SingRu(Celine) Hoe

Texas A&M University-Commerce Department of Accounting & Finance Email: Celine.Hoe@tamuc.edu

Education

January, 2020

- Ph D, University of Texas at Arlington. Major: Finance, Minor: Economics
- MBA, George Washington University. Major: Finance
- BA, Fu-Jen Catholic University. Major: International Trade/Business

Professional Positions

Academic

Associate Professor, Texas A&M University – Commerce.

Assistant Professor, Texas A&M University – Commerce.

Post-doctoral Research Associate, University of Texas at Dallas.

Faculty Research Associate, University of Texas at Arlington.

TEACHING

Teaching Experience

Texas A&M University-Commerce

- FIN 501, Finance for Decision Makers
- FIN 504, Financial Management
- FIN 550, Portfolio Management in Excel
- FIN 571, International Business Finance
- FIN 304, Introduction to Business Finance
- FIN 312, Money, Banking and Financial Markets
- FIN 404, Advanced Financial Management
- FIN 410, Analysis of Financial Derivatives
- FIN 450, Financial Modeling in Excel
- FIN 471, International Business Finance

RESEARCH

Published Intellectual Contributions

Refereed Journal Articles

Bensoussan, A., Hoe, C., & Yan, Z. (2019). A Mean-Variance Approach to Capital Investment Optimization. *SIAM Journal on Financial Mathematics* (**A*** in TAMUC 2017-2018 COB Journal List), 10 (1), 156-180.

- Bensoussan, A., Hoe, C., & Yan, Z. (in press, 2019). Capital Accumulation with Constraint: A Mean Field Type Control Framework. *Markov Processes and Related Field*.
- Hoe, C., Yan, Z., Bensoussan, A. (2018) Technical Note: The Impact of Competitive Advantage on the Investment Timing in the Stackelberg Leader-Follower Game. *Engineering Economist* (B in TAMUC 2017-2018 COB Journal List), 63 (3), 236-249.
- Bensoussan, A., Hoe, C., Yan, Z., Yin, G. (2017) Real Options with Competition and Regime Switching. *Mathematical Finance* (A* in TAMUC 2017-2018 COB Journal List), 27(1), 224-250.
- Hoe, C., Liu, L., Diltz, J. D., Ogunc, A. K. (2017) Sinners and Saints: An Alternative Approach to Evaluating the Investment Performance of Sin Funds versus Sinless Fund. *Journal of Accounting and Finance* (B in TAMUC 2017-2018 COB Journal List), 17(6), 109-116.
- Hoe, C., Nippani, S, Diltz, J. D. (2017) Should CAMELS Ratings be publicly disclosed? *Economics Bulletin* (**B** in TAMUC 2017-2018 COB Journal List), 37(3), 1567-1572.
- Hoe, C., Nippani, S. (2017) 2016 U.S. Presidential Election and Stock Market in China, International Journal of Economics and Finance, 9(7), 32-38.
- Bensoussan, A., Hoe, C., Kantarcioglu, M. A (2014) Trust-Score-Based Access Control in Assured Information Sharing Systems: An Application of Financial Credit Risk Score Models. *Risk and Decision Analysis* (**B** in TAMUC 2017-2018 COB Journal List), 5, 129-138.
- Hoe, C., Diltz, J. D. (2012) A Contingent Claims Approach to Valuing Licensing Agreements. *Quarterly Review of Economics and Finance* (A in TAMUC 2017-2018 COB Journal List), 52(3), 322-332.
- Bensoussan, A., Hoe, C., Diltz, J. D. (2010). Real Options Games in Complete and Incomplete Markets with Several Decision Makers. SIAM Journal on Financial Mathematics (A* in TAMUC 2017-2018 COB Journal List), 1, 666-728.

Book Chapters

- Bensoussan, A., Hoe, C. (2013). Real Options with Competition and Incomplete Markets, in Inspired by Finance: The Musiela Festschrift. Yuri Kabanov, Marek Rutkowski, and Thaleia Zariphopoulou, eds., Springer (2013).
- Bensoussan, A., Hoe, C., Diltz, J. D. (2011) *Real Options and Competition*, in Stochastic Analysis, Stochastic Systems, and Applications to Finance. A. Tsoi, D. Nualart and G. Yin, eds., World Scientific, Singapore (2011), 63-100.
- Bensoussan, A., Hoe, C., Koo, H. K. (2011). *Real Options and Variational Inequality*, in Advances in Financial Engineering, Hyeng Kuen Koo and Jaeyoung Sung, eds., IOS Press.

