility Models, 2004, with M.A. Carnero and D. Peña, *Journal of Financial Econometrics*, 2, 319-342
12. Properties of the sample autocorrelations of non-linear transformations in long memory stochastic volatility models, 2003, with A. Pérez, A., *Journal of Financial Econometrics*, 1(3), 420-444
11. Asymmetric long memory GARCH: A reply to Hwang's model, 2003, with A. Pérez, *Economics Letters*, 78(3), 415-422
10. Relaciones dinámicas en el mercado internacional de carne de vacuno, 2002, with N. Hernández and C. Pañeda, *Revista de Economía Aplicada*, 10(29), 137-149
9. Modelos de memoria larga para series temporales económicas y financieras, 2002, with A. Pérez, *Investigaciones Económicas*, 26(3), 359-410
8. Bootstrapping financial time series, 2002, with L. Pascual, *Journal of Economic Surveys*, 16, 271-300
- Reprinted** in *Contributions to Financial Econometrics: Theoretical and Practical Issues*, 2002, M. McAleer and L. Oxley (eds.), Blackwell
7. Outliers and Conditional Autoregressive Heteroscedasticity in time series, 2001, with M.A. Carnero and D. Peña, *Estadística*, 53, 143-213.
6. Finite sample properties of a QML estimator of Stochastic Volatility models with long memory, 2001, with A. Pérez, *Economics Letters*, 70(2), 157-164
5. Effects of parameter estimation on prediction densities: A bootstrap approach, 2001, with L. Pascual, L. and J. Romo, *International Journal of Forecasting*, 17(1), 83-103
4. Stock Market Regulations and Internacional Financial Integration: the case of Spain,



1995, with J.I. Peña, *European Journal of Finance*, 1, 367-382

3. Quasi-Maximum Likelihood Estimation of Stochastic Variance Models, 1994, *Journal of Econometrics*, 63, 289-306

**Reprinted** in *Recent developments in Time Series*, 2003, P. Newbold and S.J. Leyburne (eds.), Edgard Elgar.

2. Multivariate Stochastic Variance Models, 1994, with A.C. Harvey and N.G. Shephard, *Review of Economic Studies*, 61, 247-264.

**Reprinted** in *ARCH: Selected readings*, 1995, R.F. Engle (ed.), Oxford University Press.

**Reprinted** in *Recent developments in Time Series*, 2003, P. Newbold and S.J. Leyburne (eds.), Edgard Elgar.

**Reprinted** in *Selected Readings for Stochastic Volatility*, 2005, N.G. Shephard (ed.), Oxford University Press.

**Reprinted** in *Volatility*, 2018, T.G. Andersen and T. Bollerslev (eds.), Edward Elgar.

1. Unobserved Component Time Series Models with ARCH Disturbances, 1992, with A.C. Harvey and E. Sentana, *Journal of Econometrics*, 52(1/2), 129-158

### Articles in books

3. Small versus big-data factor extraction in Dynamic factor models: An Empirical assessment, 2015, with P. Poncela, en E. Hillebrand and S.J. Koopman (editores), *Advanced Econometrics*, Vol. 35, Dynamic Factor Models, Emerald Publishing Group

2. More is not always better: Kalman filtering in dynamic factor models, 2015, with P. Poncela, in S.J. Koopman y N.G. Shephard (eds.), *Unobserved Components and Time Series Econometrics*, Oxford University Press.

1. An overview of probabilistic and time series models in finance, 2005, with A. Balbás and M.R. Romera, in Baeza-Yates, R., J. Glaz, H. Gzil, J. Hüsler and J.L. Palacios (eds.), *Recent Advances in Applied Probability*, Springer.

