

LIST OF PROJECTS: CONFERENCES AND PUBLICATIONS

Istat Advisory Committee on statistical methods

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LIST OF PROJECTS

This document lists the projects discussed by the Advisory Committee on statistical methods, giving information on project title and members per year, with the list of research outputs (conferences and articles). Wherever possible, a link to the research output is given. The list is updated yearly.

PROJECTS DISCUSSED BY THE ADVISORY COMMITTEE ON STATISTICAL METHODS

YEAR	PROJECT TITLE	PROJECT MEMBERS	CONFERENCES	ARTICLES AND BOOKS
2017	Text mining and machine learning techniques for text classification	Gianpiero Bianchi; Francesco Scalfati; Fabiana Bianchi		Gianpiero Bianchi, Renato Bruni, Francesco Scalfati (2018): Identifying e-Commerce in Enterprises by means of Text Mining and Classification Algorithms. <i>Mathematical Problems in Engineering</i> , Vol. 2018 Pp1-8 Link
2017	Use of Internet data in Official Statistics a proposal for a methodological framework	Giulio Barcaroli; Paolo Righi	Giulio Barcaroli, Natalia Golini, Paolo Righi (2018): Quality evaluation of experimental statistics produced by making use of Big Data. Q2018, 26-29 giugno 2018, Cracovia, Polonia Paolo Righi, Giulio Barcaroli, Mariagrazia Rinaldi, Gianpiero Bianchi (2019). Producing contingency table estimates integrating survey data and Big Data. ITACOSM Firenze, 5-7 giugno 2019 Link	
2017	Census and Social Surveys Integrated System	Stefano Falorsi; Andrea Fasulo; Marco Fortini; Paolo Righi	D'Alò Michele, Falorsi Stefano, Fasulo Andrea, Solari Fabrizio (2017): Sample Design for the Integration of Population Census and Social Surveys Il Disegno Campionario per L'integrazione Del Censimento Della Popolazione e delle Indagini Sociali. In Petrucci A, Racioppi, Verde. (editors) <i>New Statistical Developments in Data Science</i> . SIS 2017, Florence, Italy, June 28-30, Pages 191-202 Link : Falorsi S. (2017). Census and social surveys integrated system. United Nations Economic Commission for Europe, Conference of European Statisticians Group of Experts on Population and Housing Censuses, Nineteenth Meeting, Geneva, Switzerland, 4-6 October 2017. Link	D'Alò F., Falorsi S., Solari F. (2017). Space-Time Unit-Level EBLUP for Large Data Sets. <i>Journal of Official Statistics</i> , Vol. 33, N. 1, pp 61-77. Link
2017	On the design and implementation of a Generalized Process for Business Statistics	Mauro Bruno; Domenico Infante; Giuseppina Ruocco; Monica Scannapieco	Standardization of Business Statistics Processes in Istat (2018): Standardization of Business Statistics Processes in Istat. Q2018, 26-29 giugno	

