CURRICULUM VITAE ROBERT L. WELCH

12 Barbican Trail Home Phone: (905) 227-7597 St. Catharines, Ontario L2T 3Z9 Office Phone: (905) 685-5550, Ext. 3920

Education

1988	Ph.D. Finance, State University of New York at Buffalo
	(Minors in Economics and Statistics)
1982	Certified General Accountant (C.G.A. Association of Canada)
1977	M.B.A., University of Western Ontario (U.W.O.)
1975	M.A. (Statistics), U.W.O.
1974	Hons. B.Sc. (Mathematics), U.W.O.

Awards and Grants

1989	Social Sciences and Humanities Research Council of Canada (S.S.H.R.C.) Grant to study Option Market Efficiency (2 year grant of \$25,000)
1984	Doctoral Completion Fellowship (S.S.H.R.C.)
1983	Doctoral Completion Fellowship (S.S.H.R.C.)
1982	Seagram's Business Faculty Award, Doctoral Fellowship (S.S.H.R.C.)
1969	G. W. Young Scholarship (U.W.O.)

Employment

Professor of Finance (Brock University)
Associate Professor of Finance (Brock University)
Assistant Professor of Finance (Brock University)
Lecturer (Brock University)
Case Writer for School of Business (U.W.O.)

Publications and Research Articles

Ayadi, M., W. Ben Omrane, J. Wang, and R Welch M "Macroeconomic News, Public Communications, and Foreign Exchange Jumps around US and European Financial Crises" in *International Journal of Finance and Economics*, forthcoming..

Ben Omrane Walid, R. Welch and X. Zhou, The Dynamics Effect of Macroeconomic News on the Euro-Dollar Exchange Rate, with R. Welch and X. Zhou, *Journal of Forecasting*, Forthcoming

2019	Ben Omrane Walid, Savaser, T, Welch, R, Zhou, Joseph, "Time-varying Effects of Macroeconomic News on Euro-Dollar Returns", <i>North American Journal of Economics and Finance</i> , 50, 1 – 20.
2019	Chen L., Lazrak , S., Wang Y., and Welch, R., "Pure Momentum is Priced". Journal of Behavioural and Experimental Finance, 22, 75 - 89.
2018	Ayadi, M.A., Lazrak S., Liao, Y. and Welch R., "Performance of Fixed-income Mutual Funds with Markovian Regime-Switching Models". Quarterly Review of Economics and Finance, 69, 217 - 231.
2017	Ben Omrane, W., Tao, Y. and Welch, R" Scheduled Macro-News Effects on a Euro/US Dollar Limit Order Book around the 2008 Financial Crisis", Research in International Business and Finance. Volume 42, May, 2017.

2017 Ayadi, M., Lazrak, S. and Welch, R.." *Determinants of Bankruptcy Regime Choice for Canadian Public Firms*", Research in International Business and Finance, 42, 161-172.

Publications and Research Articles (Continued)

