

Gurupdes S. Pandher

University of Maryland (visiting)
Robert H. Smith School of Business

Professor & Senior Associate Dean (2012-17), on leave¹

Odette School of Business

University of Windsor²
Windsor, Ontario, Canada



LEADERSHIP EXPERIENCE – SUMMARY

- Eight years of innovative academic leadership and administrative experience as *Senior Associate Dean* (Academic, 2012-17) responsible for faculty administration, AACSB accreditation, new program development and School development/representation activities and previously as *Graduate Coordinator* (2009-12) at UBC’s Faculty of Management responsible for managing and developing all graduate programs.
- Over 10 years of industry experience working closely with top management at high profile organizations (e.g., Deloitte, Andersen, Sunlife, Treasury Board, Statistics Canada, FinCad, IMF).

EDUCATION

- Cornell University, Ph.D. (Economics; Major: Financial Economics) 1999
(Graduate Committee Chair: Professor Robert Jarrow)
- University of Waterloo, Master of Mathematics 1989
- University of British Columbia, B.Sc. (Computer Science) 1987

PROFESSIONAL OVERVIEW

18 years of academic experience & 10 years of professional/consulting experience

Academic:

- University of Maryland, Robert Smith School of Business (visiting) 2018
- University of Windsor, Odette School of Business³ 2012–present
Professor of Finance (Tenured) (on leave)
Senior Associate Dean (Academic) 2012-2017
- University of British Columbia, Faculty of Management 2008–2012
Associate Professor of Finance (Tenured)
Graduate Coordinator 2009-12
- University of Hong Kong (HKU), *Visiting Associate Professor* July 2010–2015
- Hong Kong University of Science & Technology (HKUST) May 2011
Visiting Associate Professor
- DePaul University, Chicago *Associate Professor (Tenured)* 2006–2007
- DePaul University, *Assistant Professor (Finance)* 2000–2006

Non-Academic:

- BlueKrystal Technologies & Business Insights (*Advisor*), Windsor 2015–present
- FinancialCad Corporation (*Senior Quantitative Consultant*), Vancouver Summer 2006
- Arthur Andersen and Deloitte & Touche (*Manager, Consulting*), Chicago 2001–2003

¹I am on leave till May 2019 and have been visiting the Robert Smith School of Business at the University of Maryland (College Park) and pursuing a start-up venture opportunity related to my research in banking risk management.

²*Times Higher Education* ranks the University of Windsor as among the “world’s best universities”. Located in the city of Windsor across the river from Detroit (Michigan), it is known as Canada’s ‘automotive capital’ and is an important trade gateway accounting for over a third of the Canada-US trade. The university has approximately 17,092 students of whom 2,004 are graduate students and employs 524 faculty members. It offers 190 undergraduate programs, 65 graduate research-based programs, and 6 professional masters programs.

³The Odette School of Business serves approximately 1,630 undergraduate and 450 graduate students and has a faculty complement of 70 full-time members (the School is non-departmentalized).

- International Monetary Fund & World Bank (*Economist*), Washington D.C. Summer 1996, 1997
- Treasury Board Secretariat & Statistics Canada (*Methodologist*), Ottawa 1991–1995
- Sunlife Insurance Company (*Actuarial Analyst*), Toronto, Canada 1989–1990

RESEARCH & TEACHING EXPERIENCE

Significant international teaching experience in business schools in US, Canada and Asia: University of Windsor, University of Maryland, McMaster University, University of Hong Kong, HKUST, University of British Columbia, DePaul University.

- Courses taught in undergraduate, MBA, Masters of Finance & Ph.D. programs include Risk Management, Fixed Income Analysis, Advanced Interest Rate Models, Derivatives, Investments and Corporate Finance.
- Current research areas: entrepreneurial finance, CEO compensation, firm performance and risk management, innovation in organizations, asset pricing, mutual funds.

