

AVI BICK

Degrees

Ph.D.	Business Administration/Finance University of California, Berkeley Thesis: "Topics in the Theory of Arbitrage."	June 1983
M.B.A.	(Finance), with distinction Hebrew University of Jerusalem, Israel	June 1978
M.Sc.	Mathematics, with distinction Tel Aviv University, Israel	February 1973
B.Sc.	Mathematics Tel Aviv University, Israel	June 1970

Academic positions and teaching experience

Simon Fraser University, Associate Professor, July 1991 – present.

- "Investments" (BUS 315)
- "Investment Analysis and Design" (BUS 416)
- "Derivative Securities" (BUS 316)
- "Derivative Securities II" (BUS 493)
- "Advanced Derivative Securities" (BUS 419)
- "Portfolio Theory" (BUEC 815)
- "Advanced Topics in Finance" (ECON 818)
- "Derivatives Securities I" (BUS 814)
- "Derivatives Securities II" (BUS 818)

The Univ. of British Columbia, Visiting Assistant Professor, Sept. 1988 – June 1991.

- "Seminar in Security Analysis"
- "Securities Markets"
- "Quantitative Analysis of Financial Decisions" (Options and Futures Markets)

New York University, Assistant Professor, Sept. 1983 – June 1988.

- "Problems in Financial Management"
- "Introduction to Portfolio Analysis"
- "Financial Theory II" (A doctoral course)
- "Introduction to Finance"
- "Financial markets and Portfolio Analysis"

University of California, Berkeley, Jan 1980 – June 1983

- "Theory of Finance" (Teaching Assistant)
- "Investments" (Teaching Associate)

Hebrew Univ. of Jerusalem, Instructor, March 1974 – June 1976, Jan. 1978 – June 1978

Various courses in Mathematics

Tel Aviv University, Sept. 1970 – June 1971, March 1972 – June 1973

Various courses in Mathematics (Teaching Assistant)

Teaching awards

Recipient of the 2006 TD-Canada Trust Distinguished Teaching Award.

Recipient of the 2016 TD-Canada Trust Distinguished Teaching Award.

Published refereed articles

- Avi Bick, "The relationship between reciprocal currency futures prices," *Finance Research Letters*, Vol. 9 (2012), 194–201.
- Avi Bick, "On the Mathematics of the Portfolio Frontier: A Geometry-based Approach," *Quarterly Review of Economics and Finance*, Vol. 44 (2004), 337-361.
- Avi Bick, "Two Closed-form Formulas for the Futures Price in the Presence of a Quality Option," *European Finance Review* (journal renamed *the Review of Finance* in 2003), Vol. 1 (1997), 81-104.
- Avi Bick, "Quadratic-Variation-Based Dynamic Strategies," *Management Science*, Vol. 41 (1995), 722-732.
- Avi Bick and Walter Willinger, "Dynamic Spanning without Probabilities," *Stochastic Processes and their Applications*, Vol. 50 (1994), 349-374.
- Avi Bick, "On Viable Diffusion Price Processes of the Market Portfolio," *Journal of Finance*, Vol. 45 (1990), 673–689.
- Avi Bick, "Producing Derivative Assets with Forward Contracts," *Journal of Financial and Quantitative Analysis*, Vol. 23 (1988), 153–160.
- Avi Bick, "On the Consistency of the Black-Scholes Model with a General Equilibrium Framework," *Journal of Financial and Quantitative Analysis*, Vol. 22 (1987), 259–275.
- Avi Bick, "Comments on the Valuation of Derivative Assets," *Journal of Financial Economics*, Vol. 10 (1982), 341–345.
- Avi Bick, "On the Duals of Flat Banach Spaces," *Canadian Mathematical Bulletin*, Vol. 20 (1977), 293–299.

Working papers

- Avi Bick, "Futures Replication and the Law of One Futures Price."
Work in progress. Posted on SSRN.

Program appearances (from 1990)

- "The Law of One Futures Price," presented at
- The 4th World Congress of Bachelier Finance Society, Tokyo, August 2006.
 - The China International Conference in Finance, Xian, China, July 2006.
 - The Northern Finance Association meetings, Vancouver, September 2005..
- "On the Relationship between Reciprocal Currency Futures Prices," presented at
- Brazilian Finance Association Meetings, Sao Paulo, July 2005.
 - Northern Finance Association meetings, Banff, September 2002.
 - Conference on "Quantitative Methods in Finance," Cairns, Australia, December 2002.
- "On the Mathematics of the Portfolio Frontier: A Geometry-based Approach," presented at:
- Canadian Operational Research Society Meetings, Vancouver, June 2003

“A Simplified Continuous-time Version of the Fundamental Theorem of Asset Pricing,” invited paper presented at a conference organized at the occasion of the 50th anniversary of the Faculty of Economics of the University of Groningen: “Continuous-time Processes, Specification, Estimation and Utilization,” October 1998.

