



Mikayel VARDANYAN

Ph.D. in Economics

Full Professor, Quantitative Methods

Head of Department

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EDUCATION

2005 Ph.D. in Economics, Oregon State University, USA

RESEARCH INTERESTS

Economics, Quantitative Methods

PROFESSIONAL EXPERIENCE

ACADEMIC:

2023 - Present Full Professor, IÉSEG School of Management, France

2017 - 2023 Associate Professor, IÉSEG School of Management, France

2013 - Present Head of Department, IÉSEG School of Management, France

2010 - 2017 Assistant Professor, IÉSEG School of Management, France

2008 - 2010 Research Associate, University of Luxembourg and the Central Bank of Luxembourg, Luxembourg City, Luxembourg

2006 - 2008 Lecturer, The State University of New York at Binghamton, Binghamton, USA

2005 - 2006 Lecturer, Oregon State University, Corvallis, USA

2001 - 2005 Teaching and Research Assistant, Oregon State University, Corvallis, USA

COURSES TAUGHT

- Economics and business research seminar, Grande ecole (master cycle)
- Quantitative methods, International mba
- Quantitative methods and data analysis, Msc in fashion management

Papers in refereed journals

Published

- Cheng W., Ouyang X., Yu A., Shen Z., Vardanyan M., (2024), Subjective Perceptions versus Objective Outcomes: Assessing the Impact of Smart City Pilots on Environmental Quality in China, *Technological Forecasting and Social Change*, 209(2024), pp. 123799
- Deng H., Lyu B., Shen Z., Vardanyan M., (2024), Research and development expenditures, technology spillovers, and green productivity in agriculture: an empirical analysis, *Post-Communist Economies*, 36(3), pp. 360-381
- Dong K., Jiang Q., Liu Y., Shen Z., Vardanyan M., (2024), Is energy aid allocated fairly? A global energy vulnerability perspective, *World Development*, 173(n/a), pp. 106409
- Du J., Gu H., Shen Z., Song M., Vardanyan M., (2024), Assessing Regional Energy Security Characteristics: Evidence from Chinese Province-Level Data, *Energy Economics*, 140(2024), pp. 107964
- Niu Y., Boussemart J.-P., Shen Z., Vardanyan M., (2024), Performance evaluation using multi-stage production frameworks: assessing the tradeoffs among the economic, environmental, and social well-being, *European Journal of Operational Research*, 318(3), pp. 1000-1013
- Cai J., Zheng H., Vardanyan M., Shen Z., (2023), Achieving carbon neutrality through green technological progress: evidence from China, *Energy Policy*, 173(2023), pp. 113397
- Di D., Li G., Shen Z., Song M., Vardanyan M., (2023), Environmental credit constraints and pollution reduction: Evidence from China's blacklisting system for environmental fraud, *Ecological Economics*, 210(2023), pp. 107870
- Du J., Shen Z., Song M., Vardanyan M., (2023), The role of green financing in facilitating renewable energy transition in China: perspectives from energy governance, environmental regulation, and market reforms, *Energy Economics*, 120(2023), pp. 106595
- Li L., Shen Z., Song M., Vardanyan M., (2023), Public Expenditure, Green Finance, and Environmental Governance: Evidence From China, *Environmental Modelling and Assessment*, 28(5), pp. 859-873
- Song M., Pan H., Vardanyan M., Shen Z., (2023), Evaluating the energy efficiency-enhancing potential of the digital economy: Evidence from China, *Journal of Environmental Management*, 344(2023), pp. 118408
- Shen Z., Baležentis T., Vardanyan M., (2022), Evaluating green productivity gains with the exponential by-production technology: An analysis of the Chinese industrial sector, *Environmental Modelling and Assessment*, 27(5), pp. 759-770
- Vardanyan M., Valdmanis V., Leleu H., Ferrier G., (2022), Estimating Technology Characteristics of the U.S. Hospital Industry Using Directional Distance Functions with Optimal Directions, *Omega*, 113(December 2022), pp. 102716
- Boussemart J.-P., Leleu H., Shen Z., Vardanyan M., Zhu N., (2019), Decomposing banking performance into economic and credit risk efficiencies, *European Journal of Operational Research*, 277(2), pp. 719-726
- Ferrier G., Leleu H., Valdmanis V., Vardanyan M., (2018), A Directional Distance Function Approach for Identifying the Input/Output Status of Medical Residents, *Applied Economics*, 50(9), pp. 1006-1021
- Färe R., Pasurka C., Vardanyan M., (2017), On Endogenizing Direction Vectors in Parametric Directional Distance Function-Based Models, *European Journal of Operational Research*, 262, pp. 361-369
- Färe R., Vardanyan M., (2016), A note on Parameterizing Input Distance Functions: Does the Choice of a Functional Form Matter?, *Journal of Productivity Analysis*, 45(2), pp. 121-130
- Chambers R., Färe R., Grosskopf S., Vardanyan M., (2013), Generalized Quadratic Revenue Functions, *Journal of Econometrics*, 173(1), pp. 11-21
- Guarda P., Rouabah A., Vardanyan M., (2013), Identifying Bank Outputs and Inputs with a Directional Technology Distance Function, *Journal of Productivity Analysis*, 40(2), pp. 185-195
- Färe R., Carlos Martins-Filho C., Vardanyan M., (2010), On Functional Form Representation of Multi-Output Production Technologies, *Journal of Productivity Analysis*, 33(2), pp. 81-96
- Vardanyan M., Noh D.-W., (2006), Approximating the Cost of Pollution Abatement via Alternative Specifications of a Multi-Output Production Technology: a Case of the U.S. Electric Utility Industry, *Journal of Environmental Management*, 80(2), pp. 177-190