ACADEMIC LEADERSHIP EXPERIENCE & SERVICE

Senior Associate Dean (Academic, 5 years)

The Odette School of Business serves approximately 1,630 undergraduate and 450 graduate students and has 70 full-time faculty members. I have provided leadership to School processes and initiatives in all core areas.

Role & Responsibilities:

- **Faculty Administration & Development**
 - Responsible for administering the School's Promotion Tenure and Review (PTR) processes; Chaired the School's PTR Committee.
 - Represented School in cases on the UCAPT (University Committee on Appointment Promotion and Tenure); handled over 35 cases.
 - Conducted faculty performance review (+55); I pursued a mentoring and coaching approach to empower faculty to reach their potential.
- **AACSB Accreditation**
 - Managed the School's AACSB accreditation processes and led School to achieve initial AACSB accreditation and developed and submitted first CIR report to maintain accreditation.
 - Led the development and authored the School's Self-Evaluation Report for AACSB accreditation; prepared faculty and staff for the accreditation visit (e.g. meetings with School Committees, Staff, Area Heads, Directors, Faculty Council, held TownHalls); hosted the 3-day visit of the Peer Review Team. OBS achieved initial accreditation on May 11, 2015.
 - Developed and authored the School's CIR Application and Eligibility Procedures report (June 2017) to maintain AACSB accreditation.
- **Budgetary Planning & Financial Approval**
 - Responsible for financial approval of School expenditures and expenses and involved in budgetary planning. Performed strategic management analysis of School budget as per se AACSB Standard 3 to show strategic alignment and develop transparent financials for each program including contingency planning.
 - Developed budgets for new research-based programs (M.Sc. and Ph.D. in Business Administration).
 - Oversaw course scheduling and assignments; identified efficiencies.
- **New Program Initiatives**
 - Facilitated the development of a new joint Master of Engineering Management program and represented the School during External Program Review.
 - Led the development of new research-based programs (M.Sc., Ph.D. in Business Administration) that are financially viable while incorporating a number of distinctive features. Consulted with Provost and Deans and held discussions with Area Heads, Graduate Program

- Committee, Executive Committee and faculty (e.g. Town Hall and Faculty Council) in developing the program structure and curriculum.
- Represented Dean at Sun Yet Sen University (China) to initiate a new partnership.
 - Managed Odette’s Outstanding Scholar Program (OSP) which attracts the brightest students to work on faculty research.
- **Promoting & Supporting Research Excellence**
 - Initiated and implemented new academic policies to improve School research productivity and thought leadership (e.g. support for regular Area-based seminar series, additional course remission policy and conference support, etc.).
 - Reviewed and evaluated faculty sabbatical applications and provided feedback on SSHRC grant applications.
 - In the AACSB SER, demonstrated strong improvements in School research quality and productivity over recent years (e.g. publications in School’s top three journal categories increased from 27 to 119 in past 5 years over previous period).
 - **Active Communication**
 - Regularly updated and discussed initiatives under my charge in monthly Faculty Council meetings (e.g. AACSB, SER, assurance of learning, academic policies and strategies, research-based programs, OSP, etc.).
 - Held Faculty Town Halls and meeting with Areas Heads and Odette Committees to discuss and further School initiatives.
 - Worked with Areas to develop area descriptions and highlights for the School website.
 - **School Representation**
 - Represented the School and Dean, when necessary, to university administration, students, alumni and the business community.
 - These engagements include: representing School at UCAPT (University Committee for Promotion Tenure & Review); CFBSD (Canadian Federation of Business School Dean) Meetings, Deans’ Council meetings with Provost, Annual President’s Retreat, Windsor-Essex Chamber of Commerce; Chaired Faculty Council meetings; Welcome addresses to students; Convocation toasts; Hosted the Austrian Ambassador’s visit to the School; Met with the Indian High Commissioner during his visit to Windsor; and others.
 - **Development Work**
 - Engaged in School’s development activities and initiatives and strategy discussions with the School’s Development Officer (the School raised over \$8m in gifts/donations in recent years).
 - Cultivated relationships with alumni in high corporate positions and managing directors of accounting firms.
 - Facilitated funding of research grants for Odette faculty (over \$300,000) from the Cross-Border Institute (CBI).
 - Visited Schools in China, Hong Kong and Singapore to initiate exchange agreements and partnerships.
 - **Other**
 - Chair of Student Appeals Committee, 2012-present.
 - Adjudicate decisions on request to withdraw in Odette programs.
 - Developed a new ‘early warning system’ to identify students are risk.
 - Managed Odette’s Outstanding Scholar Program (2013-17).
 - Member, Advisory Board of University of Windsor’s Outstanding Scholars Program, 2013-2017.
 - Member, University Senate, 2015-2017
 - Member, Senate Student Caucus, 2015-2017.
 - Ex-officio Member, Faculty Recruitment Committees.

