#### DR. WILLIAM T. CANNON

Distinguished Faculty Fellow of Finance, Smith School of Business, Queen's University

#### Home

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#### Education

1976 Ph.D.

Business Economics, Harvard University.

 (1971-1974) Attended a joint doctoral program between the Harvard Business School and the Economics Department of Harvard College; Fields of concentration: Business Finance and Monetary Economics

1969 M.B.A. York University.

1967 B. Com. University of Manitoba.

#### **Positions Held**

2011 - present	Distinguished Faculty Fellow of Finance, School of Business, Queen's University
2008 - 2011	Distinguished Faculty Professor of Finance, School of Business, Queen's University
2005 - 2008	Commerce '83 Teaching Fellow in Finance, School of Business, Queen's University
1974 - 2005	Associate Professor of Finance, School of Business, Queen's University.
	<ul> <li>Have taught in several Executive Development Programs offered by the Queen's School of Business</li> </ul>
1971 - 1974	Employed as the Research Assistant to Dean Lawrence E. Fouraker
	<ul> <li>Prepared case studies for, and taught some of the classes in, the Harvard Business School's Executive Program</li> </ul>
1969 - 1971	Employed at the Head Office of The Bank of Nova Scotia as Assistant to the then Deputy Chief General Manager, Dr. Robert M. MacIntosh (subsequently President of the Canadian Bankers' Association)

# **Consulting Relationships and Experience**

- Have advised the Ontario Energy Board in connection with the restructuring and regulation of Ontario's
  electricity distribution system in the areas of capital structure policies, allowed rates of return,
  performance-based regulation (PBR), and mergers, acquisitions, amalgamations, and divestitures.
- Have advised the Ontario Energy Board with respect to the March 1997 "Draft Guidelines on a Formula-Based Return on Common Equity For Regulated Utilities," and Review of these Guidelines during 2003.
- Have advised the Staff of the Ontario Energy Board during the O.E.B. hearings in connection with Inter-City Gas' takeover of Northern and Central Gas (Nov.-Dec. 1984), Unicorp Canada's takeover of Union Enterprises (March-May 1985), Westcoast Energy's takeover of ICG Ontario (Sept.-Dec. 1989) and British Gas' takeover of Consumers' Gas (March-July 1990), and prepared and defended testimony in these cases; have also advised O.E.B. Staff and prepared evidence in connection with Gulf Canada's application to acquire (indirectly) shares in Consumers' Gas (Sept.-Oct. 1986) and in connection with Westcoast Energy's takeover of Union Energy in E.B.R.L.G. 36 (Oct.- Nov. 1992).
- Have advised the Ontario Energy Board in connection with its review of the policies and capital budgeting procedures surrounding the expansion of the natural gas distribution system in Ontario (E.B.O. 134).
- Have advised the Ontario Ministry of Environment and Energy in connection with the NEB's 1993 Inter-Coastal Pipe Line hearing and the proposed revision of the Undertakings of the Ontario gas distribution utilities to facilitate their diversification into non-gas-utility businesses.

- Have advised the Consumer Advocate of Newfoundland and Labrador and presented written evidence in connection with the 2006 General Rate Application of Newfoundland and Labrador Hydro and the 2007 General Rate Application of Newfoundland Power.
- Have advised the Ontario Energy Board, the Government of Ontario, the B.C. Petroleum Corporation, and CanWest Gas Supply Inc. on rate-of-return regulatory matters and testified as an expert witness in various Consumers' Gas, Union Gas, Centra Gas Ontario, Tecumseh Gas Storage, Westcoast Energy, TransCanada PipeLines, and Pacific Northern Gas rate hearings, as well as the NEB's 1994 Multi-Pipeline Cost of Capital Hearing (RH-2-94).
- Have advised the B.C. Petroleum Corporation regarding debenture valuation.
- Have consulted to Toronto-Dominion Bank (TD Securities Inc.), Royal Trust Company, and the Bank of Montreal

### **Other Endeavors**

- Have conducted extensive research into corporate financing strategies, portfolio management strategies, the development of fin'l instruments, and asset and liability management policies of fin'l intermediaries.
- Have written in excess of 85 case studies on business financing and investment problems, and on investment and portfolio management and other financial intermediary management problems.
- In particular, have written numerous case studies for the Smith-School-sponsored Inter-Collegiate Business Case Competition over the past 44 years, and have graded and judged the submissions and presentations of the participants during most of these years.
- I am the Vice President and a financial supporter of a Winnipeg-based registered charity serving indigenous, immigrant, and other at-risk youth living in poverty through the provision of after-school and weekend recreational and cultural activities 2012-present
- Member of Investment Committee of The Community Foundation of Greater Kingston, 2000 2008.
- Member of the Finance and Risk Committee of the Kingston Tennis Club 2016-2017.