			2018, Cracovia, Polonia Link	
2017	Balancing methods for ensuring time and space consistency of demographic estimates in the Italian integrated system of statistical registers	Marco Di Zio; Marco Fortini; Diego Zardetto	Di Zio M., Fortini M. Zardetto D. (2018). Balancing methods for ensuring time and space consistency of demographic estimates in the Italian integrated system of statistical registers. Workshop of the Advisory Committee on Statistical Methods, 19 novembre 2018, Roma-Istat. Link	Zardetto D., Di Zio M., Fortini M. (2022). Balancing population stocks and flows in the Italian demographic estimation system: a proposal. <i>Rivista di Statistica Ufficiale</i> n. 2/2022 pp 99 - 122. Link
2017	Integration of administrative sources and survey data through Hidden Markov Models for the production of labour statistics	Danila Filipponi; Ugo Guarnera; Roberta Varriale	Filipponi, Danila, Ugo Guarnera, and Roberta Varriale (2021). Latent Mixed Markov Models for the Production of Population Census Data on Employment. Book of short papers, SIS2021, Pisa, 21-25 giugno 2021, pp. 112-117 Link	Laura Boeschoten, Danila Filipponi, Roberta Varriale (2020). Combining Multiple Imputation and Hidden Markov Modelling to Obtain Consistent Estimates of Employment Status. <i>Journal of Survey Statistics and Methodology</i> , Volume 9, Issue 3, June 2021, Pp. 549–573 Link
2017	The anticipated variance as a measure for the accuracy of complex multisource statistics	Piero Demetrio Falorsi; Paolo Righi	Piero Demetrio Falorsi, Giorgio Alleva, Francesca Petrarca, Paolo Righi (2019): Estimates of accuracy of statistical registers based on Anticipated Variance. ITSEW 2019 –International Total Survey Error Workshop, Bergamo, 12 June 2019 Piero Demetrio Falorsi, Giorgio Alleva, Francesca Petrarca, Paolo Righi (2019): The accuracy of aggregates computed from a statistical registers. ESS Workshop on the use of Administrative and Social Statistics, Valencia 4-5 June-2019	Giorgio Alleva, Francesca Petrarca, Piero D. Falorsi, Paolo Righi (2021): Measuring the Accuracy of Aggregates Computed from a Statistical Register. <i>Journal of Official Statistics</i> , 2021, vol. 37, issue 2, pp. 481-503. Link
2017	The Italian Integrated System of Statistical Registers_Design and Implementation of an Ontology_based Data Integration Architecture	Roberta Radini; Monica Scannapieco; Laura Tosco	Raffaella Aracri, Adele Bianco, Roberta Radini, Monica Scannapieco, Laura Tosco, Federico Croce, Maurizio Lenzerini, Domenico Fabio Savo (2018): On the Experimental Usage of Ontology-based data access for the Italian Integrated System of Statistical Registers: Quality Issues. Q2018, 26-29 giugno 2018, Cracovia, Polonia Link	
2017	Methods for treating bias deriving from different sources of nonsampling errors in mixed mode social surveys	Claudia De Vitiis; Alessio Guandalini; Francesca Inglese; Marco Dionisio Terribili	C De Vitiis, A Guandalini, F Inglese, M Terribili (2018): Assessing and adjusting bias deriving from mode effect in mixed mode social surveys. European Conference on Quality in Official Statistics (Q2018), Kraków, Polonia Link C De Vitiis, A Guandalini, F Inglese, MD Terribili (2019): Evaluation of the impact of mixed mode design on the	ISTAT (2017). L'effetto tecnica nelle indagini mixed mode. <i>Collana Metodi - Letture statistiche</i> , Istat, Roma. Link C De Vitiis, A Guandalini, F Inglese, Marco D. Terribili (2019). The Transition from Single to Mixed-Mode of the Aspects of Daily Life Household Survey: An Evaluation on the Quality of the Estimates. <i>Statistica & Applicazioni</i> 17 (2), 175-199 Link

			quality of the estimates of the Aspects of Daily Life social survey. ITACOSM 2019-Survey and Data Science	C De Vitiis, A Guandalini, F Inglese, MD Terribili (2021). Assessing and Adjusting Bias Due to Mixed-Mode in Aspect of Daily Life Survey. <i>Journal of Official Statistics</i> (JOS) 37 (2) Link
2018	Forecasting Tourism Demand through Social Network and Semantic Analysis of Online Big Data	Barbara Guardabascio	Fronzetti Colladon, Andrea & Guardabascio, Barbara & Innarella, Rosy. (2019). Forecasting Tourism Demand: A Social Network Analysis and Text Mining Approach. XXXIX Sunbelt Conference of the International Network for Social Network Analysis, 18-23 giugno 2019, Montréal, Québec, Canada	Andrea Fronzetti Colladon, Barbara Guardabascio, Rosy Innarella (2019): Using social network and semantic analysis to analyze online travel forums and forecast tourism demand. <i>Decision Support Systems</i> , Vol 123, pp113-175 Link
2018	Multiscale Decomposition of Big Data Time Series for analysis and prediction of macroeconomic data	Livio Fenga		
2018	A new framework for quality assessment of processes based on integrated administrative data	Orietta Luzi; Fabiana Rocci; Roberta Varriale	Orietta Luzi, Fabiana Rocci, Roberta Varriale (2018): Quality evaluation of statistical processes based on administrative data: a new version of the TSE approach. Q2018, 26-29 giugno 2018, Cracovia, Polonia Link Orietta Luzi, Fabiana Rocci, Roberta Varriale (2018): Quality evaluation of statistical processes based on administrative data. Computational and Methodological Statistics - ERCIM 2018. Pisa, 16 December 2018	Orietta Luzi, Fabiana Rocci, Roberta Varriale (2022): Total Process Error: An Approach for Assessing and Monitoring the Quality of Multisource Processes. <i>Journal of Official Statistics</i> , Volume 38, Issue 2, pp. 533-556. Link
2018	Estimation of criminal populations from administrative registers in the presence of linkage errors	Tiziana Tuoto; Valentina VC. Chiariello	Tiziana Tuoto, Antonella Baldassarini, Valentina Chiariello (2018). Enhancing the quality of National Accounts in the estimation of proceeds from illegal markets. Q2018, 26-29 giugno 2018, Cracovia, Polonia Link	Baldassarini, Antonella; Chiariello, Valentina; Tuoto, Tiziana (2019). Estimating Criminal Populations from Administrative Registers. <i>Statistika</i> , vol. 99, 3, 287-300 Link
2018	The statistical matching of EU-SILC and HBS at ISTAT: where do we stand for the production of official statistics	Gabriella Donatiello; Mauro Scanu; Marcello D'Orazio; Doriana Frattarola; Mattia Spaziani	Donatiello G., D'Orazio M., Frattarola D., Rizzi A., Scanu M, Spaziani M. (2016): The statistical matching of EU-SILC and HBS at ISTAT: where do we stand for the production of official statistics, DGINS - Conference of the Directors General of the National Statistical Institutes, 26-27 September 2016, Vienna	Donatiello G., D'Orazio M., Frattarola D., Rizzi A., Scanu M., Spaziani M. (2016): The role of the conditional independence assumption in statistically matching income and consumption". <i>Statistical Journal of the IAOS</i> , 32, pp. 667-675. Link
2020	A Deep Learning Approach to Land	Fabrizio De Fausti; Francesco Pugliese;	Zardetto D., De Fausti F., Cerasti E., Pappagallo A., Pugliese F. Deep Learning	Bernasconi E., De Fausti F., Pugliese F., Scannapieco M., Zardetto D. (2022): Deep Learning Segmentation for Improved Land