Graduate Coordinator (3 years), Faculty of Management, UBC

- Responsible for developing and administering all graduate programs (e.g., Master of Management, M.Sc., Ph.D.) including admissions, program development, graduate committee formation, funding, monitoring student progress and dissertation completion. Also, served as the Faculty's liaison with the School of Graduate Studies.
- Chaired the Graduate Committee, Faculty Recruitment committees (e.g. Finance, Accounting, and Management positions) and the Curriculum Committee. Was elected to the University Senate from 2008-2012 (two terms) and served on its budget, nominating and curriculum committees.

Other Service – Faculty & University

University of British Columbia:

Faculty of Management

- Chair, Graduate Admissions Committee, 2009-2011
- Chair, Faculty Search Committees (Accounting, Finance, Management), 2010-2012
- Member, Reappointment, Promotion & Tenure (RPT) Committee, 2008-2012
- Member, Faculty Curriculum Committee, 2008-2009, 2011-2012
- Chair, Faculty Curriculum Committee, 2008

Senate

- Senator, Member of UBC Senate, 2008-2012
- Chair, Senate Nominating Committee, 2011-2012
 - Planned agenda items for Senate meetings, determined membership of Senate Committees, and appointments to senior university searches (e.g. Deans, Provosts, Deputy Vice-Chancellor).
 - Represented the Senate in annual meetings with the UBC Board of Governors.
- Member, Senate Budget & Academic Resources Committee, 2009-2012
- Member, Senate Curriculum Committee, 2008-2011
- Member, Senate Nominating Committee, 2008-2011

University

- Member, College of Graduate Studies Council, 2011-2012
- Member, Provost Search Committee, 2011
- Member, Search Committee for Associate VP of Research & International, 2011
- Member, President's Committee on Student Discipline, 2008-2009
- Provost Office, Developed MOU and budget for International Master of Management, 2008

DePaul University⁴:

- Member, Academic Integrity Board (AIB), 2005-2007
- Member, Editorial Board of *Commerce Exchange* (college alumni magazine), 2006-2007
- Member, Finance Promotion & Tenure Committee, 2006-2007
- Member, Finance Faculty Recruitment Committee, 2000-2006
- Member, Finance Curriculum Committee, 2002-2006
- Coordinator, Joint Seminar Series of the College of Commerce & Chicago Federal Reserve Bank, 2002-2003, 2006-2007

BUSINESS SCHOOL DEANS CONFERENCES

- CFBSD Associate Deans Meeting, Montreal, June 1-2, 2017.
- AACSB International Conference and Annual Meeting (ICAM 2017), Houston, April 23-25, 2017.
- CFBSD Annual Meeting, Halifax, October 23-25, 2016.
- AACSB International Annual Accreditation Conference, Minneapolis, September 18-20, 2016.
- AACSB International Conference and Annual Meeting (ICAM 2016), Boston, April 3–5, 2016.
- AACSB Seminar on “Continuous Improvement Review Seminar”, Miami, January 30, 2016.
- CFBSD Annual Meeting, Quebec City, October 17-19, 2015.

