

# HONG MIAO

Colorado State University  
Department of Finance and Real Estate

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[Goolge Citations Page](#)

## ACADEMIC INTERESTS

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Quantitative Finance, Derivatives, Energy Finance, Microstructure

## EDUCATION

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University of Calgary, Ph.D. in Finance, 2008, Advisor: Robert J. Elliott

CFA Institute, Chartered Financial Analyst, 2005

Lancaster University, MRes in Finance, 2004

Fudan University, MBA, 2003

Tongji University, BEng in Mechanical Engineering, 1993

## ACADEMIC POSITIONS

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Professor, July 2023 to present, Colorado State University

Associate Professor, July 2014 to June 2023, Colorado State University

Assistant Professor, August 2008 to June 2014, Colorado State University

## PUBLICATIONS

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### Refereed Journal Articles

**Boldface journals are on the Department of Finance and Real Estate's Premier and High-Quality Journal List**

42. Lockwood, J., Lockwood, L., Miao, H., Uddin, R., & Li, K. (2022). Does Analyst Optimism Fuel Stock Price Momentum? *Journal of Behavior Finance*, Forthcoming.
41. Kim, S., Lockwood, J., Lockwood, L., & Miao, H. (2021). Determinants of Put-Call Disparity: KOSPI 200 Index Options. *Journal of Behavior Finance*, Forthcoming.
40. Lockwood, J., Lockwood, L., Miao, H., Ramchander, R., & Yang, D. (2022). The Information Contents of ETF Options. *Global Finance Journal*, 53, 100725.
39. Yang, J., Li, Z., & Miao, H., (2021). Volatility Spillovers in Commodity Futures Markets: A Network Approach. *Journal of Futures Markets*, 41, 1959-1987
38. Butler, S., Kokoszka, P., Miao, H., & Shang, H. (2021). Neural Network Prediction of Crude Oil Futures Using B-Splines. *Energy Economics*, 94, 105080.
37. Kokoszka, P., Miao, H., Petersen, A., & Shang, H. (2019). Forecasting of Density Functions with an Application to Cross-sectional and Intraday Returns. *International Journal of Forecasting*, 35, 1304-1317.

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<sup>1</sup>Updated July 1, 2023

36. Kokoszka, P., Miao, H., Stove, S., & Zheng, B. (2019). Risk Analysis of Cumulative Intraday Return Curves. *Journal of Time Series Econometrics*, 20180011.
35. Chatrath, A., Christie-David, R., Miao, H., & Ramchander, S. (2019). Losers and Prospectors in Short-Term Options. *Journal of Futures Markets*, 39, 721-743.
34. Miao, H., Ramchander, S., Ryan, P., & Wang, T. (2018). Default Prediction Models: The Role of Forward-Looking Measures of Returns and Volatility. *Journal of Empirical Finance*, 46, 146-162.
33. Kokoszka, P., Miao, H., Reimherr, M., & Taoufik, B. (2018). Dynamic Functional Regression with Application to The Cross Section of Returns. *Journal of Financial Econometrics*, 16, 461-485.
32. Miao, H., Ramchander, S., Wang, T., & Yang, J. (2018). The Impact of Crude Oil Inventory Announcements on Prices: Evidence from Derivatives Markets. *Journal of Futures Markets*, 38, 38-65.
31. Gallagher, T., Miao, H., & Ryan, P.A. (2017). Implied Risk Adjusted Discount Rates and Certainty Equivalence in Capital Budgeting. *Global Journal of Accounting and Finance*, 1, 25-35.
30. Miao, H., Ramchander, S., Wang, T., & Yang, D. (2017). Influential Factors in Crude Oil Price Forecasting. *Energy Economics*, 68, 77-88.
29. Miao, H., Ramchander, S., Wang, T., & Yang, D. (2017). The Role of Index Futures on China's Stock Markets: Evidence from Price Discovery and Volatility Spillover. *Pacific-Basin Finance Journal*, 44, 13-26.
28. Li, K., Lockwood, J., & Miao, H., (2017). Risk-Shifting, Equity Risk, and Distress Puzzle. *Journal of Corporate Finance*, 44, 275-288.
27. Kokoszka, P., Miao, H., & Zheng, B. (2017). Testing for Asymmetry in Betas of Cumulative Returns: Impact of the Financial Crisis and Crude Oil Price. *Statistics & Risk Modeling*, 34, 33-53.
26. Chatrath, A., Miao, H., Ramchander, S., & Wang, T. (2016). Examination on the Flow Characteristic of Crude Oil: Evidence from the Risk-Neutral Moments. *Energy Economics*, 54, 213-223.
25. Chatrath, A., Christie-David, R., Miao, H., and Ramchander, R. (2015) Short-term Options: Clienteles and Event-induced Premia. *Journal of Banking and Finance*, 61, 237-250.
24. Adrangi, B., Chatrath, A., Christie-David, R., Miao, H., & Ramchander, S. (2015). Stock-versus-Flow Distinctions, Information, and the Role of Inventory. *Journal of Futures Markets*, 35, 1003-1025.
23. Kokoszka, P., Miao, H., & Zhang, X. (2015). Functional Multifactor Regression for Intraday Price Curves. *Journal of Financial Econometrics*, 13, 456-477.
22. Chatrath, A., Miao, H., Ramchander, S., & Wang, T. (2015). The Forecasting Efficacy of Risk-Neutral Moments for Crude Oil Volatility. *Journal of Forecasting*, 34, 177-190.
21. Elder, J., Miao, H., & Ramchander, S. (2014) Price Discovery in Crude Oil Futures. *Energy Economics*, 46, S18-S27.
20. Miao, H., Ramchander, S., & Zumwalt, J.K. (2014). S&P 500 Index-futures Price Jumps and Macroeconomic News. *Journal of Futures Markets*, 34, 980-1001.
19. Chatrath, A., Miao, H., Ramchander, S. (2014). Crude Oil Moments and PNG Stock Returns. *Energy Economics*, 44, 222-235.
18. Chatrath, A., Miao, H., Ramchander, S. & Villupuram, S. (2014). Currency Jumps, Cojumps and Trading Profits: Role of Macroeconomic Announcements. *Journal of International Money and Finance*, 40, 42-62.