#### **Academic Awards & Honours**

2011 - 2021	Awarded the SSB "Distinguished Faculty Fellowship in Finance"
2008	Awarded the Queen's University Council's Distinguished Service Award
2008	Awarded the QSB "Distinguished Faculty Professorship in Finance"
2005	Awarded the QSB "Commerce '83 Teaching Fellowship in Finance"
1999, 2002	Recipient of Commerce Teaching Excellence Awards.
1994, 1996	Recipient of Queen's MBA Teaching Excellence Awards.
1981	Recipient of the Queen's University Alumni Award for Excellence in Teaching.
1967 - 1969	Fellow in the CIBC's Centennial International Fellowship Programme administered through the Faculty of Administrative Studies at York University.
2003 & 2013	ICBC Arnoldi Award for long-standing contribution to ICBC (Inter-Collegiate Business Competition)

## **Regulatory Consulting Publications**

"Testimony on the Cost of Capital, Capital Structure, and the Automatic Adjustment Formula in Regard to the Newfoundland Power 2007 General Rate Application", 3 August 2007.

"Testimony on the Automatic Adjustment Mechanism, the Embedded Cost of Debt, and the Test-Year Cost of Borrowing in Regard to the Newfoundland & Labrador Hydro 2006 General Rate Application", 27 Oct., 2006.

- "Cost of Capital," paper presented at CAMPUT's Queen's Conference on Energy Regulation, initially in July 2005, and presented a revised paper every summer since then, except for 2020.
- "Review of the Board's Guidelines For Setting ROE," prefiled written testimony before the Ontario Energy Board in RP-2002-0158 and EB-2002-0484, June 2003
- "A Discussion Paper on Adjudicating Mergers, Acquisitions, Amalgamations and Divestitures by Participants Within Ontario's Electricity Market," prepared for the Ontario Energy Board, June 1999.
- "A Discussion Paper on the Determination of Return on Equity and Return on Rate Base For Electric Distribution Utilities in Ontario," prepared for the Ontario Energy Board, December 1998.
- "The Appropriate Return on Equity For the Transco and Disco Business Operations of the Ontario Hydro Services Company", prepared for the Staff of the Ontario Energy Board in connection with the Ontario Hydro rate hearing, January 22, 1999.
- "Prefiled Testimony in Connection With the Application of Union Gas Limited Before the Ontario Energy Board in E.B.R.O.499," September 1998.
- "Prefiled Testimony in Connection With the Applications of Union Gas Limited and Centra Gas Ontario Inc. Before the Ontario Energy Board in E.B.R.O. 493/494." July 1996
- "Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 487." May 1994.
- "Written Evidence of Dr. William T. Cannon Filed On Behalf of Minister of Environment and Energy For Ontario and Industrial Gas Users Association Before the National Energy Board in RH-2-94." September 1994.
- "Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 485." July 1993.
- "Prefiled Testimony in Connection With the 1991 Application of TransCanada PipeLines Ltd. Before the National Energy Board in RH-1-91." April 1991.
- "Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 473." October 1991.
- "Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 464." March 1990.
- "Prefiled Testimony in Connection With the Applications of British Gas PLC and GW Utilities Limited, GW-CG Investments Ltd, and In Connection With a Reference From the Lieutenant Governor in Council, Regarding the Proposed Change of Control of The Consumers' Gas Company Ltd. in E.B.R.L.G. 35 et al." June 1990.
- "Prefiled Testimony in Connection With the 1990 Application of Westcoast Energy Inc. Before the National Energy Board in RH-1-90." September 1990.
- "Prefiled Testimony in Connection With the Application of Tecumseh Gas Storage Limited Before the Ontario Energy Board in E.B.R.O. 455." June 1989.
- "Prefiled Testimony in Connection with the 1989 Application of Westcoast Energy Inc. Before the National Energy Board in RH-2-89." September 1989.
- "Prefiled Testimony in Connection With the Applications of Inter-City Gas Corporation and Westcoast Energy Inc. Regarding the Proposed Change in Control of ICG Utilities (Canada) Ltd. and ICG Utilities (Ontario) Ltd. Before the Ontario Energy Board in E.B.R.L.G. 34." November 1989.

"Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 452." June 1988.

"Prefiled Testimony in Connection With the December 1986 Application of Westcoast Transmission Company Limited Before the National Energy Board." August 1987.

"Prefiled Testimony in Connection With the Application The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 414." May 1986.