⁴DePaul's professional MBA program has been ranked in the top 10 by *U.S. News & World Report* for the past 20 years.

- CFBSD Ontario Deans Meeting, Toronto, May 6, 2015.
- AACSB International Conference and Annual Meeting (ICAM 2015), Tampa, Florida, April 26–28, 2015.
- CFBSD Associate Deans Meeting, “Building Excellence in Research Cultures for Canadian Business Schools” (presented session on “Promoting Research Collaboration”), Montreal, March 23-25, 2014.
- CFBSD Annual Meeting, “The Canadian B-School and the Future of Management Education”, Saskatoon, November 17-19, 2013.
- AACSB International Conference and Annual Meeting (ICAM 2015), Chicago, March 13-15, 2013.
- CFBSD (Canadian Federation of Business School Deans) Annual Meeting, “The Canadian B-School and the Future of Management Education”, Ottawa, November 12-14, 2012.

RESEARCH

My research includes a blend of theoretical, modeling and empirical contributions. It tends to be interdisciplinary (involves markets and organizations) but is based on finance and economics foundations. Recent and current areas of research include: venture finance contracting and boundaries of angel/VC markets; VC and bank finance – role of default and valuation risks; strategic risks to innovation in organizations; collaboration in multibusiness firms and manager incentives; CEO pay and alignment with firm characteristics; CEO compensation, firm performance and managing downside business risk; a generalized market-timing framework for funds; a comprehensive approach to banking risk management; and asset pricing with wealth and consumption utilities.

Previous work has included extending employee stock-option pricing models to allow for multiple severance risks; studying the risk and return characteristics of the U.S. real estate market using zip-code level housing data; extending the HJM framework for interest-rate securities; econometric models for option pricing and monetary targeting by central banks; estimating diffusion processes from option prices; and using active scholar surveys to rank academic journals.

Completed Working Papers

“Risk-adjusted Performance of Convertible Venture Investments: Role of Failure and Valuation Risks & Search by Entrepreneurs”, 2019, under review at *Review of Financial Studies*.

“Firm Performance and Managing Downside Business Risk” (with Jerry Sun, Russell Currie), 2018, under review at *The Accounting Review*.

“CEO Compensation and Firm Characteristics” (with David Koslowsky), 2018, under review at *Strategic Management Journal*.

“Composition of CEO Compensation & Shareholder Returns”, 2017, under review at *American Economic Review*.

“Regression-based Valuation of Condominiums: with Application to the *Floridian* in Miami”, 2007.

Research in Progress

- Venture & Bank finance – the role of default and valuation risks.
- Managing downside business risk, firm performance and CEO compensation.
- A generalized framework for evaluating the market-timing ability of portfolio managers.
- A comprehensive approach to banking risk management.
- Framework for transforming loans in Islamic banking to western equivalents.
- Asset-pricing based on utilities over consumption and wealth – implications for the equity premium puzzle and boom-bust dynamics.

Journal Publications

Over past six years, 5 of 7 publications are in FT-50 journals. Over an eighteen year academic career, 14 of 18 publications are in journals classified as “A*” or “A” by ABDC⁵. Among “top 10% of Authors on SSRN by all-time downloads”. The ordering of author names below is alphabetical unless denoted by “*”.

Pandher, G.S. (2018), “Financier Search and Boundaries of the Angel and VC Markets”, forthcoming in *Entrepreneurship Theory and Practice*. [ABDC:“A*”, FT-50]

*Pandher, G.S., Vu, J. (2017), “Spillovers, Cooperation & Managerial Incentives in Multidivisional Firms”, *International Review of Economics & Finance*, 54, 44-54. [ABDC:“A”]

*Pandher, G.S., Mutlu, S., Sammani, A. (2016), “Employee-based Innovation in Organizations: Overcoming Strategic Risks from Opportunism & Governance”, *Strategic Entrepreneurship Journal*, 11, 4, 464-482. [ABDC:“A*”, FT-50]

