

Michel Simioni

INRAE, UMR MoISA
2, place Viala
34060 Montpellier, France

Phone: +33 (0)499612479
Email: michel.simioni@inrae.fr
URL: <https://umr-moisa.cirad.fr/>

Born: July 27, 1959 – Toulouse, France
Nationality: French

Current position

Senior Researcher, Institut National de Recherche pour l’Agriculture, l’Alimentation et l’Environnement

Areas of specialization

Production Econometrics: productivity and efficiency measurement
Econometrics of Food Consumption and Nutrition
Empirical issues in Environmental Economics
Climate Change Econometrics
Non and semiparametric econometrics

Education

1999 Authorized to supervise PhD theses (HDR), University of Toulouse, France
1984 PHD in Economics, University of Toulouse, France (supervisor: Prof. Xavier Freixas)

Professional experiences

2022–... Member of the Scientific Committee of the Center for Advanced Studies in Economics and Data Science (CASED), Hanoi, Vietnam.
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2022–... Associate researcher, TSE-R, Toulouse
2020–2024 Elected member, Scientific Commission in Social Sciences, Economics and Management INRAE (CSS-SESG)
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2020–2024 Elected member, Scientific Council of EcoSocio Departement, INRAE
2018-2019 Visiting Professor, Hanoi University of Natural Resources and Environment, Hanoi, Vietnam (October 2018 - March 2019)
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2018-2019	Visiting Researcher, Asia CIAT, Hanoi, Vietnam (October 2018 - March 2019)
2018	Visiting Professor, University of Economics and Law, HCMC, Vietnam (Sept. 2018)
2015-...	Senior researcher at INRA-MOISA, Montpellier
2015	Visiting Researcher, University of Ferrara, Italy (February)
2014-2016	Director of the Master of Economics and Trading, French University Pole, Vietnam
.	National University, HCMC, and TSE, Toulouse
2008-2015	Appointed member, Scientific Commission in Social Sciences, Economics and Manage-
.	-ment, INRA (CSS-SESG)
2007-2015	Senior researcher at TSE, INRA-GREMAQ, Toulouse
2005-2006	Head of INRA research team ESR, Toulouse
2002-...	Senior researcher at INRA
1999-2015	Associated researcher at IDEI, Toulouse
1998-2001	Researcher at INRA, Toulouse
1996-1998	Researcher at INSEE-CREST, Paris
1996-1998	Professor at INSEE-ENSAI, Rennes
1995	Visiting Researcher, Humboldt University, Berlin, Germany (June)
1986-1996	Junior researcher at INRA, Toulouse
1986	Research officer at Pioneer France Maïs, Toulouse
1984-1985	Military service
1982-1984	PhD student at GREMAQ, Toulouse, funded by DGRST

Editorial activities

2016	Editor, Special Issue: "Special issue in honor of Jean-Pierre Huiban," <i>Review of Agricultural, Food and Environmental Studies</i> , 97(2)
2016-2018	Editorial board of <i>Review of Agricultural, Food and Environmental Studies</i>
2014	Guest editor, Special Issue: "Advances in Industrial and Applied Mathematics," <i>Vietnam Journal of Mathematical Applications</i> , 12(2)
2011-2015	Editorial board of <i>Review of Agricultural and Environmental Studies</i>
2006-2015	Editorial board of <i>Case Studies in Business, Government and Industrial Statistics</i>
2004	Editor, Special Issue: "De l'agriculteur au consommateur: la transmission des prix le long des filières de l'agro-alimentaire," <i>Economie Rurale</i> , 283-284.
2002-2010	Editorial board of <i>Journal of Agricultural and Food Industrial Organization</i>
1994	Editor, Special Issue: "Efficacité et productivité dans l'agriculture," <i>Cahiers d'Economie et de Sociologie Rurales</i> , 31.