Revise and Resubmit Refereed Journal Articles

- Bensoussan, A, Cakanyildirim, M., Hoe, C., Li, M., Sethi, S. P., Mean and Mean-Variance Based Policies for an Inventory Model with Incomplete Information, *Operations Research* (A+ in ABDC List) 3rd-Round Revise and Resubmit.
- Bensoussan, A, Hoe, C. Real Options Games Stackelberg vs.Preemption in Complete and Incomplete Capital Markets, *Finance and Stochastics* ("A" in ABDC List) Revsie and Reubmit.

Submitted Refereed Journal Articles

- Bensoussan, A., Hoe, C., Kim, J., & Yan, Z. A Risk Extended Version of Merton's Optimal Consumption and Investment Portfolio.
- Hoe, C. How Does First Mover Advantage and Second Mover Advantage Affect Stackelberg Leader's Entry Threshold Hold Under Uncertainty?

Refereed/Peer-reviewed Conference Proceedings

- Bensoussan, A., Hoe, C., Kantarcioglu, M., Bensoussan, A. (2012). A Game Theoretical Analysis of Lemonizing Cybercriminal Black Markets. Decision and Game Theory for Security: Third International Conference, LNCS, Vol. 7638, 60-77.
- Hoe, C., Kantarioglu, M., Bensoussan, A. (2012). Studying Dynamic Equilibrium of Cloud Computing Adoption with Application of Mean Field Game. Communication, Control, and Computing (Allerton), 2012 50th Annual Allerton Conferenc, 220-224, October 2012.
- Kantarcioglu, M., Bensoussan, A., Hoe, C. (2011). *Investment in Privacy-Preserving Technologies under Uncertainty*. Decision and Game Theory for Security: Second International Conference, LNCS, Vol. 7037, 219-238.
- Kantarcioglu, M., Bensoussan, A., Hoe, C. (2011). *Impact of Security Risks on Cloud Computing Adoption*. "Impact of security risks on cloud computing adoption," Communication, Control, and Computing (Allerton), 2011 49th Annual Allerton Conference, 670-674, Sept. 2011.
- Bensoussan, A., Kantarcioglu, M., Hoe, C. (2010). A Game-Theoretical Approach for Finding Optimal Strategies in a Botnet Defense Model. Decision and Game Theory for Security: First International Conference, LNCS, Vol. 6442, 135-148.
- Kantarcioglu, M., Bensoussan, A., Hoe, C. (2010). When Do Firms Invest in Privacy-Preserving Technologies?. Decision and Game Theory for Security: First International Conference, LNCS, Vol. 6442, 72-86.
- Bensoussan, A., Diltz, J. D., Hoe, C. (2008). Utility-Based Pricing of Portfolio Credit Derivatives: Dynamic Copula and Top Down Approaches with Information Asymmetries. Proceedings of Bachelier Finance Society 5th World Congress.
- Hoe, C., Diltz, J. D. (2007). *Real Options, Competition, and the Valuation of Pharmaceutical Licensing Agreements*. Proceedings of 11th Annual Real Options Conference.

Technical Report

A Game-Theoretical Approach for Finding Optimal Strategies in a Botnet Defense Model, with Alain Bensoussan and Murat Kantarcioglu, Technical Report, UTDCS-14-10, http://cs.utdallas.edu/research/technical-reports-10.

Presentations Given

- Hoe, C. (Author Only), 2012 Conference on Decision and Game Theory for Security, "A Game Theoretical Analysis of Lemonizing Cybercriminal Black Markets," Budapest, Hungary. (November 5, 2012).
- Hoe, C. (Presenter & Author), Allerton Conference on Communication, Control and Computing,

"Studying Dynamic Equilibrium of Cloud Computing Adoption with Application of Mean Field Game," University of Illinois at Urbana-Champaign. (October 2, 2012).