Oxley, J., Pandher, G.S. (2015), “Equity-based Incentives and Collaboration in Multi-business Firms”, *Strategic Management Journal*, 37, 7, 1379-1394.⁶ [ABDC:“A*”, FT-50]

*Currie, R., Wesley, F., Pandher, G.S. (2014), “Contextualising Site Factors for Feasibility Analysis”, *Journal of Environmental Planning and Management*, 57, 10, 1484-1496. [ABDC:“B”]

*Pandher, G.S., Currie, R. (2013), “CEO Compensation: A Stakeholder-Bargaining Perspective of the Resource Advantage”, *Strategic Management Journal*, 34, 1, 22-41. [ABDC:“A*”, FT-50]

Currie, R., Pandher, G.S. (2012), “Management Education Journals’ Rank and Tier by Active Scholars”, *Academy of Management, Learning and Education*, 12, 2, 194-218. [ABDC:“A*”, FT-50]

Currie, R., Pandher, G.S. (2011), “Finance Journal Rankings & Tiers: An Active Scholar Assessment Methodology”, *Journal of Banking & Finance*, 35, 1, 7-20. [ABDC:“A*”]

Miller, N., G.S. Pandher (2008), “Idiosyncratic Risk and the Housing Market”, *Journal of Housing Research*, 17, 13-32. [ABDC:“B”]

Pandher, G.S. (2007), “No-Arbitrage Valuation of Interest Rate Securities under HJM Forward-rates with Speed & Acceleration Diffusions”, *Journal of Economic Theory*, 137, 432-459. [ABDC:“A*”]

Pandher, G.S. (2007), “Regression-based Modeling of Market Option Prices: with Application to S&P500 Options”, *Journal of Forecasting*, 26, 7, 475-496. [ABDC:“A”]

Pandher, G.S. (2007), “Modeling and Controlling Monetary & Economic Identities with Constrained State-Space Models”, *International Statistics Review*, 75, 2, 150-169. [ABDC:“A”]

Cannon, S., Miller, N., G.S. Pandher (2006), “Risk and Return in the U.S. Housing Market: A Cross-sectional Asset-Pricing Approach”, *Real Estate Economics*, 34, 4, 519-552. [ABDC:“A”]

⁵ABDC (Australian Business Deans Council) Journal Rankings List (2016): “A*” is classified as “best or leading journal”, “A” is a “highly regarded journal”, “B” is a “well regarded journal”, and “C” is a “recognized journal” (<http://www.abdc.edu.au/master-journal-list.php>); FT-50 are top business journals selected by the *Financial Times*.

⁶Mentioned in the *Globe and Mail* (February 23, 2016); <http://www.theglobeandmail.com/report-on-business/careers/business-education/why-diversity-never-comes-to-many-workplaces/article28852340/>
Business News Daily (February 8, 2016), To Improve Teamwork, Give Managers Equity; <http://www.businessnewsdaily.com/8771-company-equity-teamwork.html>

Pandher, G.S. (2003), "Valuation of Executive Stock Options under Multiple Severance Risks", *Journal of Derivatives*, 11, 2, 25-37. [ABDC:"A"]

Pandher, G.S. (2002), "Forecasting Multivariate Time Series with Linear Restrictions using Constrained Structural State Space Models", *Journal of Forecasting*, 21, 281-300. [ABDC:"A"]

Pandher, G.S. (2001), "Estimation of Security Excess Returns from Derivative Prices & Testing for Risk-Neutral Pricing", *Econometric Theory*, 17, 785-819. [ABDC:"A*"]

Pandher, G.S. (2000), "Drift Estimation of Generalized Security Price Processes from High Frequency Derivative Prices", *Review of Derivatives Research*, 4, 263-284. [ABDC:"B"]

Pandher, G.S. (1996), "Skewed Survey Populations: Optimal Sample Redesign under the Generalized Regression Estimator with Application to the Government Finance Survey", *Survey Methodology*, 22, 13-22.