Referee reports for: *Agriculture, American Journal of Agricultural Economics, Annales d'Economie et de Statistique, Cahiers d'Economie et de Sociologie Rurales, Canadian Journal of Agricultural Economics, CSBIGS, China Economic Review, Ecological Economics, Econometrica, Economic Modelling, Economics Bulletin, Economie Rurale, Environment and Development Economics, European Journal of Comparative Economics, European Journal of Operational Research, European*

Review of Agricultural Economics, Journal of Agricultural Economics, Journal of Applied Econometrics, Journal of Econometrics, Health and Social Care in the Community, Marine Policy, Revue Economique, Revue d'Economie Politique, Revue d'Economie Rurale et Urbaine, Revue Française d'Economie, Review of Agricultural, Food and Environmental Studies, Review of Economic Development, Sustainability, Vietnam Journal of Mathematical Applications.

Recent teaching activities

2023-...	Statistical consulting, Master2, TSE, Toulouse
2023-...	Panel data econometrics, Master2, TSE, Toulouse
2020-2022	Introductory econometrics, CASED, Hanoi, Vietnam
2019-...	Panel data econometrics, Master1, TSE, Toulouse
2015-2018	Introductory Econometrics, VCREME, Hanoi and HCMC, Vietnam
2015	Nonparametric Estimation, post-graduate lecture, University of Ferrara, Italy
2014-2015	Panel data econometrics, Master2, TSE, Toulouse
2012-2018	Discrete choice models, Master2, PUF, HCMC, Vietnam, and TSE, Toulouse
2011-2013	Applied time series analysis, Master2, TSE, Toulouse
2010	Non-Parametric Models with Applications to Production Frontiers, Summer School
.	on Mathematical Methods in Finance and Economy, Hanoi National University of
.	Education, Hanoi, Vietnam
2009-2015	Non and semiparametric models, Master2, TSE, Toulouse
2006-2015	Statistical consulting, Master2, TSE, Toulouse

Supervision activities

PhD supervision: Céline Bonnet (Toulouse, 2004), Sébastien Markley (Toulouse, 2008), Joanna Morais (Toulouse, 2017), Huong Trinh Thi (Toulouse, 2018), Phan Thi Thanh Huong (Montpellier, 2021), Nguyen Thi Lan Anh (Montpellier, 2021), Hung Trung Vo (Montpellier, 2021)

PhD dissertation committee member: Isabelle Perrigne (Toulouse, 1991), Inès Heba-Nurja (chairman, Toulouse, 2005), Thi Thuy Linh Nguyen (referee, Bordeaux, 2016), Quang Le Van (referee, Rouen, 2018), Hoai Son Nguyen (referee, Paris-Saclay, 2019), Hai Van Tran (chairman, Montpellier, 2020), Yoro Diallo (referee, Clermont-Ferrand, 2021), Ibirénoyé Sodjahin (referee, Rennes, 2022).

HDR supervision: Céline Bonnet (Toulouse, 2014).

HDR dissertation committee member: Bernard Elyakime (referee, Bordeaux, 2007), Laure Latruffe (chairman, Rennes, 2010), Serge Garcia (referee, Toulouse, 2011), Stéphane Blancard (referee, Perpignan, 2013), Julie Subervie (referee, Montpellier, 2016), Iragaël Joly (referee, Lyon, 2017), , Thanh Tam Nguyen-Huu (referee, Paris-Nanterre, 2024).

