

## CURRICULUM VITAE

### Wulin Suo

School of Business  
Queen's University  
143 Union Street  
Kingston, Ontario, Canada K7L 3N6  
Tel: (613) 533-2337 Email: [wsuo@business.queensu.ca](mailto:wsuo@business.queensu.ca)

### EDUCATION:

**Ph. D in Finance**, 2002, Rotman School of Management, University of Toronto

**Ph. D. in Applied Mathematics**, 1994, University of British Columbia

**M. Sc. in Mathematics**, 1985, Hebei University, China

**B. Sc. in Mathematics**, 1982, Hebei University, Baoding, Hebei, China

### WORKING EXPERIENCE:

#### Teaching

- **Associate Professor (Tenured)**: School of Business, Queen's University (tenured, 2007-present).
- **Assistant Professor**: School of Business, Queen's University (since July 2000).  
**Instructor**: Rotman School of Management, Univ. of Toronto.
- **Instructor**: Department of Mathematics (1988 -- 1994), UBC.
- **Lecturer**: Department of Mathematics (1985 -- 1988), Hebei Univ., China.

#### Visiting

- Rotman School of Management, University of Toronto: September 2007 – August 2008 (Sabbatical leave)

#### Industry

Part-time 1997-2000:

- Trading Risk Management -- Royal Bank of Canada: Implementation of interest rate models and exotic option pricing models.
- Balance-Sheet Management, Treasury Department of RBC: Model implementation for fund transfer pricing; valuation of non-maturity accounts and credit card balances; interest rate hedging and risk management

#### Postdoctoral Fellow

- 1994 -- 1996: Faculty of Management, Univ. of Toronto

#### Consultant

- Trading Risk Management -- Royal Bank of Canada (2008)
- Quantitative Auditing – Royal Bank of Canada (2004)
- Canadian Housing and Mortgage Corporation (on risk-based pricing)

### RESEARCH INTERESTS:

- Asset pricing theory and continuous-time finance

- Valuation and hedging of derivative securities, term structure of interest rate modeling
- Application of asset pricing to executive compensations
- Financial risk management
- Credit risk and valuation of defaultable securities
- Mathematical finance, computational finance

## **PUBLICATIONS:**

### **In Refereed Journals**

- Explaining Debt recovery Using an Endogenous Bankruptcy Model (with Wei Wang and Qi Zhang), *Journal of Fixed Income*, Vol 23, Number 2, Fall 2013, pp114-131
- An Empirical Comparison of Option Pricing Models in Hedging Exotic Options (with Yunbi An) *Financial Management*, No 4, 2009, pp889-914
- Assessing Credit Quality from the Equity Market: Can Structural Approach Forecast Credit Ratings? (with Yu Du), *Canadian Journal of Administrative Studies*, 24 (2007-09) pp. 212-228
- The Compatibility of Market Models in Cap and Swaption Markets: Evidence from Their Dynamic Hedging Performance (with Yunbi An), *Journal of Futures Markets*, 28 (2007), pp. 109-130
- Volatility surfaces: theory, rules of thumb, and empirical evidence (with John Hull and Toby Daglish), *Quantitative Finance* 7 (2007), pp.507-534
- Are Strategic Alliance Always Value-Creating? A Real Option Analysis, *Finance Letters*, 3 (2005), pp.30-37 (with Lew Johnson)
- A methodology for assessing model risk and its application to the implied volatility function model, *Journal of Financial and Quantitative Analysis* 37 (2002), pp297-318 (with J. Hull)
- Existence of singular optimal control laws for stochastic differential equations, *Stochastics* 48 (1994), pp.249-272 (with U.G. Haussmann)
- Singular stochastic controls I: Existence of optimal controls, *SIAM J. Control and Optimization* 33 (1995), pp.916-936 (with U.G. Haussmann)
- Singular stochastic controls II: The dynamic programming principle and applications, *SIAM J. Control and Optimization* 33 (1995), pp.937-959 (with U.G. Haussmann)
- Optimal production planning in a stochastic manufacturing system with long-run average cost, *Journal of Optimization Theory and Application*, 92 (1997), pp.161-188 (with S.P. Sethi, M.I. Taksar, and Q. Zhang)
- Producing in a manufacturing system with minimum average cost, *Nonlinear Analysis, Theory, Methods & Applications*, 30 (1997), pp.4357-4363 (with S.P. Sethi, M.I. Taksar, and Q. Zhang)
- Optimal feedback production planning in a stochastic N-machine flow-shop with internal buffers, *Automatica*, 33 (1997), pp.189-193 (with E. Presman, S.P. Sethi)
- Optimal Production Planning in a Multi-Product Stochastic Manufacturing System with Long-Run Average Cost. *Journal of Discrete Events and Dynamic Systems*, 8 (1998), pp. 37-54 (with S.P. Sethi, M.I. Taksar, and H. Yan)

