

Alessia Naccarato

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Current position

11/2020 Associate Professor (SC 13/D1, SSD SECS-S/01 – Statistics), Department of Economics, University of Roma Tre.

Position held

05/ 2019 – 10/ 2020 member of the CUN - National University Council

02/2005 – 10/2020: Researcher (SC 13/D1, SSD SECS-S/01 – Statistics), Department of Economics, University of Roma Tre.

09/2002 – 01/2005: Researcher, ISTAT – Italian National Institute of Statistics.

Research Grant

10/2001 – 08/2002 Bayesian Inference: Theory and Application, Department of Economics, University of Roma Tre.

Education

04/2001 Ph.D “Statistical methods for Business and Economics”, Department of Economics, University of Roma Tre.

09/1996 Degree in Statistics University of Roma “La Sapienza”

Teaching Experience

- Since 2008/2009, Statistical Methods for Economics (Ph. D), Department of Economics, University of Roma Tre.
- Since 2020/2021, Statistical Methods for Finance (adv. undergraduate), Department of Business Economics, University of Roma Tre
- Since 2009/2010, Statistical Methods for Econometrics (adv. undergraduate), Department of Economics, University of Roma Tre.
 - 2013/2014 - 2017/2018, Mathematical Statistics (adv. undergraduate), Department of Mathematics and Physics, University of Roma Tre.
 - 2011/2012 - 2017/2018, Statistics (undergraduate and adv. undergraduate), Department of Mathematics and Physics, University of Roma Tre.
 - 2007/2008-2008/2009, Computational Methods in Statistics and Econometrics (adv. undergraduate), TEMPUS Project, University of “SS. Cyril and Methodius”, Skopje, Macedonia Republic.
 - 2006/2007-2008/2009, Sampling theory and practice (adv. undergraduate), Department of Economics, University of Roma Tre.
 - 2005/2006-2006/2007, Computational Statistics (undergraduate and adv. undergraduate), Department of Economics, University of Roma Tre.

Articles in referred journals

- 2020 Naccarato A., Benassi F., World population densities: convergence, stability, or divergence? *Mathematical Population Studies*, doi: 10.1080/08898480.2020.1827854.
- 2020 Reynaud C., Miccoli S., Benassi F., Naccarato A., Salvati L., Unravelling a demographic ‘Mosaic’: Spatial patterns and contextual factors of depopulation in Italian Municipalities, 1981–2011. *Ecological Indicators*, vol. 115 (106356).

