

Curriculum Vitae

Tommaso Proietti

1 Biographical data

Birth place and date: Rome, 6th of June 1964
Civilian status: Married to Angela Lisanti, father of Giulia (14 yrs), Elisa (9) and Margherita (6)
Citizenship: Italian
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EconPapers: <http://econpapers.repec.org/ras/ppr15.htm>

2 Education

- *Ph.D. Statistics*, The University of London, Subject: “Unobserved components in time series” (Supervisor: Prof. A.C. Harvey, Discussants: Prof. S. Hall, Prof. P. Burridge).
- *Master in Statistics*, awarded with distinction, The London School of Economics and Political Science.
- *Laurea in Economia*, cum laude, Università degli Studi di Perugia, Facoltà di Economia “Luca Pacioli”, Italy.

3 Work experience

- *Current position and affiliation* Full Professor of Economic Statistics, Dipartimento di Economia e Finanza (DEF), University of Rome, “Tor Vergata”, Italy, 2005-
- *Previous positions:*
 - Associate Professor of Business Statistics, The University of Sydney Business School, Discipline of Business Analytics, Sydney, NSW, Australia (from July 2011 to November 2012):
 - Full Professor of Economic Statistics, Dipartimento di Scienze Statistiche, University of Udine, Italy, 2002-2005.
 - Associate Professor of Economic Statistics, Dipartimento di Scienze Statistiche, University of Udine, Italy, 1998-2002.
 - Lecturer in Economic Statistics, Dipartimento di Scienze Statistiche, University of Perugia, Italy, 1990-1998.

- *Jean Monnet Fellow*, Department of Economics, European University Institute, Florence, calendar year 2002.
- Visiting Professor, University of Technology, Sydney, June-July 2001.
- Visiting Erskine Fellow, University of Canterbury, New Zealand, July-August 2010.

4 Courses taught

1. Current teaching load at the University of Tor Vergata, Rome:
 - *Finanza Quantitativa* (Quantitative Finance, in Italian), 6 credits, postgraduate *LM Economia dei Mercati e degli Intermediari Finanziari*.
 - *Business Statistics* (in English), 6 Credits, *MSc Business Administration*.
 - *Financial Econometrics* (in English), 3 Credits, *MSc Finance and Banking*.
 - *Macroeconometrics* (in English), 3 Credits, *MSc Economics*.
2. Courses taught at the University of Sydney Business School: QBUS6810 (Statistical learning and data mining), QBUS3810 (Data mining and data analysis), EC4103 (Econometrics Honours C),
3. Other undergraduate (U) and postgraduate (PG) courses taught before at the Universities of Udine, Perugia, Urbino, Rome Tor Vergata, and Rome LUISS Guido Carli: *Statistics (Statistica, U)*, *Economic Statistics (Statistica per l'analisi economica, U)*, *Econometrics (Econometria, PG)*, *Applied Econometrics (Econometria applicata, U)*, *Sampling theory with applications to marketing research (Statistica aziendale, U)*, *Time series analysis (Analisi delle serie temporali, PG)*.
4. FORMSTAT Course on *Seasonal adjustment methods and state space models*, Rome, June 1997.
5. CEPR-NASEF Summer School on *State Space Modelling with Applications to Business Cycle Analysis*, European University Institute, San Domenico di Fiesole (FI): 11-16 September 2000.
6. Course on *Unobserved Components Models for Measuring Output Gaps, Capacity Utilisation and Core Inflation*, European Central Bank, Frankfurt am Main, 10-11 June 2001.
7. SIS (*Società Italiana di Statistica*) Summer school on Time series analysis, Treviso, 2002 and 2003, Venice 2005, Salerno 2006.
8. Summer School *Modelling business cycles using state space methods*, Centro de Estudios Andaluces, Frigiliana, Spain, 26-31 July, 2004.
9. Course on *Modelling business cycles using state space methods*, ISEG - CREMAPRE , Lisbon, Portugal, 30 March - 1 April, 2005.