Publications

In peer-reviewed journals

- 2025 “The role of endogeneity in the relationship between board gender diversity and corporate social performance: Evidence from a control function method,” with R. Dang, L. Houanti and J.-M. Sahut, *Annals of Operational Research* 347: 333–365, <https://doi.org/10.1007/s10479-023-05682-y>.
- 2024 “Tourists’ preferences and willingness to pay for protecting a World Heritage site from coastal erosion in Vietnam,” with L.A. Nguyen, M.-H. Nguyen, V.-N. Hoang, A. Reynaud and C. Wilson, *Environment, Development and Sustainability* 26 (11): 27607-27628
- 2024 “A comparative study of residents and tourists’ valuation for a heterogeneous environmental good: The case of coastal erosion,” with L.A. Nguyen, M.-H. Nguyen, and A. Reynaud, *Marine Policy* 161: 106038, <https://doi.org/10.1016/j.marpol.2024.106038>.
- 2023 “Board gender diversity and environmental performance: A semi-parametric panel data analysis,” with R. Dang, M. Karmani, L. Houanti, and I. Abid, *Finance Research Letters* 58: 104032, <https://doi.org/10.1016/j.frl.2023.104032>.
- 2023 “Interactive R&D Spillovers: An estimation strategy based on forecasting-driven model selection,” with G. Gioldasis and A. Musolesi, *International Journal of Forecasting*, 39(1): 144-169.
- 2022 “By what may women on corporate boards influence corporate social performance. evidence from a semi parametric panel model,” with M. G. Bruna, R. Dang, L. Houanti and J.-M. Sahut, *Finance Research Letters*, 49. <https://doi.org/10.1016/j.frl.2022.103048>
- 2022 “Valuing mangrove conservation attributes in Red River Delta, Vietnam: A choice experiment approach,” with Trung, H.V. and Nguyen, V.T., *Marine Resource Economics* 37(3): 349-368.
- 2022 “How do women on corporate boards shape corporate social performance? Evidence drawn from semiparametric regression,” with Rey Dang, Lubica Hikkerova, and Jean-Michel Sahut *Annals of Operational Research*, <https://doi.org/10.1007/s10479-022-04550-5>.
- 2022 “Productivity, technical efficiency, and technological change in Vietnamese oceanic tuna fisheries”, with Thanh Viet Nguyen, Cao Le Quyen, Hreiðar Pór Valtýsson, *Fisheries Research* 248, <https://doi.org/10.1016/j.fishres.2021.106202>
- 2021 “Demographic and socio-economic shifts partly explain the Martinican nutrition transition: an analysis of 10-year health and dietary changes (2003–2013) using decomposition models ,” with Z. Colombet, S. Drogue, V. Lamani, M. Perrignon, Y. Martin-Prevel, N. Darmon, L.-G. Soler and C. Mejean, *Public Health Nutrition*, doi:10.1017/S136898002100327X.
- 2021 “Economic Analysis of Choices among Differing Measures to Manage Coastal Erosion in Hoi An (a UNESCO World Heritage Site),” with M.-H. Nguyen, T. L. Nguyen, T. Nguyen, A. Reynaud, and V.-N. Hoang, *Economic Analysis and Policy*, 70: 529-543.
- 2021 “Do women on corporate boards influence corporate social performance? A control function approach”, with R. Dang, L. Houanti and J.-M. Sahut, *Finance Research Letters* 39, <https://doi.org/10.1016/j.frl.2020.101645>
- 2021 “Technical efficiency of Vietnamese manufacturing firms: do FDI spillovers matter?,” with C. Nguyen, M. Le and K. Cai, *Journal of Business Economics and Management* 22(2): 518-536.

In peer-reviewed journals (cont'd)

