Hong Miao, Ph.D., CFA

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Contact

Department of Finance and Real Estate
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Education

- Ph.D. (Major: Finance / Minor: Statistics), University of Calgary, April 2008
- Charted Financial Analyst (CFA®), CFA Institute, August 2005
- MRes (Master of Research) (Finance), Lancaster University, December 2004
- MBA (Finance), Fudan University, May 2003
- BEng (Mechanical Engineering), Tongji University, July 1993

Work Experience

- Associate Professor of Finance (with tenure), July 2014 to present.
- Assistant Professor of Finance, August 2008 to June 2014
  College of Business, Colorado State University

Research Interests

Quantitative Finance, Derivatives, Energy Finance, Microstructure

Refereed Journal Articles

39. Kim, S., Lockwood, J., Lockwood, L., & Miao, H. (2021) Determinants of Put-Call Disparity: KOSPI 200 Index Options. Fortcoming at the *Journal of Behavior Finance.*

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.
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., Tao, L., & 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 (pp. 960-989). New York, USA: Oxford University Press.

Peer-reviewed Conference Presentations

11. Lockwood J., Miao, H., Ramchander, S. & Yang, D. (2017). The Informational Role of Options Prices in China. Southern Finance Association Annual Meeting, Key West, Florida.
10. Miao, H., Ramchander, S., Wang, T., & Yang, D. (2016). Angel or Evil: The Role of Index Futures on the Chinese Stock Markets. Southern Finance Association Annual Meeting, St. Destin, Florida.
9. Chatrath, A., Christie-David, R., Miao, H., and Ramchander, R. (2014) Short-term Options: Clienteles and Event-induced Premia. Financial Management Association International Annual Meeting, Nashville, Tennessee.
8. Chatrath, A., Miao, H., Ramchander, S., & Wang, T. (2013) Risk Neutral Moments and Crude Oil Returns. Eastern Finance Association Annual Meeting, St. Pete Beach, Florida.
7. Miao, H., Ramchander, S., & Zumwalt, J.K. (2012). Information Driven Price Jumps and Trading Strategy in Equity Index Futures. Financial Management Association International Annual Meeting, Atlanta, Georgia.
6. Chatrath, A., Dailing, R., Miao, H., & Ramchander, S. (2012). Currency Jumps, Cojumps and Trading Profits: Role of Macroeconomic Announcements. Eastern Finance Association Annual Meeting, Boston, Massachusetts.
5. Elder, J., Miao, H., & Ramchander, S. (2011). Impact of Macroeconomic News on Metal Futures. Financial Management Association International Annual Meeting, Denver, Colorado.
4. Miao, H., Ramchander, S., & Simpson, M. (2010). Return and Volatility Spillovers in U.S. Housing Markets. Midwest Finance Association Annual Meeting, Las Vegas, Nevada.
3. Elliott, R.J. & Miao, H. (2008). VaR and CVaR: A Non-normal Regime Switching Framework. Northern Finance Association Annual Conference, Calgary, Canada.
2. Elliott, R.J. & Miao, H. (2007). VaR and CVaR: A Non-normal Regime Switching Framework. Financial Management Association International Annual Meeting, Orlando, Florida.
1. Elliott, R.J., Miao, H., & Yu, J. (2007). Investment Timing under Regime Switching, Financial Management Association International Annual Meeting, Orlando, Florida.

Courses Taught

Derivative Securities (Graduate and Undergraduate Levels)

Financial Modelling (Graduate and Undergraduate Levels)

Investments (Undergraduate Level)

Grants, Awards, and Honors

Faculty Fellowship, College of Business, Colorado State University, 2014-2019

Summer Enterprise Research Program, 2016-2019, College of Business, Colorado State University

Dean's Scholar, 2009-2018, College of Business, Colorado State University

Co-PI, The Vice President for Research's Pre-Catalyst for Innovative Partnerships (PRE-CIP), 2016–2017, Colorado State University

Excellence in Research Award, College of Business, Colorado State University, 2014

Summer Research Grant, 2012-2014, College of Business, Colorado State University

Best Paper Semifinalist, 2011, Financial Management Association International Annual Meeting

Summer Research Support 2009-2011, College of Business, Colorado State University

Professional Services

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 Statistic, 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, 2017, 2018), Eastern Finance Association Annual Meetings (2009-2014), Financial Management Association International Meeting (2012)

Discussant:

Eastern Finance Association Annual Meeting (2012, 2013), Financial Management Association International Meetings (2007, 2011-2012), Northern Finance Association Annual Conference (2008)