5 Research interests

Time series analysis and forecasting. Business cycles: dating, filtering and signal extraction. Frequency domain methods. Linear and nonlinear state space models. Locally stationary processes. Statistical learning and data mining.

6 Research Grants and Contracts

- Chief Investigator and National Coordinator of the Research Group PRIN (Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale) *Forecasting economic and financial time series: understanding the complexity and modelling structural change*.
 - Start date: 1 February 2013.
 - Duration: 36 months.
 - Cost 723,049 euros.
 - Co-funding received by the Italian Ministry of Education: 506,134 euros.
 - Research Units: Rome Tor Vergata (Tommaso Proietti); Rome La Sapienza (Marco Lippi); University of Modena (Mario Forni), University of Bologna (Alessandra Luati), University of Salerno (Michele La Rocca), University Insubria of Varese (Paolo Paruolo).
- Member and scientific coordinator of PRIN research groups:
 - 1993 (member), *La misura dei consumi privati, uno studio sull'accuratezza, coerenza e qualità dei dati*.
 - 1995 (member), *Contributi della metodologia statistica all'econometria*.
 - 1997 (member), *Strategie e tecniche di formazione dei dati microeconomici per l'analisi dei comportamenti delle famiglie e delle imprese*.
 - 1996 (local scientific coordinator), *Misura della produttività e dell'efficienza della Pubblica Amministrazione*.
 - 1999-2000 (local scientific coordinator), *Indicatori e modelli statistici per l'analisi territoriale*.
 - 1999-2000 (local scientific coordinator), *Linearità e non linearità in modelli state space: problemi di specificazione, stima, verifica di ipotesi e previsione*.
 - 2002-2003 (local scientific coordinator), *Modelli state space lineari e nonlineari: inferenza e applicazioni all'economia e alla finanza*.
 - 2004-2005 (local scientific coordinator), *Inferenza per modelli flessibili e adattivi di serie temporali*.
- Research Contracts:
 1. Research contract n. 13/2000, Sonderforschungsbereich 373, National Research Center for Quantification and Simulation of Economic Processes, Humboldt-Universität zu Berlin, 15-31 July 2000.
 2. Research contract with Istat/Ministry of the Economy and Finance for nowcasting the Italian regional accounts, years 2001-2002.
 3. Research contract European University Institute “Macroeconomic Aggregates” in coordination with Prof. Michael Artis, year 2003.
 4. Italian Ministry of Economics and Finance. Research contract for “The Role of Revisions in Output Gap Estimation”, year 2010.

7 Editorial Roles

- *Associate Editor* of the following journals:
 - *Computational Statistical and Data Analysis* (2006-)
 - *Statistical Methods and Applications* (2005-2008).
 - *Sri Lankan Journal of Applied Statistics* (2013-)
 - *Econometrics* (2012-)
- Editor of *Statistical Methods and Applications*, Section: Applications.
- *Guest Editor* of *Computational Statistical and Data Analysis* (2nd Special Issue on Statistical Signal Extraction and Filtering) and *Studies in Nonlinear Dynamics and Econometrics*.
- Regional Editor of *Palgrave-MacMillan Texts in Econometrics* Series (<http://www.palgrave.com/econometrics/>).
- Referee for the following journals: *American Statistician*, *Annals of Applied Statistics*, *Computational Statistics and Data Analysis*, *Computational Economics Journal*, *Econometrics Journal*, *Econometric Theory*, *Empirical Economics*, *International Journal of Forecasting*, *Journal of Applied Econometrics*, *Journal of Business and Economic Statistics*, *Journal of Econometrics*, *Journal of Forecasting*, *Journal of Macroeconomics*, *Journal of Multivariate Analysis*, *Journal of the American Statistical Association*, *Journal of the European Economic Association*, *Journal of Official Statistics*, *Journal of Statistical Planning and Inference*, *Journal of the Royal Statistical Society (series C)*, *Journal of Time Series Analysis*, *Journal of Time Series Econometrics*, *Oxford Bulletin of Economics and Statistics*, *Oxford Economic Papers*, *Statistica Neerlandica*, *Statistical Methods and Applications*, *Studies in Nonlinear Dynamics and Econometrics*, *Review of Economics and Statistics*, *Scandinavian Journal of Statistics*.

