



3rd ITALIAN CONFERENCE ON ECONOMIC STATISTICS

SUSTAINABILITY, INNOVATION
AND DIGITALIZATION:
Statistical Measurement for
Economic Analysis

CONFERENCE PROGRAM

GENERAL INFORMATION

- The whole Conference will be held at Palazzo Pacanowski, Via Generale Parisi, 13.
- The Conference Reception Desk is located on the first floor.

13th February 2025

13.00-14.00 Welcome and Registration – FLOOR 1

14.00-14.30 Opening and Institutional Greetings – FLOOR 1 | ROOM 1.2

- **ANTONIO GAROFALO**, Rector of Parthenope University of Naples
- **MARCELLO CHIODI**, SIS President
- **FRANCESCO CALZA**, Vice-Rector of Parthenope University of Naples
- **FRANCESCA PERLA**, Head of the Department DISAQ, Parthenope University of Naples
- **CLAUDIO QUINTANO**, Professor Emeritus, Parthenope University of Naples

14.30-15.15 Plenary Session – FLOOR 1 | ROOM 1.2

Chair: **ANDREA CICCARELLI**, University of Teramo

The Role of Official Statistics in the Era of Digitalization and Artificial Intelligence
FRANCESCO MARIA CHELLI, ISTAT President

15.15-15.45 Coffee break – FLOOR A

15.45-17.00 Invited Session (A) – FLOOR 1 | ROOM 1.2

Advances in Spatial Data Analysis for Economics

Chair: **MARIA MICHELA DICKSON**, University of Padua

Discussant: **FRANCESCA BASSI**, University of Padua

Spatial spillovers and tourism: the impact of sustainable initiatives in Italian provinces

RICCARDO GIANLUIGI SERIO, University of Trento

DIEGO GIULIANI, University of Trento

GIUSEPPE ESPA, University of Trento

MARIA MICHELA DICKSON, University of Padua

Infrastructure innovations and their impact on electricity markets volatility: a case study of Sicily and Sardinia

MARINA BERTOLINI, University of Padua

FRANCESCO LISTI, University of Padua

PIERDOMENICO DUTTILO, University of Padua

From micro to macro: building up regional capabilities from individual firms and employees

ALESSIO BUMBEA, Mercatorum University

GIUSEPPE ESPA, University of Trento

ANDREA MAZZITELLI, Mercatorum University

EMANUELE PUGLIESE, United Nations University

17.00-18.00 Round-Table Talks – FLOOR 1 | ROOM 1.2

Measuring and Evaluating Innovation and Sustainability: the Contribution of Economic Statistics

Moderator: **ANTONELLA BIANCHINO**, Territorial office director for the southern area - ISTAT

Participants: **FELICE CASUCCI**, Councillor for Tourism and Administrative Simplification of the Campania Region, **VALERIO FIORESPINO**, CEO Fremantle Italy Group, **GIOVANNI FIENGO**, CEO Kineton, **ALESSANDRO FARAMONDI**, Head of Division "Structural statistics on businesses, governmental and non-profit organizations" - ISTAT

18.00-19.15 Session of contributed papers (1) – FLOOR 1 | ROOM 1.1

Advances in Time Series Forecasting for Socio-Economic Dynamics

Chair: **GIORGIA RIVIECCIO**, Parthenope University of Naples

Forecast reconciliation and Multivariate GARCH

MASSIMILIANO CAPORIN, DANIELE GIROLIMETTO, EMANUELE LOPETUSO

Common features in volatilities: a new Multiplicative Error Model

EDOARDO OTRANTO, LUCA SCAFFIDI DOMIANELLO

Forecasting VaR and ES from high-frequency quantiles and consistent loss functions

ANTONIO NAIMOLI, OSTAP OKHRIN, GIUSEPPE STORTI

A new composite bootstrap approach for estimating the long-memory parameter

LUISA BISAGLIA, MARGHERITA GEROLIMETTO, MARGHERITA PALOMBA

Forecasting short social time series with Theta method: an application to worldwide human development

RAFFAELE MATTERA, GERMANA SCEPI, PARMJIT KAUR

Cointegrated Matrix Auto-Regressive Models

MASSIMILIANO CAPORIN, EMANUELE LOPETUSO

18.00-19.15 Session of contributed papers (2) – FLOOR 1 | ROOM 1.6

Socioeconomic Vulnerabilities and Regional Disparities

Chair: **MATILDE BINI**, European University of Rome

Multidimensional perspectives on food poverty in Italy: insights from POSet analysis