Prepared background materials for Ontario Energy Board Staff in Connection with Gulf Canada's Indirect Acquisition of Consumers' Gas, which were reproduced in Special Counsel's Submission to the Ontario Energy Board in E.B.R.L.G. 30, October 1986.

"Prefiled Rate-of-Return Testimony in Connection With the Application of Pacific Northern Gas Ltd. Before the B.C. Public Utilities Commission." April 1985.

"Prefiled Testimony in Connection With Ontario Energy Board Reference Re Union Enterprises Limited and Unicorp Canada Corporation in E.B.R.L.G. 28." April 1985.

"Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 403." May 1985.

"Prefiled Testimony in Connection With the Applications of Inter-City Gas Corp. et al, and Norcen Energy Resources Ltd. Before the Ontario Energy Board in E.B.O. 118, 119." December 1984.

"Prefiled Testimony in Connection With the December 1, 1982 Application of Westcoast Transmission Company Limited before the National Energy Board." April 1983.

"Prefiled Testimony in Connection With the Application of Union Gas Ltd. Before the Ontario Energy Board in E.B.R.O. 382." January 1982.

"Prefiled Testimony in Connection With the Application of The Consumers' Gas Company Ltd. Before the Ontario Energy Board in E.B.R.O. 386." July 1982.

# Other Research and Publications (Excluding Case Studies)

- Cannon, W.T. (2018) "Alternative Channels of Funds and Security Flows Within the Financial System", SSB Monograph.
- Cannon, W.T. (2018) "Bank Corporate Loan Portfolio Risk Management", SSB monograph.
- Cannon, W.T. (2016) "Credit Unions and Caisses Populaires", SSB monograph.
- Cannon, W.T. (2015) "Managing Interest Rate Risk With Bond and BA Futures and Options", SSB monograph.
- Cannon, W.T. (2014) "Over-the-Counter Interest Rate Derivative Instruments: Forward Rate Agreements, Interest Rate Swaps, and Interest Rate Caps, Collars, and Floors", QSB monograph.
- Cannon, W.T. (2014) "Financial Asset and Liability Management at a Conceptual Level", QSB monograph.
- Cannon, W.T. (2014) "The Canadian Life Insurance Industry", QSB monograph.
- Cannon, W.T. (2014) "Bond Investment Strategies", QSB monograph.
- Cannon, W.T. (2013) "The Analysis of Mergers and Acquisitions", QSB monograph.
- Cannon, W.T. (2013) "The Evolution of Canadian Banking Since 1946", QSB monograph.

Cannon, W.T. (2013) "The Residential Mortgage Market in Canada", QSB monograph.

Cannon, W.T. (2013) "Bank Commercial Lending Policies and Practises", QSB monograph.

Cannon, W.T. (2013) "Canadian Chartered Bank Capital Management", QSB monograph.

Cannon, W.T. (2013) "Yield-Curve-Based Interest Rate Forecasting: Rate Forecasts Based on the Forward Rates Implicit in Term Structure of Rates", QSB monograph.

Cannon, W.T. (2012) "Convertible Security Financing", Queen's School of Business monograph.

Cannon, W.T. (2012) "Instructions on How to Use Regression Analysis in the Excel Program Contained in Microsoft Office 2010", Queen's School of Business monograph.

Cannon, W.T. (2011) "The Capital Structure Choices of Canadian Corporations", Queen's School of Business monograph.

Cannon, W.T. (2011) "Asset and Liability Management Using Gap Analysis", Queen's School of Business monograph.

Cannon, W.T. (2008) "Bank Corporate Loan Portfolio Risk Management", Queen's School of Business monograph.

Cannon, W.T. (2008) "The Good, the Bad, and the Ugly - Asset Securitization in Canada", Queen's School of Business monograph.

Cannon, W.T. (2008) "The Functions Performed by Financial Markets and Financial Intermediaries, and the Role of Financial Market Efficiency", Queen's School of Business monograph.

Cannon, W.T. (2008) "Liquidity, Liquid Assets, and Financial Intermediary Liquidity Management", Queen's School of Business monograph.

Cannon, W.T. (2008) "Modelling a Financial Intermediary, Its Environment, and Its Decision-Making Framework", Queen's School of Business monograph.

Cannon, W.T. (2008) "The Residential Mortgage Market in Canada", Queen's School of Business monograph.

Cannon, W.T. (2008) "The Consumer Credit Market in Canada", Queen's School of Business monograph.

Cannon, W.T. (2008) "Credit Unions and Caisses Populaires", Queen's School of Business monograph.

Cannon, W.T. (2008) "Mortgage Securitization in Canada", Queen's School of Business monograph.