8 Other activities

- Member of the Scientific Committee of the following conferences:
 - 3rd World Conference on Computational Statistics & Data Analysis, Cyprus, 2005; SIS, Torino 2006,
 - ANSET, Rome, 2005;
 - ERCIM Salerno 2006,
 - 1st International Workshop on “Computational and Financial Econometrics”, 2007 Geneva.
 - 2nd International Workshop on “Computational and Financial Econometrics”, 19-21 June 2008, Neuchâtel, Switzerland
 - 3rd International Conference on Computational and Financial Econometrics (CFE’09) 29-31 October 2009, Limassol, Cyprus
 - 4th CSDA International Conference on Computational and Financial Econometrics (CFE’10) 10-12 December 2010, Senate House, University of London, UK

Chair of the Scientific Committee of the 1st First Macroeconomic Forecasting Conference, Rome, 27th March 2009.

- Member of the Governmental Commissions i) *Il sistema statistico delle imprese - A Statistical System for Enterprises*, Presidenza del Consiglio dei Ministri, Commissione per la Garanzia dell'Informazione Statistica, 1996, ii) *Le procedure di destagionalizzazione di serie storiche economiche: esperienze internazionali e pratica nell'ambito dell'ISTAT (Seasonal Adjustment Procedures: international experiences and practice within ISTAT)*, Presidenza del Consiglio dei Ministri, Commissione per la Garanzia dell'Informazione Statistica, 1999.
- Member of the ISTAT (Istituto Nazionale di Statistica) Commission *Commissione di studio sul trattamento dei dati ai fini dell'analisi congiunturale, incaricata di formulare proposte relative alle strategie da utilizzare per la destagionalizzazione delle serie storiche di fonte ISTAT (The treatment of data for short-term analysis, with respect to the seasonal adjustment of ISTAT time series)*, 1998.
- Expert member of the ISTAT Commission on *Temporal disaggregation methods for the estimation of the Italian Quarterly National Accounts*, year 2004.
- Co-chair of the ERCIM (European Research Consortium for Informatics and Mathematics) working group *Statistical Signal Extraction and Filtering*.
- Member of the following professional societies:
 - ASA: American Statistical Association
 - EABCN: Euro Area Business Cycle Network
 - SIS: Società Italiana di Statistica
- European Central Bank Consultant, years 2001 and 2002, 2005: *Estimation of potential output and the output gap for the Euro area*.

9 Selected Publications

9.1 Refereed journals

- Proietti T. and Lütkepohl H (2013). Does the BoxCox transformation help in forecasting macroeconomic time series?. *International Journal of Forecasting*, vol.29, 88–99.
- Grassi S. and Proietti T. (2013). Characterizing Economic Trends by Bayesian Stochastic Model Specification Search, *Computational Statistics and Data Analysis*, in press.
- Luati A., Proietti T. and Reale M. (2012). The Variance Profile. *Journal of the American Statistical Association*, 107, 607–621.
- Proietti, T. (2012). Seasonality, Forecast Extensions and Business Cycle Uncertainty. *Journal of Economic Surveys*, 26, 555-569.
- Proietti T. and Musso A. (2012). Growth accounting for the euro area. A structural approach. *Empirical Economics*, 43, 219-244.
- Proietti T. (2012). Discussion of “Testing Time Series Data Compatibility for Benchmarking by Benoit Quenneville and Christian Gagne”, Forthcoming, *International Journal of Forecasting*.
- Luati, A. and Proietti, T. (2011). On the equivalence of the weighted least squares and the generalised least squares estimators. *Annals of the Institute of Statistical Mathematics*, 63, 851–871.

