WALTER N. TOROUS

MIT Center for Real Estate

Office Address:

Massachusetts Institute of Technology
Center for Real Estate
77 Massachusetts Avenue
Building 9-333
617-253-4473
wtorous@mit.edu

Academic Degrees

B. Math.	University of Waterloo, Statistics and Economics, 1976
Ph. D.	University of Pennsylvania, Economics, 1981

Academic Appointments

1980-81	Graduate School of Business Administration, University of Michigan, Lecturer
1981-85	Graduate School of Business Administration, University of Michigan, Assistant Professor
1986-87	Graduate School of Management, University of California, Los Angeles, Visiting Assistant Professor
1987-90	Graduate School of Management, University of California, Los Angeles, Assistant Professor
1990-95	John E. Anderson Graduate School of Management, University of California, Los Angeles, Associate Professor
1995-97	London Business School, Corporation of London Professor of Finance

1995-2006 John E. Anderson Graduate School of Management, University of California, Los Angeles, Professor

1997-2003 Director, Richard S. Ziman Real Estate Center, John E. Anderson Graduate School of Management, University of California, Los Angeles

2006-2012 John E. Anderson Graduate School of Management, University of California, Los Angeles, Lee and Seymour Graff Endowed Professor

2009-2011 Visiting Professor
Center for Real Estate
Massachusetts Institute of Technology, Cambridge, MA

2012- Senior Lecturer
Center for Real Estate / Sloan School of Management
Massachusetts Institute of Technology, Cambridge, MA

Professional Activities

Real Estate Economics,
    Associate Editor, 1993 - 2005
    Editor, 2006 –
Journal of Housing Economics, Associate Editor, 1991 -
Journal of Real Estate Finance and Economics, Associate Editor, 1992 -
Pacific-Basin Finance Journal, Associate Editor, 1997- 2003
Economic Notes, Associate Editor, 1999 - 2011

Ad hoc referee for Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Banking and Finance, Journal of Business, Review of Financial Studies, Journal of Financial Economics, Journal of Money, Credit, and Banking, Management Science, Journal of Empirical Finance, Journal of International Money and Finance

Member:
American Finance Association, 1980 -
American Real Estate and Urban Economics Association, 1990 -
Western Finance Association, 1980 -
    Associate Program Chair, 1990
    Board of Directors, 1991-94

Refereed Publications

1. Ball, C. A., and Torous, W. N., "A Simplified Jump Process for Common Stock Returns," Journal of Financial and Quantitative Analysis, 18:1, pp. 53-65, March 1983.

2. Ball, C. A., and Torous, W. N., "Bond Price Dynamics and Options," Journal of Financial and Quantitative Analysis, 18:4, pp. 517-531, December 1983.

3. Ball, C. A., and Torous, W. N., "The Maximum Likelihood Estimation of Security Price Volatility: Theory, Evidence, and Application to Option Pricing," Journal of Business, 57:1, pp. 97-112, January 1984.

4. Milne, W. J., and Torous, W. N., "Long-Term Interest Rates and the Price Level: The Canadian Evidence on the Gibson Paradox," Canadian Journal of Economics, 17:2, pp. 327-339, May 1984.

5. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "On Inferring Standard Deviations from Path Dependent Options," Economic Letters, 18, pp. 377-380, 1985.

6. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "The Degree of Price Resolution: The Case of the Gold Market," Journal of Futures Markets, 5:1, pp.29-43, Spring 1985.

7. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "An Empirical Investigation of the EOE Gold Options Market," Journal of Banking and Finance, 9:1, pp. 101-113, March 1985.

8. Ball, C. A., and Torous, W. N., "On Jumps in Common Stock Prices and Their Impact on Call Option Pricing," Journal of Finance, 40:1, pp. 155-173, March 1985.

9. Torous, W. N., "Differential Taxation and the Equilibrium Structure of Interest Rates," Journal of Banking and Finance, 9, pp. 363-385, August 1985.

   Reprinted in The Debt Market, S. Ross (Editor), Edward Elgar, 2000.

10. Ball, C. A., and Torous, W. N., "Futures Options and the Volatility of Futures Prices," Journal of Finance, 41:4, pp. 857-870, September 1986.

11. Ball, C. A., and Torous, W. N., "Investigating Security Price Performance in the Presence of Event Date Uncertainty," Journal of Financial Economics, 22, pp. 123-153, October 1988.

12. Schwartz, E. S., and Torous, W. N., "Prepayment and the Valuation of Mortgage-Backed Securities," Journal of Finance, 44:2, pp. 375-392, June 1989.