	Cover Estimation from Satellite Imagery	Diego Zardetto	Segmentation for Improved Land Cover Maps and Estimates. NTTS2021 Link	Cover Maps and Estimates, <i>Statistical Journal of the IAOS</i> , vol. 38, no. 1, pp. 183-199, 2022 Link
2018	Sampling schemes using scanner data for the consumer price index	Claudia De Vitiis; Francesca Inglese; Marco Dionisio Terribili; Alessio Guandalini	Claudia De Vitiis, Alessio Guandalini, Francesca Inglese, Marco Dionisio Terribili (2017). Sampling Schemes Using Scanner Data for the Consumer Price Index. In Petrucci A, Racioppi, Verde. (editors) <i>New Statistical Developments in Data Science</i> . SIS 2017, Florence, Italy, June 28-30, Pages 203-217 Link	Tiero F., Bernardini A., Casciano M.C., De Vitiis C., Guandalini A., Inglese F., Seri G., Terribili M.D. (2019): Re-design project of the Istat consumer price survey: use of probability samples of scanner data for the calculus of price indices. <i>Rivista di statistica ufficiale</i> , vol. 2-3, pp. 64-140 Link
2019	On Designing Aggregated Data as Statistical Data Cubes	Monica Scannapieco; Mauro Scanu; Laura Tosco; Adele Maria Bianco; Michele Riccio	M.K. Riccio e M. Scanu (2024). Semantics and ontologies of data sets along a data production process. Q2024, Lisbona Link	Scanu M., Scannapieco M., Tosco L, Bianco A., Riccio M. (2022). Metadata for statistical processes on registers: how to organise facts with GSIM. <i>Proceedings of the Workshop on methodologies for official statistics</i> . Roma, Italy: Istat. Link
2019	A Hierarchical Bayesian model for quality check of the Italian population count by Administrative Data	Simona Toti; Rosa Maria Lipsi; Sara Giavante; Stefano Daddi		
2019	Imputation of the "Attained Level of Education" in Base Register of Individuals: a comparison between Machine Learning and standard techniques	Fabrizio De Fausti; Romina Filippini; Marco Di Zio; Simona Toti; Diego Zardetto	De Fausti F., Di Zio M., Filippini R., Toti S., Zardetto D. (2020). The imputation of the "Attained Level of Education" in the base register of individuals: an experimentation using Machine Learning techniques. United Nations - Economic Commission for Europe, Conference of European Statisticians, Workshop on Statistical Data Editing, Geneva, Switzerland, 15-17 April 2020.	De Fausti F., Di Zio M., Filippini R., Toti S., Zardetto D. (2022). Multilayer perceptron models for the estimation of the attained level of education in the Italian Permanent Census. <i>Statistical Journal of the IAOS</i> , vol. 38, no. 2, pp. 637-646, 2022 Link
2019	Joint distribution of income based and consumption based absolute poverty	Andrea Cutillo; Mauro Scanu		Andrea Cutillo e Mauro Scanu (2020): A mixed approach for data fusion of HBS and SILC. <i>Social Indicators Research</i> , 150, pp. 411-437 Link
2019	Machine Learning methods for estimating occupational status in Italy	Roberta Varriale		
2019	Quality Reviews at Istat: the way to certification	Giovanna Brancato	Giovanna Brancato, Giorgia Simeoni, Andrea Bruni, Gabriele Ascari (2018): The new quality strategy in the modernised Italian National Statistical Institute. Q2018, 26-29 giugno 2018, Cracovia, Polonia Link	