Cannon, W.T. (2008) "Canadian Chartered Bank Capital Management", Queen's School of Business monograph.

Cannon, W.T. (2008) "Discounted Cash Flow (DCF) Approaches to Common Stock Valuation", Queen's School of Business monograph.

Cannon, W.T. (2008) "Fundamental Securities Analyst's Stock Valuation Model", Queen's School of Business monograph.

Cannon, W.T. (2007) "The Goals of Corporations, Their Shareholders, and Their Senior Managers", Queen's School of Business monograph.

Cannon, W.T. (2007) "The Two-Stage Gordon-DCF Model", Queen's School of Business monograph.

Cannon, W.T. (2006) "Capital Management at Canadian Life Insurance Companies", Queen's School of Business monograph.

Cannon, W.T. (2006) "The Goals of Financial Intermediaries, Their Shareholders, and Their Senior Managers", Queen's School of Business monograph.

Cannon, W.T. (2006) "Interest Rates and the Valuation of Fixed-Income Securities", Queen's School of Business monograph.

Cannon, W.T. (2006) "The Rise and Fall of Independent Trust and Mortgage Loan Companies in Canada", Queen's School of Business monograph.

Cannon, W.T. (2006) "Treasury Operations, Interest Rate Risk, and FI Gap Management", Queen's School of Business monograph.

Cannon, W.T. (2005) "Cost of Capital" – QSB monograph on theoretical and practical approaches to estimating a firm's overall cost of capital.

Cannon, W.T. (2003) "The Capital Asset Pricing Model Approach To Estimating the Cost of Equity Capital" – QSB monograph (a) dealing with the estimation of equity capital costs in an efficient market environment and (b) providing a review of recent studies of the "market risk premium."

Cannon, W.T. (2003) "Cyclically-Normalized, Real Economic Earnings" – QSB monograph reviewing the need for, and procedures for, adjusting corporate earnings reports to make the figures relevant for stock valuation purposes.

Cannon, W.T. (2001). "Hedging Corporate Interest Rate Risk." Queen's School of Business monograph.

Cannon, W.T. (2001). "Preferred Share Financing." Queen's School of Business monograph.

Cannon, W.T. (2001). "Explaining and Forecasting Interest Rates." Queen's School of Business monograph.

Cannon, W.T. (2001). "The Canadian Life Insurance Industry." Queen's School of Business monograph.

Cannon, W.T. (2000). "The Evolution of the Canadian Banks During the Latter Half of the 20<sup>th</sup> Century and a Peek At Their Future." Queen's School of Business monograph.

Cannon, W.T. (2000). "The Consumer Credit Market in Canada." Queen's School of Business monograph.

Cannon, W.T. (2000). "The Residential Mortgage Market in Canada." Queen's School of Business monograph.

Cannon, W.T. (1999). "Mapping Ontario's Electric Distribution Terrain", <u>Standard & Poor's Canadian Focus</u>, November 1999.

Cannon, W.T. (1996). "Pro Forma Financial Statement Forecasting For Assessing the Impact of Strategic and Policy Choices and Environmental Changes." Queen's School of Business monograph.

Cannon, W.T. (1996). "A Guide to the FRICT Analysis Framework For Making Corporate Financing Decisions." Queen's School of Business monograph on a practical approach to analyzing business financing decisions.

Cannon, W.T. (1996). "The Fundamental Securities Analyst's Common Stock Valuation Model." Queen's School of Business monograph on the practical approaches to common stock valuation used by fundamental securities analysts.

Cannon, W.T. (1995). "Financial Leverage, Income, and Risk." Queen's School of Business monograph.

Cannon, W.T. (1994). "A Practical Framework For Making Capital Budgeting Decisions." Queen's School of Business monograph.

Cannon, W.T. (1993). "Financial Ratio Analysis For Stock Valuation Purposes." Queen's School of Business monograph.

Cannon, W.T. (1987). "The Aggregate Customer Net Benefit Test - A New Framework for Gas Utility Capital Budgeting Decisions." Published as Appendix C of the Ontario Energy Board Staff Discussion Paper "A Review of the Expansion of the Natural Gas System in Ontario." in E.B.O. 134, Feb. 2, 1987.

Cannon, W.T. & Neave, T. (1985). "Consumer Credit." <u>The Canadian Encyclopedia</u>, Hurtig Publishers Ltd., Edmonton.

Cannon, W.T. (1981). "Integrating the Pure Theory of Financial Intermediation." paper submitted to the Journal of Financial and Quantitative Analysis; returned for revision.