Vardanyan M., Tremblay V., (2006), The Measurement of Marketing Efficiency in the Presence of Spillovers: Theory and Evidence, *Managerial and Decision Economics*, 27(5), pp. 319-331

Forthcoming

Li L., Boussemart J.-P., Shen Z., Vardanyan M., (2025), Assessing the Potential of Digital Technology: An Integrated Measurement of Economic, Environmental, and Social Performance, *Annals of Operations Research*, forthcoming(.), pp. N/A

Shen Z., Li J., Vardanyan M., Wang B., (2022), Nonparametric shadow pricing of non-performing loans: a study of the Chinese banking sector, *Annals of Operations Research*, X(X), pp. X

Shen Z., Vardanyan M., Baležentis T., Wang J., (2021), Analyzing the Tradeoff between the Economic and Environmental Performance: the Case of the Chinese Manufacturing Sector, *IEEE Transactions on Engineering Management*, forthcoming(X), pp. X

Communications in refereed conferences

International

Ferrier G., Leleu H., Valdmanis V., Vardanyan M., (2019), *Measuring Efficiency Gains Using Distance Functions with Optimal Directions: Evidence from the US Hospital Sector*. INFORMS Annual Meeting, Seattle, USA

Ferrier G., Leleu H., Valdmanis V., Vardanyan M., (2018), *Does Hospital Efficiency and Productivity Depend on Hospital Type?* 10th North American Productivity Workshop, Miami, USA

Färe R., Pasurka C., Vardanyan M., (2016), *On Endogenizing Direction Vectors in Parametric Directional Distance Function-Based Models* 9th North American Productivity Workshop, Quebec City, Canada

Ferrier G., Leleu H., Valdmanis V., Vardanyan M., (2015), *A Directional Distance Function Approach for Identifying the Input/Output Status of Medical Residents* 14th European Workshop on Efficiency and Productivity Analysis, Helsinki, Finland

Färe R., Vardanyan M., (2013), *Parameterizing Input Distance Functions: Does the Choice of the Functional Form Matter* Thirteenth European Workshop on Efficiency and Productivity Analysis, Helsinki, Finland

Ferrier G., Leleu H., Valdmanis V., Vardanyan M., (2013), *A Directional Distance Function Approach to Identifying the Input/Output Status of Medical Residents* INFORMS Annual Meeting, Minneapolis, USA

Guarda P., Rouabah A., Vardanyan M., (2013), *Identifying Bank Outputs and Inputs with a Directional Technology Distance Function* Ninth Eurasia Business and Economic Society Conference, Rome, Italy

Guarda P., Rouabah A., Vardanyan M., (2011), *A Directional Distance Function Approach to Identifying Bank Output* Banking, Productivity and Growth, Luxembourg City, Luxembourg

Guarda P., Rouabah A., Vardanyan M., (2010), *Efficiency and Productivity in Luxembourg's Banking Industry: A Stochastic Directional Distance Function Approach* Sixth North American Productivity Workshop, Houston, USA

Guarda P., Rouabah A., Vardanyan M., (2009), *Returns to Scale and Economies of Scope in Luxembourg's Banking Industry* Eleventh European Workshop on Efficiency and Productivity Analysis, Pisa, Italy

GRANTS AND HONORS

Award

2004 Outstanding Graduate Student Award (exceptional scholar), Oregon State University, Unknown

2003 Outstanding Graduate Assistant Award, Oregon State University, Unknown

EDITORIAL ACTIVITY

Reviewer in an academic journal

2019 European Journal of Operational Research

2018 - 2019 European Journal of Operational research

2018	Journal of Productivity Analysis
2017 - 2018	Journal of Productivity Analysis
2017 - 2018	European Journal of Operational Research
2017 - 2018	Agricultural Economics
2016 - 2017	Journal of Productivity Analysis
2015 - 2016	Journal of Productivity Analysis

RESEARCH ACTIVITIES

COMMITTEE CHAIR

Contribution to an international academic partnership

2019 - 2019	Visiting Professor, Wuhan University, China
2018 - 2018	Visiting Professor, Wuhan University, China
2017 - 2017	Visiting Professor, Wuhan University, China
2015 - 2016	Facilitation of the Organization of a Sabbatical Visit , University of Arkansas, USA

Extensive contribution to a corporate partnership

2016 - 2016

2016	Executive Education Programs, IÉSEG School of Management, France
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Head of a recruitment jury (orals)

2019 - 2019	Oral Admission Exams, IÉSEG School of Management, France
2018 - 2018	
2017 - 2017	
2016 - 2016	Oral Admission Exams, IÉSEG School of Management, France

Member of a teaching quality committee

2017 - 2017

Participation in a pedagogical cafe

2016 - 2016	Pedagogical Cafe, IÉSEG School of Management, France
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Participation in recruitment of professors

2017 - 2017

2015 - 2016