- Optimal feedback production planning in a stochastic dynamic job-shop, *Lectures in Applied Mathematics*, 33 (1997), American Mathematical Society, pp.235-252 (with E. Presman, S.P. Sethi)

#### **In Refereed Book Chapters**

- Hedging Options With Transaction Costs, in “*Stochastic Processes, Optimization, and Control Theory: Applications in Financial Engineering, Queueing Networks, and Manufacturing Systems* (A volume in Honor of Suresh Sethi), International Series in Operation Research & Management Science, Vol 94, H. Yan, G. Yin and Q. Zhang (Eds), Springer-Verlag, Ney York, 2006

#### **In Conference Proceedings**

- Singular optimal control for stochastic differential equations, *Proc. of the 33rd IEEE Conference on Decision and Control*, Lake Buena Vista, FL, December, 1994, pp.496-500
- Minimum Average-cost production plan in a multi-product stochastic manufacturing system, *Proceedings of the 5<sup>th</sup> International Conference on Emerging Technologies and Factory Automation*, Kauai, Nov. 18-21, 1996 (with S.P. Sethi, M.I. Taksar, and H. Yan)

#### **Working Papers**

- Design of Contingent Convertibles and Their Price Sentivities, 2015
- An Analysis of Hedge Fund Returnds (with Lew Johnson), 2006
- Assessing Default Probabilities from Structural Credit Risk Models (with Wei Wang), 2005
- An Empirical Study on Credit Rating Change Behavior (with Yu Du), 2004
- Barrier Option Pricing (technical notes), August, 1997

#### **Work-In-Progress**

- Equilibrium asset pricing under Levy processes
- Corporate governance and over-investment (with Lew Johnson)
- Idiosyncratic risk and credit risk (with Qi Zhang)
- Are the risks priced consistently in the equity market and debt market?

#### **Other Works**

- Translated “Options Futures, and Other Serivatives” (7<sup>th</sup> and 8<sup>th</sup> edition) by John C. Hull into Chinese (with Yong Wang), published in 2009, 2011, 2014. 期权、期货及其它衍生产品 (译著, 第七版, 第八版, 第九版。机械工业出版社) (with Yong Wang),

#### **CONFERENCE/SEMINAR PRESENTATIONS:**

- Assessing Default Probabilities from Structural Credit Risk Models, 2007 Interdisciplinary Mathematical and Statistical Techniques, May 20-23, Shanghai, China