13. Titman, S., and Torous, W. N., "Valuing Commercial Mortgages: An Empirical Investigation of the Contingent-Claims Approach to Valuing Commercial Mortgages," Journal of Finance, 44:2, pp. 345-373, June 1989.

    Reprinted in The Debt Market, S. Ross (Editor), Edward Elgar, 2000.

14. Franks, J. R., and Torous, W. N., "An Empirical Investigation of U.S. Firms in Reorganization," Journal of Finance, 44:3, pp. 747-769, July 1989.

    Reprinted in Corporate Bankruptcy and Distressed Restructurings: Analytical Issues and Investment Opportunities, E. Altman (Editor), Irwin, 1992.

15. Schwartz, E. S., and Torous, W. N., "Valuing Stripped Mortgage-Backed Securities," Housing Finance Review, 8, pp. 241-251, Fall 1989.

    Reprinted in The Debt Market, S. Ross (Editor), Edward Elgar, 2000.

16. Haugen, R. A., Talmor, E., and Torous, W. N., "The Effect of Volatility Changes on the Level of Stock Prices and Subsequent Expected Returns," Journal of Finance, 46:8, pp. 985-1007, July 1991.

17. Geske, R. L., and Torous, W. N., "Skewness, Kurtosis, and Black-Scholes Option Mispricing," Statistical Papers, 32, pp. 299-309, December 1991.

18. Schwartz, E. S., and Torous, W. N., "Prepayment, Default, and the Valuation of Mortgage Pass-Through Securities," Journal of Business, 65:2, pp. 221-239, April 1992.

19. Franks, J. R., and Torous, W. N., "Lessons from a Comparison of U.S. and U.K. Insolvency Codes," Oxford Review of Economic Policy, 8:3, pp. 70-82, September 1992.

    Reprinted in Journal of Applied Corporate Finance, pp. 95-103, January 1993.

20. Schwartz, E. S., and Torous, W. N., "Mortgage Prepayment and Default Decisions: A Poisson Regression Approach", Journal of the American Real Estate and Urban Economics Association, 21:4, pp. 431-448, March 1993.

21. Franks, J. R., and Torous, W. N., "A Comparison of Financial Recontracting in Workouts and Chapter 11 Reorganizations," Journal of Financial Economics, 28:8, pp. 349-370, June 1994.

    Reprinted in Studies in Empirical Corporate Finance, M. Brennan (Editor), Edward Elgar, 2001.

22. Ball, C. A., and Torous, W. N., "On Unit Roots and the Estimation of Interest Rate Dynamics", Journal of Empirical Finance, 3:2, pp. 215-238, June 1996.

23. Franks, J. R., Nyborg, K., and Torous, W. N., "A Comparison of U. K, U. S., and German Insolvency Codes," Financial Management, 25:3, pp. 274-301, Autumn 1996.

24. Roma, A., and Torous, W. N., "On the Cyclical Behavior of Interest Rates," Journal of Finance, 52:4, pp. 1519-1542, September 1997.

25. Brennan, M. J., and Torous, W. N., "Individual Decision Making and Investor Welfare," Economic Notes, 28:2, pp. 119-143, July 1999.

26. Ball, C. A., and Torous, W. N., "The Stochastic Volatility of Short-term Interest Rates: Some International Evidence," Journal of Finance, 54:6, pp. 2339-2359, December 1999.

    Reprinted in Model Risk: Concepts, Calibration, and Pricing, R. Gibson (Editor), Risk Books, 2000.

27. Ball, C. A., and Torous, W. N., "Stochastic Correlation Across International Stock Markets," Journal of Empirical Finance, 7:3-4, pp. 373-388, November 2000.

28. Torous, W. N., Yan, S. and Valkanov, R., "On Predicting Stock Returns with Nearly Integrated Explanatory Variables," Journal of Business, 77:4, pp. 937-966, October 2004.

29. Dierker, M., Quan, D., and Torous, W. N., "Pricing the Defeasance Option in Securitized Commercial Mortgages," Real Estate Economics, 33:4, pp. 663-680, Winter 2005.

30. Berardi, A., and Torous, W. N., "Term Structure Forecasts of Long Term Consumption Growth," Journal of Financial and Quantitative Analysis, 40:2, pp. 241-258, June 2005.

31. Brennan, M. J., Lee, F., and Torous, W. N., "Dollar Cost Averaging", Review of Finance, 9:4, pp. 509-535, 2005.

32. Hong, H, Torous, W. N., and Valkanov, R., “Do Industries Lead Stock Markets?”, Journal of Financial Economics, 83:2, pp. 367-396, 2007.