- 2021 “Optimal Capital Adequacy Ratio: An investigation of Vietnamese commercial banks using two-stage DEA,” with P.A. Nguyen and B.L. Tran, *Cogent Business & Management*, 8(1)
<https://doi.org/10.1080/23311975.2020.1870796>
- 2020 “The Influence of Household Refrigerator Ownership on Diets in Vietnam,” with Brent R. Heard, Huong Trinh Thi, Dharani Dhar Burra, Martin C. Heller, Shelie A. Miller, Thanh Thi Duong and Andrew D. Jones, *Economics and Human Biology* 39: 100930.
- 2020 “Willingness to pay for mangrove preservation in Xuan Thuy National Park, Vietnam: Do stakeholders’ knowledge and interest play a role?,” with Trung, H.V. and Nguyen, V.T., *Journal of Environmental Economics and Policy* 9(4): 402-420.
- 2020 “Assessing the long-term impact of agricultural research on productivity: Evidence from France,” with S. Lemarié, V. Orozco, J.-P. Butault, A. Musolesi and B. Schmidt, *European Review of Agricultural Economics*, 47(4): 1559-1586.
- 2020 “Does board gender diversity influence firm profitability? A control function approach,” with R. Dang, L. Houanti and K. Reddy, *Economic Modelling*, 90: 168-181.
- 2020 “Supermarkets and household food acquisition patterns in Vietnam in relation to population demographics and socioeconomic strata: insights from public data”, with Huong Trinh Thi Dharani Dhar Burra, Stef De Haan, Tuyen Thi Thanh Huynh, Tung Van Huynh, and Andrew D. Jones, *Frontiers in Sustainable Food Systems*, <https://doi.org/10.3389/fsufs.2020.00015>.
- 2019 “Assessment of TFP change at provincial level in Vietnam: New evidence using Färe-Primont productivity index,” with Nguyen, V.T. and Le, V.D., *Economic Analysis and Policy* 64: 329-345.
- 2019 “Relations between socio-economic factors and nutritional diet in Vietnam from 2004 to 2014: new insights using compositional data analysis,” with J. Morais, C. Thomas-Agnan and H.T. Trinh, *Statistical Methods in Medical Research*, 28(8): 2305-2325.
- 2018 “Reconciling the Porter hypothesis with the traditional paradigm about environmental regulation: a nonparametric approach,” with J.-P. Huiban, C. Mastromarco and A. Musolesi, *Journal of Productivity Analysis*, 50(3): 85-100
- 2018 “Growth Strategy with Social Networks and Physical Capital - Evidence and Theory: the Case of Vietnam,” with Cuong Le-Van, Anh Ngoc Nguyen, and Ngoc-Minh Nguyen, *Journal of Public Economic Theory*, 20(5): 768–787.
- 2018 “Decomposition of changes in the consumption of macronutrients in Vietnam between 2004-2014,” with H.T. Trinh and C. Thomas-Agnan, *Economics and Human Biology*, 31: 259-275.
- 2018 “Interpreting the impact of explanatory variables in compositional models,” with J. Morais and C. Thomas-Agnan, *Austrian Journal of Statistics* 47: 1-25. <https://doi.org/10.17713/ajs.v47i5.718>
- 2018 “Assessing the nonlinearity of the calorie-income relationship: an estimation strategy - With new insights on nutritional transition in Vietnam ,” with H. Trinh Thi and C. Thomas-Agnan, *World Development*, 110: 192-204.
- 2018 “Using compositional and Dirichlet models for market-share regression,” with J. Morais and C. Thomas-Agnan, *Journal of Applied Statistics* 45(9): 1670-1689.

In peer-reviewed journals (end)

- 2018 “A New Perspective on Inequality in Vietnam: Using Copulas to Decompose Urban-Rural Living Standards,” with H. Trinh Thi, J.L. Gallup, and T. Le Van, *Vietnam Journal of Mathematical Applications*, 16(1): 59-74.
- 2016 “Calorie Intake and Income in China: New Evidence Using Semiparametric Modelling with Generalized Additive Models” with H.T. Trinh and C. Thomas-Agnan, *Vietnam Journal of Mathematical Applications* 14(1): 11-26.
- 2015 “Territorial Analysis of the diffusion of organic farming in France: between heterogeneity and spatial dependence,” with G. Allaire, E. Cahuzac, Y. Desjeux, E. Maigne et T. Poméon, *Ecological Indicators* 59: 70-81.
- 2015 “Productivity and Efficiency of Vietnamese Banking System: New evidence using Färe-Primont Index Analysis,” with P.A. Nguyen, *Applied Economics* 47: 4395-4407
- 2014 “Nonparametric Models with Applications in Economics,” with P.A. Nguyen, *Vietnam Journal of Mathematical Applications*, 12: 1-24.
- 2014 “Approche spatiale de la conversion à l’agriculture biologique : les dynamiques régionales en France,” with G. Allaire, E. Cahuzac et T. Poméon, *Economie Rurale*, 339 : 9-31, 2014.
- 2013 “Quality labels and firm survival: some first empirical evidence,” with C. Bontemps et Z. Bouamra-Mechemache, *European Review of Agricultural Economics* 40: 413-439. .
- 2013 “Detecting Asymmetric Price Transmission (APT) with Consistent Threshold along the fish supply chain,” with F. Gonzales, P. Guillotreau et L. Le Grel , *Canadian Journal of Agricultural Economics*, 61: 37-60.
- 2009 “Organic Food Consumption Patterns,” with D. Hassan, S. Monier-Dilhan et V. Nichèle, *Journal of Agricultural and Food Industrial Organization*, Vol. 7(2), Article 12.
<http://www.bepress.com/jafo/vol7/iss2/art12>
- 2009 “Contractualisation et diffusion spatiale des mesures agro-environnementales herbagères,” with G. Allaire and E. Cahuzac, *Revue d’Etudes en Agriculture et Environnement*, 90: 25-50.
- 2008 “Semiparametric Hedonic Price Models : Assessing the Effects of Agricultural Non-point Source Pollution,” with C. Bontemps and Y. Surry, *Journal of Applied Econometrics*, 23: 825-842.
- 2005 “Price-Cost Margins and Structural Change: Sub-Contracting within the French Salmon Value Chain,” with P. Guillotreau and L. Le Grel, *Review of Development Economics*, 9: 581-597.
- 2004 “Transmission des prix dans les filières fruits et légumes : une application des tests de cointégration avec seuils,” with D. Hassan, *Economie Rurale*, 283-284: 27-46.
- 2001 “Assessing Consumer Response to Protected Designation of Origin Labeling: A Mixed Multinomial Logit Approach,” with C. Bonnet, *European Review of Agricultural Economics*, 28: 433-449.
- 2001 “Welfare Losses due to Market Power: Hicksian versus Marshallian Measurement,” with P. Lavergne and V. Réquillart, *American Journal of Agricultural Economics*, 83: 157-165.
- 2000 “Estimation of Two-Stage Models of Multicrop Production: With an Application to Irrigated Water Allocation in Tunisian Agriculture,” with N. Belhaj Hassine, *Région et Développement*, 12: 121-141.
- 1998 “Pertes de bien-être et pouvoir de marché dans les industries agro-alimentaires françaises,” with P. Lavergne and V. Réquillart, *Economie et Prévision*, 135: 77-86.