### Other publications

16. Introduction to Flash Indicators, 2013, with M. Scaglione y D. Croushore, *International Journal of Forecasting*, 29, 642-643

15. Can we evaluate the predictability of financial markets?, 2012, with Nuno Crato, *International Journal of Forecasting*, doi 10.1016/j.ijforecast.2011.02.002

14. Estimando relaciones entre variables económicas (utilizando integrales, límites, inversión de matrices, maximización numérica y derivadas), 2011, *Matematicalia*, 7(1)

13. Entrevista con Profesor Andrew Harvey, 2011, *BIAM*, 200

12. El efecto de la crisis sobre la volatilidad y el riesgo del IBEX35, 2010, with M.R. Nieto, *BIAM*, 186, 79-87

11. Modelos de volatilidad estocástica: Una alternativa atractiva y factible para modelizar la evolución de la volatilidad, 2008, with H. Veiga, *Anales de Valladolid*, 18, 1-59.



10. Interview with Prof. Rob Engle, 2007, *BIAM*, 159, 64-66
9. Comments on "Band-limited stochastic processes in discrete and continuous time" by D.S.G. Pollock, 2007, Proceedings of the 56<sup>th</sup> Session of the ISI. The Bulletin of the International Statistical Institute.
8. Introduction to nonlinearities, business cycles, and forecasting, 2005, with A. García-Ferrer, A., J.G. De Gooijer and P. Poncela, *International Journal of Forecasting*, 21, 623-808
7. Robert Engle y Clive Granger. Métodos modernos de análisis de series temporales, 2004, with A. Espasa, *Economistas*, no. 100 extra, 382-384
6. QML and GMM estimators of stochastic volatility models: Response to Andersen and Sorensen, 1997, *Journal of Econometrics*, 76, 405
5. STAMP 5.0: Un programa para el análisis de series temporales, 1997, *Revista de Economía Aplicada*, 5, 175-193
4. Comment on "Bayesian Analysis of Stochastic Volatility models", by E. Jacquier, N.G. Polson y E. Rossi, 1994, with A.C. Harvey, *Journal of Business and Economic Statistics*, 12(4), 402-403.
3. Modelos para series temporales heterocedásticas, 1994, *Cuadernos Económicos del ICE*, 56, 73-108
2. Comments on "Métodos Cuantitativos para el Análisis de la Coyuntura Económica", by A. Espasa and J.R. Cancelo, 1993, *Estadística Española*, 35(133), 467-469
1. Comments on "Guía para la estimación de modelos ARCH", by A. Novales and M. Gracia-Díez, 1993, *Estadística Española*, 35(132), 68-73

## Working papers

10. Estimating non-stationary common factors: implications for risk sharing, with F. Corona and P. Poncela, Universidad Carlos III de Madrid, Departamento de Estadística, WP 17-02 (Statistics and Econometrics)
9. Measuring the uncertainty of principal components in dynamic factor models, with J. De Vicente, Universidad Carlos III de Madrid, Departamento de Estadística, WP 16-14 (Statistics and Econometrics)
8. A bootstrap approach for generalized autocontour testing, with J.H.G. Maezzu and M.H. Veiga, Universidad Carlos III de Madrid, Departamento de Estadística, WP 16-11 (Statistics and Econometrics)
7. Score driven asymmetric stochastic volatility, with Xiuping, M. and M.H. Veiga, Universidad Carlos III de Madrid, WP 14-26 (Statistics and Econometric Series 18)
6. One for all: Nesting asymmetric stochastic volatility models, with Mao, X. and H. Veiga, Universidad Carlos III de Madrid, WP 13-11
5. Bootstrap prediction intervals for VaR and ES in the context of GARCH models, with M.R. Nieto, Universidad Carlos III de Madrid, WP 10-05



4. Comparing sample and plug-in moments in asymmetric GARCH models, with Rodríguez, M.J., Universidad Carlos III de Madrid, WP 10-41
3. Modelling intra-daily volatility by functional data analysis: an empirical application to the Spanish stock market, 2009, with Alva, P.K. and J. Romo, Universidad Carlos III de Madrid, WP 09-28
2. Measuring Financial risk: Comparison of alternative procedures to estimate VaR and ES, 2008, with Nieto, M.R., Universidad Carlos III de Madrid, WP 08-73(26)
1. Detecting level shifts in the presence of conditional heteroscedasticity, 2003, with M.A. Carnero and D. Peña, Universidad Carlos III de Madrid, WP 03-63(13).

