Hoang Nguyen

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Personal Information
Nationality: Vietnam
Date of birth: 29 Jan 1989
Marital Status: Married

Current Position

Senior lecturer at Department of Management and Engineering (IEI), Linköping University — 08/2023-Now

Postdoctoral researcher at School of Business, Örebro University — 2019-2023

Education

PhD. Business and Quantitative methods, Universidad Carlos III de Madrid
Bayesian inference for high dimensional factor copula models
Supervisors: **Prof. M. Concepción Ausín** and **Prof. Pedro Galeano** — 2019
Visiting PhD student at Ca' Foscari University of Venice,
Invited by **Prof. Roberto Casarin**, — Oct - Dec, 2017

MSc. Business and Quantitative methods, Universidad Carlos III de Madrid — 2015

BA in Banking and Finance, National Economics University, Vietnam (NEU) — 2011

Publication

12. Audronė Virbickaitė, **Hoang Nguyen** and Minh-Ngoc Tran (2023), *Bayesian predictive distributions of oil returns using Mixed Data Sampling volatility models*, Resources Policy (Paper - Codes)

11. **Hoang Nguyen**, Farrukh Javed (2023), *Dynamic relationship between Stock market and Bond market: A GAS MIDAS copula approach*, Journal of Empirical Finance (Paper - Codes)

10. **Hoang Nguyen** and Audronė Virbickaitė (2023), *Modeling stock-oil co-dependence with Dynamic Stochastic MIDAS Copula models*, Energy Economics. (Paper - Codes)

9. Sune Karlsson, Stepan Mazur, **Hoang Nguyen** (2022), *Vector autoregression models with skewness and heavy tails*, Journal of Economic Dynamics and Control. (Paper - Codes - Appendix - Slides)

8. Tamás Kiss, Stepan Mazur, **Hoang Nguyen** and Pär Österholm (2022), *Modelling the Relation between the US Real Economy and the Corporate Bond-Yield Spread in Bayesian VARs with non-Gaussian Disturbances*, Journal of Forecasting. (Paper - Codes)

7. Tamás Kiss, **Hoang Nguyen** and Pär Österholm (2022), *Modelling Okun's Law–Does non-Gaussianity Matter?*, Empirical Economics. (Paper - Codes)

6. Tamás Kiss, **Hoang Nguyen**, and Pär Österholm (2021), *Modelling Returns in US Housing Prices—You're the One for Me, Fat Tails*, Journal of Risk and Financial Management. (Paper)

5. **Hoang Nguyen**, Trong-Nghia Nguyen, Minh-Ngoc Tran (2021), *A dynamic leverage stochastic volatility model*, Applied Economics Letters. (Paper - Slides)

4. Tamás Kiss, **Hoang Nguyen**, and Pär Österholm (2021), *The Relation between the High-Yield Bond Spread and the Unemployment Rate in the Euro Area*, Finance Research Letters. (Paper)

3. Tamás Kiss, Stepan Mazur, and **Hoang Nguyen** (2021), *Predicting returns and dividend growth - the role of non-Gaussian innovations*, Finance Research Letters. (Paper)

2. **Hoang Nguyen,** M. Concepción Ausín and Pedro Galeano (2020), *Variational Inference for high dimensional structured factor copulas*, Computational Statistics & Data Analysis. (Paper - Code - Appendix - Slides - Poster)

1. **Hoang Nguyen,** M. Concepción Ausín and Pedro Galeano (2019), *Parallel Bayesian inference for high dimensional dynamic factor copulas*, Journal of Financial Econometrics, 17(1), 118-151. (Paper - Code - Appendix - Slides - Poster)

Working paper

Taras Bodnar, Stepan Mazur, **Hoang Nguyen** (2022), *Estimation of optimal portfolio compositions for small sample and singular covariance matrix* (Paper)

Hien Nguyen Thi, **Hoang Nguyen** and Minh-Ngoc Tran (2023), *Deep Learning Enhanced Volatility Modelling with Covariates* (Paper - Codes)

Sune Karlsson, Tamás Kiss, **Hoang Nguyen** and Pär Österholm, *Hybrid time varying parameter VAR models with fat tails* (Paper - Codes)

Ongoing work

Hoang Nguyen, Audronė Virbickaitė, M. Concepción Ausín and Pedro Galeano, *Structured factor copulas for modeling the systemic risk of European and U.S. banks*

