# Hoang Nguyen

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**Contact Information**
Office: N4032
School of Business
Örebro University
Fakultetsgatan 1
70281 Örebro, Sweden
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**Personal Information**
Nationality: Vietnam
Date of birth: 29 Jan 1989
Marital Status: Married

**Research interests** Bayesian econometrics, Copulas, Financial econometrics, Risk management.

**Current Position** Postdoctoral researcher at School of Business, Örebro University 2019-Now

**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**

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 sampleand singular covariance matrix* (Paper)

**Hoang Nguyen** and Audronė Virbickaitė (2022), *Modeling stock-oil co-dependence with Dynamic Stochastic MIDAS Copula models* (Paper - Codes)

**Hoang Nguyen**, Farrukh Javed (2021), *Dynamic relationship between Stock market and Bond market: A GAS MIDAS copula approach* (Paper - Codes)

**Ongoing work**

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

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

**Hoang Nguyen,** M. Concepción Ausín and Pedro Galeano, *Variational Inference for extended factor copulas*

**Teaching Experience**

**Instructor,** Statistics Unit, Örebro University

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|---|---|
| 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

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|---|---|
| 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**

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|---|---|
| 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?**

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|---|---|
| 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

## Awards

NBER-NSF SBIES travel grant — 2022
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);