

CURRICULUM VITAE

Panagiotis Merkouris

EDUCATION

PhD: Statistics, 1992

University of Waterloo, Department of Statistics and Actuarial Science, Waterloo, Canada

Thesis title: *A Transform Method of Optimal Estimation in Stochastic Processes*

MSc: Mathematical Statistics, 1983

McGill University, Department of Mathematics and Statistics, Montreal, Canada

BSc: Mathematics, 1979

National and Kapodistrian University of Athens, Department of Mathematics

EMPLOYMENT

Athens University of Economics and Business (AUEB), Department of Statistics

Professor, 2023-

Associate Professor, 2016-2023

Assistant Professor, 2007-2016

Visiting Scientist, February 2003 - September 2003

Statistics Canada, Survey Research and Innovation Division, and Household Survey Methods Division

Senior Research Methodologist, 1997-2001, 2003-2007

Survey Methodologist, 1992-1997.

National Statistical Agency of Greece

Expert Scientist, Αύγουστος 2001 - Ιανουάριος 2003

Vanier College, Department of Mathematics, Montreal

Professor of Mathematics, Ιανουάριος 1983 - Ιούλιος 1986

RESEARCH INTERESTS

Main research interests:

Survey Sampling, Official Statistics

Other research interests:

Inference in Stochastic Processes, Estimating Functions, Generalized Regression Estimation, Survey Data Analysis.

PUBLICATIONS

Publications in refereed statistical journals

- Merkouris, T., Smith, P.A., and Fallows, A. (2023). Combining National Surveys with Composite Calibration to Improve the Precision of Estimates from the UK's Living Costs and Food Survey. *Journal of Survey Statistics and Methodology*, 11, 713-741.
- Merkouris, T. (2022). Optimal Linear Estimation in Two-phase Sampling. *Survey Methodology*, 48, 439-461.
- Ioannidis, E., Merkouris, T., Zhang, Li-Chun, Karlberg, M., Petrakos, M., Reis, F., Stavropoulos, F. (2016). On a Modular Approach to the Design of Integrated Social Surveys. *Journal of Official Statistics (Discussion paper)*, 32, 259-286.
- Merkouris, T. (2015). An Efficient Estimation Method for Matrix Survey Sampling. *Survey Methodology*, 41, 237-262.
- Merkouris, T. (2010). Combining Information from Multiple Surveys by Using Regression for Efficient Small Domain Estimation. *Journal of the Royal Statistical Society, Series B*, 72, 27-48.
- Merkouris, T. (2009). On the Inter-Regional Mover Problem in Panel Household Surveys. *Journal of Official Statistics*, 25,63-76.
- Merkouris, T. (2007). Transform Martingale Estimating Functions. *The Annals of Statistics*, 35, 1975-2000.
- Merkouris, T. (2004). Combining Independent Regression Estimators from Multiple Surveys. *Journal of the American Statistical Association*, 99, 1131-1139.
- Merkouris, T. (2001). Cross-sectional Estimation in Multiple-Panel Household Surveys. *Survey Methodology*, 27, 171-181.

Publications in conference proceedings

- Merkouris, T. (2021). A New Approach to Composite Estimation for Repeated Surveys with Rotating Panels. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 1857-1863.
- Merkouris, T. (2016). Calibration Estimators Including Fractional Exponents of Auxiliary Variables. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 2001- 2012.
- Merkouris, T. (2014). Composite Calibration Estimation Integrating Data from Different Surveys. *Proceedings 59th ISI World Statistics Congress, August 2013, Hong Kong*, 205-210.
- Merkouris, T. (2010). An Estimation Method for Matrix Survey Sampling. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 4880-4886.
- Merkouris, T. (2010). Use of Auxiliary Sources in Weighting: The Case of Integration of Social Survey Data. *Proceedings of the Annual International Methodology Symposium. Statistics Canada*, 256-263.

- Merkouris, T. (2008). Efficient Calibration for Some Variants of Double Sampling. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 3329-3335.
- Merkouris, T. (2006). Efficient Small-Domain Estimation by Combining Information from Multiple Surveys through Regression. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 3419-3425.
- Merkouris, T. (1999). On the Weight Share Method for Panel Household Surveys. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 255-260.
- Merkouris, T. (1997). On Cross-Sectional Estimation for Repeated Panel Household Surveys. *Proceedings of the Survey Methods Section, Statistical Society of Canada*, 93-98.
- Singh, A., and Merkouris, T. (1995). A Diversity Component Analysis of Interviewer Effects in Categorical Survey Data. *Proceedings of the International Conference on Survey Measurement and Process Quality*, Bristol, UK., 332-337.
- Singh, A., and Merkouris, T. (1995). Composite Estimation by Modified Regression for Repeated Surveys. *Proceedings of the Section on Survey Research Methods, American Statistical Association*, 420-425.
- Merkouris, T. (1992). A Transform Method for Optimal Estimation in Stochastic Processes: Basic Aspects. In: J.Chen (Ed.), *Recent Concepts in Statistical Inference, Proceedings of a Symposium in Honor of Professor V. P. Godambe*, University of Waterloo, 42pp.

