

VIJAY SINGAL

J. Gray Ferguson Professor of Finance
Pamplin College of Business, Virginia Tech
Blacksburg, VA 24061
540-231-7750, 540-231-5904, singal@vt.edu

Education

THE UNIVERSITY OF MICHIGAN, ANN ARBOR, MI
Ph.D., Finance.

INDIAN INSTITUTE OF MANAGEMENT, CALCUTTA, INDIA
Master of Business Administration (PGDM), Finance.

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, INDIA
Bachelor of Technology, Chemical Engineering.

CFA Charterholder.

Academic Experience

STERN SCHOOL OF BUSINESS, NEW YORK UNIVERSITY, NY
Visiting Professor of Finance, 2011-12.

VIRGINIA TECH, BLACKSBURG, VA
J. Gray Ferguson Professor of Finance, 2002 – Current.
Head, Department of Finance, January 2003 – July 2009.
Associate Professor, 1998 – 2002.
Assistant Professor, 1992 – 1998.

THE UNIVERSITY OF MICHIGAN, ANN ARBOR, MI
Visiting Faculty: 1991-92.

Industry Experience (*details within*)

SAPIENT CORP., BOSTON, MA
Board of Directors: 2008 – Current; Member, Audit Committee: 2008 – Current; Member, Risk Committee: 2009 – Current; Chair, Risk Committee: 2010 – Current; Member, Governance and Nominating Committee: 2010-Current.

CASTLE FINANCIAL LLC, EDISON, NJ
Consultant: 2004 – Current.

NEW RIVER FUNDS, RADFORD, VA
Board of Trustees: 2003 – 2008.

OIL AND NATURAL GAS COMMISSION, BOMBAY, INDIA
Joint Director of Finance. 1977-87.

Research - Interests

My current and past research spans three areas:

- Anomalies related to market efficiency, indexed mutual funds and mutual funds (current)
- International finance (currencies, emerging markets, ADRs, and investments), and
- Resolving corporate finance-related issues using data from one industry but from both financial and product markets.

Research – Publications (*All author listings are alphabetical*)

1. “Concentrated Ownership and Firm Performance: Does Family Control Matter?” (with M. Singal). *Strategic Entrepreneurship Journal*. December 2011, 5:375-396.
2. “Disposition Bias and the Effect on Mutual Fund Flows” (with Lily Xu). *Journal of Banking and Finance*, October 2011, 35(10), pp. 2704-2718.

3. "Information Content of Stock Splits" (with Honghui Chen and Hoang Huy Nguyen). *Journal of Banking and Finance*, September 2011, 35(9), pp. 2454-2467.
4. "Index Changes and Losses to Investors in S&P 500 and Russell 2000 index funds" (with Honghui Chen and Greg Noronha). *Financial Analysts Journal*, 2006, July/August, pp. 31-47. Abstracted in the CFA Digest, November 2006; Webcast by CFA Institute in September 2006.
5. "S&P 500 Index Changes and Investor Awareness" (with Honghui Chen and Greg Noronha). *Journal of Investment Management*, 4(2), 2006, pp. 23-37. Abstracted in the CFA Digest, February 2007.
6. "Exchange Rate Exposure of Exporting and Importing Firms" with Mahesh Pritamani and Dilip Shome. *Journal of Applied Corporate Finance*, Summer 2005, 17(3), pp. 87-94.
7. "The Price Response to S&P 500 Index Additions and Deletions: Evidence of Asymmetry and a New Explanation" (with Honghui Chen and Greg Noronha). *Journal of Finance*, August 2004, 59(4), 1901-1929.
8. "All Things Considered, Taxes Drive the January Effect" with Honghui Chen. *Journal of Financial Research*, Fall 2004, Vol. 27. This paper won the Best Paper Award for 2004 (\$5,000).
9. "Foreign exchange exposure of exporting and importing firms" with Mahesh Pritamani and Dilip Shome. *Journal of Banking and Finance*, July 2004, 28(7), pp. 1697-1710.
10. "Financial Health and Product Safety" with Greg Noronha. *Managerial and Decision Economics*, January/February 2004, 25(1), p. 1-16. Lead article.
11. "A December Effect with Tax-Gain Selling?" with Honghui Chen. *Financial Analysts Journal*, July/August 2003, 59(4), 78-90.
12. "Do Short Sellers Cause the Weekend Effect" with Honghui Chen. *Journal of Investment Management*, 2003, 1(3), 20-35.
13. "Speculative Short Sales and the Weekend Effect" with Honghui Chen. *Journal of Finance*, April 2003, 58(2), 685-705.
14. "Tax Savings with Mutual Fund Distributions". *Journal of Portfolio Management*, Fall 2002, 29(1), pp. 82-88. Abstracted in the CFA Digest (May 2003).
15. "Return predictability following large price changes and information releases" with Mahesh Pritamani. *Journal of Banking and Finance*, April 2001, 25(4), pp.631-656 (lead article).
16. "The Fear of Globalizing Capital Markets" with E. Han Kim. *Emerging Markets Review*, November 2000, 1(3), pp. 183-198 (lead article). In the top 10 requested articles during 2003.
17. "Opening of Stock Markets: Experience of Emerging Economies" with E. Han Kim. *Journal of Business*, January 2000, 73(1), pp. 25-66.
18. "Floating Currencies, Capital Controls, or Currency Boards? What's the best remedy for the recent currency crises". *Journal of Applied Corporate Finance*, Winter 1999, pp. 40-56. In an article following this paper, an opposing view is expressed by Nobel laureate Merton Miller. Abstracted in the CFA Digest (Fall 1999).
19. "The Competitive Impact of Air Crashes: The Stock Market Evidence" with J.C. Bosch and Woody Eckard. *Journal of Law and Economics*, October 1998, pp. 503-519.
20. "Are Open Markets Good for Foreign Investors and Emerging Nations" with E. Han Kim. *Journal of Applied Corporate Finance*, Fall 1997, 10(3): 18-33.
21. "Privatization and Efficiency: Industry Effects of the Sale of British Airways" with Catherine Eckel and Doug Eckel. *Journal of Financial Economics*, February 1997, pp. 275-298.
22. "Interdependence of Airline Firms: Evidence from Airline Mergers". *Managerial and Decision Economics*, November/December 1996, pp. 559-574.
23. "Airline Mergers and Competition: An Integration of Stock and Product Price Effects". *Journal of Business*, April 1996, pp. 233-268.