ILARIA BENEDETTI, CHIARA GRAZINI

Testing the convergence hypothesis on per capita GDP across European provinces from 1997 to 2023

PAOLO MARANZANO, BRUNO PAOLO BOSCO, GIULIA SACCHETTI

Inner areas in Lombardy: an analysis of vulnerability

CHIARA GIGLIARANO, ANNAMARIA BIANCHI, SARA MAIORINO, RASHAD MAMMADLI

Beyond the Multidimensional Poverty Index (MPI): a fuzzy approach based on proximity measures to investigate household deprivation in three Italian regions

ANDREA REGOLI, GIUSEPPE VERDOLIVA

Assessing the spatial impact of the "display average fuel prices" obligation in Italy

RICCARDO D'ALBERTO

Assessing the targeting of Austrian social assistance schemes: who is left behind?

SILVIA DE NICOLÒ, ALESSIA BROKA, STEFAN ANGEL

18.00-19.15 Session of contributed papers (3) – FLOOR 1 | ROOM 1.7

Sustainability and Innovation in Economic Development

Chair: **GAETANO FAUSTO ESPOSITO**, G. Tagliacarne Research Center

The impact of technology transfer in Italy: some preliminary remarks

ANDREA CICCARELLI, AUDREY DE DOMINICIS, GRETA TORQUATI

Impact of the National Recovery and Resilience Plan on the productivity in the Italian territories

GIUSEPPE CINQUEGRANA, AGATA MARIA MADIA CARUCCI

Sustainable Development Goals in Italian regions: temporal dynamics and spatial patterns

GIUSEPPE NOTARSTEFANO, GIUSEPPE TERZO

What are the complex interactions among the different Sustainable Development Goals (SDGs)? An analysis of European Island ecosystems

SIMONA CAFIERI

Updating the estimate of transport costs in Europe: a focus on insularity

GIANPAOLO ZAMMARCHI, PAOLO MATTANA

Forecasting Italian daily electricity generation disaggregated by geographical zones and energy sources using coherent forecast combination

DANIELE GIROLIMETTO, TOMMASO DI FONZO

Tourism and Energy Decoupling in Mountain Areas. Towards an Integrated Framework for Analysis and Forecasting

CONSUELO RUBINA NAVA, STEFANO TEDESCHI

20:15 Social Dinner

14th February 2025

08.30-09.00 Registration – FLOOR 1

09.00-10.00 Session of contributed papers (4) – FLOOR 1 | ROOM 1.1

Transition Towards a Sustainable Future

Chair: **CATERINA MARINI**, University of Bari

Intertemporal Mahalanobis Distance Matching for heterogeneous-treatment-effect evaluations of air-pollution-abatement policies

DANIELE BONDONIO, PAOLO CHIRICO

Integration of statistical and administrative data for companies in the non-energy mineral extraction sector

FLORA FULLONE, MIRELLA MORRONE, DONATELLA VIGNANI

Does private supply drive personal health choices? A spatial approach of health tax deductions at the municipal level

MAURO MARÈ, FRANCESCO PORCELLI, FRANCESCO VIDOLI

Spending diversity and quality indexes by SWB levels and urbanization degree

CRISTINA BERNINI, SILVIA EMILI, FEDERICA GALLI

Catastrophic Health Expenditure: heterogeneity among Regions and citizenship

MARIA ROSARIA FERRANTE, LORENZO MORI, SILVIA PACEI

09.00-10.00 Session of contributed papers (5) – FLOOR 1 | ROOM 1.6

Data-Driven Insights for Sustainable Energy and Environmental Policy

Chair: **GIOVANNI DE LUCA**, Parthenope University of Naples

The dual impact of energy efficiency and rebound effects on energy poverty: an Italian case study
ALFONSO CARFORA, FRANCESCO MARIA CHELLI, GIUSEPPE SCANDURRA

A quantification of the costs and benefits of the "Green buildings" directive in two Italian regions
LORENZO FORNI, FILIPPO FORTUNA, ELENA GIARDA, FRANCESCO GIOVANARDI, DEMETRIO PANARELLO

Environmental awareness and its determinants: a multilevel approach
IDA D'ATTOMA, MARCO IEVA, MARIAGIULIA MATTEUCCI