CURRENT GRADUATE SUPERVISION

- Christopher Himmelstein, Ph.D. candidate
- Harish Rajput, Ph.D. candidate

AWARDS & HONORS

Received approximately \$160,000 in external research grants over past 5 years (total over \$270,000).

- Social Sciences & Humanities Research Council (SSHRC) Grant: "Entrepreneurial Finance: Expected Investment Returns & Equity Division in Angel and Venture Capitalist Deals." 2016-19, (\$49,280)
- Cross-Border Institute (CBI) Grant, University of Windsor, "Risk Management in the Canadian Automotive Sector", 2013-15 (\$30,657)
- Cross-Border Institute (CBI) Grant, University of Windsor, "Location Problem with Border Disruption Risk", 2013-15 (\$22,500)
- Odette School of Business Research Grant, 2012-17 (\$25,000)
- Social Sciences & Humanities Research Council (SSHRC) Grant: "Optimal Equity & Cash Managerial Incentives in Multidivisional Firms with Cross-divisional Spillovers" 2012-14 (\$30,814)
- UBC, Faculty of Management Competitive Research Grant, 2010 (\$10,000)
- Competitive Faculty Research Award, College of Commerce, DePaul University, 2007 (\$15,000)
- Competitive Faculty Research Award, College of Commerce, DePaul University, 2005 (\$15,000)
- DePaul Real-Estate Center Award, 2004 (\$15,000)
- Faculty Research Sabbatical, DePaul University, 2003 (\$30,000)
- Competitive Faculty Research Award, College of Commerce, DePaul University, 2003 (\$15,000)
- University Research Council, Research Grant, DePaul University, 2000 (\$3,000)
- Sage Scholarship, Cornell University, 1995-1998
- Statistics Canada Employee Recognition Award: "For an exceptional and distinguished contribution to the effectiveness of Statistics Canada", 1992

PRESENTATIONS AT ACADEMIC CONFERENCES & SEMINARS

- University of Maryland, Department of Finance, May 2018
- University of Victoria, Department of Economics, September 2017

- Concordia University, Molson School of Business, March 2016
- Brock University, Goodman School of Business, October 2015
- McMaster University, DeGroote School of Business, June 2014
- Sun Yat Sen University, Lingnan College, Symposium on Strategic Management and Organization Development, Plenary Seminar, July 2014
- Ryerson University, Ted Rogers School of Management Seminar, March 2014
- University of Windsor, Economics Department Seminar, January 2013
- University of Windsor, Odette School of Business Research Seminar, October 2012
- University of Macau, Faculty of Business Administration, Department of Finance and Business Economics, July 2012
- University of Hong Kong, Department of Finance Seminar, August 2011
- UOIT, Faculty of Business & Information Technology, March 2011
- Financial Management Association, October 2010, New York City
- University of British Columbia, March 2008, Research Week Presentation
- California State University, Long Beach, December 2006
- Financial Management Association (FMA), October 2006, Salt Lake City
- American Real Estate & Urban Economics Association (AREUEA) & Real Estate Society (RES) International Conference, June 2006, Vancouver
- Allied Social Sciences Association (ASSA), January 2006, Boston
- Northern Finance Association (NFA), September 2005, Vancouver, British Columbia
- Financial Management Association (FMA), October 2004, New Orleans
- European Finance Association (EFA), August 2004, Maastricht
- Simon Fraser University, March 2001, Vancouver, British Columbia
- Financial Management Association (FMA), October 2000, Seattle
- Koch University, June 2000, Istanbul
- Southern Finance Association (SFA), November 1999, Key West, Florida
- European Financial Management Association (EFMA), June 1999, Paris
- Finance Recruiting Seminars (1999-2000): Concordia University, DePaul University, Simon Fraser University, University of Virginia, Rutgers University

