

# Hoang Nguyen

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## Contact Information

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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

13. **Hoang Nguyen** and Pär Österholm (2024), *A Note on The Dynamic Effects of Supply and Demand Shocks in the Crude Oil Market*, Applied Economics Letters. (Paper)

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

**Hoang Nguyen**, Audronė Virbickaitė, M. Concepción Ausín and Pedro Galeano, *Structured factor copulas for modeling the systemic risk of European and U.S. banks* (Paper - Online Appendix - Codes)

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

##### 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

**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

<b>Awards</b>	IEI travel grant	2024
	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 (Beginner);