- 2020 Grimaccia E., Naccarato A. Confirmatory factor analysis to validate a new measure of food insecurity: perceived and actual constructs. *Quality&Quantity*, vol. 54(4), 1211-1232.
- 2020 Grimaccia E., Naccarato A., Food Insecurity in Europe: A Gender Perspective. *Social Indicators Research*, <https://doi.org/10.1007/s11205-020-02387-8>.
- 2019 Fasulo A., Naccarato A., Pizzichini A., Nowcasting the Italian unemployment rate with Google Trends. *Rivista Italiana di Economia Demografia e Statistica*, vol. LXXIII (4), p. 29-40.
- 2019 Benassi F., Naccarato A. Modelling the spatial variation of human population density using Taylor's power law, Italy 1971-2001. *Regional Studies*, vol. 53 (2), pp. 206-216.
- 2019 Naccarato A., Pierini A., Ferraro G., Markowitz Portfolio Optimization through Pairs Trading Cointegrated Strategy in Long-term Investment. *Annals of Operation Research*, <https://doi.org/10.1007/s10479-019-03225-y>.
- 2019 De Paolis G., Naccarato A., Cibelli F., D'Alete A., Mastroianni C., Surdo L., Casale G., Magnani C. The effectiveness of progressive muscle relaxation and interactive guided imagery as a pain-reducing intervention in advanced cancer patients: A multicentre randomised controlled non-pharmacological trial. *Complementary Therapies in Clinical Practice*, Volume 34, pp. 280-287.
- 2018 Grimaccia E., Naccarato A. Food Insecurity Individual Experience: A Comparison of Economic and Social Characteristics of the Most Vulnerable Groups in the World. *Social Indicators Research*, p. 1-20, issue1/2019, <https://doi.org/10.1007/s11205-018-1975-3>.
- 2018 Naccarato A., Benassi F., On the relationship between mean and variance of world's human population density: A study using Taylor's power law. *Letters in Spatial and Resource Sciences*, p. 1-8, ISSN: 1864-4031, vol. 11 (3), pp. 307-314.
- 2018 Naccarato A., Falorsi S., Loriga S., Pierini A. Combining official and Google Trends data to forecast the Italian youth unemployment rate. *Technological Forecasting and Social Change*, vol. 130, p. 114-122.
- 2017 Benassi F., Naccarato A., Households in potential economic distress. A geographically weighted regression model for Italy, 2001-2011. *Spatial Statistics*, vol. 21, pp. 362-376.
- 2017 Venanzi D., Naccarato A., The capital structure choice of European firms: the role of financial system and institutional setting. *International Business Research*, vol. 10, pp. 22-47.
- 2016 Fratini S. M., Naccarato A., The Gravitation of Market Prices as A Stochastic Process. *Metroeconomica*, vol. 67, pp. 698-716.
- 2016 Morresi O., Naccarato A., Are Family Firms Different in Choosing and Adjusting Their Capital Structure? An Empirical Analysis through the Lens of Agency Theory. *International Journal of Economics and Finance*, vol. 8, pp. 216-232.
- 2016 Benassi F., Naccarato A., Foreign Citizens Working in Italy: Does Space Matter?. *Spatial Demography*, vol. 6 (1), pp. 1-16.
- 2015, Benassi F., Naccarato A., Demographic Structure and Spatially Contiguous Areas in Tuscany Region, *Statistica Applicata – Italian Journal of Applied Statistics*, vol. 24, n° 3.
- 2014 Naccarato A., Pierini A., Element-by-element estimation of a volatility matrix. An Italian portfolio simulation, *Investment Management and Financial Innovation*, vol. 11 (3).
- 2013 Naccarato A., Zurlo D., Pieraccini L., Least Orthogonal Distance Estimator and Total Least Square, *Statistica*, vol. 73 (2), pp. 201-219.
- 2012, Caratelli M., Naccarato A., Ricci O., Alfabetizzazione finanziaria. Il contributo dell'esperienza. *Bancaria*, vol. 6, pp. 34-57.
- 2008 Naccarato A., Zurlo D., A Monte Carlo Study on Full Information Methods in Simultaneous Equation Models, *Quaderni di Statistica*, vol. 10, pp. 115-144.

- 2008, Naccarato A., Pieraccini L., Least Orthogonal Distance Estimator of structural parameters in simultaneous equation models, *Statistica*, vol. 68, n° 3/4, pp. 349-364.
- 2007 Naccarato A. Full Information Least Orthogonal Distance Estimator of structural parameters in simultaneous equation models, *Quaderni di Statistica*, vol. 9, p. 87-105.
- 2004 Naccarato A. I minimi quadrati a due stadi per la stima di serie spazio-temporali con effetto simultaneo. *QUADERNI DI STATISTICA*, vol. 6, p. 49-69.

Contributions in volume

- 2020 Grimaccia E., Naccarato A., Terzi S., World ranking of urban sustainability through composite indicators. In: *Book of Short Papers SIS 2020*, Eds. Pollice A., Salvati N., Schirripa Spagnolo F., Pearson.
- 2020 Benassi F., Naccarato A., Testing evenness multigroup residential segregation indexes using regular lattice data. A first investigation on the major Italian Functional Urban Areas. In: (a cura di): De Muro P. Fratini S. M. Naccarato A., *Economics, Policy and Law. Proceedings of the Research Days Department of Economics*. p. 47-61, RomaTre Press.
- 2019 Benassi F., Naccarato A., Territorial Integration of Foreigners as a Key Factor in the Social Sustainability of the Host Societies: The Role of Mixed Couples. In: *Sustainability: Understanding and Insight*, Ed. Giuseppe Cirella, University of Gdansk (PL), Springer Nature.
- 2016 Naccarato A., Pierini A., A Multivariate VEC-BEKK Model for Portfolio Selection. In: *AA.VV. (a cura di): Alleva G. Giommi A., Topics in Theoretical and Applied Statistics*. p. 307-315, Springer International Publishing.
- 2014, Naccarato A., Pierini A., BEKK Element-by-Element Estimation of a Volatility Matrix. A Portfolio Simulation, in *Mathematical and Statistical Methods for Actuarial Sciences and Finance*, Eds. Perna C., Sibilio M., Springer International Publishing.
- 2011 Momanji Kebati K., Moroni L., Naccarato A., La Popolazione, in: *Impresa e Territorio - per un Atlante delle imprese della Provincia di Roma*, a cura di Monni S., Naccarato A., Scarano G., Università degli Studi Roma Tre – CROMA (Centro per lo studio di Roma), pp. 23-41.
- 2011 Giua M., Gnesi C., Lelo K., Moroni L., Naccarato A., Dinamiche del tessuto imprenditoriale 2005-2010, in: *Impresa e Territorio - per un Atlante delle imprese della Provincia di Roma*, Eds. Monni S., Naccarato A., Scarano G., Università degli Studi Roma Tre – CROMA (Centro per lo studio di Roma), pp. 55-140.
- 2009 Caratelli M., Filotto U., Naccarato A., Nicolini G., Non è mai troppo tardi: l'imperativo ergonomico nella financial education, *Quattordicesimo Rapporto sul Sistema Finanziario Italiano*, Fondazione Rosselli, Editrice Bancaria.
- 2006 Naccarato A., Solari F., A dynamic linear model for preliminary estimation with an application to the Italian industrial turnover, in "Metodi statistici per l'integrazione di dati da fonti diverse", Eds. Liseo B., Montanari G. E., Torelli N., Ed. F. Angeli, pp. 369-379.
- 2005 Naccarato A., Lamberti A., Var Models for Spatio-Temporal Structures: an application to environmental data, in *New Development in Classification and Data Analysis, and Knowledge Organization*, Eds. Bock H. H., Gaul W., Vichi M. Arabie Ph., Baier D., Critchley F., Decker R., Diday E., Greenacre M., Lauro C., Springer International Publishing, pp. 243-250.