17. Miao, H., Ramchander, S., & Wang, T. (2014). Response of Bond Prices to Insurer Rating Changes. *Geneva Papers on Risk and Insurance – Issues and Practice*, 39, 389-413.
16. Elder, J., Miao, H., & Ramchander, S. (2013). Jumps in Oil Prices: the Role of Economic News. *Energy Journal*, 34, 217-237.
15. Elder, J., Elliott, R. J., & Miao, H. (2013). Fractional Differencing in Discrete Time. *Quantitative Finance*, 13, 195-204.
14. Elliott, R., Lau, J.W., Miao, H., & Siu, T.K. (2012). A Viterbi-Based Estimation for Markov Switching GARCH Model. *Applied Mathematical Finance*, 19, 219-231.
13. Chatrath, A., Miao, H., Ramchander, S., & Villupuram, S. (2012). Corporate Bonds, Macroeconomic News and Investor Flows. *Journal of Fixed Income*, 22, 25-40.
12. Chatrath, A., Miao, H., & Ramchander, S. (2012). Does the Price of Crude Oil Respond to Macroeconomic News? *Journal of Futures Markets*, 32, 536-559.
11. Elder, J., Miao, H., & Ramchander, S. (2012). Impact of Macroeconomic News on Metal Futures. *Journal of Banking and Finance*, 36, 51-65.
10. Black, J.R., Miao, H., & Ramchander, S. (2012). Return Dynamics and Trading Strategy in Alternative Trading Systems. *Journal of Trading*, 7, 52-65.
9. Miao, H., Ramchander, S., & Simpson, M.W. (2011). Return and Volatility Transmission in U.S. Housing Markets. *Real Estate Economics*, 39, 701-741.
8. Khalifa, A.A., Miao, H., & Ramchander, S. (2011). Return Distributions and Volatility Forecasting in the Metal Futures Markets: Evidence from Gold, Silver and Copper. *Journal of Futures Markets*, 31, 55-80.
7. Elliott, R.J., Lyle, M.R., & Miao, H. (2010). A Model for Energy Pricing with Stochastic Emission Costs. *Energy Economics*, 32, 838-847.
6. Elliott, R.J., Miao, H., & Yu, J. (2009). Investment Timing under Regime Switching. *International Journal of Theoretical and Applied Finance*, 12, 443-463.
5. Cadenillas, A., Elliott, R.J., Miao, H., & Wu, Z. (2009). Risk-Hedging in Real Estate Markets. *Asia-Pacific Financial Markets*, 16, 265-285.
4. Elliott, R.J. & Miao, H. (2009). VaR and Expected Shortfall: a Non-normal Regime Switching Framework. *Quantitative Finance*, 9, 747-755.
3. Elliott, R.J., Miao, H., & Yu, J. (2008). General Equilibrium Model under Regime Switching. *Communications on Stochastic Analysis*, 2, 445-458.
2. Elliott, R.J., Lin, T., & Miao, H. (2007). A Hidden Markov Multi-asset Price Model. *Canadian Applied Mathematics Quarterly*, 15, 23-51.
1. Elliott, R.J., & Miao, H. (2006). Stochastic Volatility Model with Filtering. *Stochastic Analysis and Applications*, 24, 661-684.