2019	Inference for the Consumer Confidence Index	Alessio Guandalini	
2019	Optimal Spatial stratified sampling	Marco Ballin; Giulio Barcaroli	
2019	Private Set Intersection with Analytics	Massimo De Cubellis; Fabrizio De Fausti; Monica Scannapieco; Diego Zardetto	Massimo De Cubellis, Mauro Bruno, Fabrizio De Fausti, Monica Scannapieco (2021): Input Privacy-Preservation Techniques Project: Privacy Set Intersection with Analytics. UNECE ModernStats Link
2020	Mobile phone data to support Disaster Risk Management	Antonio Laureti Palma; Angela Ferruzza; Giovanna Tagliacozzo	
2020	Violence against woman, stereotype and big data: a methodological approach to use different data sources	Claudia Villante; Maria Giuseppina Muratore	
2020	Current directions for research on record linkage in Istat	Tiziana Tuoto; Marco Fortini	M Fortini, T Tuoto (2019). Use of record linkage in Official Statistics and feedbacks on research. ITACOSM 2019-Survey and Data Science Link
2020	Survey on Siero-prevalence of Covid-19, planned sampling design	Stefano Falorsi	Falorsi S., D'Alò M., De Vitiis C., Fasulo A., Filippini D., Guandalini A., Inglese F., Luzi O., Orsini E., Radini R. (2021) Survey aimed to estimate the seroprevalence of SARS-CoV-2 infection in Italian population at national and regional level. Book of short papers, SIS2021, Pisa, 21-25 giugno 2021, pp. 279-284 Link
2020	Spatially balanced sampling design of an area frame survey to estimate the coverage of the agricultural census	Federica Piersimoni	
2020	The problem of classifying smart enterprises and its joint use with other sources	Stefania Della Queva; Massimo Armenise; Sergio Salamone	
2021	Census count estimates geocoded at sub-domain levels	Stefano Daddi; Marco Di Zio; Michele D'Alò; Stefano Falorsi; Danila Filippini	
2021	Planning the Post-21 Permanent Census of Population and Housing according to a	Claudia De Vitiis; Stefano Falorsi; Alessio	

	Responsive-Adaptive Survey Design approach	Guandalini; Francesca Inglese; Paolo Righi; Marco Dionisio Terribili		
2021	A pseudo-population bootstrap approach for variance estimation of population counts with under/over coverage	Simona Toti; Marco Di Zio; Alessandra Ronconi		Toti S., Di Zio M., Ronconi A. (2023). A study on bootstrap approaches for variance estimation of population counts with under/over coverage. <i>Istat Working Papers</i> . N.2 2023 Link Ballerini V., Di Zio M., Liseo B., Toti S. (2025). Combining Administrative and Survey Data to Correct Coverage Errors in Register-Based Statistics: A Bayesian Approach. <i>Journal of Official Statistics</i> (in corso di pubblicazione)
2021	LFS non response indicators for register overcoverage estimation	Silvia Loriga; Loredana Di Consiglio; Stefano Falorsi	Loredana Di Consiglio, Stefano Falorsi (2021). LFS non response indicators for population register overcoverage estimation. Book of short papers, SIS2021, Pisa, 21-25 giugno 2021, pp. 279-284 Link	
2021	Longitudinal and cross-sectional analyses of data in the Integrated System of Statistical Registers	Raffaella Maria Aracri; Francesco Altarocca; Roberta Benedetti; Roberta Radini; Giulia Vaste		
2021	A proposal for a concentration spatial index	Marco Ballin		
2021	A theoretical framework for estimating population mean in non probability samples	Simona Rosati		
2022	A statistical framework for register based population size estimation	Antonella Bernardini; Nicoletta Cibella; Fabrizio Solari	Bernardini, A., Chieppa, A., Cibella, N., Solari, F., e Zindato, D. (2022). Estimation of population count: lessons learned from the first cycle of the Italian Permanent Population Census, 7 th Italian Conference on Survey Methodologies ITACOSM 2022, Perugia, 8-10 giugno 2022 Bernardini, A., Chieppa, A., Cibella, N., Gallo, G., e Solari, F., Zindato, D. (2022). Evolution of the Italian Permanent Population Census: lessons learned from the first cycle and the design of the Permanent Census beyond 2021, Meeting of the Group of Experts on Population and Housing Censuses Statistics Population and Housing Censuses, Ginevra, 21-23 settembre 2022 Bernardini A., Cibella N., e Solari F. (2023). Audit survey approach for the evaluation of the quality of the permanent population	Solari, F., Bernardini, A. & Cibella, N. (2023) Statistical framework for fully register based population counts. <i>METRON</i> , vol. 81, pp. 109–129 Link Bernardini A., Cibella N., e Solari F. (2023) Discussion of ‘A system of population estimates compiled from administrative data only’ by Dunne and Zhang, <i>Journal of the Royal Statistical Society Series A</i> , 187(1), 28-29 Link