Proceedings

- 2019 Grimaccia E., Naccarato A., Validation of a food insecurity scale through structural equation models, *Book of Abstract of the Scientific Conference on Statistics for Health and Well-being*, University of Brescia (IT), September 25-27, 2019.

- 2018 Grimaccia E., Naccarato A., Economic and social factors of food insecurity: A study of individual vulnerability at the global level, Proceedings of 7th AIEAA Conference, Italian Association of Agricultural and Applied Economics “Evidence-based policies to face new challenges for agri-food systems”, Conegliano (IT), 14-15 June 2018.
- 2018 Benassi F., Naccarato A., Evaluating the effect of mixed couples on residential segregation of foreign groups in Italy: First evidences from a regional study case, Proceedings of the 2nd International Conference on Sustainability, Human Geography and Environment (ICSHGE18), Krakow (PL), 28 November – 2 December 2018.
- 2016 Falorsi S., Loriga S., Naccarato A., Pierini A., Forecasting the Italian Youth Unemployment Rate with Internet Search Data, Proceedings of SIS 2016, 48th Scientific Meeting of the Italian Statistical Society, University of Salerno (IT), 8-10 June 2016.
- 2014 Casarin R., Naccarato A., Pierini A., Multiple bi-dimensional SV models for volatility matrix estimation. The case of 5D-italian banks' return, Book of Abstract of 8th Conference on Computational and Financial Econometrics, December 6-8, 2014, University of Pisa, Italy.
- 2014 Pierini A., Naccarato A., Resampling and asymptotic test statistic distributions for portfolio selection, Book of Abstract of 8th Conference on Computational and Financial Econometrics, University of Pisa (IT), December 6-8, 2014.
- 2013 Pierini A., Naccarato A., A multiple bi-dimensional BEKK model for portfolio volatility Matrix estimation of the Italian stock market, Book of Abstract of the 7th International Conference on Computational and Financial Econometrics (CFE 2013), Senate House, University of London (UK) December 14-16, 2013.
- 2012 Pierini A., Naccarato A., The combined use of CVAR and BEKK models for portfolio selection of Italian stock-market, Book of Abstract CFE 2012 6th CSDA International Conference on Computational and Financial Econometrics, University of Oviedo (SP), December 1 - 3 2012.
- 2012 Pierini A., Naccarato A., A multivariate VEC-BEKK model for portfolio selection, Proceedings of the XLVI Scientific Meeting of Italian Statistical Society, Sapienza University of Rome (IT), June 20-22, 2012.
- 2012 Morresi O., Naccarato A., Capital Structures theories and convergence towards optimal debt ratios: Explaining the speed of adjustment in majority-controlled firms, Proceedings of 16th Financial Management Association European Conference, Istanbul (TR), 6-8 June, 2012.
- 2010 Naccarato A., Zurlo D. Least Orthogonal Distance Estimator for SEM based on Singular Value Decomposition, Proceeding of 25th International Workshop on Statistical Modeling, IWSM 2010, University of Glasgow (UK), July 5-9th, 2010.
- 2006 D'Alò M., Falorsi S., Naccarato A., Solari F., Modelling preliminary data in repeated business survey: the italian industrial turnover, Proceedings of Q2006 European Conference on Quality in Survey Statistics, Cardiff (UK), April 24-26, 2006.
- 2006 D'Alò M., Gismondi R., Naccarato A., Solari F., Estimation in Repeated Business Surveys using Preliminary Sample Data, Proceeding of the XLIII Scientific Meeting of the Italian Statistical Society, Torino (IT), June 14-16, 2006.
- 2004 Lamberti A., Naccarato A., Pallara A., Improving Timeliness of Short-Term Business Statistics through State-Space Modelling of Preliminary Survey Data, Proceedings of Q2004 European Conference on Quality and Methodology in Official Statistics, Mainz (DE), 24-26 May 2004.