SERVICE TO THE ACADEMIC COMMUNITY

Member of Editorial Board, Global Finance Journal, 2018-present

Reviewer, Global Finance Journal, 2017 (3), 2018 (2)

Reviewer, International Economic Review, 2016

Reviewer, Strategic Management Journal, 2014, 2015 (2), 2016

Reviewer, Journal of Empirical Finance, 2015

External Reviewer, Quality Assurance Graduate Program – Cyclical Program Review, MBA Program, Faculty of Business Administration, Lakehead University, Visit on August 10-12, 2016

Internal Reviewer, External Review Report on the Academic Programs in the Department of Mathematics and Statistics at the University of Windsor (April 2, 2015), Windsor, Canada, Visit on February 12-13, 2015

Reviewer, Economic Modelling, 2014, 2015

Reviewer, Quantitative Finance, 2008, 2009, 2010, 2014

Reviewer, European Economic Review, 2012, 2013 (2)

Reviewer, Journal of Economic Theory, 2007, 2009

Reviewer, Review of Financial Studies, 2005

Reviewer, Journal of Econometrics, 2006

Reviewer, Journal of Applied Finance, 2002, 2005 (2), 2006, 2007, 2008

Reviewer, Journal of Financial Research, 2005

Reviewer, Mathematics & Computers, 2005

Reviewer, Financial Review, 2003

American Economic Association (AEA) 2012 Annual Meeting, Chicago, Session Chair
External Examiner, Ph.D. Dissertation in Finance, University of New South Wales, 2010
Session Chair, “Non-Standard Option Pricing”, 2004 FMA Annual Meeting
Track Chair, “Asset Pricing”, 2003 Midwest Finance Meeting, New Orleans

PROFESSIONAL EXPERIENCE

Arthur Andersen, Deloitte, Precision Economics, BlueKrystal Business Insights 2001–present
Consultant, Manager

- Provided advisory and consulting services in the areas of executive compensation, risk management, valuation, model verification, securities litigation, and interest rate derivatives modeling (LMM) & calibration.
- Served as Manager of Consulting with Arthur Andersen and Deloitte in Chicago.

FinancialCad Corporation, Vancouver, Canada Summer 2006
Senior Quantitative Consultant

- Evaluated and proposed improvements to the calibration of interest rate derivatives pricing models including the LIBOR market model implemented in the company’s software.
- Validated models for pricing caps, swaptions and constant maturity swap (CMS) notes in the LIBOR market framework.
- Presented a seminar series on “*Advanced Elements of Interest Rate Modeling*” that covered LIBOR market models (with local & stochastic volatility) and Hull-White interest rate model for derivatives.

International Monetary Fund & World Bank, Washington Summer 1996, 1997
Economist

- Developed new models for estimating inter-country trade flows & Central Bank monetary programming based on my research in structural time series modeling.
- Presented research and results to IMF Directors and Senior Economists. Models were subsequently implemented.
- Developed articles for the 1997 World Development Indicators publication.

Treasury Board Secretariat & Statistics Canada, Ottawa, Canada 1991–1995
Methodologist

Provided quantitative expertise and consultation on analytical studies and business/economic/social surveys conducted by the Canadian Government.

- Served as chief consultant to Study Head at *Treasury Board Secretariat* in developing the estimation methodology used in the Canadian Government’s *Equal Pay for Equal Work Study* involving over \$1.5 billion in gender-wage disparity compensation adjustments.
- Led the Redesign of the Local Government Finance Survey and estimates total uses and sources of funds by local governments in Canada.

Sunlife Insurance Company, Toronto, Canada 1989–1990
Actuarial Analyst

- Designed new insurance products and re-priced existing products after carrying out profitability and risk analysis.
- Evaluated the financial risk and profitability of raising the company's highest face-value of life insurance offered. Presented analysis to VPs and Senior Officers and the new limit (\$2 million higher) was adopted.