

Meng Han

PhD Candidate in Finance
Faculty of Economics and Business
University of Groningen
P.O. Box 800, 9700AV
the Netherlands

Phone: +86 153 0009 6592
Email: m.han0609@hotmail.com
Date of birth: 09 June 1992
Place of birth: Shandong, China
Homepage: <https://www.financemeng.com/>



RESEARCH FIELDS

Major Fields: Empirical Asset Pricing, Futures Markets

Secondary Fields: Theoretical Asset Pricing, Derivative pricing

EDUCATION

- **University of Groningen** Groningen, Netherlands
Ph.D. in Finance 2018-2022 (expected)
 - **Thesis:** Commodities as an asset class
 - **Defense:** 13 October 2022
 - **Supervisor:** Prof. Bert Scholtens, Prof. Lammertjan Dam
- **Ocean University of China** Qingdao, China
Master in Finance 2015-2018
- **Qingdao University of Science and Technology** Qingdao, China
Bachelor in Economics; Graduated with Distinction 2010-2014

WORKING PAPERS

Commodity Momentum and Reversal: Do They Exist, and If So, Why? (Job market paper; Single author paper; Submitted)

Abstract: Whether momentum and reversal patterns on commodity markets are sensitive to formation periods, why differences in these patterns seem to emerge for commodity futures versus spot markets, and how these patterns can be explained, remain unanswered questions. Investigating 23 commodities for a period of fifty years, I first show that the inclusion of the net convenience yield in the commodity spot return definition reconciles the differences in the results for commodity spot and futures markets. Quantitatively consistent momentum and reversal effects exist on both commodity futures and spot markets: An initial momentum effect is followed by a reversal effect and then a momentum effect again, which are robust to the choice of formation period. The observed momentum and reversal patterns for commodities can be jointly explained by a combination of traditional asset pricing factors and a yield factor related to the net convenience yield.

The Net Convenience Yield and the Cross-section of Commodity Returns (with Lammertjan Dam and Bert Scholtens; Submitted)

Abstract: We study which risk factors explain the cross-section of commodity returns and where this explanatory ability results from. We argue that the net convenience yield as a

latent payoff of a commodity should be included into the definition of commodity return and thus decompose commodity return into capital gain and percentage (net convenience) yield. The findings reveal that both common asset pricing and commodity-specific risk factors or models can explain the cross-section of commodity returns, e.g., the Fama and French (1993) three-factor model and commodity-specific three-factor model. As to individual commodity returns, the explanatory ability of risk factors mainly results from the percentage yields. For commodity portfolio returns, the explanatory ability of risk factors derives from both capital gains and percentage yields.

What Drives Commodity Price Variation? (with Lammertjan Dam and Walt Pohl; Submission ready)

Abstract: We investigate the importance of time-varying discount rates for commodity prices. We show that unlike other financial markets, in commodity markets time variation in discount rates play a smaller role. Instead, prices forecast future net convenience yields as well as future expected return. A high price for a commodity today forecasts a high expected future convenience yield and a low expected future return. For longer horizons, the variation in percentage net convenient yields seems mainly driven by net convenience yield growth, making commodities much closer to the classical textbook view of price changes representing news about cash flows.

WORK IN PROGRESS

Structural Estimation of Convenience Yield and Storage Cost (with Lammertjan Dam)

PUBLICATIONS

- "Probability density forecasts for steam coal prices in China: The role of high-frequency factors." *Energy* 220 (2021): 119758. (Corresponding Author, JCR Q1)
- "Forecasting China's wastewater discharge using dynamic factors and mixed-frequency data." *Environmental Pollution* 255 (2019): 113148. (Corresponding Author, JCR Q1)
- "Forecasting carbon prices in the Shenzhen market, China: The role of mixed-frequency factors." *Energy* 171 (2019): 69-76. (First Author, JCR Q1)
- "Forecasting carbon dioxide emissions based on a hybrid of mixed data sampling regression model and back propagation neural network in the USA." *Environmental Science and Pollution Research* 25.3 (2018): 2899-2910. (JCR Q2)
- "Usefulness of economic and energy data at different frequencies for carbon price forecasting in the EU ETS." *Applied Energy* 216 (2018): 132-141. (JCR Q1)

PRESENTATIONS

2022	European Financial Management Association 2022 Annual Meeting (EFMA 2022, discussant), SOM PhD Conference
2021	International Risk Management Conference 2021 (IRMC2021), SOM PhD Conference, SOM PhD Seminar

2019 11th International Conference on Applied Energy (ICAE2019), Fourth Conference on Econometric Models of Climate Change (EMCC-IV)

TEACHING EXPERIENCE

Spring 2022 Quantitative Finance (master), Teaching assistance
Fall 2021 Responsible Finance and Investing (master), Teaching assistance

SELECTED AWARDS

2018-2022 Scholarship from China Scholarship Council (CSC)
2016 Second prize in the National Post-Graduate Mathematical Contest in Modeling, Excellent Graduate Student
2015 Second prize in the National Post-Graduate Mathematical Contest in Modeling
2014 Excellent Graduate in Shandong Province
2013 Excellent Student in Shandong Province
2012 First prize in the National Post-Graduate Mathematical Contest in Modeling, National Scholarship

REFEREE SERVICE

Environmental Science and Pollution Research, Neural Computing and Applications (NCAA), Heliyon, Journal of Environmental Management, Carbon Management

OTHER INFORMATION

Programming: Python, MATLAB, STATA
Languages: Chinese (native), English (fluent)

REFERENCES

Bert Scholtens
Professor in Finance
University of Groningen
Duisenberg Building
Nettelbosje 2
9747 AE Groningen
the Netherlands
l.j.r.scholtens@rug.nl

Lammertjan Dam
Associate Professor in Finance
University of Groningen
Duisenberg Building
Nettelbosje 2
9747 AE Groningen
the Netherlands
l.dam@rug.nl

Walt Pohl
Professor in Finance
NHH Norwegian School of Economics
NHH, Helleveien 30
5045 Bergen
the Norway
walter.pohl@nhh.no