- Assessing Credit Quality from the Equity Market: Is Structural Approach a Better Approach? 2007 China International Conference in Finance, July 9-12, Chengdu, China
- Assessing Default Probabilities from Structural Credit Risk Models, 2006 Financial Management Association, October 11-14, Salt Lake City, Utah
- Assessing Default Probabilities from Structural Credit Risk Models, 2006 Northern Finance Association, September 15-17, Montreal
- Hedge Fund Performance, 2006 Northern Finance Association, September 15-17, Montreal
- Assessing Default Probabilities from Structural Credit Risk Models, 2006 China International Conference in Finance, July 17-20, Xi'An, China
- Stochastic Process in Finance, Invited speaker for Hebei Mathematics Society, July 29-30, ShiJiaZhang, China
- Estimating Default Probabilities, International Conference Honors Suresh P. Sethi, School of Management, University of Texas at Dallas, May 20-22, 2006
- Assessing Credit Quality from Equity Markets , Stochastic Modeling Symposium, Canadian Institute of Actuaries, Toronto, April 2006,
- An Empirical Study on Credit Rating Change Behavior, Northern Finance Association Annual Meeting, Vancouver, BC, September 2005.
- An Empirical Study on Credit Rating Change Behavior, McGill University, April, 2005
- The Performance of Option Pricing Models in Hedging Exotic Options, Financial Management Association Annual Meeting, New Orleans, October, 2004
- Volatility Surfaces: Theory, Rules of Thumb, and Empirical Evidence, Asian Financial Management Association Annual Meeting, Taipei, July, 2004
- Assessing Credit Quality from Equity Markets: Is Structural Model a Better Approach? Second Annual Risk Management and Insurance Conference, Waterloo, June, 2004
- The Empirical Performance of Options Pricing Models, Schulich School of Management, York University, November 2003
- Volatility Surfaces: Theory, Rules of Thumb, and Empirical Evidence, Financial Management Association Annual Meeting, Denver, Colorado, October, 2003
- The Empirical Performance of Options Pricing Models on Hedging Exotic Options, Quebec City, Northern Finance Association Annual Meeting, Banff, Alberta, September, 2003 (With Yunbi An)
- Hedging Options With Transaction Costs, Northern Finance Association Annual Meeting, Banff, Alberta, September, 2002
- Modelling Implied Black-Scholes Volatilities, Northern Finance Association Annual Meeting, Halifax, Nova Scotia, October, 2001. *The paper won the "Best Derivative Paper" award at this conference*
- Pricing Errors in Implied Volatility Models, Northern Finance Association Annual Meeting, Waterloo, Ontario, September, 2000
- Existence of Singular Optimal Control Laws, *West Pacific Optimization Seminar*, University of Washington, Seattle, WA, February 25, 1994
- Singular Optimal Control for Stochastic Differential Equations, *33rd IEEE Conference on Decision and Control*, Lake Buena Vista, FL, December 14, 1994

## **EDITORIAL SERVICES:**

Ad Hoc Reviewer for

*Journal of Banking and Finance, Mathematical Finance, Canadian Journal of Administrative Sciences, Mathematical Analysis and Applications, Quantitative Finance,*

*International Economic Journal, The European Physical Journal B, Siam Journal On Control and Optimization, Management Science, Journal of Business Finance and Accounting, Annual of Operation Research*

**COURSES TAUGHT:**

- Undergraduate Level
  - Investment and portfolio analysis
  - Fixed income securities
  - Introduction to financial theory
- Master Level
  - Investment theory
  - Financial derivatives
- PhD Level
  - Financial economics
  - Asset pricing and continuous-time finance

**GRADUATE STUDENT SUPERVISION:**

- Ph.D Thesis Committee Chair
  - Zhang (Graduated, April 2013)
  - Wei Wang (Graduated, 2006)
  - Yunbi An (Graduated, 2005)
  - Yu Du (Graduated, 2004)
- M.A. / M.Sc Thesis Supervisor
  - Ghufran Tarin (2013)
  - Dong Shen (2013)
  - Rahil Valiani (2013)
  - Robert Hayes (2013)
  - Abir Paula (2009)
  - Chong Lio (2009)
  - Fangpeng Dong (2009)
  - Di Ma (2007)
  - Ramon William (2007)
  - Weiwei Li (2007)
  - Ewen Miller (2007)
  - Genshen Yang (2007)
  - Yi Luo (2006)
  - Bin Hu (2006)
  - Lili Xie (2006)
  - Wei Yu (2006)
  - Qi Zhang (2005)
  - Jian Zhou (2004)

- Bin Chang (2002)
- Shiheng Wang (2002)
- Yu Dong (2001)

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.