

# 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, Department of Statistics

Associate Professor 2016 -

Assistant Professor, 2007-2016

Visiting Scientist, February 2003 - September 2003

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

Senior Research Methodologist, 1997-2001, 2003-2007

Survey Methodologist, 1992-1997

National Statistical Service of Greece

Expert Scientist, August 2001 - January 2003

Vanier College, Department of Mathematics, (Post-secondary Education), Montreal

Professor of Mathematics, January 1983 - July 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

- 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. (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**

- 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 Greel Statistical Institute, University of Patras, 2011. Opening lecture. “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, Οκτώβριος 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 University of Athens, May 2002. “Regression and Calibration in Survey Sampling”.

Department of Statistics and Actuarial Science, University of Pireaus, 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".

217<sup>th</sup> 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".