CURRICULUM VITAE

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BIRTH: 12 - May - 1968 (Valladolid, Spain), Spanish citizen.

EDUCATION

- PhD, London School of Economics and Political Science, University of London. Supervisor: Prof. P.M. Robinson (1997).
- PhD courses in Economy, Econometrics and Statistics, Universidad Carlos III de Madrid (1993).
- PhD courses, Department of Applied Economics - Statistics and Econometrics, Universidad de Valladolid (1993).
- BSc Economics, Universidad de Valladolid (1991).

POSITIONS

- Professor (Catedrático de Universidad, Fundamentos Análisis Económico), Department of Economics, Universidad Carlos III de Madrid (since 2007).
- Associate Professor (Profesor Titular de Universidad), Department of Economics, Universidad Carlos III de Madrid (2004-2007).
- ICREA Research Professor (Institució Catalana de Recerca i Estudis Avançats). Department of Economics, Universitat Autònoma de Barcelona (2003-2004).
- Associate Professor (Profesor Titular de Universidad), Department of Statistics and Econometrics, Universidad Carlos III de Madrid (2001-2003).

- Visiting Professor, Department of Statistics and Econometrics, Universidad Carlos III de Madrid (1997-2001).
- Junior Lecturer, Department of Statistics, University of Oxford (1996-1997).
- Tutor in Statistics, Colleges St Edmund Hall and Lady Margaret Hall, University of Oxford (1997).
- Teaching Assistant, Department of Statistics, London School of Economics (1995/96 and 1996/97).
- Research Assistant, Department of Economics, London School of Economics (1994/95 and 1995/96).
- Teaching Assistant, Department of Applied Economics - Statistics and Econometrics, Universidad de Valladolid (1991).

PUBLICATIONS

Articles

1. ‘Semiparametric Gaussian Estimation of Non-Stationary Time Series’, *Journal of Time Series Analysis*, 20, 87-127, 1999.
2. ‘Non-Stationary Log-Periodogram Regression’, *Journal of Econometrics*, 91, 325-371, 1999.
3. ‘Non-Gaussian Log-Periodogram Regression’, *Econometric Theory*, 16, 44-79, 2000.
4. ‘Local Cross Validation for Spectrum Bandwidth Choice’, *Journal of Time Series Analysis*, 21, 329-361, 2000.
5. ‘Long Memory in Stock Market Trading Volume’, with I.N. Lobato, *Journal of Business and Economic Statistics*, 18, 410-427, 2000.
6. ‘Whittle Pseudo-Maximum Likelihood Estimates of Non-Stationary Time Series’, with P.M. Robinson, *Journal of the American Statistical Association*, 95, 1229-1243, 2000.
   Reprinted in *Recent Developments in Time Series*, eds. P. Newbold and S.J. Leybourne, Edward Elgar Publishing Ltd., UK, 2003.
7. ‘Edgeworth Expansions for Spectral Density Estimates and Studentized Sample Mean’, with P.M. Robinson, *Econometric Theory*, 17, 497-539, 2001.
8. ‘Trend Stationarity versus Long Range Dependence in Time Series Analysis’, with F. Marmol, *Journal of Econometrics*, 108, 25-42, 2002.
9. ‘Gaussian Semiparametric Estimation of Fractional Cointegration’, *Journal of Time Series Analysis*, 24, 345-378, 2003.
10. ‘Nonparametric Frequency Domain Analysis of Non-Stationary Multivariate Time Series’, *Journal of Statistical Planning and Inference*, 116, 209-247, 2003.
11. ‘A Simple Test for Normality for Time Series’, with I.N. Lobato, *Econometric Theory*, 20, 661-679, 2004.
12. ‘Consistent Testing of Cointegration Relationships’, with F. Marmol, *Econometrica*, 72, 1809-1844, 2004.

13. 'Trimming and Tapering Semiparametric Estimates in Asymmetric Long Memory Time Series', with J. Arteche. *Journal of Time Series Analysis*, 29, 581-611, 2005.

14. 'Sign Tests for Long Memory Time Series', with M.A. Delgado. *Journal of Econometrics*, 128, 215-251, 2005.

15. 'Distribution Free Goodness-of-fit Tests for Linear Processes', with M. Delgado and J. Hidalgo. *Annals of Statistics*, 33, 2568-2609, 2005.