Other publications

- Merkouris, T. (2014). On Best Linear Unbiased Estimation in Two-Phase Sampling. Methodology Branch Technical Report, no.SRID-2014-003E, Statistics Canada.
- Merkouris, T. (2006). Combining information for efficient small domain estimation through regression. Methodology Branch Technical Report, no.HSMD-2006-007E, Statistics Canada.
- Merkouris, T. (2003). Weighting and Variance Calculation Issues Related to Inter-Stratum Moves in Panel Household Surveys. Technical Report no 201, Department of Statistics, Athens University of Economics and Business.
- Merkouris, T. (2001). Combining Regression Estimators from Independent Samples from the Same Finite Population. Methodology Branch Technical Report, no.HSMD-2001-008E, Statistics Canada.
- Merkouris, T. (2001). Diversity Measures of Interviewer Error in Categorical Survey Data. Methodology Branch Technical Report, no.HSMD-2001-007E, Statistics Canada.
- Merkouris, T. and Khan, K. (2001). Calibrating the Survey Component of the Social Policy Simulation Data Base: A Case Study in Variable Selection for Calibration in Complex Surveys. Methodology Branch Technical Report, no.HSMD-2001-005E, Statistics Canada.
- Latouche, M., Dufour, J., and Merkouris, T. (2000). Cross-Sectional Weighting for the Survey of Labour and Income Dynamics: Combining Two or More Panels. Income Research Paper Series, no.75F0002MIE6, Statistics Canada.
- Merkouris, T. (1999). Cross-Sectional Estimation in Multiple-Panel Household Surveys. Methodology Branch Technical Report, no.HSMD-1999-004E, Statistics Canada.

Merkouris, T. (1999). The Weight Share Method for Panel Household Surveys: Issues Related to Moves Between Strata. Methodology Branch Technical Report, no.HSMD-1999-003E, Statistics Canada.

Merkouris, T. (1992). A Transform Method for Optimal Estimation in Stochastic Processes. Technical Report Series, STAT-92-02. University of Waterloo.

PARTICIPATION IN CONFERENCES AND INVITED TALKS

Joint Statistical Meetings, August 2021, Seattle, USA. “A New Approach to Composite Estimation for Repeated Surveys with Rotating Panels”.

Contemporary Theory and Practice of Survey Sampling: A Celebration of Research Contributions of J.N.K. Rao May 2017, Kunming, China. “On Best Linear Unbiased Estimation in Survey Sampling”.

Joint Statistical Meetings, August 2016, Chicago, USA. “Calibration Estimators Including Fractional Exponents of Auxiliary Variables”.

Biannual Conference of the European Survey Research Association, July 2015, Reykjavik, Iceland. “Weighting schemes for linking various survey data sources”.

Department of Statistics, London School of Economics, February 2015. “On Best Linear Unbiased Estimation and Calibration in Survey Sampling”.

Department of Social Statistics, University of Southampton, February 2015. “Optimal Linear Estimation and Calibration in Survey Sampling”.

The 59th World Statistical Congress, Hong Kong, 2013. Invited Session. “Composite Calibration Estimation Integrating Data from Different Surveys”.

The 59th World Statistical Congress, Hong Kong, 2013. Invited Session. Organizer and Discussant. “Matrix Sampling and Split-Questionnaire: Design and Estimation”.

First Conference of the International Society for NonParametric Statistics (ISNPS), Invited Session, June 2012, Chalkidiki, Greece. “Efficient small-area calibration estimators integrating data from different surveys”.

Annual conference of the Greek Statistical Institute, University of Patras, 2011. Opening talk. «Transparency in Statistical Practice»

Joint Statistical Meetings, August 2010, Vancouver, Canada. “An Estimation Method for Matrix Survey Sampling”.

Annual International Methodology Symposium. Statistics Canada. Invited Session. Ottawa, Canada, October 2010. “Use of Auxiliary Sources in Weighting: The Case of Integration of Social Survey Data”.

Joint Statistical Meetings, August 2008, Denver, USA. “Efficient Calibration for Some Variants of Double Sampling”.

International Conference on the Methodology of Longitudinal Surveys, July 2006, University of Essex, England. On the Inter-Stratum Mover Problem in Longitudinal Household Surveys.

Joint Statistical Meetings, August 2006, Seattle, USA. “Efficient Small-Domain Estimation by Combining Information from Multiple Surveys through Regression”.