			census counts, LIX Riunione Scientifica SIEDS, Napoli, 25-26 maggio 2023	
			Solari, F., Bernardini A., e Cibella N. (2026). Italian Population Census: register-based population size estimation, Royal Statistical Society Section Group Meeting on Data Integration for Official Statistics: Traditional and Big Data Sources, 22 gennaio 2026	
			Link	
2022	Defining the sample designs for small area estimation	Piero Demetrio Falorsi; Stefano Falorsi; Paolo Righi		
2022	On the use of social media to detect anomalous events: Social Mood on Economy Index	Mauro Bruno, Elena Catanese	Catanese E., Scannapieco M., Bruno M., Valentino L. (2022). The Italian Social Mood on Economy Index: recent methodological developments, Proceedings of the 16th international conference on statistical analysis of textual data (JADT) 2022 - Volume 1 - Isbn : 9791280153302 - Pag. 213-220	Catanese, E., M. Scannapieco, M. Bruno, and L. Valentino. (2022). Natural language processing in official statistics: The social mood on economy index experience, <i>Statistical Journal of the IAOS</i> , Volume 38, Issue 4: 1451-1459. Link
2022	A proposal for the problem of matching probabilities estimation in record linkage	Mauro Scanu, Tiziana Tuoto, Marco Fortini, Sara Piombo	Scanu M., Tuoto T., Fortini M., Piombo S. (2022). A proposal for the problem of matching probabilities estimation in record linkage, Proceedings of Statistics Canada Symposium 2022 "Data Disaggregation: Building a more representative data portrait of society"	Link
2022	Several data on labour status, a problem or a resource	Michele D'Alo' Stefano Falorsi Danila Filippini Silvia Loriga		
2023	A graph sampling approach for audit survey sampling design supporting register based population size estimation	Solari F.	Solari, F., Bernardini A., e Cibella N. (2026). Italian Population Census: register-based population size estimation, Royal Statistical Society Section Group Meeting on Data Integration for Official Statistics: Traditional and Big Data Sources, 22 gennaio 2026	In preparazione un paper da sottoporre per la pubblicazione
			Link	
2023	Accuracy evaluation of register based estimates	Falorsi S., Chianella D., Filippini R., Toti S., Falorsi P.D., Deliu N., Alleva G., Liseo B.		Falorsi S., Chianella D., Filippini R., Toti S., Falorsi P.D., Deliu N., Alleva G., Liseo B. (2025) Linearization approach for measuring the accuracy of multinomial outcomes from a statistical register . <i>Proceedings of the 3rd Workshop on methodologies for official statistics</i> , Istat.

				Deliu, N, Falorsi, PD, Falorsi, S., Chianella, D, Alleva, G. Evaluating the Accuracy of Register-based Official Statistics with an Application to the Attained Level of Education. Submitted
2023	Labour cost indices at Istat: criticisms and enhancement opportunities	Anna Ciammola, Eleonora Cimino and Donatella Tuzi	Anna Ciammola, Eleonora Cimino and Donatella Tuzi (2023) Dealing with index numbers of ratios. A case study with short-term unit labour cost indicators". Scientific ASA Conference on Statistics, Technology and Data Science for Economic and Social Development, Bologna, 7.9.2023 Link	Ciammola, A., Cimino, E., Tuzi, D. (2023). Dealing with index numbers of ratios. A case study with short-term unit labour cost indicators. <i>Rivista Statistica Applicata</i> , Vol. 35, Number 3, Supplement, pp. 141-145 Link
2023	Generation of Synthetic Data from actual data of Mobile Network Operators (MNO) through Generative Adversarial Networks (GANs): motivations, techniques and preliminary results	Pugliese F., De Cubellis M.		
2023	Multi-source data: New approaches for non-standard employment statistics. The Dutch and Italian experience	Danila Filippini, Mauricio Garnier-Villarreal, Silvia Loriga, Dimitris Pavlopoulos, Roberta Varriale		Filippini D., Loriga S., Garnier-Villarreal M., Pavlopoulos D., Varriale R. (2024). Measurement of contract type from multi-source data. Preliminary results from the Dutch and Italian experience. <i>Proceedings of the 2nd Workshop on methodologies for official statistics</i> . Link .
2023	Quantification of urban green areas: An innovative remote sensing approach for official statistics	Mugnoli S., Sabbi A., De Fausti F., Lancioni G., Sisti F.		Mugnoli S., Sabbi A., De Fausti F., Lancioni G., Sisti F. (2024). Quantification of urban green areas: An innovative remote sensing approach for Official Statistics. <i>Proceedings of the 2nd Workshop on methodologies for official statistics</i> . Link .
2023	Quality aspects using mobile network operators data for official statistics	Gabriele Ascari, Erika Cerasti, Cristina Faricelli, Paolo Mattera, Sara Piombo, Roberta Radini, Giorgia Simeoni and Tiziana Tuoto	T. Tuoto, M. Offermans, R Herranz, M Tiru, F Carausu, E. Cerasti, R. Radini, C. Faricelli, P. Mattera, G Ascari, G. Simeoni, L. Valentino, E de Jonge, M. Picornell, V Tonnison, C. Escribano. (2024) Towards the usage of Mobile Network Operators' data for European official statistics production: improving quality through standardisation. Q2024, Lisbona. Link	Ascari G., Cerasti E., Faricelli C., Mattera P., Piombo S., Radini R., Simeoni G., Tuoto T. (2024). Quality aspects using mobile network operators data for official statistics. <i>Proceedings of the 2nd Workshop on methodologies for official statistics</i> . Link .
2024	A study on machine learning for longitudinal information in administrative data: the case of the Attained level of education	De Fausti F., Di Zio M., Filippini R., Toti S.	De Fausti F., Di Zio M., Filippini R., Toti S. (2024) Applying Machine Learning to Longitudinal Administrative Data: A Case Study in Education. Q2024, Lisbona. Link	
2024	Applying the extended Total Survey Error	Ascari G., Simeoni G.	Ascari G. Simeoni G. (2024) Applying the extended Total	