In peer-reviewed journals (end)

- 1996 “Comparing Fourier and Translog Specifications of a Multiproduct Technology: Evidence from an Incomplete Panel of French Farmers,” with M. Ivaldi, N. Ladoux and H. Ossard, *Journal of Applied Econometrics*, 11: 649-668.
- 1996 “Functional Estimation under Shape Constraints,” with M. Delecroix and C. Thomas-Agnan, *Journal of Nonparametric Statistics*, 6: 69-89.
- 1995 “A Shape Preserving Smoother: Simulation Study,” with M. Delecroix and C. Thomas-Agnan, *Computational Statistics*, 10: 155-175.
- 1995 “Stochastic Production Frontiers and Panel Data: A Latent Variable Framework,” with M. Ivaldi and S. Monier-Dilhan, *European Journal of Operational Research*, 80: 534-547.
- 1994 “Productive Efficiency of French Grain Producers: A Latent Variable Model,” with M. Ivaldi and I. Perrigne, *Journal of Productivity Analysis*, 5: 287-299.
- 1994 “Efficacité dans la production céréalière : une approche non paramétrique,” with I. Perrigne, *Cahiers d'Economie et de Sociologie Rurales*, 31: 106-124.
- 1992 “Systèmes de régressions empilées et panel incomplet: un tour d’horizon,” with M. Ivaldi, *Economie et Prévision*, 105: 97-107.

Submissions and works in progress

- 2025 “Incorporating spatial heterogeneity in coastal erosion management policy valuation: Insight from Hoi An (Vietnam),” with Nguyen Thi Lan Anh and Arnaud Reynaud, in progress.
- 2025 “Too few or too many? Untangling the relationship between women on corporate boards and environmental performance: Evidence from a semiparametric method,” with R. Dang, in progress.
- 2025 “Does Institutional Quality Favor the Impact of FDI in Vietnam? A conditional nonparametric production frontier analysis,” with V.T. Nguyen and P.-A. Nguyen, in progress.
- 2025 “Productivity Growth in the Norwegian Cod Trawl Fishery: Do Vessel Size and Operational Efficiency Matter?”, with Viet Thanh Hguyen and Yajie Liu, submitted.
- 2025 “Efficiency in the Context of Digital Transformation: The Influence of Provincial Governance and Public Administration in Vietnam, ” with Nguyen P.A., and D.T.T. Le, submitted.
- 2025 “Climate change, adaptation, and rice yield in Vietnam,” with V.T. Nguyen and T.H. Vo, submitted.
- 2025 “Discrete and smooth scalar-on-density compositional regression for assessing the impact of climate change on rice yield in Vietnam,” with H.T. Trinh, and C. Thomas-Agnan, resubmitted.
- 2024 “Is infrastructure capital really productive? Non-parametric modeling and data-driven model selection in a cross-sectionally dependent panel framework”, with A. Musolesi and G.A. Prete, resubmitted.
- 2024 “Technical progress, technical efficiency, and environmental change: New insights into Vietnam’s productivity growth,” with V.T. Nguyen, resubmitted.
- 2017 “Impact of advertising on brand’s market shares in the automobile market: A Multi-channel attraction model with competition and carryover affects”, with J. Morais, and C. Thomas-Agnan.