- Hoe, C. (Presenter & Author), Second International Conference, GameSec 2011, "Investment in Privacy-Preserving Technologies under Uncertainty." (November 15, 2011).
- Hoe, C. (Presenter & Author), FMA Annual Meeting, 2011, "Media Content and REIT Returns." (October 2011).
- Hoe, C. (Author Only), Forty-Ninth Annual Allerton Conference on Communication, Control, and Computing, 2011, "Impact of Security Risks on Cloud Computing Adoption." (September 2011).
- Hoe, C. (Author Only), Annual Conference and 2011 Meeting of the Academy of Economics and Finance, "Media Content and REIT Returns." (March 2011).
- Hoe, C. (Author Only), 2010 Conference on Decision and Game Theory for Security, "A Game-Theoretical Approach for Finding Optimal Strategies in a Botnet Defense Model." (November 2010).
- Hoe, C. (Author Only), 2010 Conference on Decision and Game Theory for Security, "When Do Firms Invest in Privacy-Preserving Technologies?." (November 2010).
- Hoe, C. (Author Only), 2010 MENARES Annual Conference, "Media Content and REIT Returns." (October 2010).
- Hoe, C. (Presenter & Author), Society for Design and Process Science, "Real Options in a Competitive Environment." (June 2010).
- Hoe, C. (Author Only), New Directions in Financial Mathematics, Institute of Pure and Applied Mathematics (an NSF Math Institute at UCLA), "Real Options in a Satckelberg Game." (January 2010).
- Hoe, C. (Author Only), Applied Math Seminar, "Real Options in Complete and Incomplete Markets with Several Decision Makers," Standford University. (December 2009).
- Hoe, C. (Author Only), Bachelier Finance Society 5th World Congress. (July 2008).
- Hoe, C. (Presenter & Author), Annual Real Options Conference, 2007, "Real Options, Competition, and the Valuation of Pharmaceutical Licensing Agreements." (2007).
- Hoe, C. (Presenter & Author), Annual Real Options Conference, 2006, "Early-Stage Partnering Agreements with Application in Pharmaceuticals." (2006).
- Hoe, C. (Presenter & Author), FMA Annual Meeting, "Contingent Claims Valuation of Early-Stage Partnering Agreements." (2006).
- Hoe, C. (Presenter & Author), FMA Annual Meeting, "Long-term versus Short-term Stock Repurchase." (October 2003).

Contracts, Grants and Sponsored Research

Grant Proposal Proposed

Hoe, C. (Co-Principal), "Cyber Security (SC) Collaborative Research Alliance (CRA)," Sponsored by U.S. Army Research Laboratory, Federal, \$200,000.00, 10/01/2013 - 09/31/2018. (Proposed)

Working Papers

Bensoussan, A., Hoe, C., Yan, Z. Optimal Investment Timing Under Mean-Variance Strategy.

Research in Progress

"Inventory Management in Over-The-Counter Markets"

"Mean Field Games and Optimal Capacity Choice under Uncertainty"

"Mean Field Games and Life-time Portfolio Choice"

"Mean Field Games and Renewable Energy"

"Investment Timing, Costly Information and Incomplete Markets"

"Structure Strategic Alliance in Real Options"

- "Utility-Based Pricing of Portfolio Credit Derivatives: Dynamic Copula and Top Down Approaches with Information Asymmetries" (On-Going)
- "Valuing Real Options under Stochastic Volatility by q-Optimal Measures versus Indifference Prices"

SERVICE

General Service - Academic Committees and Service

College

College of Business - Tenure and Promotion Committee: Member (August 2017 -).

College of Business - Engagement Committee: Member (August 2017 – May 2019).

- College of Business Faculty Committee: Member (August 2014 2017).
- College of Business and Entrepreneurship Assessment Committee: Member (September 2013 August 2014).

College of Business and Entrepreneurship - Teaching Excellence Committee. (August 2012 - August 2013).

Department

Department Scholarship Committee: Chair (2014 to 2017).

Excel Certificate Initiative: Member (August 2017 -).

IE Plan Owner for MS Finance Program (January 2014 to Spring 2016).

MS in Finance Program Committee: Member (to Present).

Academic Search Committee for Assistant Professor of Finance: Member (Spring 2016).

Academic Search Committee for Assistant Professor of Finance: Member (Spring 2015).

QEP Department Mentor (Spring 2013 to August 2014).

Academic Search Committee for Assistant Professor of Finance: Chair (Spring 2013).

- Academic Search Committee for Assistant Professor of Finance/Economics: Member (Spring 2013).
- Academic Search Committee for Assistant Professor of Finance/Economics: Member (Spring 2012)

Editorial and Review Activities

Referee for the following journals:

"International Review of Economics and Finance", "International Journal of Strategic Property Management", "Computer Standards & Interfaces", "Applied Mathematics & Optimization"

Referee for the following conferences:

2012 and 2013 Conferences on Decision and Game Theory for Security.