33. Schwartz, E. S., and Torous, W. N., “Commercial Office Space: Tests of a Real Options Model with Competitive Interactions”, Real Estate Economics, 35:1, pp. 1-20, 2007.

    Awarded Edwin S. Mills Prize for best paper in Real Estate Economics for 2007.

34. Plazzi, A., Torous, W. N., and Valkanov, R., “The Cross-Sectional Dispersion of Commercial Real Estate Returns and Rent Growth: Time Variation and Economic Fluctuations”, Real Estate Economics, 36:3, pp. 403-429, 2008.

35. Plazzi, A., Torous, W. N., and Valkanov, R., “Expected Returns and the Expected Growth in Rents of Commercial Real Estate”, Review of Financial Studies, 23:9, pp. 3469-3519, 2010.

36. Plazzi, A., Torous, W. N., and Valkanov, R., “Exploiting Property Characteristics in Commercial Real Estate Portfolio Allocation”, Journal of Portfolio Management, Special Real Estate Issue, pp. 39-50, 2011.

Submitted Manuscripts

37. Ball, C. A., and Torous, W. N., “Contagion in the Presence of Stochastic Interdependence”, *revise and resubmit*, Review of Financial Studies.

37. Linnainmaa, J. T., and Torous, W. N., “Reading the Tea Leaves: Why Serial Correlation Patterns in Analysts’ Forecast Errors are Not Evidence of Inefficient Information Processing”, *revise and resubmit,* Journal of Financial Economics

38. Miltersen, K.R., and Torous, W. N., “Second Mortgages: Valuation and Implications for the Performance of Structured Financial Products”, *submitted,* Review of Financial Studies

Chapters in Books

39. Geske, R. L., and Torous, W. N., "Black-Scholes Option Pricing and Robust Variance Estimation," pp. 49-69, in Options: Recent Advances in Theory and Practice, S. Hodges (Editor), Manchester University Press, 1990.

40. Schwartz, E. S., and Torous, W. N., "Caps on Adjustable Rate Mortgages: Valuation, Insurance, and Hedging," pp. 283-303, in Financial Markets and Financial Crises, R. G. Hubbard (Editor), University of Chicago Press, 1991.

41. Betker, B. L., Franks, J. R., and Torous, W. N., "Are Stockholders Better Off When Debt is Restructured Privately?," pp. 391-400, in Corporate Bankruptcy and Distressed Restructuring: Analytical Issues and Investment Opportunities, E. Altman (Editor), Irwin, 1992.

42. Torous, W. N., "Mortgage Backed Securities," in North-Holland Handbook of Operations Research and Management Science, R. A. Jarrow, V. Maksimmovic, and W. T. Ziemba (Editors), North-Holland, 1995.

43. Franks, J. R., Nyborg, K, and Torous, W. N., "A Tale of Three Codes: A Comparison of U. K., U. S., and German Insolvency Codes," in Mastering Finance, H. Rose (Editor), Pittman Publishing, 1998.

44. Torous, W. N. "The Behaviour of Short Term Interest Rates," in Mastering Finance, H. Rose (Editor), Pittman Publishing, 1998.

45. Schwartz, E. S., and Torous, W. N., “Can We Disentangle Risk Aversion from Intertemporal Substitution in Consumption?,” in Essays on Uncertainty: Festschrift in Honor of Steinar Ekern, Norges Handelshoyskole, Bergen, Norway, 2002.

46. Ghysels, E., Plazzi, A., Torous, W. N., and Valkanov, R., “Forecasting Real Estate Prices”, in Handbook of Economic Forecasting, 2, G. Elliott and A. Timmermann (Editors), North-Holland, forthcoming.

Working Papers

47. Goyal, A., Kahl, M., and Torous, W. N., “The Long-Run Performance of Financially Distressed Firms: An Empirical Investigation”, 2003.

48. Bokhari, S., Torous, W. N., and Wheaton, W., “Why did Household Mortgage Leverage Rise from the mid-1980s until the Great Recession?”, 2011

<u>Teaching History</u> (since 2001)

Management 237J (Asset-Backed Securities Markets): Fall 2009, Fall 2011

Management 278A (Real Estate Financing and Investment): Fall 2011

Management 278B (Real Estate Securitization): Winter 2003, Fall 2004, Winter 2004, Winter 2005, Spring 2006, Spring 2007

Management 408 (Foundations of Finance): Winter 2001, Winter 2002, Fall 2006, Fall 2007, Fall 2008, Fall 2009

Management 466A (Financial Policy for Managers): Fall 2001, Fall 2002, Fall 2003, Fall 2004, Fall 2005, Spring 2006, Spring 2007, Spring 2008

Management 478 (Selected Topics in Management for EMBA): Winter 2001