- Proietti, T. (2011). Direct and iterated multistep AR methods for difference stationary processes, *International Journal of Forecasting*, 26, 266–280.
- Frale, C., Marcellino, M., Mazzi, G. and Proietti, T. (2011). EUROMIND: A Monthly Indicator of the Euro Area Economic Conditions, *Journal of the Royal Statistical Society - Series A*, 174, 439-470.
- Proietti, T. (2011). Estimation of Common Factors under Cross-Sectional and Temporal Aggregation Constraints, *International Statistical Review*, 79, 455–76.
- Bernardi M., Della Corte G., and Proietti T. (2011), Extracting the cyclical component in hours worked. *Studies in Nonlinear Dynamics and Econometrics*, Vol. 15: No. 3, Article 5.
- Proietti, T. (2011). Multivariate Temporal Disaggregation with Cross-Sectional constraints, *Journal of Applied Statistics*, 38, 1455–1466.
- Proietti, T. and Luati, A. (2011). Low-Pass Filter Design using Locally Weighted Polynomial Regression and Discrete Prolate Spheroidal Sequences, *Journal of Statistical Planning and Inference*, 141, 831–845.
- Proietti, T., Frale C. (2011). New proposals for the quantification of qualitative survey data. *Journal of Forecasting*, 30, 393-408.
- Grassi, S. and Proietti, T. (2010). Has the Volatility of U.S. Inflation Changed and How? *Journal of Time Series Econometrics*, Vol. 2, Iss. 1, Article 6.
- Frale, C., Marcellino, M., Mazzi, G. and Proietti, T. (2010). Survey Data as Coicident or Leading Indicators. *Journal of Forecasting*, 29, 109-131.
- Luati, A. and Proietti, T. (2010). Hyper-spherical and Elliptical Stochastic Cycles, *Journal of Time Series Analysis*, 31, 169-181.
- Ciccarelli, C., Fenoaltea, S., and Proietti T. (2010). The effects of unification: markets, policy, and cyclical convergence in Italy, 1861-1913. *Cliometrica*, 4, 269–292.
- Luati, A. and Proietti, T. (2010). On the spectral properties of matrices associated with trend filters. *Econometric Theory*, 26, 1247–1261.
- Proietti T. (2009), On the Model Based Interpretation of Filters and the Reliability of Trend-Cycle Estimates. *Econometric Reviews*, 28, 186–208.
- Proietti, T., Riani, M. (2009). Transformations and Seasonal Adjustment. *Journal of Time Series Analysis*, 30, 47–69.
- Proietti, T., Luati, A. (2008). Real Time Estimation in Local Polynomial Regression, with an Application to Trend-Cycle Analysis. *Annals of Applied Statistics*, 2, 1523-1553.
- Proietti T. and Moauro F. (2008). Temporal Disaggregation and the Adjustment of Quarterly National Accounts for Seasonal and Calendar Effects. *Journal of Official Statistics*, vol. 24, pp. 115–132
- Proietti T. (2007), Missing Data in Time Series: A Note on the Equivalence of the Dummy Variable and the Skipping Approaches, *Statistics and Probability Letters*, vol. 78, pp. 257–264
- Proietti T. (2007), Band spectral estimation for signal extraction, *Economic Modelling*, vol. 25, pp. 54–69.