16. 'Residual Periodogram Inference for Long-Run Relationships', with U. Hassler and F. Marmol. *Journal of Econometrics*, 130, 165-207, 2006.

17. 'Generalized Spectral Tests for the Martingale Difference Hypothesis', with J.C. Escanciano, *Journal of Econometrics*, 134, 151-185, 2006.

18. 'Optimal Fractional Dickey-Fuller Tests', with I.N. Lobato, *Econometrics Journal*, 9, 492-510. 2006.

19. 'Testing the Martingale Difference Hypothesis using Integrated Regression Functions', with J.C. Escanciano, *Computational and Statistical Data Analysis*, 51, 2278-2294, 2006.

20. 'Efficient Wald Tests for Fractional Unit Roots', with I.N. Lobato, *Econometrica*, 75, 575-589, 2007.

21. 'The Periodogram of Fractional Processes', *Journal of Time Series Analysis*, 28, 600-627, 2007.

22. 'Distribution-free tests of fractional cointegration', with J. Hualde, *Econometric Theory*, 24, 216-255, 2008.

23. 'Power comparison among tests for fractional unit roots', with I.N. Lobato, *Economics Letters*, 99, 152-154, 2008.

24. 'Fractional cointegration in the presence of linear trends', with F. Marmol and U. Hassler, *Journal of Time Series Analysis*, 29, 1088-1103, 2008.

25. 'A Wald test for the cointegration rank in nonstationary fractional systems', with M. Avarucci, *Journal of Econometrics*, 151, 178-189, 2009.

26. 'Distribution Free Specification Tests for Dynamic Linear Models', with M.A. Delgado and F.J. Hidalgo, *Econometrics Journal*, 12, 105-134, 2009.

27. 'Distribution-free Test for Time Series Model Specification', with M.A. Delgado, *Journal of Econometrics*, 155, 128-137, 2010.

28. 'Specification Tests of Parametric Dynamic Conditional Quantiles', with J.C. Escanciano, *Journal of Econometrics*, 159, 209-221, 2010.

29. 'Bootstrap Assisted Specification Tests for the ARFIMA Model', with M.A. Delgado and F.J. Hidalgo, *Econometric Theory*, 27, 1083-1116, 2011.

30. 'An asymptotically pivotal transform of the residuals sample autocorrelations with application to model checking', with M.A. Delgado, *Journal of the American Statistical Association*, 106, 946-958, 2011.

Chapters of Books and Comments

1. 'Autocorrelation-Robust Inference', with P.M. Robinson. *Handbook of Statistics* 15 (Volumen in *Robust Inference*), G.S. Maddala and C.R. Rao eds., Amsterdam: North-Holland, 267-298, 1997.
2. 'Semiparametric Estimation of Long-Memory Models'. *Palgrave Handbook of Econometrics*, Vol. 1. Econometric Theory, K. Patterson and T.C. Mills eds, Palgrave, MacMillan, 353-395, 2006.
3. 'Comment on "A Review on Empirical Likelihood Methods for Regression" by Song Xi Chen and Ingrid Van Keilegom', *TEST*, 18, 455-457, 2009.
4. 'Comment on "Subsampling weakly dependent time series and application to extremes"by P. Doukhan, S. Prohl and C.Y. Robert', *TEST*, 20, 480-482, 2011.

Research in Progress

1. 'Specification tests for dynamic discrete models', joint with I. Kheifets.
2. 'Predictability Tests for the Expectations Hypothesis in the Presence of MA Disturbances', joint with S. Moon.
3. 'Are the Regression Tests Overrejecting?', joint with S. Moon.
4. 'Are Foreign Excess Returns Always Predictable? Expectations Errors Revisited', joint with S. Moon.
5. 'Fractional cointegration rank estimation', joint with K. Lasak.
6. 'The Optimal Method for Pricing Bermudan Options by Simulation', joint with A. Ibañez.