Forecasting CO2 emissions from electricity generation: comparison of methods
PIERDOMENICO DUTTILO, FRANCESCO LISI, MARINA BERTOLINI

The effect of energy efficiency upgrades on residential property prices: evidence from Italy
ELENA GIARDA, DEMETRIO PANARELLO

09.00-10.00 Session of contributed papers (6) – FLOOR 1 | ROOM 1.7

Tourism and Overtourism

Chair: **ANDREA MARLETTA**, University of Milano-Bicocca

Caveat about non-normality in relative importance estimation from tourism surveys
ANNALISA STACCHINI, ANDREA GUIZZARDI

Tourism Satellite Accounts preliminary estimation of production, value added, and internal tourism consumption
FABRIZIO ANTOLINI, ILARIA PISCITELLI

A decision-oriented approach to assess tourism sustainability in Italian regions
ELISA FUSCO, ALESSANDRO MAGRINI

Green tourism competitiveness in Italian provinces
FURIO URSO, MARTINA ARONICA, SALVATORE COSTANTINO, DAVIDE PIACENTINO, MARIA FRANCESCA CRACOLICI

Forecasting tourist nights of stays in Italy: a comparative analysis of statistical and neural network models
FABRIZIO ANTOLINI, SAMUELE CESARINI, IVAN TERRAGLIA

09.00-10.00 Session of contributed papers (7) – FLOOR 1 | ROOM 1.3

Cultural Heritage, Economic Growth and Sustainability

Chair: **VITTORIO NICOLARDI**, University of Bari

Cultural capital and economic growth
GIORGIO GARAU, ANDREA KARIM EL MELIGI, GIULIANA ALTEA, ANTONELLA CAMARDA, LUCA PODDIGHE

Is economic insecurity associated to the fruition of cultural heritage? Some evidence for Italy
ALESSANDRO GALLO, DANIELE VIGNOLI

Modelling inefficiency in multi-output spatial stochastic frontiers for cultural and creative industries: a methodological proposal
SILVIA EMILI, FEDERICA GALLI

Measuring the museums' economic and social sustainability: evidence from the Italian museum system
CARLA GALLUCCIO, FRANCESCA GIAMBONA

From choices to change: household finance and sustainability
BEATRICE BERTELLI, MARIANNA BRUNETTI, COSTANZA TORRICELLI, ARTHUR VAN SOEST, MARIANGELA ZOLI

10.00-10.30 Coffee break – FLOOR A

10.30-11.15 Plenary Session – FLOOR 1 | ROOM 1.2

Chair: **MATILDE BINI**, European University of Rome

From GDP to Sustainable and Inclusive Wellbeing
ENRICO GIOVANNINI, Tor Vergata University of Rome

11.15-12.30 Invited Session (B) – FLOOR 1 | ROOM 1.2

New Data Opportunities for Innovation in Economic Statistics

Chair: **TIZIANA LAURETI**, University of Tuscia
Discussant: **LUCA SECONDI**, University of Tuscia

Composite Beta-Bernoulli indicators for dynamic price analysis
FRANCESCA MARIANI, Marche Polytechnic University
GLORIA POLINESI, Marche Polytechnic University
MARIATERESA CIOMMI, Marche Polytechnic University
MARIA CRISTINA RECCHIONI, Marche Polytechnic University

Estimating price pass-through from changes in VAT: a case study on the tampon tax in Italy
BEATRICE BIONDI, University of Bologna
SILVIA DE NICOLÒ, University of Bologna
MARIO MAZZOCCHI, University of Bologna

Spatial price differences of accommodation services across Italy: new insights from online scraped data
FEDERICO CRESCENZI, University of Tuscia
TIZIANA LAURETI, University of Tuscia
NICCOLÒ SALVINI, University of Tuscia
LUIGI PALUMBO, Bank of Italy

11.15-12.30 Session of contributed papers (8) – FLOOR 1 | ROOM 1.1

Spatial Data Analysis for Economic and Financial Measurement

Chair: **MARIA FRANCESCA CRACOLICI**, University of Palermo

Economic complexity, technological innovation, and co-location of activities
ANNAMARIA GIUFFRIDA, ALESSIO BUMBEA, GIUSEPPE ESPA, ANDREA MAZZITELLI

Regional development, local economies and metropolitan systems in-between sustainability, resilience and crisis
LUCA SALVATI