- Proietti T., Musso A. and Westermann T. (2007), Estimating Potential Output and the Output Gap for the Euro Area: a Model-Based Production Function Approach, *Empirical Economics*, vol. 33, pp. 85–113.
- Proietti T. (2007), Signal extraction and filtering by linear semiparametric methods, *Computational Statistics & Data Analysis*, 52, 935–958.
- Proietti T. (2006), Trend–Cycle Decompositions with Correlated Components, *Econometric Reviews*, Vol. 25 pp. 61-84
- Proietti T. (2006), Temporal disaggregation by state space methods: Dynamic regression methods revisited, *Econometrics Journal*, Vol. 9, pp. 357-372.
- Proietti T. and Moauro F. (2006), Dynamic Factor Analysis with Nonlinear Temporal Aggregation Constraints, *Journal of the Royal Statistical Society (Series C - Applied Statistics)*, 55, 281-300.
- Proietti T. (2006), On the Estimation of Nonlinearly Aggregated Mixed Models, *Journal of Computational and Graphical Statistics*, Vol. 15, No. 1. (March 2006), pp. 18-38.
- Artis, M., Marcellino, M. and Proietti, T. (2005), Business Cycles in the New EU Member Countries and their Conformity with the Euro Area, *Journal of Business Cycle Measurement and Analysis*, Vol. 2, No. 1, 7–42.
- Proietti, T. (2005), New Methods for Dating the Business Cycle. *Computational Statistics and Data Analysis*, 49, 477-498
- Proietti T. (2005), Convergence in Italian regional per-capita GDP. *Applied Economics*, 37, 497-506.
- Proietti T. (2005), Forecasting and Signal Extraction with Misspecified Models, *Journal of Forecasting*, 24, (8), 539-556
- Artis, M., Marcellino, M. and Proietti, T. (2004), Dating Business Cycles: a Methodological Contribution with an Application to the Euro Area. *Oxford Bulletin of Economics and Statistics*, Volume 66, pp. 537-574.
- Proietti T. (2004). Seasonal specific structural time series models, *Studies in Nonlinear Dynamics and Econometrics*. Vol. 8, n. 2. Bepress, USA.
- Proietti T. (2003). Forecasting the U.S. unemployment rate, *Computational Statistics and Data Analysis*, 42, 3 ; p. 451-476..
- Proietti T. (2003). Leave-k-out diagnostics in state space models, *Journal of Time Series Analysis*, 24, 2, p 221-236
- Proietti T. (2004). Unobserved Components Models with Correlated Disturbances, *Statistical Methods and Applications*, 12, 3, 277-292.
- Proietti T., Harvey, A.C. (2000). A Beveridge Nelson Smoother, *Economics Letters*, 67, 139-146.
- Proietti T. (2000). Comparing seasonal components for structural time series models. *International Journal of Forecasting*, 16, 2, p. 247-260.
- Proietti T. (1999). Characterising Business Cycle Asymmetries by Smooth Transition Structural Time Series Models, *Studies in Nonlinear Dynamics and Econometrics*, Volume 3.3, pp. 141-156, MIT Press, Cambridge, MA.

- Proietti T. (1998). Seasonal Heteroscedasticity and Trends, *Journal of Forecasting*, Vol. 17, pp. 1-17. 16
- Proietti T. (1998). Distribution and Interpolation Revisited: a Structural Approach. *Statistica*, Anno LVIII, luglio-settembre, 1998, 3, pp. 411-432.
- Proietti T. (1998). Spurious Periodic Autoregressions. *Econometrics Journal*, Vol 1, pp. 1-23.
- Proietti T. (1997). Short Run Dynamics in Cointegrated Systems. *Oxford Bulletin of Economics and Statistics*, vol. 59, pp. 405-422.
- Proietti T. (1996). Persistence of Shocks on Seasonal Processes. *Journal of Applied Econometrics*, Vol 11, n. 4, pp. 383-398.
- Proietti T. (1995). The Beveridge-Nelson Decomposition: Properties and extensions. *Journal of the Italian Statistical Society*, 1995, 4, n. 1, p. 101-124.

9.2 Books and volumes

- A. C. Harvey and T. Proietti. *Readings in Unobserved Components Models*. Advanced Texts in Econometrics. Oxford University Press, 2005