## Refereed Book Chapters

1. Elliott, R.J., Miao, H., & Wu, Z. (2011). An Asset Pricing Model with Mean Reversion and Regime Switching Stochastic Volatility, In Dan Crisan, Boris Rozovskii (Ed.), *Oxford Handbook of Nonlinear Filtering*, New York, USA: Oxford University Press, 960-989.

## CONFERENCE PRESENTATIONS

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12. *The Impact of Crude Oil Inventory Announcements on Prices: Evidence from Derivatives Markets.* EIA Financial and Physical Oil Market Linkages Workshop, Washington DC, 2017.
11. *The Informational Role of Options Prices in China.* Southern Finance Association Annual Meeting, Key West, Florida, 2017.
10. *Angel or Evil: The Role of Index Futures on the Chinese Stock Markets.* Southern Finance Association Annual Meeting, St. Destin, Florida, 2016.
9. *Short-term Options: Clienteles and Event-induced Premia.* Financial Management Association International Annual Meeting, Nashville, Tennessee, 2014.
8. *Risk Neutral Moments and Crude Oil Returns.* Eastern Finance Association Annual Meeting, St. Pete Beach, Florida, 2013.
7. *Information Driven Price Jumps and Trading Strategy in Equity Index Futures.* Financial Management Association International Annual Meeting, Atlanta, Georgia, 2012.
6. *Currency Jumps, Cojumps and Trading Profits: Role of Macroeconomic Announcements.* Eastern Finance Association Annual Meeting, Boston, Massachusetts, 2012.
5. *Impact of Macroeconomic News on Metal Futures.* Financial Management Association International Annual Meeting, Denver, Colorado, 2011.
4. *Return and Volatility Spillovers in U.S. Housing Markets.* Midwest Finance Association Annual Meeting, Las Vegas, Nevada, 2010.
3. *VaR and CVaR: A Non-normal Regime Switching Framework.* Northern Finance Association Annual Conference, Calgary, Canada, 2008.
2. *VaR and CVaR: A Non-normal Regime Switching Framework.* Financial Management Association International Annual Meeting, Orlando, Florida, 2007.
1. *Investment Timing under Regime Switching.* Financial Management Association International Annual Meeting, Orlando, Florida, 2007.

## TEACHING

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- Derivative Securities (Graduate and Undergraduate Levels)
- Financial Modeling (Graduate and Undergraduate Levels)
- Investments (Undergraduate Level)

## GRANTS, AWARDS, AND HONORS

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### Colorado State University

- Co-PI, The Vice President for Research's Pre-Catalyst for Innovative Partnerships, 2016-2017

### College of Business

- Summer Enterprise Research Program, 2016-2020
- Faculty Fellowship, 2014-2019
- **Excellence in Research Award**, 2014
- Dean's Scholar, 2009-2019
- Summer Research Grant, 2012-2014

## Profession

- Top 10% Authors (Last 10 Years Publications), as of May 2022, St. Louis Fed IDEAS/RePEc economist rankings

## PROFESSIONAL SERVICES

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### Manuscript Referee

*Applied Mathematics Letters, Borsa Istanbul Review, Computers and Mathematics with Applications, Economic Modelling, Emerging Markets Finance and Trade, Empirical Economics, Energy Economics, European Journal of Finance, Financial Review, Geneva Papers on Risk and Insurance - Issues and Practice, International Review of Economics and Finance, Journal of Applied Statistics, Journal of Banking and Finance, Journal of Commodity Markets, Journal of Empirical Finance, Journal of Finance, Journal of Forecasting, Journal of International Money and Finance, Journal of Real Estate Finance and Economics, Journal of Regional Science, Journal of Risk, Non Linear Dynamics, North American Journal of Economics and Finance, Quarterly Review of Economics and Finance, Real Estate Economics, Review of Derivatives, SIAM Journal of Applied Mathematics, Statistical Modelling, Studies in Nonlinear Dynamics & Econometrics*

### Ad Hoc Reviewer

*American Mathematical Society (Math Review)*

### Program Committee

- Southern Finance Association Annual Meetings, 2016-2018, 2022
- Eastern Finance Association Annual Meetings, 2009-2014
- Financial Management Association International Meeting, 2012, 2014

### Discussant

- JP Morgan Commodity Center Symposium 2018-2021
- Eastern Finance Association Annual Meetings, 2012-2013
- Southern Finance Association Annual Meetings, 2016-2017
- Financial Management Association International Meetings, 2007, 2011-2012, 2023
- Northern Finance Association Annual Conference, 2008

## COMMUNITY SERVICES

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- Liberty Common Schools, Volunteer, August 2016 - May 2017
- Zack Elementary School, Volunteer, August 2017 - May 2022
- Zack Elementary PTO, Treasure, August 2018 - May 2021
- Animal Friend Alliance, Volunteer, May 2022 - present