2017	"Macroeconomic News and Exchange Rate Volatility: Evidence of Unstable Effect", W. Ben Omrane, R. Welch, and X. Zhou, Handbook of Global Financial Markets, 2017, Eds.: S. Boubaker, and D. Nguyen, World Scientific. Forthcoming
2016	"Tick Test Accuracy in foreign exchange ECN markets" with W. Ben Omrane in Research in International Business and Finance, 37, pg 135-152.
2014	"A Stochastic Dynamic Program for Valuing Options on Futures" with M. Ayadi, H. Ben Ameur, T. Kirillov in the Journal of Futures Markets, 34, 12, pg 1185 - 1201.
2007	"Relationship Between Treasury Bill and Eurodollar Yields; Theoretical and Empirical Analyses (Long Memory GARCH-M Analysis)" with K. Shrestha and C.F. Lee in Review of Quantitative Finance and Accounting, February, Vol. 28 pg 163-185.
2004	"A Re-examination of Miller's Gain from Leverage with Personal Taxes" with Bob Hanrahan in Advances in Financial Education, Spring, pg 57-76.
2001	"Relationship Between Expected Treasury Bill and Eurodollar Interest Rates: A Fractional Co-Integration Analysis.", with K. Shrestha in the Review of Quantitative Finance and Accounting, Vol. 16 pg 65-80.
1999	"Registered Education Savings Plans: A Tax Inventive Response to Higher Education Access", A. Young and M. Donnelly, <u>Canadian Tax Journal</u> , Vol. 47; Pg. 1-26.
1998	"The Cost of Capital, And It's Component Parts with Corporate Personal Taxes", with R. Hanrahan and T. Barnes, <u>Applied Economics Letters</u> Vol.5; Pg. 309-312.
1998	"The Cost of Capital, and It's Component Parts with Corporate Personal Taxes", with R. Hanrahan and T. Barnes, <u>Applied Economics Letters</u> Vol.5; Pg. 309-312.
1998	"The Relative Mispricing of the Constant Variance American, Put Model", With S. Hadjiyannakis and L. Culumovic, <u>The International Review of Economics and Finance</u> Vol.7; Pg. 149-171.
1997	"On The Distribution of CBOE Option Trade Prices Occurring Between Consecutive Stock Trades" with T. Y. Chung and D. M. Chen, <u>TheReview of Quantitative Finance and Accounting</u> Vol.9; Pg. 269-288.
1995	"A Profitable Call Spreading Strategy" with L. Culumovic, <u>The Journal of Derivatives</u> Vol.2, (spring) 1995; Pg. 24-44.
1994	"A Re-Examination of Constant Variance American Call Mispricing" with L. Culumovic, Advances in Futures and Options Research Vol.7, 1994; Pg. 177-223.
1993	"The RRSP Home Buyers' Plan: Advantageous for Whom?" with M. Donnelly, J. R. Hanrahan, and A. Young, <u>Canadian Tax Journal</u> Vol.41,1993; Pg. 293-305.
1993	"The Relative Mispricing of American Calls Under Alternative Dividend Models" with D. Chen, <u>Advances in Futures and Options</u> Research Vol.6, 1993; Pg. 15-43.
1991	"Static Optimization of American Contingent Claims" with D. Chen,

Advances in Futures and Options Research Vol.5, 1991; Pg. 175-184.

Publications and Research Articles (Continued)

1991	"Empirical Option Price Bands on The CBOE and The Redundancy of Options" with D. Chen, <u>Advances in Quantitative Analysis of Finance and Accounting</u> Vol.1, 1991 (Part B); Pg. 161-182.
1990	"Deriving a General Expression for the CCA Tax Shield" with R. Hanrahan, <u>CGA</u> (Certified General Accountant) May 1990; Pg. 59-62.
1988	"On the Properties of the Valuation Formula for an Unprotected American Call Option with Known Dividends and the Computation of its Implied Standard Deviation" with D. Chen, <u>Advances in Futures and Options Research</u> Vol.3, 1988; Pg. 237-257.
1982	"The Effect on Capital Budgeting Decisions of Recent Changes in the C.C.A. Calculation", <u>Cost and Management</u> May-June 1982; Pg. 52-53.
1977	Several case studies published by the U.W.O. Business School.

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Papers Presented Published at Conference Proceedings	
2019 Volatility Jumps arou	Ben Omrane, J. Wang and R Welch, Macroeconomic news and foreign Exchange and the Global Financial Crisis, Tunis, Tunisia, April 24
2018	Ayadi, M., W.Ben Omrane, J. Wang and R Welch, Macro-news effects and foreign exchange jumps around US and European crises – ASTURIMA, Financial Studies Conference, Hammamet, Tunisia, May, 2018. Best paper award.
2016	Ben Omrane, W., Tao, Y. and Welch, R., Scheduled Macro-news on a Euro/US dollar limit order book around the 2008 financial crisis - 4th Tunisian Society for Financial Studies (TSFS) Conference, Sousse, Tunisia, December, 2016.
2016	Ben Omrane, W., Tao, Y. and Welch, R Scheduled Macro-news on a Euro/US dollar limit order book around the 2008 financial crisis - 7th International Research Meeting in Business and Management (IRMBAM-2016), Nice, France, 2016.
2014	"Dynamic Performance of Canadian Fixed Income Mutual Funds" with Ayadi, M., Lazrak, S., Liao, Y.at the Northern Finance Association in Ottawa, Ontario, September 2014.
2014	"The tick Test Accuracy in Foreign Exchange ECN Market" with: Ben Omrane, W. at the European Financial Management Association in Rome, Italy, June 2014 and at the Tunisian Accounting and Finance Professor's Association of North America Annual Conference in December 18 -20, Tunis, Tunisia.
2013	"The Informational Value of Corporate Credit Ratings" with Densmore, M., Ayadi, M. and Lazrak, S. at the European Financial Management Association, June, U.K. and at the Financial Management Association, Chicago, Illinois, October.
2003	"A Re-examination of Miller's Gain from Leverage with Personal Taxes", at ASAC (June 14- 17, Halifax, Nova Scotia)
2002	"Relationship Between Treasury Bills and Eurodollar Futures: A Long Memory GARCH-M Analysis" with K. Shresthra and C.F. Lee at 2002 FMA Annual Meeting (Oct 16-19, San Antonio, Texas)