OTHER RESEARCH WORKS

1. 'El gasto de los hogares en medicina y productos farmacéuticos en la Comunidad de Madrid' [Household health and pharmaceutical expenditure in the Comunidad of Madrid], with J. Ruiz-Castillo, 2003.
2. 'Tendencias Recientes de los Gastos en Sanidad de los Hogares Españoles', [Recent trends of the health expenditure of the Spanish households], with O. Cantó, C. del Río and J. Ruiz-Castillo, 2001.
3. 'Semiparametric estimation of fractionally cointegrated time series', Revista de Estadística (Statistical Review), special issue for the 23rd Meeting of European Statisticians, 399-400, 2001.
4. 'SIPREÓLICO. A Wind Power Prediction Tool for the Spanish Peninsular Power System Operation,'with J. Usaola, O. Ravelo, I. Sánchez, J. Domínguez, M.G. Lobo, F. Soto and G. González. *Proceedings of the European Wind Energy Conference*, Paris, 2002.
5. 'SIPREÓLICO. A Wind Power Prediction System Based on Flexible Combination of Dynamic Models. Application to the Spanish Power System,'with J. Usaola, O. Ravelo, I. Sánchez, J. Domínguez, M.G. Lobo, F. Soto and G. González. *Proceedings of the World Wind Energy Conference and Exhibition*, Berlin, 2002.

SUPERVISION OF PhD THESIS AND DEGREE PROJECTS

- PhD Thesis "Estimating Deterministic Trends in Long Memory Time Series". Heiko Rachinger, PhD in Economics, Universidad Carlos III (2011, expected).
- PhD Thesis "New Misspecification Tests for GARCH Model". Xuexin Wang, PhD in Economics, Universidad Carlos III (2011, expected).
- PhD Thesis "Specification Tests for Nonlinear Dynamic Models". Igor Kheifets, PhD in Economics, Universidad Carlos III (2009, expected).
- PhD Thesis "Likelihood Analysis of Fractionally Cointegrated Systems". Katarzyna Lasak, IDEA, Autónoma de Barcelona (2007).
- PhD Thesis "Specification Tests for Econometric Models of Time Series". Juan Carlos Escanciano, PhD in Economics, Universidad Carlos III (2004). Special Doctorate prize.
- MSc Project "Modeling Persistence in the Volatility of Financial Time Series". Michael Christodolou, MSc in Statistics, University of Oxford, 1997.
- Tutor of BSc Project "Application of Cluster Methods to Costumer Classification in terms of the Charge Curve". Adrian Herranz, Industrial Engineering, Universidad Carlos III, 2001.
- BSc Project "Tasa de Escolarización en la Comunidad de Madrid". A. Gómez and R. Taladriz. Statistics, Universidad Carlos III, 1998.
- BSc Project "Análisis de las Universidades Americanas utilizando Modelos Logit". F. Fernández, I. Frutos, J.C. Gómez and D. Martín. Statistics, Universidad Carlos III, 1999.
- PhD Thesis Committees: Laura Mayoral (UC3M, 2000); José Manuel Revuelta (UC3M, 2000); Maria Helena Veiga (UAB, 2004); Julius Moschitz (UAB, 2004); Marco Avarucci (Tor Vergata, 2007); Brindusa Anghel (UAB, 2007).

FUNDED RESEARCH PROJECTS

- "Migrations and Personal Income". Main Researcher: Luis M. Borge González (Universidad de Valladolid). Supported by CICYT, SEC 92-0235. 1992.
- "Econometric Time Series". Main Researcher: Peter M. Robinson (London School of Economics). Supported by the Economic and Social Research Council (ESRC), R000235892. 1994-97.
- "Empirical Processes, Smoothing Techniques and Resampling Methods for Specification and Validation of Econometric Models." Main Researcher: Miguel A. Delgado González (Universidad Carlos III). Supported by the Dirección General de Enseñanza Superior, PB95-0292. 1997-98.
- "Specification Testing of Econometric Models". Main Researcher: Miguel A. Delgado González (Universidad Carlos III). Supported by the Dirección General de Enseñanza Superior, PB98-0025. 1999-2001.
- "Recent Trends in Health Expenditures of Spanish Families". Main Researcher: Javier Ruiz-Castillo Ucelay (Universidad Carlos III). Supported by Consejería de Sanidad, Comunidad de Madrid, 2001.