	approach to statistics based on new data sources: the case of Mobile Network Operators data		Survey Error approach to statistics based on new data sources: the case of MNO data. Q2024, Lisbona	
2024	Conflation for the Integration of Geospatial Data and Enhancement of Building Registry Quality	G. Salvucci, D. Abbatini, D. Ichim, J. Corradi, S. Lucchetti	G. Salvucci, D. Abbatini, D. Ichim, J. Corradi, S. Lucchetti UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE CONFERENCE OF EUROPEAN STATISTICIANS Expert Meeting on Statistical Data Collection and Sources, Geneva (CH) 22-24 May 2024. Link	G. Salvucci, D. Scarpitta, M. Maialetti, K. Rontos, S. Bigiotti, A. Sateriano, and A. Muolo (2024). Measuring Data Quality from Building Registers: A Case Study in Italy. <i>Geographies</i> 2024, 4(3), 596-611. Link Salvucci (2025). The integration of geographical data to support official statistics. <i>Annali del Dipartimento di metodi e modelli per l'economia, il territorio e la finanza</i> . Link Daniela Ichim, Luisa Franconi, and Damiano Abbatini (2025) Take me home: Attribute-driven spatial matching of registers in official statistics. <i>Statistical Journal of the IAOS</i> , Volume 41, Issue 4. Link
2024	Correcting for income-dependent unit non-response bias in IT-SILC using tax data	S. Gerosa		
2024	Optimization of Surveys: The 'Integrated Census and Social Surveys System' Project	C. De Vitiis, S. Falorsi, A. Guandalini, F. Inglese, S. Loriga, M. Mazziotta, F. Piersimoni, R. Ranaldi, M. Russo, M. D. Terribili, R. Benedetti		C. De Vitiis, S. Falorsi, A. Guandalini, F. Inglese, S. Loriga, M. Mazziotta, F. Piersimoni, R. Ranaldi, M. Russo, M. D. Terribili, R. Benedetti (2025). Optimization of Surveys: The "Integrated Census and Social Surveys System" Project. <i>Proceedings of the 3rd Workshop on methodologies for official statistics</i> . Roma, Italy: Istat. Link
2024	Statistical use of AIS data	F.M. Arosio, M. Di Zio, A.E. Martino, G. Massacci, F. Ortame, A. Pappagallo, F. Pugliese, N. Salamone, F. Sisti, S. Talice, L. Valentino		F.M. Arosio, M. Di Zio, A.E. Martino, G. Massacci, F. Ortame, A. Pappagallo, F. Pugliese, N. Salamone, F. Sisti, S. Talice, L. Valentino (2025). Statistical use of Automatic Identification System (AIS) data. <i>Proceedings of the 3rd Workshop on methodologies for official statistics</i> . Roma, Italy: Istat. Link
2025	Application of web intelligence techniques and AI models for automatic coding of products made by enterprises involved in business surveys	D. Summa, F. Scalfati, G. D'Amore, M. Morrone	G. D'Amore, M. Morrone, D. Summa (2025) Application of web intelligence techniques for the automatic coding of products manufactured by businesses in economic surveys. Expert Meeting on Statistical Data Collection and Sources 2025 (UNECE), 2-4 giugno 2025, Lisbon, Portugal G. D'Amore, D. Summa, M. Amarone, L. Briatico, M. Morrone, F. Scalfati (2025) From web to code: ai-driven product classification for smarter business surveys. Scientific Conference on Data, Statistics and AI for Well-Being of People and Organizations (ASA), Università della Repubblica di San Marino, San Marino Città 17-19 September 2025	In fase di revisione avanzata: <ul style="list-style-type: none">From web to code: ai-driven product classification for smarter business surveys (<i>Statistica Applicata – The Italian Journal of Applied Statistics</i>)From Company Websites to Official Product Codes: A Data-Driven Framework for PRODCOM Classification (<i>Italian Statistical Society Series on Advances in Statistics (ISSAS)</i>) Da sottoporre Leveraging Web Intelligence and Generative AI to Streamline Enterprise Product Coding in Business Surveys". <i>Statistical Journal of the IAOS</i>