Cannon, W.T. (1981). "Financing and Stabilization Policies in a Cyclical Industry: The Case of Inco in the Seventies." Technical Paper No. 1, Center for Resource Studies, Queen's University, Kingston, June 1981.

Cannon, W.T. (1979). "Financing With Floating-Rate Term Preferred Shares." Paper presented at the Spring 1979 Conference of the Financial Research Foundation of Canada, at Niagara-On-The-Lake.

Cannon, W.T. (1979). "New Mining Ventures: The Case for Preserving After-Tax Financing." Paper published by the Center for Resource Studies, Queen's University, in August 1979.

Cannon, W.T. (1977). "Integrating the Pure Theory of Financial Intermediation." paper presented at the C.A.A.S. Meeting in Fredericton, N.B., in June 1977; abbreviated version of this paper is published in the <u>Proceedings</u> of this Meeting.

Cannon, W.T. (1976). "Models of Pure Financial Intermediation, With Specific Application to Firms in the Savings and Loan Industry." Unpublished PhD thesis completed for Harvard University in May 1976.

## **Courses Taught at Queen's University**

MBAS 823 - Corporate Valuation and Merger and Acquisition Analysis

MBAS 825 - Corporate Financing and Capital Budgeting Policies and Procedures

MBAST 822 - Finance II

MBAST 823 - Applied Corporate Finance

MBAST 825 - Financial Institutions

MBAST 923 - Finance Concentration

Business 821 - Financial Management

Business 922 - Corporate Financial Planning I

Business 923 - Corporate Financial Planning II

Business 924 - Investment and Portfolio Management

Business 926 - Canadian Financial Institutions and Markets

Business 929 - Management of Financial Institutions

Commerce 322 - Corporate Financial Planning - I

Commerce 323 - Corporate Financial Planning - II

Commerce 324 - Investment and Portfolio Management

Commerce 326 - Canadian Financial Institutions and Markets

Commerce 329 - Management of Financial Institutions

Commerce 485 - Independent Business Project

Commerce 501 – Undergraduate Thesis course

EMBA - supervision of several theses

#### **Professional Associations**

American Finance Association

# Administrative Activities - Queen's University and Smith School of Business

2000 – 2021	Chair of the Investment Policy and Investment Manager Search Sub-Committees of the Pension Committee (PC) of the Board of Trustees of Queen's University, and PC member.
2000 – 2012	Chair of the Pension Committee of the Board of Trustees of Queen's University
2002 - 2008	Chair of Faculty Board of the Queen's School of Business and its Academic Appeals Committee.
2016 –	Member of Smith School of Business Academic Appeals Committee
2013 – 2016	Member of the Academic Progress Committee of the Commerce Program
2006 - 2007	Member of Chancellor A. Charles Baillie Teaching Award Selection Committee
2004 - 2005	Chair of Internal Academic Review Committee for Linguistics Unit
2002 - 2006	Member of the School of Business Undergraduate Program Committee; also in 1979-1983, and 1996-1997.
2001 - 2006	Member of the Internal Advisory Board of the Queen's Financial Economics Group
2001 - 2004	Member of the MBA for Commerce Grads Program Development Committee
2002 - 2012	Faculty Advisor to Queen's Investment Club and Queen's University Investment Council
1998 - 2000	Chair of the Senate Budget Review Committee.
1991 - 2000	Vice-Chair of the Pension Committee of the Board of Trustees of Queen's University, and its Investment Policy and its Investment Manager Search Sub-Committees.
1997 - 1999	Business School representative on the Queen's University Senate, also in 1983-1986.
1997 - 1998	Member of the Joint Board-Senate Principal Search Committee.
1992 - 1993	Member of the School of Business Promotion, Tenure, and Renewal Committee, also from 1984-88.
1990	Member of the Principal's Advisory Search Committee on the Dean of Women.
1990	Member of the Principal's Advisory Search Committee on the Director of Residences.
1988 - 1996	Chair of the Queen's University Residences (Ban Righ) Board.
1987 - 1995	Member of the School of Business Research Committee.
1987 - 1988	Principal's Delegate on the University Residences Board.
1987 - 1988	Member of the Board of Directors of the Queen's Bookstore (also 1981-1985) and Principal's Taskforce on Bookstore Operations, 1983-1985.
1985 - 1986	Member of the Student Services Sub-Group.
1983 - 1997	Secretary of the School of Business' Advisory Council.
1983 - 1985	Member of the Senate Committee on Academic Development.
1978 - 1981	Elected Member of the Senate Budget Review Committee.
1978 - 1981	Treasurer and Executive Committee Member of the Queen's University Faculty Association.
1977 - 1980	Treasurer and Executive Committee Member of the Queen's University Faculty Club.