- 2003 Lamberti A., Naccarato A., Pallara A., Using Dynamic Linear Models for obtaining preliminary estimates in business surveys, Atti del Convegno Intermedio della Società Italiana di Statistica, Napoli (IT), 9-11 giugno 2003.
- 2003 Naccarato A., Lamberti A., Var Models for Spatio-Temporal Structures: an application to environmental data, Book of Short Papers of CLADAG 2003, Meeting of the Classification and Data Analysis Group of the Italian Statistical Society, University of Bologna (IT), September 22-24, 2003.

Research project

- 2019-currently member of the EU-funded Project ENI/2019/406-262 “Technical Assistance to Support the National Bureau of Statistics of the Republic of Moldova”.
- 2018-currently member of the project “Socio-economic indicators for territorial governance: estimates for small areas and comparison between administrative sources”, ISTAT - Italian National Institute of Statistics.
- 2018-currently member of the project “Foreigners in Italy: Modalities of territorial integration”, ISTAT - Italian National Institute of Statistics.
- 2015-2016 The use of Big Data for Official Statistics: member of the project on “Nowcasting for Short-term Indicators”, ISTAT - Italian National Institute of Statistics.
- 2009-2010 member of the project “Survey on households’ consumption and their state of economic vulnerability in the Province of Rome”, Province of Rome and Department of Economics, Roma Tre University.
- 2003-2005 EMU Action Plan, member of the project “Preliminary estimate for Official Statistics”, ISTAT - Italian National Institute of Statistics, Eurostat.
- PRIN 2002-2004: member of the Project “Small Area Estimation for evaluating development policies and cohesion”.
- PRIN 2004-2006: member of the Project “Small Area Estimation for evaluating development policies and cohesion”.

Presentation at International conferences

- 2019 Grimaccia E, Naccarato A., Validation of a food insecurity scale through structural equation models (*invited talk*), Scientific Conference on Statistics for Health and Well-being, University of Brescia (IT), September 25-27, 2019.
- 2019 Grimaccia E, Naccarato A., A multidimensional approach for food insecurity in Europe: a gender perspective, LVI Riunione Scientifica SIEDS, Società Italiana di Demografia, Economia e Statistica “Benessere e Territorio: Metodi e Strategie”, Ascoli Piceno, 23-24 Maggio 2019.
- 2019 Fasulo A., Naccarato A., Pizzichini A., Nowcasting the Italian unemployment rate with google trends, LVI Riunione Scientifica SIEDS, Società Italiana di Demografia, Economia e Statistica “Benessere e Territorio: Metodi e Strategie”, Ascoli Piceno, 23-24 Maggio 2019.
- 2019 Reynaud C., Miccoli S., Benassi F., Naccarato A., Depopulation processes in Italy. Long term trends and geographical aspects, POPDAYS 2019 – Population Days 13th edition, Milan (IT), January 24-26, 2019.
- 2018 Benassi F., Naccarato A., Evaluating the effects of mixed race couples on residential segregation of foreign groups in Italy: First evidences from a regional study case, 2nd International Conference on Sustainability, Human Geography and Environment 2018 (ICSHGE18) 27 November- 2 December, Kraków, Poland.
- 2018 Grimaccia E., Maggino F., Naccarato A., Valutazione di una scala di insicurezza alimentare tramite modelli ad equazioni simultanee, V Convegno Nazionale

dell'Associazione Italiana per gli Studi sulla Qualità della Vita (AIQUAV), Fiesole (IT), 13-15 dicembre 2018.