- "Health Expenditures of Households in the Comunidad of Madrid, 1986-2000". Main Researcher: Javier Ruiz-Castillo Ucelay (Universidad Carlos III). Supported by Consejería de Sanidad, Comunidad de Madrid, 2003.
- "SIPREÓLICO. A Wind Prediction Tool for the Spanish Peninsular Power Operation". Main Researcher: Julio Usaola García (Universidad Carlos III). Supported by Red Eléctrica de España, 2001-02.
- "Robust Inference for Long Memory Time Series". Main Researcher: Carlos Velasco. Supported by Instituto Flores de Lemus de Estudios Avanzados en Economía, Univ. Carlos III, 2001-2002
- "Specification Testing of Econometric Models". Main Researcher: Miguel A. Delgado González (Universidad Carlos III). Supported by Dirección General de Enseñanza Superior, BEC2001-1270, 2002-2004.
- "ANEMOS. Development of a Next Generation Wind Resource Forecasting System for Optimal Integration of On-Shore and Off-Shore Wind Farms". Main Researcher: L. Kariniotakis and S. Leroy (ARMINES, France). Funded by UE (Energie 4-T2, 0J 2000/C303/II). 2002-2005.
- "Analysis of the Effects of the Wind Power on the Power Market". Main Researcher: Julio Usaola García (Universidad Carlos III). Supported by Red Eléctrica de España, 2002-03.
- "Specification Tests for Dynamic Models". Main Researcher: Carlos Velasco. Supported by Instituto Flores de Lemus de Estudios Avanzados en Economía, Univ. Carlos III, 2002-2003.
- "Tests for white noise". Main Researcher: Carlos Velasco. Supported by Instituto Flores de Lemus de Estudios Avanzados en Economía, Univ. Carlos III, 2003-2004.
- "Asistencia a clase y rendimiento académico en estudiantes de Economía". Main Researcher: Carlos Velasco. Supported by Ministerio de Educación y Ciencia, Programa de Mejora de la Calidad de la Enseñanza Superior.
- "Modelización Econométrica de la Política Monetaria". Main Researcher: Carlos Velasco. Fundación Ramón Areces. 2007-2009.

GRADUATE COURSES

- Asymptotic Theory for Econometrics. University of the Basque Country (2006).
- Time Series. International Doctorate in Economic Analysis. Universitat Autònoma de Barcelona (2003-2005).
- Econometrics. International Doctorate in Economic Analysis. Universitat Autònoma de Barcelona (2004).
- Long Memory Time Series. PhD in Economics. Universidad Carlos III de Madrid (2005).
- Econometrics II, PhD in Economics, Universidad Carlos III (2002/03).
- Econometrics I, PhD in Economics, Universidad Carlos III (2000/01, 2001/02).
- Time Series, MSc in Statistics, University of Oxford (1996/97, 1997/98).

- Sampling and Surveys, MSc in Statistics, University of Oxford (1996/97, 1997/98).
- Stochastic Processes, MSc in Statistics, University of Oxford (1996/97).

CONFERENCES AND INVITED SEMINARS

- Econometric Society European Meeting, Berlin, 1998.
- Rencontre Franco-Belge de Statisticiens, "Théorèmes limites et longue mémoire en statistiques", Marseille, 1998.
- Econometric Society European Meeting, Santiago de Compostela, 1999.
- Cowles Foundation Conference on New Developments in Time Series Econometrics, University of Yale, 1999.
- Workshop on Nonparametric, Semiparametric and Resampling Methods, Universidad Carlos III de Madrid, 2000.
- European Meeting of Statisticians, Funchal, Portugal, 2001.
- X Seminario sobre Especificación y Validación de Modelos Econométricos, Zaragoza, 2001.
- 2^o Taller de Econometría y Series Temporales, University of Basque Country, Bilbao, 2001.
- Econometric Society European Meeting, Venice, 2002.
- 13th EC^2 meeting on Model Selection and Evaluation, Bologna, 2002.
- Econometric Society European Meeting, Madrid, 2004.
- NSF-NBER Time Series Meeting, Heidelberg, 2005.
- ESF Workshop on Specification Testing, Santander, 2005.
- Cowles Foundation 75th Anniversary Conference, A New Generation of Econometricians, University of Yale, 2007.
- Econometric Society European Meeting, Budapest, 2007.
- Econometric Society European Meeting, Milan, 2008.
- NSF-NBER Time Series Meeting, Aarhus, 2008.
- Third CIREQ Time Series conference, Montreal (Canada), 2009.
- SETA Econometrics Conference 2009, University of Kioto (Japan), 2009.
- Far East And South Asia Econometric Society Meeting, University of Tokio (Japan), 2009.
- European Economic Association Meeting, Universitat Autònoma de Barcelona, 2009.
- IWAP 2010, International Workshop on Applied Probability, Universidad Carlos III de Madrid, 2010.
- EMS 2010, 28th European Meeting of Statisticians, University of Piraeus, Greece, 2010.