9.3 Book Chapters

- Proietti T. and Luati A. (2013). Maximum likelihood estimation of time series models: the Kalman filter and beyond, to appear in *Handbook of research methods and applications in empirical macroeconomics*, ed. Nigar Hashimzade and Michael Thornton, E. Elgar, UK.
- Proietti T. and Grassi S. (2012). Bayesian stochastic model specification search for seasonal and calendar effects. In *Economic Time Series: Modeling and Seasonality*, ed. William R. Bell, Scott H. Holan and Tucker S. McElroy, CRC Press.
- Proietti T. (2011). Trend Estimation. In Lovric, Miodrag (Ed.) *International Encyclopedia of Statistical Science* 1st Edition., Springer.
- Proietti T. (2009). Structural Time Series Models for Business Cycle Analysis. In *Handbook of Econometrics: Vol. 2, Applied Econometrics*, Part 3.4., ed. T. Mills and K. Patterson, Palgrave, London, 2009.
- Proietti T., Luati, A. (2007). Least squares regression: graduation and filters. In M. Boumans (ed.) *Measurement in Economics: A Handbook*, Academic Press, Elsevier.
- Proietti T. (2007), Measuring Core Inflation by Multivariate Structural Time Series Models, in E. J. Kontoghiorghes and C. Gatu (eds), *Advances in Computational Economics, Finance and Management Science. Optimisation, Econometric and Financial Analysis*, pp. 205-223, Springer.
- Artis, M., Marcellino, M. and Proietti T. (2004). Dating the Euro Area Business Cycle. In L. Reichlin (editor) *The Euro Area Business Cycle: Stylized Facts and Measurement Issues*, Centre for Economic Policy Research, London.
- F.Moauro and T. Proietti (2004) An Index of Coincident Indicators for the Euro Area Based on Monthly and Quarterly Series. *Modern Tools for Business Cycle Analysis*, Eurostat, MOS (Monography in Official Statistics).

- Proietti T. (2002), State Space Decompositions with Correlated Disturbances, with applications to the Euro Area, *Modern Tools for Business Cycle Analysis*, Eurostat, MOS (Monography in Official Statistics).
- Proietti T. (2002). Forecasting with Structural Time Series Models. In *A Companion to Economic Forecasting*, M. Clements e D. Hendry (Eds.), Blackwell Publishers, Oxford.
- Proietti T. (2000), The Seasonal Adjustment of the Italian Industrial Production Series, in Seasonal Adjustment procedures, Experiences and perspectives, *Annali di Statistica*, 129, pp. 373-378, Istituto Nazionale di Statistica, Roma.
- Proietti T. (2000). The Seasonal Adjustment of SISTAN Time Series: A Comparison of Tramo - Seats and X-12-ARIMA, in Seasonal Adjustment procedures, Experiences and perspectives, *Annali di Statistica*, 129, pp. 159-176, Istituto Nazionale di Statistica, Roma.
- Proietti T. (1995). Item Nonresponse in Income Surveys - A Review with a Case Study. In *Income Distribution, Social Welfare, Inequality and Poverty*, in Volume VI of *Researches on Income Inequality*, D.J. Slottje (ed.), JAI Press, Greenwich, CT, USA.

9.4 Other publications

- Pollock D.S.G., and Proietti, T. (2007). Editorial: 2nd Special Issue on Statistical Signal Extraction and Filtering. *Computational Statistics & Data Analysis* Volume 52, Issue 2, 15 October 2007, Pages 817-820.
- Dagum, E.B. and Proietti, T. (2004). Introduction, *Studies in Nonlinear Dynamics & Econometrics*, Berkeley Electronic Press, vol. 8(2), pages 1207-1207.
- Marchini, A., and Proietti, T. (1995). The Dynamics of the Technical Efficiency of Italian Farms over the last decade. *XLIII congress of the European Association of Agricultural Economists*, Woudschoten, Netherlands, 16-18 Oct 1995.

9.5 Recent working papers

- Proietti, T. and Luati, A. (2013). The Exponential Model for the Spectrum of a Time Series: Extensions and Applications. MPRA Working paper.
- Proietti, T. and Luati, A. (2012). The Generalised Autocovariance Function. Working paper, Discipline of Business Analytics, University of Sydney Business School.
- Proietti, T. and Luati, A. (2012). Generalised Linear Spectral Models. Working paper, Discipline of Business Analytics, University of Sydney Business School.
- Proietti T. (2009). The Multistep Beveridge-Nelson Decomposition. Economics and Econometrics Research Institute (EERI) Research Paper Series, 24.
- T. Proietti and M. Riani (2007), Transformations and Seasonal Adjustment: Analytic Solutions and Case Studies (PDF) *LSE Research Reports*, No. 143. London School of Economics.

Roma, May 7, 2013

Tommaso Proietti