24. "Mergers and Market Power: Evidence from the Airline Industry" with E. Han Kim. *American Economic Review*, June 1993, pp. 549-569.

Research – Books, Book Chapters, Reprints, and Other Scholarly Work

1. Chapter on *Indexes: Purpose, Construction and Performance* in “Institutional Money Management: Objectives, Constraints, and Strategies” edited by Hany Shawky and David Smith, anticipated publication by Wiley Handbooks, 2011.
2. CFA Program, Level I curriculum, 2011 onwards. The Level I curriculum contains two chapters authored by me on Portfolio Risk and Return - Part I and Portfolio Risk and Return Part - II. These are required readings for about 60,000 candidates every year.
3. The article “Index Changes and Losses to Investors in S&P 500 and Russell 2000 index funds” is reprinted in *Investment Performance Measurement: Evaluating and Presenting Results*, edited by Philip Lawton and Todd Jankowski, and published by John Wiley and Sons (2009) in the CFA Institute Investment Perspectives series.
4. “Chinks in the armour of market efficiency” by Vijay Singal. Union Bank of Switzerland’s Wealth Management magazine, 3rd quarter, 2005, pp. 28-29. Translated into Italian, Swiss, French, and other languages.
5. The article “Mergers and Market Power: Evidence from the Airline Industry” is reprinted in *Corporate Governance* edited by David Denis and John McConnell and published by Edward Elgar Publishing (2005) in the International Library of Critical Writings in Financial Economics.
6. The article “Opening of Stock Markets: Experience of Emerging Economies” is reprinted in *Emerging Markets* edited by Geert Bekaert and Campbell Harvey and published by Edward Elgar Publishing (2004) in the International Library of Critical Writings in Financial Economics.
7. Singal, V. *Beyond the Random Walk: A Guide to Market Anomalies and Low Risk Strategies*. This is an original book published by Oxford University Press (2004), and then reissued in paperback (2006). Chapter 1 of the book is included in Level I of the CFA Program as one of the required readings. 2006-2010.
8. Roanoke Times (March 8, 2003): A column on not investing in employer stock.
9. "Opening of Stock Markets in Emerging Economies: Effect on Portfolio Flows and Volatility of Stock Prices" with E. Han Kim in *Portfolio Investment in Developing Countries* edited by Stijn Claessens and Sudarshan Gooptu, World Bank Discussion Paper, The World Bank, Washington, D.C., December 1993, pp. 383-403.

Current Research – Completed Working Papers, Work in progress

1. “Index Funds and Non-index Portfolios: The Case for Multiple Randomly Constructed Index Funds” (with Debarati Bhattacharya).
2. “CEO Pay and Board Power: Are they related? Evidence from family-controlled and nonfamily-controlled S&P 500 firms” (with M. Singal). September 2010. Presented at the FMA 2010 meetings.
3. “Glass Ceiling, Discrimination, or Poor Performance? Lack of Gender Diversity in the Corner Office” (with M. Singal).