			<p>M. Morrone, G. D'Amore, D. Summa, T. Gambuti, P. Pianura, F. Scalfati (2025). An Experimental Approach Based on Web Intelligence and Artificial Intelligence Techniques for the Automatic Classification of Products. European Establishment Statistics Workshop (EESW25) 6 novembre 2025</p> <p>G.D'Amore, D. Summa (2026). From Company Websites to Official Product Codes: A Data-Driven Framework for PRODCOM Classification. Fourth Conference of the Statistics and Data Science Section (SDS 2026) of the Italian Statistical Society Caserta il 31 marzo 2026</p> <p>G.D'Amore, D. Summa (2026). Leveraging web intelligence and generative AI to streamline enterprise product coding in business surveys. Seventh International Workshop on Business Data Collection Methodology (BDCMW 2026) 8-10 June 2026, Heerlen, Olanda</p> <p>G. D'Amore e D. Summa (2025). Virtual Business Data Collection Methodology (e-BDCM) international meeting, 2 ottobre 2025.</p>	
2025	An automated approach for tuning precision constraints in an optimal allocation problem	I. Bombelli, G. Barcaroli, A. Fasulo, A. Guandalini, G. Sacco, M. Terribili	<p>Barcaroli, G., Bombelli, I., Fasulo, A., Guandalini, A., Terribili, M.D., & Sacco, G. (2025). An automated approach for tuning precision constraints in an optimal allocation problem. In: Book of Abstract, ITACOSM2025-IASS, Satellite Conference Shaping the future of survey statistics in the data-driven era (p. 91)</p> <p>Barcaroli, G., Bombelli, I., Fasulo, A., Guandalini, A., Terribili, M.D., & Sacco, G. (2025). Controlling Estimation Errors in Stratified Sampling Design through a Genetic Algorithm. In: Book of Abstract, SAE2025-Conference on Small Area Estimation, Survey and Data Science (p.35).</p>	<p>sottomesso un articolo dal titolo "An automated approach for tuning precision constraints in an optimal allocation problem" (Barcaroli, G., Bombelli, I., Guandalini, A., Terribili, M.D.) alla Special Issue "Shaping the future of survey statistics in the data-driven era", proposta nell'ambito di ITACOSM2025-IASS e ospitata dalla rivista Survey Methodology</p> <p>Barcaroli, G., Bombelli, I., Fasulo, A., Guandalini, A., & Terribili, M. D. (2026). Book & Software Review: R2BEAT, an R Package for Performing Optimal Allocation and Sample Selection. The Survey Statistician, 96, pp. 64–74.</p>
2025	Some evidence supporting the design of the Italian integrated system of social surveys	A. Guandalini, S. Loriga, M. Terribili	<p>Guandalini, A., Loriga, S., Terribili M.D. (2025) Evidence supporting the design of the Italian Integrated System of Social Surveys. Conferenza Itacosm, Bologna 1-4 luglio 2025</p>	<p>Technical report Istat, dal titolo "Ridisegno delle indagini del sistema integrato censimento e indagini sociali (Sicis)", sottoposto a rivista</p>
2025	Innovations in the quality of EU-SILC Survey Estimates	D. Chianella, M. D'Alò, S. Gerosa, M. Terribili, C. De Vitiis	<p>Sarà inviato un lavoro alla prossima conferenza SIEDS (Catania, maggio 2026)</p>	