Book chapters

- 2024 “Analyser la transition nutritionnelle à travers l’offre et la demande alimentaires: approches croisées en économie, gestion et nutrition,” with S. Drogue, S. Costa, V. Lamani, M.-J. Amiot and C. Méjean, in: A. Thomas, A. Alpha, A. Barczak and N. Zakhia-Rozis (eds), *Durabilité des systèmes pour la sécurité alimentaire*, Quae Editions, 53-63.
- 2022 “Analyzing the nutrition transition through food supply and demand: Crossed-perspective approaches in economics, management and nutrition,” with S. Drogue, S. Costa, V. Lamani, M.-J. Amiot and C. Méjean, in: A. Thomas, A. Alpha, A. Barczak and N. Zakhia-Rozis (eds), *Sustainable Food Systems for Food Security*, Quae Editions, 47-56.
- 2021 “Diet quality and food sources in Vietnam: First evidence using compositional data analysis,” with Huong Thi Trinh, Tuyen Thi Thanh Huynh and Thao-Vy Vuong, in: A. Daouia and A. Ruiz-Gazen (eds.), *Advances in Contemporary Statistics and Econometrics*, Springer, 547-570.
- 2020 “Econometrics of Scoring Auctions,” with J.-J. Laffont, I. Perrigne and Q. Vuong, in: T. Li, M.H. Pesaran and D. Terrell (Eds.), *Essays in Honor of Cheng Hsiao, Advances in Econometrics*, Vol. 41, 285-320, Emerald Publishing.
- 2016 “Productivity convergence in Vietnamese manufacturing industry: evidence using a spatial Durbin model,” with P.A. Nguyen and T.H. Phan, in: Huynh, Van-Nam, Kreinovich, Vladik, Sriboonchitta, Songsak (Eds.), *Causal Inference in Econometrics*, 603-619. Studies in Computational Intelligence, 622, Springer International Publishing.
- 2015 “Financial Ratios and Efficiency of Vietnamese Banks: A Semiparametric Approach,” with Nguyen Phan Tuan Dat, Nguyen Phuong Anh, and Phan Tat Hien. In: *New Perspectives in Business, Economics and Management Research and Practice*, 586-594, 2015.
- 2011 “Modèles à direction révélatrice unique: application en économie,” in: J.-J. Dreesbeke, and G. Saporta (eds), *Approches Non Paramétriques en Régression*, Paris: Editions TECHNIP, 357-386.
- 1999 “Enquête sur la sécurité alimentaire dans le cadre des enseignements de l’ENSAI,” with O. Deletombe, L. Huon de Penanster, P. Lainé, and Y. Tillé (eds), *Enquêtes et sondages: Méthodes, modèles, applications, nouvelles approches*, Paris: Dunod, 47-53.
- 1999 “La réalisation d’une enquête à l’École Nationale de la Statistique et de l’Analyse de l’Information,” with Yves Tillé, in: *Actes de Journées de Méthodologie Statistique, 17 et 18 Mars 1998*, INSEE-Méthodes 84-85-86: 315-322.
- 1997 “Fonctions de gains : une approche non paramétrique,” in: *Actes de Journées de Méthodologie Statistique, 18 et 19 Octobre 1995*, INSEE-Méthodes 59-60-61: 283-294.
- 1995 “Econometrics of Optimal Procurement Auctions,” with J.-J. Laffont, A. Oustry, and Q.H. Vuong, in: D. Neven and L.H. Röller (eds), *The Empirical Analysis of Industrial Organization*, Center for Economic Policy Research, London.
- 1989 “Les choix en matière de brevets: une analyse économique,” in: *Actes et Communications 4*: 79-95.