Laboratory for Research in Statistics and Probability, Department of Mathematics, Carleton University, Ottawa, Δεκέμβριος 2004. “Combining Information from Multiple Surveys for Small Area Estimation Using Generalized and Optimal Regression”.

Department of Statistics, University of Waterloo, January 2004. “Combining Regression Estimators from Multiple Surveys”.

Department of Mathematics, National and Kapodistrian University of Athens, May 2002. “Regression and Calibration in Survey Sampling”.

Department of Statistics and Actuarial Science, University of Piraious, December 2000. “On the Combination of Multiple Panels in Repeated Panel Surveys”.

Joint Statistical Meetings, August 1999, Baltimor, USA. “On the Weight Share Method for Panel Household Surveys”.

Statistical Society of Canada, Annual Meeting, June 1997, Fredericton, Canada. “On Cross-Sectional Estimation for Repeated Panel Surveys”.

Joint Statistical Meetings, August 1995, Orlando, USA. “Composite Estimation by Modified Regression for Repeated Surveys”.

International Conference on Survey Measurement and Process Quality, Bristol, England, 1995. “A Diversity Component Analysis of Interviewer Effects in Categorical Survey Data”.

Statistical Society of Canada, Annual Meeting, June 1993, Wolfville, Canada. “A Multivariate Measure of Intraclass Correlation for Categorical Survey Data”.

Department of Statistics, Athens University of Economics and Business, December 1993. “A Diversity Component Analysis of Categorical Survey Data”.

217th IMS-ENAR Meeting, March 1991, Huston, USA. “A Transform Method for Optimal Estimation in Stochastic Processes”.

Symposium in Honor of Professor V.P. Godambe, August 1991, University of Waterloo. “A Transform Method for Optimal Estimation in Stochastic Processes”: Basic Aspects.

Statistical Society of Canada, Annual Meeting, June 1991, Toronto, Canada. “Some Applications of Estimating Functions to Inference for Stochastic Processes”.

OTHER ACTIVITIES

Professional-scientific

National Center of Social Research, Greece

Scientific collaborator, occasionally between August 2002 - March 2003.

- Sampling design of the Greek component of the European Social Survey.
- Design of a supplement to the EU Survey of Income and Living Conditions, and combination with the main survey conducted by the National Statistical Agency of Greece.

Bank of Greece

Methodology Advisor for the Household Finance and Consumption Survey (Central European Bank), March 2010 - May 2010.

Greek Statistical Authority

Expert Scientist, 13/11/2017-31/12/2018.

Sampling redesign of the Survey of Income and Living Conditions of Households (EU-SILC), to adjust the sample size at the regional level (NUTSII).

Research projects — Research Center of AUEB

Research program: “Investigating the Benefits of Including LFS Data in the Estimation of LCF”, 18/4/2019 - 31/10/2019.

Funding: UK Office for National Statistics, Contractor: University of Southampton.

Research program: “Composite calibration estimation combining information from various survey sources”, 1/12/2014 - 31/3/2016.

Funding: Program ΔΠΑΣΗ 1 (Excellence), Research Center of AUEB.

Research program: “Methodology for Production of European Statistics (Development of methods and scenarios for an integrated system of European Social Surveys)”, 17/5/2013 - 18/10/2013.

Funding: EUROSTAT. Contractor: Agilis A.E.

Refereeing

Reviewer for the journals *Biometrika*, *Journal of Official Statistics*, *Survey Methodology Journal*, *Journal of Statistical Theory and Practice*.

Administrative work

Athens University of Economics and Business

- Director of the Laboratory of Applied Statistics, Probability and Data Analysis, 2018-2021.
- Member of the committee of the program of undergraduate studies, Department of Statistics, 2020-2021.
- Member of the committee of the undergraduate studies guide, 2014-2021.
- Member of the committee for the evaluation of candidates for positions in the program "acquisition of academic teaching experience for young scientists with PhD degrees", 2018-2022.
- Member of the committee for the evaluation of candidates for term teaching positions, 2019-2020.
- Member of the electoral board for the election of two faculty members, 22/5/2018 and 4/10/2019, and for the tenure of two faculty members, 9/4/2020 and 9/12/2021.
- Member of the committee of student placement examinations, 2020.
- Member of the committee for alumni, 2014.

Statistics Canada

- Research Coordinator in the Household Surveys Methods Division, 2004-2007.

Member of sections, groups and committees in Statistics Canada

- Member of the Survey Research and Innovation Division.

- Member of the Survey and Analysis Methods Development Section, Labour Force Survey Methods Section, Expenditure Survey and Analysis Methods Section.
- Collaborator of the Longitudinal and Financial Survey Methods Section, and the Data Analysis Resource Center.

Memberships

- American Statistical Association
- Statistical Society of Canada
- Greek Statistical Institute