2025	A Contamination Model for Multivariate Zero-Inflated Data	D. Di Cecco, D. Filipponi, U. Guarnera	Inviato per una presentazione alla conferenza Q2026 a Sebenico (Croazia)	In preparazione un paper da sottoporre alla rivista Journal of Survey Statistics and Methodology
2025	A constrained optimization approach for adjusting misclassified proxy variables	F. Solari, V. Quondamstefano, R. Filippini, G. Rocchetti	<p>F. Solari, C. Ciccaglioni, V. Quondamstefano (2026). A constrained optimisation approach for adjusting misclassified proxy variables, PhD program in Statistics</p> <p>DSS Statistics Seminar, Dipartimento di Scienze Statistiche, Università di Roma Sapienza, 22 maggio 2026</p> <p>F. Solari, C. Ciccaglioni, V. Quondamstefano (2026). A constrained optimisation approach for adjusting misclassified proxy variables (relazione invitata), 53^a Riunione della Società Italiana di Statistica, Roma, 22-25 giugno 2026</p>	<p>F. Solari, Ciccaglioni, C., V. Quondamstefano, R. Filippini, G. Rocchetti (2026). A constrained optimization approach for adjusting misclassified proxy variables. <i>Proceedings of the 4th Workshop on methodologies for official statistics</i></p> <p>In preparazione un paper da sottoporre per la pubblicazione</p>

LIST OF CONSULTING ACTIVITIES

This is the list of projects at the beginning of their activities for which the Advisory committee gave support during informal consulting meetings. The list is updated yearly.

CONSULTING ACTIVITIES OF THE ADVISORY COMMITTEE ON STATISTICAL METHODS

YEAR	PROJECT TITLE	PROJECT MEMBERS	CONFERENCES	ARTICLES AND BOOKS
2022	Sentiment Analysis Techniques and outgrowing methods	Mauro Bruno, Elena Catanese	Bruno M., Scannapieco M., Catanese E., Valentino L., De Fausti F. (2022). Italian sentiment analysis on climate change: emerging patterns from 2016 to today, Proceedings Q 2022 Vilnius, 2022,6. Link Catanese E., Scannapieco M., Bruno M., Valentino L. (2022). The Italian Social Mood on Economy Index: recent methodological developments, Proceedings of the 16th international conference on statistical analysis of textual data (JADT) 2022 - Volume 1 - Isbn : 9791280153302 - Pag. 213-220	Catanese, E., M. Scannapieco, M. Bruno, and L. Valentino. (2022). Natural language processing in official statistics: The social mood on economy index experience, <i>Statistical Journal of the IAOS</i> , Volume 38, Issue 4: 1451-1459. Link
2022	New System for the Social Surveys: Two-Stage for Two-Phase Sampling design	Alessio Guandalini, Silvia Loriga, Stefano Falorsi, Michele D'Alò	De Vitiis C., Falorsi S., Guandalini A., Inglese F., Righi P., Terribili M.D. (2022). The Responsive-Adaptive Survey Design approach for planning the Permanent Census of Population and Housing. Balzanella A., Bini M., Cavicchia C., Verde R. (Eds.) Book of the Short Papers, SIS 2022 – 51st Scientific Meeting of the Italian Statistical Society Link Guandalini A., De Vitiis C., Falorsi S., Inglese F., Terribili M.D. (2022). Robustness to misspecification of non-response model in a responsive-adaptive survey design approach: an application on the Italian Census., 7th ITALIAN Conference on Survey Sampling (ITACOSM 2022). Perugia Link	De Vitiis C., Falorsi S., Guandalini A., Inglese F., Righi P., Terribili M. D. (2024). Adaptive sampling design for the Italian social sample surveys: an application on the population census. <i>METRON</i> 1-17. Link
2022	A Locality Sensitive Hashing Approach For Efficient Time Series Clustering	Pierpaolo Massoli, Alessandro La Rocca		
2022	A non-ignorable response model for the estimation of the bias due to the link between survey participation and target variables	Marco Fortini		

2022	The Sampling Variance of the Consumer Confidence Index	Alessio Guandalini	
2023	Proposal of new methods of measuring Italian Public Administration Reform in the context of the NRPP	Cinquegrana, Bianchi, Cosco, Orecchini, Righi, Giungato, D'Autilia, Nazzaro, Verde	
2025	Stratifying the second stage sample units via marginal allocation in two-stage sampling design for Istat social surveys	Terribili, De Vitiis, Trambusti, Asti, Inglese	Stratifying the second stage sample units via marginal allocation in two-stage sampling design for Istat social surveys", paper presentato alla conferenza Itacosc, Bologna 1-4 luglio 2025
2025	Selected issues on machine learning methods for total non-response treatment	Terribili, De Vitiis, Trambusti, Asti, Inglese	
2025	Addressing selectivity bias in social media platforms	Catanese	Catanese, D'Orazio (ottobre 2025): Alcune riflessioni sull'utilizzo dei social media per la produzione statistica dell'Istituto. Nota predisposta per il presidente Istat,.