- Long Memory CREATES Conference, Aarhus, 2011
- Econometric Society European Meeting, Oslo, 2011.

RECEPTION OF RESEARCHERS

- Marco Avarucci, University "Tor Vergata", Rome (February 2005-December 2005).
- Ignacio N. Lobato, ITAM, Mexico (Sabbatical 2005-2006).

HONOURS, SCHOLARSHIPS AND FELLOWSHIPS

- *Econometric Theory* Multa Scripsit Award, 2011.
- Fellow of the *Journal of Econometrics*, 2010.
- Excellence Award to Young Researchers, Universidad Carlos III de Madrid (2009 and 2011).
- 21th position in Ranking of individuals by theoretical econometrics publications based on standardized page counts, 2000-2005; and 31th in Ranking of individuals by all econometrics publications, 2000-2005, in B.H. Baltagi, *Worldwide Econometrics Rankings: 1989-2005*, 2007.
- Special Remuneration Complement by Research, Teaching and Administrative Merits, Universidad Carlos III de Madrid (2002-03 & 2003-04).
- Research Evaluation (Sexenio Investigación: 1991-2000, 2001-2006).
- Teaching Remuneration Complement (Quinquenio Docencia), Universidad Carlos III de Madrid (08/10/1991-05/07/2001, 06/07/2001-05/07/2006).
- Research fellowships funded by Instituto Flores de Lemus de Estudios Avanzados en Economía, Universidad Carlos III de Madrid (2001, 2002, 2003).
- Scholarship for Studies in Economics of the "Fundación Ramón Areces" (Spain) for the completion of the doctoral thesis at the London School of Economics (October 1994 - September 1996).
- Scholarship of "Plan de Formación de Profesorado Universitario" [Plan for the Education of University Teachers] of the Spanish Ministry of Education and Science, at the Department of Applied Economics - Statistics and Econometrics, Universidad de Valladolid (January 1992 - September 1994).
- Distinction to the Best Academic Record, BSc Economics 1986-91, Universidad de Valladolid (1992).

PROFESSIONAL ACTIVITIES

- Director of Graduate Studies in Economics, Universidad Carlos III de Madrid (2007-09).
- Associate Editor *TEST* (Springer, 2009-).
- Associate Editor *Journal of Time Series Econometrics* (Berkeley Electronic Press, 2007-).

- Associate Editor *Spanish Economic Review* (Springer, 2004-2006).
- Member of the Econometrics and Empirical Economics (EEE) Program Committee of the Econometric Society European Meetings (ESEM), 2004, 2006, 2007, 2008, 2009, 2011.
- Member of the Econometrics and Empirical Economics Program Committee for the Latin American Meeting of the Econometric Society (LAMES), 2006.
- Member of the Programme Committee for the Simposio de Análisis Económico, 2006, 2007.
- Anonymous Referee for the following publications:
  Econometrica, American Economic Review, Journal of Econometrics, Econometric Theory, Econometrics Journal, Economic Letters, Statistics and Probability Letters, Investigaciones Económicas, Annals of Statistics, International Journal of Forecasting, Journal of Time Series Analysis, Review of Economic Studies, Statistical Inference for Stochastic Processes, Stochastic, Computational and Statistical Data Analysis, Stochastic Processes and their Applications, Bernoulli, Journal of Water Resources Research, The Manchester School, Estadística, Test, Communications in Statistics, Journal of Computational Finance.
- Member of the Econometric Society (since 1998).
- Member of the "Instituto Universitario de Economía", Universidad Carlos III de Madrid (2005-).
- Member of the General Assembly of Universidad Carlos III de Madrid (2002-2005).
- Member of the Self-Assessment Committee of the Department of Statistics and Econometrics, Universidad Carlos III de Madrid (2002).
- Information Technologies coordinator, Department of Statistics and Econometrics, Universidad Carlos III de Madrid (1999-2001).

1/11/2011