Spatial dependence in the dynamics of the 2020 presidential election polls trackers
GIAMPIERO MARIA GALLO, DEMETRIO LACAVA, EDOARDO OTRANTO

The contribution of spatial dependency in finance
EMMA BRUNO, GENNARO PUNZO

Reconstructing climate change awareness survey data using socio-economics and geographical information
GIANPAOLO ZAMMARCHI

Evaluating the impact of European regional policy: a spatial dose-response approach
MATUSCA DE CASTRIS, GUIDO PELLEGRINI

12.30-13.00 Presentation of the SIS Group: Statistical Measurement for Economic Analysis (SMEA) – FLOOR 1 | ROOM 1.2

ANDREA CICCARELLI, University of Teramo

13.00-14.00 Lunch – FLOOR A

14.00-15.15 Invited Session (C) – FLOOR 1 | ROOM 1.2

Advanced Measurement Models and AI-Based New Data Sources for Labour Market Analysis

Chair: **LUCIA BUZZIGOLI**, University of Florence

Discussant: **ALESSANDRO RINALDI**, G. Tagliacarne Research Center

ICT and undeclared work in Europe: confronting social desirability bias in the Eurobarometer survey

MARIA FELICE AREZZO, Sapienza University of Rome

GIUSEPPINA GUAGNANO, Sapienza University of Rome

Spillover effects and temporal dynamics on the impact of renewables on labour force: A world perspective

ANNA GLORIA BILLÈ, University of Bologna

MARCO ROGNA, European Commission, Joint Research Centre (JRC-Seville)

Exploring labour information with specialized ontologies and large language models: the integration of destructured language, repositories and norms

CRISTINA MARTELLI, University of Florence

ADHAM KAHLAWI, Lloyds banking group, Edinburgh, UK

14.00-15.15 Session of contributed papers (9) – FLOOR 1 | ROOM 1.1

Sustainability Indicators: Regional Insights and Applications

Chair: **DAVIDE PIACENTINO**, University of Palermo

Municipal indicators for the analysis of the economy of Inland areas

ANTONELLA BIANCHINO, AGATA MARIA MADIA CARUCCI, VALERIA MARZOCCA, ROBERTO ANTONELLO PALUMBO

Environmental sustainability: a new data-driven indicator

ARIANNA AGOSTO, ALESSANDRO BITETTO, PAOLA CERCHIELLO, YANA KOSTIUK

Cluster-based weighting approach for composite indicators with an application to measuring well-being in European regions

VIET DUONG NGUYEN, CHIARA GIGLIARANO

Corporate sustainability: a technical rehearsal for the construction of a composite index

LUCA PATELLI, DANIELE TONINELLI

Proposal of a synthetic measure of (e)quality of life satisfaction: a regional perspective on gender disparities in Italy

DANIELA FUSCO, PAOLA GIORDANO, MARIA ANTONIETTA LIGUORI, MARGHERITA MARIA PAGLIUCA

The effect of Covid-19 on risk aversion: evidence from the SHARE survey

DESIRÉ DE LUCA, GIORGIO TASSINARI

15.15-16.30 Invited Session (D) – FLOOR 1 | ROOM 1.2

Time Series Methods for Economics and Financial Applications

Chair: **MASSIMILIANO CAPORIN**, University of Padua

Discussant: **PAOLO SANTUCCI DE MAGISTRIS**, Luiss University

Markov switching bilinear models: statistics and economic applications

MADDALENA CAVICCHIOLI, University of Modena and Reggio Emilia

Sequential Monte Carlo for noncausal processes

STEFANO GRASSI, Tor Vergata University of Rome

GIANLUCA CUBADDA, Tor Vergata University of Rome

FRANCESCO GIANCATERINI, Tor Vergata University of Rome

Monitoring time-varying tail risk with the extended Generalized Pareto distribution

LUCA TRAPIN, University of Bologna

CARLOTTA PACIFICI, University of Bologna

15.15-16.30 Session of contributed papers (10) – FLOOR 1 | ROOM 1.1

Statistical Measurement for Insecurity

Chair: **ANDREA REGOLI**, Parthenope University of Naples

Exploring workplace discrimination through digital ethnography

GIOVANNI Busetta, MARIA GABRIELLA CAMPOLO, ANTONIA CAVA, DEBORA MARIA PIZZIMENTI

Measuring housing insecurity: the relationship with well-being across family types in Italy