## **Ph.D. Supervision**

### **Ph.D. in Progress**

1. Javier de Vicente, Dpto. De Estadística, Universidad Carlos III de Madrid

### **Ph.D. thesis**

17. Francisco Corona, July 2017, Non-stationary dynamic factor models, co-supervised with P. Poncela, Dpt. of Statistics, Universidad Carlos III de Madrid, Sobresaliente Cum Laude por unanimidad
16. Joao Henrique Goncalves Mazzeu, December 2016, Topics in density forecast in parametric univariate time series models, co-supervised with M.H. Veiga, Dpt. De Estadística, Universidad Carlos III de Madrid, Sobresaliente Cum Laude por unanimidad
15. Daniel de Almeida, Septiembre 2016, Essays on expected equity returns and volatility: modeling and prediction, co-supervised with L. Hotta, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente Cum Laude por unanimidad
14. Carlos Trucíos, Agosto 2016, Bootstrap forecast densities in univariate and multivariate volatility models, co-supervised with L. Hotta, Instituto de Matematica, Estadística e Computacao Cientifica, Universidade Estadual de Campinas, Brasil, Sobresaliente Cum Laude por unanimidad
13. Julieta Fuentes, March 2015, Essays on forecasting with partial least squares methods, co-supervised with P. Poncela y J. Rodríguez, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente Cum Laude por unanimidad
12. Xiuping MAO, March 2015, Asymmetric stochastic volatility models, Dpto. de Estadística, Universidad Carlos III de Madrid, co-supervised with M.H. Veiga, Sobresaliente Cum Laude por unanimidad
11. Diego FRESOLI, 2014, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
10. María José RODRÍGUEZ, 2011, Volatility models with leverage effects, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.



9. María Rosa NIETO, 2010, Estimación de riesgo financiero, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
8. Andre SANTOS, 2010, joint with Javier Nogales, Multivariate volatility models in financial risk management and portfolio selection, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
7. Alejandro RODRÍGUEZ, 2010, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
6. Santiago PELLEGRINI, 2009, joint with A. Espasa, Predicción en modelos de componentes inobservados con heterocedasticidad condicional, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
5. Carmen BROTO, 2004, Estimación de modelos de volatilidad estocástica y modelos de componentes inobservados condicionalmente heterocedásticos, Dpto. de Estadística, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
4. Ángeles CARNERO, 2003, joint with D. Peña, Heterocedasticidad condicional, atípicos y cambios de nivel en series temporales financieras, Dpto. de Estadística y Econometría, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad.
3. Lorenzo PASCUAL, 2001, joint with J. Romo, Predicción bootstrap en series temporales, Dpto. de Estadística y Econometría, Universidad Carlos III de Madrid, Sobresaliente CUM LAUDE por unanimidad. Premio extraordinario del doctorado en Ingeniería Matemática.
2. Ana PÉREZ, 2000, Estimación e identificación de modelos de volatilidad estocástica con memoria larga, Dpto. de Economía Aplicada (Estadística y Econometría), Universidad de Valladolid, Sobresaliente CUM LAUDE por unanimidad. Premio extraordinario del doctorado en Ciencias Empresariales.
1. Nuria HERNÁNDEZ NANCLARES, 1999, joint with C. Pañeda, Los efectos internacionales de la política agraria común en el sector de la carne del vacuno, Dpto. de Economía Aplicada, Universidad de Oviedo, Sobresaliente CUM LAUDE por unanimidad. Premio extraordinario del doctorado en Economía.

## **Competitive research Projects (as Project leader)**

7. Indicadores económicos: predicción con incertidumbre e inestabilidad, Ministerio de Educación y Ciencia, ECO2015-70331-C2-2-R, 23.500 €.
6. Modelos econométricos para la incertidumbre: Nuevos desarrollos, Ministerio de Economía y Competitividad, ECO2012-32401, 2013-2015, 35.000 €.
5. La incertidumbre en la predicción macroeconómica y financiera: técnicas bootstrap, Ministerio de Innovación y Ciencia, ECO2009-08100 (subprograma ECON), 2010-2012, 96.000 €.
4. Predictability of Financial Markets, Universidad Carlos III de Madrid, 2009/00287/001, 2009, 2.500 €.
3. Incertidumbre en la construcción de modelos econométricos y metodologías de





predicción para series macroeconómicas y financieras ,Ministerio de Educación y Ciencia, SEJ2006-03919, 2006-2009, 97.388 €.