“Futures Pricing via Futures Strategies” presented at:

- Meetings of the Institute for Operations Research and the Management Sciences (INFORMS), invited paper, June 1998.
- Financial Mathematics programme, The Isaac Newton Institute for Mathematical Sciences, Cambridge University, April 1995.

“On the Quality Option and Other Homogeneous-of-degree-1 Futures Boundary Conditions” presented at:

- The Econometric Society meetings, January 1995.
- The Northern Finance Association meetings, September 1994.
- The Cornell-Queen's University Derivative Securities conference, May 1994.

“Quadratic-Variation-Based Dynamic Strategies” presented at

- The European Finance Association meetings, August 1991.

“Dynamic Spanning without Probabilities” presented at

- The American Finance Association meetings, December 1990.
- The Western Finance Association meetings, June 1990.

Other program participation (from 1990)

Session chairperson, The 4th World Congress of Bachelier Finance Society, Tokyo, August 2006.

Discussant, The China International Conference in Finance, Xian, China, July 2006.

Session chairperson and discussant, Northern Finance Association meetings, Vancouver, September 2005.

Discussant, Brazilian Finance Association Meetings, Sao Paulo, July 2005.

Session chairperson, Canadian Operational Research Society Meetings, June 2003.

Session chairperson, Meetings of the Institute for Operations Research and the Management Sciences (INFORMS), June 1998.

Invited resident scholar, Financial Mathematics programme, The Isaac Newton Institute for Math. Sciences, Cambridge Univ., for the month of April 1995.

Discussant, The American Finance Association meetings, January 1995.

Discussant, The Northern Finance Association meetings, September 1994.

Discussant, The European Finance Association meetings, August 1991.

Discussant, The Western Finance Association meetings, June 1990.

Invited and in-house seminars (from 1990)

“On the relationship between reciprocal currency futures prices,” presented at

- Simon Fraser University, November 2002.

“Continuous-time Trading Strategies: Alternative approaches” presented at:

- The Hebrew University of Jerusalem, December 1995.

“On the Quality Option and Other Homogeneous-of-degree-1 Futures Boundary Conditions” presented at:

- The University of British Columbia, January 1994
- The Hebrew University of Jerusalem, December 1993
- Haifa University, December 1993
- Simon Fraser University, November 1993.

“Quadratic-Variation-Based Dynamic Strategies” presented at

- Simon Fraser University, 1992.
- University of Illinois at Chicago, 1991.

“Dynamic Spanning without Probabilities” presented at

- York University, 1991
- The University of Western Washington, 1991
- The University of British Columbia, 1990.
- Simon Fraser University, 1990

Areas of interest

Valuation of options and futures contracts.

Financial markets equilibrium models.

Mathematical Finance.

Professional activities

- Member of the Bachelier Society.
- Refereed numerous articles for *The Journal of Finance*, *The Review of Financial Studies*, *Journal of Financial and Quantitative Analysis*, *Journal of Banking and Finance*, *Journal of Economic Theory*, *Management Science*, *Mathematical Finance*, *Financial Management*, *The Journal of Accounting, Auditing and Finance*, *The Journal of Futures Markets*, *The European Financial Review* and *Review of Derivatives Research*.
- Member of the program committee for the Northern Finance Association meetings, 2005 and 2008.
- Served as SSHRC reviewer in 1992, 1993, 1996, 1997, 2000, 2002 and 2004.
- Member of the international program committee for IASTED conference “Financial Engineering and Applications,” 2003-2007.
- An external reviewer for a promotion for two institutions, in 2003, 2005, 2007 and 2008.
- Served as textbook reviewer for McGraw-Hill.
- Member of the 1991 Program Committee, The Western Finance Association Meetings.
- Taught at the Certified Financial Analyst review weekend, 1993, 1994 and 1995.

Membership in doctoral dissertation committees

Zabolotnyuk, Yuriy, graduated 2009 (internal-external member)

Victor Aina, SFU, graduated 1999 (internal-external member)

Andrew Cheung, SFU, graduated 1994.

Joseph Atta-Mensah, SFU, graduated 1992 (internal-external member)

Naoki Kishimoto, New York University, graduated 1987

Elli Kraizberg, New York University, graduated 1986.