Other Publications

Sune Karlsson, Tamás Kiss, **Hoang Nguyen**, and Pär Österholm (2022), *Svensk ekonomi är inte normal (och oberoende) – fakta om makroekonomiska variablers tidsserieegenskaper*, Ekonomisk Debatt. (Paper)

Teaching Experience

Instructor, IEI, Linköping University
Financial Risk Management — 2023 - 2024
Portfolio Management — 2024

Instructor, Statistics Unit, Örebro University
Independent Project I - II, Statistics — 2019 - 2022
Economics, Methods for Analysis in Economics and Finance — 2022
Data mining and business analytics — 2022

Teaching Assistant, Statistics Department, UC3M
Course: *Optimization and simulation for business* - Web content — 2019
Course: *Statistics for Business and Administration II* - Web content — 2018

Course: *Statistics for Social Sciences I* - Web content	2018
Course: *Optimization and simulation for business* - Web content	2018
Course: *Statistics for Social Sciences I* - Web content	2017
Course: *Statistics for Social Sciences III* - Web content	2017
Course: *Statistics for Business Administration* - Web content	2016
Course: *Statistics for Telecommunication* - Web content	2016
Course: *Financial Risk Management* - Web content	2015

Conference & seminar

Parallel Bayesian inference for high dimensional dynamic factor copulas

Presenter, CFE-CMStatistics 2016	Seville 2016
Presenter, Workshop in Bayesian Econometrics, UC3M	Madrid 2016
Poster presenter, International Society for Bayesian Analysis (ISBA)	Cagliari 2016

What are drivers of Swedish sustainable development path?

Presenter, XX Applied Economics Meetings	Valencia 2017

Variational Inference for high dimensional structured factor copulas

Presenter, 49th Meeting of the Working Groups "Statistical Computing" and "Biostatistics"	Gunzburg 2017
Presenter, University Ca' Foscari Internal research seminar	Venice 2017
Presenter, Workshop on Financial Econometrics	Örebro 2018
Presenter, CFE-CMStatistics 2018	Pisa 2018
Poster presenter, International Society for Bayesian Analysis (ISBA)	Edinburgh 2018
Poster presenter, Bayesian Statistics in the Big Data Era	Marseille 2018

Variational Inference for extended factor copulas

Presenter, The 2nd workshop on Multivariate Data and Software	Cyprus 2019
Presenter, 39th International Symposium on Forecasting	Thessaloniki 2019
Presenter, CFE-CMStatistics 2019	London 2019

Vector autoregression models with skewness and heavy tails

Presenter, Instituto Tecnológico Autónomo de México external seminar	Virtual 2020
Presenter, 40th International Symposium on Forecasting	Virtual 2020
Presenter, 2nd Vienna Workshop on Economic Forecasting	Virtual 2020
Presenter, Stockholm University Matstat seminar	Virtual 2020
Presenter, ISBA world meeting	Virtual 2021

Dynamic relationship between Stock market and Bond market

Presenter, CFE-CMStatistics 2020	Virtual 2020
Presenter, 41th International Symposium on Forecasting	Virtual 2021
Presenter, ISI world statistics congress 2021	Virtual 2021
Presenter, 27th International Conference on Computing in Eco&Fin	Virtual 2021

A dynamic leverage stochastic volatility model

Poster presenter, 11th European Seminar on Bayesian Econometrics	Hybrid 2021

Modeling stock-oil co-dependence with DSM Copula models

Presenter, 2022 NBER-NSF SBIES Conference	Hybrid 2022
Presenter, Swedish Conference in Economics	Stockholm 2022
Poster presenter, ISBA world meeting	Montreal 2022

Hybrid time varying parameter VAR models with fat tails

Poster presenter, ESOBE 2022	Salzburg 2022

Bayesian predictive distributions of oil returns using Mixed Data Sampling volatility models
Presenter, 2023 NBER-NSF SBIES Conference — Philadelphia 2023

Awards

NBER-NSF SBIES travel grant	2023
Siamon Foundation travel grant	2022
ISBA World meeting travel grant	2018&2022
ISF travel grant	2019
CRoNoS travel grant	2019
UC3M mobility grant	2017
ALDE travel grant	2017

Computer Skills

Languages: R, C++, Python, Matlab
Software: Latex, Open Office.
OS: Linux.

Languages

Vietnamese (Native), English (Advanced); Spanish (Elementary); Swedish (Elementary);