2. Nuevos modelos teóricos para la volatilidad de series temporales, DGICYT, Ministerio de Educación y Ciencia, PB92-0244, 1993-1996, 2.000.000 Ptas.

1. Econometric inference using simulation techniques, European Union, program "Human Capital & Mobility Project", ERB CHR XCT 94 0514, 1995-1998, 380.000 ecus

## Invited conference talks and seminars (last 10 years)

Dpto. de Economía de las Instituciones, Estadística Económica y Econometría, **Universidad de la Laguna**, *The relationship between ARIMA-GARCH and unobserved component models with GARCH disturbances*, La Laguna, February 2008; **Tinbergen Institute**, *Bootstrap forecast in conditionally heteroscedastic unobserved component models*, with A. Rodríguez, April 2008; **Universidad Carlos III de Madrid**, Departamento de Ingeniería de Sistemas y Automática, *Outliers in GARCH models*, with M.A. Carnero and D. Peña, October 2008; Dpto. de Economía Aplicada, **Universidad de Oviedo**, *Conditionally heteroscedastic unobserved component models*, with S. Pellegrini and A. Espasa, November 2008; Dpto. de Análisis Económico, **Universidad de Zaragoza**, *Bootstrap prediction in unobserved component models*, with A. Rodríguez, March 2009; Dpto. de Fundamentos del Análisis Económico, **Universidad Autónoma de Madrid**, *Procedimientos bootstrap para la predicción en modelos con componentes inobservables*, with A. Rodríguez, October 2009; Workshop on Modelling and Numerical methods in Quantitative Finance, A Coruña (Spain), October 2009; **ECARES (Bruselas)**, *Bootstrapping misspecified unobserved component models*, March 2011; **CREST (París)**, *Bootstrapping misspecified unobserved component models*, May 2011; **Banco de Chile (Santiago de Chile)**, *A further look at GARCH models with leverage effect*, July 2011; Dpto. de Estadística, **Universidad de Concepción (Chile)**, *A further look at GARCH models with leverage effect*, July 2011; Dpt. of Commerce, Finance and Sailing, **Cyprus University of Technology**, *More is not always better: back to the Kalman filter in Dynamic Factor Models*, November 2012; Dpt. of Statistics, **University of British Columbia**, (virtual seminar), *Bootstrap Forecasts*, May 2013; Dpto. de Estadística, **Universidad Nacional de Colombia**, *Stochastic volatility with leverage effects*, January 2014; CREATES, **Universidad de Aarhus**, *Bootstrap bands for conditional correlations*, February 2014; Center of Finance and Econometrics, Konstanz University, February 2015; Information Systems, Decision Sciences and Statistics (IDS) Dept., **ESSEC Business School, París**, April 2015; Nucleo de Investigacao em Políticas Económicas (**NIPE**), **Escola de Economia e Gestao, Universidade do Minho, Braga**, *Asymmetric Stochastic volatility models: properties and estimation*, October 2015; **Joint Research Center (European Commission)**, *Measuring the uncertainty of principal components in dynamic factor models*, September 2016; Workshop in New Developments in Econometrics and Time Series, Instituto de Big Data, Universidad Carlos III de Madrid, October, 2016; **Universidad de Liverpool, Management School**, March 2017; Joint statistics and econometrics workshops, **London School of Economics**, *Measuring the uncertainty of principal components in dynamic factor models*, March 2017; Workshop in New Developments in Econometrics and Time Series, University of Rome, November 2017; Institute of Econometrics and Statistics, **University of Cologne**, January 2018, *Accurate confidence bounds for Principal Component Factors*; **CREST**, May 2018.

