Duong Trinh

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INFORMATION Office 101, 12 Southpark Terrace

Glasgow, G12 8LG, United Kingdom

RESEARCH INTERESTS Bayesian Microeconometrics; Applied Econometrics; Applied Microeconomics

Causal Inference; Machine Learning; High-dimensional Models; Spatial & Network Models

EDUCATION University of Glasgow, Glasgow, UK

Ph.D. in Economics 2021 – 2025 (expected)

· Advisors: Professor Dimitris Korobilis, Dr. Kenichi Shimizu, Dr. Santiago Montoya-Blandón.

· Thesis title: Three Essays in Bayesian Microeconometrics: Embracing Causality and Heterogeneity.

University of Glasgow, Glasgow, UK

M.Res. in Economics (Distinction) 2019 – 2021

Foreign Trade University, Hanoi, Vietnam

B.A. in International Business Economics (Excellent) 2014 – 2018

REFERENCES Professor **Dimitris Korobilis**, Ph.D.

Adam Smith Business School, University of Glasgow

Dimitris Korobilis@glasgow.ac.uk

Dr. Santiago Montoya-Blandón

Adam Smith Business School, University of Glasgow

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Dr. Kenichi Shimizu

Department of Economics, University of Alberta

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WORKING PAPERS Ca

Causal Inference on Quantiles in High Dimensions: A Bayesian Approach, Job Market Paper

Abstract: This paper proposes a novel approach, Bayesian Analog of Doubly Robust (BADR) estimation, to estimate unconditional Quantile Treatment Effects (QTEs) in observational studies. By augmenting the proposed estimator with shrinkage priors, this framework can account for high-dimensional covariates and feature a flexible Bayesian modeling strategy with favorable frequentist properties in finite samples, even when either the treatment assignment or outcome models are misspecified. The proposed approach offers a straightforward and adaptable implementation for incorporating probabilistic machine learning techniques to fit the propensity score and conditional cumulative distribution function, followed by combining posterior draws. This enables the effective handling of high-dimensional covariate spaces or nonlinear relationships to achieve better accuracy and appropriate uncertainty quantification. The simulation results show that BADR estimators yield a substantial improvement in bias reduction for QTE estimates compared with popular alternative estimators found in the literature. We revisit the role of microcredit expansion and loan access on Moroccan household outcomes, demonstrating how the new method adds value in characterizing heterogeneous distributional impacts on outcomes and detecting changes in overall economic inequality, which is also appealing to other applied contexts.

Bayesian Causal Inference in the Presence of Endogenous Selection into Treatment and Spillovers. (2024)

A Comparative Review of Bayesian Shrinkage and Variable Selection in Econometrics. (with Dimitris Korobilis, Kenichi Shimizu) (2022)

Inference on Treatment Effects with High-dimensional Controls: Frequentist and Bayesian Approaches. (2021)

Government Disclosure in the Pandemic. (2020)

Early Career Gender Wage Gap: First Evidence in Vietnam. (with Anh Nguyen Ngoc, Hai Doan Ma, Thuc Hoang Kim) (2018)

WORK In Progress	Selection-corrected SAR Mixture Model. (with Santiago Montoya-Blandón).	
Published Papers	Firm Export and the Impact of Foreign Ownership in Vietnam: A Micro-data Analysis. (with Vinh Nguyen Thi Thuy), <i>Journal of Economic Development</i> (2020), 45(1).	
	The Impact of Exchange Rate Volatility on Exports in Vietnam: A Bounds Testing Approach. (with Vinh Nguyen Thi Thuy), <i>Journal of Risk and Financial Management</i> (2019), 12(1).	
TEACHING	University of Glasgow, Glasgow, UK	
Experience	Graduate Teaching Assistant Sep 2	2020 – present
	· Bayesian Data Analysis (Graduate) Spring 2025	
	· Basic Econometrics (Graduate) Fall 2023, 2024	
	· Econometrics 2 (Undergraduate) Spring 2024	
	· Econometrics 1 (Undergraduate) Fall 2020, 2021	
	· Introductory Statistics for Economists (Undergraduate) Spring 2022, 2024	
Research Experience	The Development and Policies Research Center, Hanoi, Vietnam Research Intern, Research Assistant	2017 - 2018
	Institute of Economics and International Trade , Hanoi, Vietnam <i>Research Intern</i>	2016
CONFERENCE PRESENTATIONS	Annual Conference of International Association for Applied Econometrics (IAAE), Thessaloniki, Greece	2024
	5 th Panmure House Annual PhD Workshop, Edinburgh, UK	2022
	12th Vietnam Economists Annual Meeting (VEAM), Dalat, Vietnam	2019
	11th Vietnam Economists Annual Meeting (VEAM), Hanoi, Vietnam	2018
	13 th Asia Pacific Trade Seminars (APTS), Hanoi, Vietnam	2017
	Others: Volunteer at RES and SES Annual Conference 2023, Glasgow, UK; Participant at European Seminar on Bayesian Econometrics (ESOBE) 2023, Glasgow, UK.	
SELECTED SHORT COURSES	1st Oxford Economics Summer School on Machine Learning and Treatment Effects	Sep 2022
	1 st SGPE PhD Summer School on <i>Machine Learning for Economists</i>	Aug 2022
	MITx Certification on Introduction to Computer Science and Programming Using Python	Aug 2020
SCHOLARSHIPS & AWARDS	Adam Smith Business School Scholarship (M.Res. & Ph.D.)	2019 – 2024
	Foreign Trade University Academic Scholarships	2014 - 2018
	Third Prize at the Undergraduate Olympiad of Econometrics and Applications	2017

Languages: Vietnamese (native), English (fluent).

 $\textbf{Programming}\hbox{:}\ R, MATLAB, Python, Stata, Cpp, Julia, \LaTeX\hbox{:}\ Markdown, CSS, Git, Unix.$

SKILLS