Papers Presented Published at Conference Proceedings (Continued)

1999	"A Fractional Relationship Between Treasury Bills and Eurodollar Futures: A Long Memory Analysis", with K. Shrestha, at Northern Finance Association Annual Meeting (University of Calgary, September 24, 1999).
1994	"The Effect of Option Introduction on the Risk and Return of Canadian Equity Securities for 1975-91" with I. Masse, J. R. Hanrahan, and J. Kushner, at <u>ASAC</u> Vol.15, June 1994; pp. 146-155.
1990	"Static Optimization of American Contingent Claims" with D. Chen at <u>ASAC</u> Vol.11, June 1990; pp. 248-258.
1989	"A Simple Derivation of the SML" with J. R. Hanrahan, at MOFAC December 1989, pp. 104-108.

Working Papers

Public Communication Effects on the Foreign Exchange Diffusion Process Components, with M Ayadi , W. Bern Omrane, J Wang.

- Macroeconomic news and foreign exchange volatility jumps around the global financial crisis, with M. Ayadi, C. Wang, and R. Welch.
- Performance of Canadian Emerging Markets Mutual Funds. with Ayadi, M.A., Lazrak S., and A. Singh.
- Dynamic Effect of Macroeconomic News on Euro/\$ with Ben Omrane and X. Zhou under review at Journal of Financial Services Research.
- "The Informational Value of Corporate Credit Ratings" with: Ayadi, M, Densmore, M. and Lazrak, S.
- Macroeconomics News and Time Varying Effects on FOREX, with Zhou, X., T. Lavaser and Ben Omrane, W.
- "Understanding Your RRSP Retirement Options"
- "Personal Leverage Effects on RRSP Profitability"
- "Beware of the Unprofitable RRSP"

Work-in-Progress

- Public Communications and FOREX risk around the Global Financial Crisis, with M. Ayadi, J. Wang and Ben Omrane
- Real Estate Mutual Funds in Canada' with M. Ayadi
- A Discrete Dividend Bias of the RGW American Call Option Pricing Model
- The Historical Behaviour of Trading Activity and Bid Ask Quotes on Equity Option Markets with Culumovic, L.
- Composite (Spliced) Time Series, with Veloce, B.
- Financial and Tax Policy: Employee's Automobile, with Young, A.
- "Long Term Memory and Stability in Derivative Securities"

Work-in-Progress (Continued)

- Quoting Behaviour on the CBOE, with T. Chung
- Taxation of Derivatives, with A. Young
- Market Efficiency and Spreading Strategies on CBOE Puts

- On the Computation of the American Put's Implied Standard Deviation
- The Effect of Short Sale Constraints on a Share and Its Option
- Credit Policy Decisions and Accounts Receivable Investment

Ph.D. Thesis

"Short Sale Constraints: The Implications for Option and Equity Markets", Defended in December 1987.

MSc. Committee Member:

- 2009 Tymur Kirillov and Boya Li
- 2010 Chunrong Wang
- 2011 Mike Densmore
- 2012 Farooq Durrani and Yusui Liao
- 2013 Xinyao Zhou and Anterpreet Singh
- 2014 Jiahui Wang and Yusi Tao
- 2015 Lemeng Chen
- 2016 Jiayu Wang

Courses Taught at Brock University

Introductory Finance (FNCE 3P92, 3P93)

Financial Accounting (ACTG 2P53)

Management Accounting (ACTG 2P54)

Theory of Finance (FNCE 4P06)

International Finance (FNCE 4P05)

Investments (FNCE 4P04)

Options (FNCE 4P11)

Futures (FNCE 4P12)

Derivatives I (FNCE 4P16)

Derivatives II (FNCE 4P17)

Intro to Derivatives (MBAB 5P44)

Administrative Experience at Brock

2004 -- 2010 Department Chair – Finance, Operations and Information Systems 1992 – 1995 Department Chair – Accounting and Finance

University Level Committees

I have served as a member of Senate, teaching and research sub committees, 6 years on promotion & tenure (3 years in the mid-nineties and 2006-2009), multiple terms on the pension committee and three decanal search committees.