ALESSANDRO GALLO, ANDREA BALLERINI, DANIELE VIGNOLI

Corruption and sustainable development

FABRIZIO SBICCA

A study on the impact of "Reddito di Cittadinanza" using a multivariate linear mixed model

PAOLO MARANZANO, LAURA MARCIS, GIANLUCA MONTURANO, MARIA CHIARA PAGLIARELLA, RENATO SALVATORE

Italian social security system sustainability: a statistical study based on INPS data bank

MASSIMILIANO GIACALONE, MARIA LONGOBARDI, STEFANO MARRA, GIANFRANCO PISCOPO

A systematic review of gender and ethnic discrimination in hiring

GIOVANNI Busetta, MARIA GABRIELLA CAMPOLO, GIOVANNI MARIA FICARRA, ALESSANDRA TRIMARCHI

16.30-17.30 Session of contributed papers (11) – FLOOR 1 | ROOM 1.1

Labour Market, Entrepreneurship and Digitalization

Chair: **FRANCESCA GIAMBONA**, University of Florence

Exploring occupational mismatch in European labor markets: measures, determinants, and implications

SERGIO LONGOBARDI, MARGHERITA MARIA PAGLIUCA

Unveiling underemployment through a fuzzy approach: a comparison of fuzzy and official employment rates in Italy (2021–2023)

ANDREA REGOLI, BRUNO CHELI, ALESSANDRA COLI

European digital skill supply: a latent variable perspective

FEDERICO BACCHI, PINUCCIA PASQUALINA CALIA, MARIA ROSARIA FERRANTE

A non-parametric approach to employee performance in digital workplaces

FABIO DEMARIA, MADDALENA CAVICCHIOLI, TOMMASO FABBRI, ARIADNI PAPANA DAGIASIS, ANNA CHIARA SCAPOLAN

Firm resilience to exogenous shocks: the impact of gender diversity in leadership

FURIO URSO, CRISTINA LEONE, PASQUALE MASSIMO PICONE, MARIA FRANCESCA CRACOLICI

16.30-17.30 Session of contributed papers (12) – FLOOR 1 | ROOM 1.6

Innovation and Geopolitical Dynamics

Chair: **PAOLO MAZZOCCHI**, Parthenope University of Naples

The impact of digitalisation and sustainability on innovation propensity: firm-level evidence from European Union countries

DAVID ARISTEI

Exploring globalization in the international natural gas trade market

FEDERICO BROGI, MAURO BRUNO, ERIKA CERASTI, FABRIZIO DE FAUSTI, BARBARA GUARDABASCIO, GIULIO MASSACCI

Italian spatial price indices: using web scraping in an experimental analysis for electricity

CRISTINA DORMI, BARBARA DRAMIS, AGOSTINA ZANOLI

Examining the impact of geopolitical risk, climate policy uncertainty, waste management, and financial efficiency on renewable energy investment in the USA: a novel dynamic simulated ARDL approach

AAMIR JAVED, AGNESE RAPPOSELLI

From financial stability to climate change: a BERTopic analysis of ECB and national central bank speeches
DAVID ARISTEI, MAURO BRUNO, BARBARA GUARDABASCIO, FRANCESCO ORTAME

16.30-17.30 Session of contributed papers (13) –FLOOR 1 | ROOM 1.7

Digital Transformation: Skills, Integration, and Market Dynamics

Chair: **ANTONELLA ROCCA**, Parthenope University of Naples

Towards the balancing of Italian quarterly national accounts
FILIPPO MOAURO

Digital skills of citizens, enterprises and local PA
VALERIANA LEPORANICO, CIRA ACAMPORA

Analysis of the wage determination in selected European Union countries
FABIANO CAMPANELLI, MÁRIA BOHDALOVÁ

Leveraging Data integration for effective revenue Management
ANDREA GUIZZARDI, ERCOLINO RANIERI, FEDERICO ZARDO

Framing a field: Understanding collectible design through a Delphi study
LAURA BENEDAN, FEDERICA CODIGNOLA, CARLOTTA GALEONE, PAOLO MARIANI

17.30-18.00 Closing Remarks – FLOOR 1 | ROOM 1.2

- **ROSALIA CASTELLANO**, Parthenope University of Naples
 - **GIOVANNI DE LUCA**, Parthenope University of Naples
 - **VITTORIO NICOLARDI**, University of Bari
-