**Keynote speaker:** Dynamic Factor Models, Meeting of the Portuguese Statistical Society, Aveiro (Portugal), November 2013; Bootstrapping prediction intervals, 6<sup>th</sup> CSDA International Conference on Computational and Financial Econometrics (CFE 2012) and 5<sup>th</sup> International Conference of the ERCIM Working Group on Computing



Statistics (ERCIM 2012), Oviedo (Spain), December 2012.

## Member of organizing committees of international meetings

European Course in Advanced Statistics on Time Series Analysis, September, 1997, San Lorenzo del Escorial; First International Institute of Forecaster`s Workshop, December 2003, Madrid; 26th International Symposium on Forecasting, June 2006, Santander; Fith International Institute of Forecaster`s Workshop, January 2009, Lisboa; Fourth International Conference on Computational and Financial Econometrics, London, December 2010; 7<sup>th</sup> International Institute of Forecaster`s Workshop, January 2011, Verbier (Switzerland); **Chair**, First Meeting on Time Series Modelling and Computation, July 2013, Universidad Carlos III de Madrid; Workshop Honouring Antoni Espasa, June 2015, Universidad Carlos III de Madrid; **Chair Program Committee** International Symposium Forecasting, June 2015, Riverside (California, EEUU); International Symposium Forecasting, June 2016, Santander.

## Administrative commitments

Chair of the Statistics department, Universidad Carlos III de Madrid, September 2011-May 2015.

Member of the Board of Directors of the International Institute of Forecasters, 2011-2017.

## Consulting and public service

### Private sector

Econometric advisor, Bankinter Bank, 2016

Econometric advisor, Caja Laboral Popular S. Coop. de Crédito, 2017.

### Public sector

Expert in Economics of the commission to evaluate of research projects of the Education Ministry of the Spanish Government, 2008.

Member of the panel of experts of the program ACADEMIA of the National Agency for research evaluation (ANECA), November 2011-June 2012.

Expert of the committee for the selection of Economists group 14 of the Bank of Spain, May 2014, May 2015, May 2016, May 2018.

### Academic sector

Member of the selection committee of post-doc positions at Center for Applied Mathematics and Economics (CEMAPRE) of the Universidad Politécnica de Lisboa, December 2007, October 2008

Member of the selection committee of researchers of IKERBASQUE, October 2008.

Member of the selection committee of excellence chairs program UC3M-Banco de Santander, December 2010.

Member of the selection committee for lecturers of Economics, Universidad Autónoma de Madrid, September 2010-September 2016.



Member of promotion committees (last 10 years):

**Full Professor:** Universidad del País Vasco (CUC8/1-D00044-6), June 2009; Universidad de Alicante (DF02623), January 2010; Universidad Carlos III de Madrid (DF000353), June 2010; Universidad de Salamanca (G053/D05305), September 2010; Universidad Carlos III de Madrid (DF000619), September 2012; Universidad de Salamanca, March 2018; Universidad del País Vasco, June 2018.

**Associate Professor:** Universidad Carlos III de Madrid (DF000444), November 2009; Universidad Autónoma de Madrid (UAM-A243TU), October 2011; Universidad Carlos III de Madrid (DF000592), July 2012; Cyprus University of Technology, November 2012; Universidad Autónoma de Madrid (UAM-A319TU), May 2014, Universidad Carlos III de Madrid, September 2015

Member of PhD thesis committees (last 10 years): Miguel Artiach, Universidad del País Vasco, 2009; Francisco Javier Eransus Armendáriz, Universidad Complutense de Madrid, February 2010; Miguel Angel Bermejo Mancera, Universidad Carlos III de Madrid, October 2011; Rocío Alvarez Aranda, Universidad de Alicante, July 2012; Hanwen Zhang, Universidad Nacional de Colombia, January 2014; Marco Bazzi, PhD School of Statistics of the University of Padua (External expert for Doctor Europeus), January, 2015; Guillermo Carlomagno, Universidad Carlos III de Madrid, May 2016; Leopoldo Catania, University of Rome, "Tor Vergata", September 2017; Johan Stax Jalobsen, University of Aarhus, January 2018.