- 2018 Grimaccia, E., Naccarato A., Economic and social factors of food insecurity: A study of individual vulnerability at the global level, 7th AIEAA Conference - Evidence-based policies to face new challenges for agri-food systems, Conegliano (IT), 14-15 June 2018.
- 2017 Falorsi S., Fasulo A., Naccarato A., Pratesi M., Small Area model for Italian regional monthly estimates of young unemployed using Google Trends Data (*invited talk*), 61st World Statistics Congress ISI 2017, Marrakech (MA), July 16-21, 2017
- 2016 Falorsi S., Loriga S., Naccarato A., Pierini A., Forecasting the Italian Youth Unemployment Rate with Internet Search Data, 48th Scientific Meeting of the Italian Statistical Society, University of Salerno (IT), June 8-10, 2016.
- 2015 As invited expert in Peer Advice Group 2: Methods and procedures for ensuring the quality of Big Data for the 10th Annual meeting of the European Network on Regional Labour Market Monitoring (EN RLMM) on "Big Data and The Complexity of Labour Market Policies: New Approaches in Regional and Local Labour Market Monitoring for Reducing Skills Mismatches", University of Milano Bicocca (IT), October 15, 2015.
- 2014 Pierini A., Naccarato A., Resampling and asymptotic test statistic distributions for portfolio selection, 8th Conference on Computational and Financial Econometrics, December 6-8, 2014 University of Pisa, Italy.
- 2014 Casarin R., Naccarato A., Pierini A., Multiple bi-dimensional SV models for volatility matrix estimation. The case of 5D-italian banks' return (*Invited talk*), 8th Conference on Computational and Financial Econometrics, University of Pisa (IT), December 6-8, 2014.
- 2014 Fratini S.M., Naccarato A., The Gravitation of Market Prices as a Stochastic Process, What have we learnt on Classical Economy since Sraffa? Université Paris Ouest Nanterre (FR), October 16-17, 2014.
- 2014 Naccarato A., Pierini A., BEKK Element-by-Element Estimation of a Volatility Matrix. A Portfolio Simulation (*Invited talk*), Sixth International Conference on Mathematical and Statistical Methods for Actuarial Sciences and Finance, University of Salerno (IT), April 22-24, 2014.
- 2013 Pierini A., Naccarato A., A Multiple bi-dimensional BEKK model for portfolio volatility matrix estimation of the Italian stock market, 7th International Conference on Computational and Financial Econometrics (CFE 2013), University of London (UK), December 14-16, 2013.
- 2012 Pierini A., Naccarato A., Reale M., The Combined Use of CVAR and BEKK Model for Portfolio Selection of Italian Stock Market, (*Invited talk*), 6th CSDA International Conference on Computational and Financial Econometrics (CFE 2012), 1-3 December 2012, Oviedo, Spain.
- 2010 Naccarato A., Zurlo D. Least Orthogonal Distance Estimator for SEM based on Singular Value Decomposition, 25th International Workshop on Statistical Modeling, IWSM 2010, University of Glasgow (UK), July 5-9th, 2010.
- 2006 D'Alò M., Falorsi S., Naccarato A., Solari F., Modelling preliminary data in repeated business survey: the italian industrial turnover, Q2006 European Conference on Quality in Survey Statistics, Cardiff (UK), April 24-26, 2006.
- 2006 D'Alò M., Gismondi R., Naccarato A., Solari F., Estimation in Repeated Business Surveys using Preliminary Sample Data (*invited talk*), XLIII Scientific Meeting of the Italian Statistical Society, Torino (IT), June 14-16, 2006.

- 2004 Lamberti A., Naccarato A., Pallara A., Improving Timeliness of Short-Term Business Statistics through State-Space Modelling of Preliminary Survey Data, Q2004 European Conference on Quality and Methodology in Official Statistics, Mainz (DE), 24-26 May 2004.
- 2003 Lamberti A., Naccarato A., Pallara A., Using Dynamic Linear Models for obtaining preliminary estimates in business surveys, Atti del Convegno Intermedio della Società Italiana di Statistica, Napoli (IT), 9-11 giugno 2003.
- 2003 Naccarato A., Lamberti A., Var Models for Spatio-Temporal Structures: an application to environmental data, CLADAG 2003 - Meeting of the Classification and Data Analysis Group of the Italian Statistical Society, University of Bologna (IT), September 22-24, 2003.

Review activities for international journals

Journal of Business Research, Italian Journal of Applied Statistics, Sustainability, International Journal of Environmental Research and Public Health, International Journal of Engineering Business Management, Quality&Quantity, Social Indicators Research, Technological Forecasting and Social Change.