Research - Presentations

1. Pamplin Research Seminar, 2011. “CEO Pay and Board Power: Are they related? Evidence from family-controlled and nonfamily-controlled S&P 500 firms.”
2. Super Bowl of Indexing Conference, Panel Participant and Panel Chair, 2010.
3. Financial Management Association, 2010. “CEO Pay and Board Power: Are they related? Evidence from family-controlled and nonfamily-controlled S&P 500 firms”.
4. Family Enterprise Research Conference, 2010. “Family Control or Concentrated Ownership: What determines firm value? Evidence from India” with M. Singal. Awarded the Best Paper/Poster Prize.
5. Super Bowl of Indexing Conference, Panel Participant and Panel Chair, 2009.
6. Family Enterprise Research Conference, 2009. “CEO Compensation in Family Controlled Firms” with M. Singal.

7. Super Bowl of Indexing Conference, 2008. "The Active or Passive Decision: At Odds or Complementary?"
8. Strategic Management Society Conference, India, 2008. "Effect of Concentrated Ownership on firm performance in India" with M. Singal.
9. Strategic Management Society Conference, Cologne, 2008. "Interest Alignment and CEO Compensation in Family Controlled Firms", with M. Singal.
10. Strategic Management Society, 2006. "Are Anti-Takeover Provisions Effective Deterrents to Takeovers?" with M. Singal.
11. Temple University, 2005. "Signaling with Stock Splits: Who Picks Up the Signals?"
12. Securities and Exchange Commission, 2005. "Index changes and losses to index fund investors" with Honghui Chen and Greg Noronha.
13. University of Arkansas, Fayetteville, 2005. "Index changes and losses to index fund investors" with Honghui Chen and Greg Noronha.
14. Financial Management Association, 2004. "Preannounced index changes and losses to index fund investors" with Honghui Chen and Greg Noronha.
15. Commodity Futures Trading Commission, Washington, DC, 2004. "Does Aggregation of Information by Futures Reduce Momentum?"
16. University of Massachusetts, Amherst, 2003. "Does Aggregation of Information by Futures Reduce Momentum?"
17. European Financial Management Association, 2002. "The Price Impact of S&P 500 Index Additions and Deletions".
18. Financial Management Association, 2001. "January Effect – A Re-examination" with Honghui Chen.
19. University of Alabama, 2000. "Stock Prices and Exchange Rates".
20. Financial Management Association, 1999. "Financial Health and Airline Safety".
21. University of Tokyo, 1999. "Open Capital Markets and Corporate Governance". Paper presentation and Panel discussion.
22. University of South Carolina, 1999. "Stock Market Openings: Experience of Emerging Economies".
23. American Economic Association, 1999. "Financial Health and Airline Safety".
24. Financial Management Association, 1997. "The Competitive Impact of Air Crashes".
25. Financial Management Association, 1997. "On the Coattails of Stealth Traders: Profitable Strategies for Small Traders" with Mahesh Pritamani.
26. University of North Carolina, 1996. "Privatization and Efficiency: Industry Effects of the Sale of British Airways" with C. Eckel and D. Eckel.
27. Financial Management Association, 1995. "Corporate Performance Around New Financings" with Rob Hansen.
28. Financial Management Association, 1995. "Privatization and Efficiency: Industry Effects of the Sale of British Airways" with C. Eckel and D. Eckel.
29. Financial Management Association, 1993. "Airline Mergers and Competition: An Integration of Stock and Product Price Effects".
30. World Bank Conference on Emerging Economies, 1993.
31. University of Chicago, 1992. "Airline Mergers, Market Power, and Efficiency".
32. University of Rochester, 1992. "Airline Mergers, Market Power, and Efficiency"
33. U.S. Department of Justice, 1992. "Airline Mergers, Market Power, & Efficiency".
34. Wayne State University in 1991, Michigan State University in 1991, and the Financial Management Doctoral Seminar in 1991. "Airline Mergers, Market Power, and Efficiency"

Research – Doctoral Students

1. Student co-authored published papers:
 - a. "Index Changes and Losses to Investors in S&P 500 and Russell 2000 index funds" (with Honghui Chen and Greg Noronha). *Financial Analysts Journal*, 2006, July/August, pp. 31-47. *Abstracted in the CFA Digest, November 2006; Webcast by CFA Institute in September 2006.*
 - b. "S&P 500 Index Changes and Investor Awareness" (with Honghui Chen and Greg Noronha). *Journal of Investment Management*, 4(2), 2006, pp. 23-37. *Abstracted in the CFA Digest, February 2007.*
 - c. "Exchange Rate Exposure of Exporting and Importing Firms" with Mahesh Pritamani and Dilip Shome. *Journal of Applied Corporate Finance*, Summer 2005, 17(3), pp. 87-94.

- d. "The Price Response to S&P 500 Index Additions and Deletions: Evidence of Asymmetry and a New Explanation" (with Honghui Chen and Greg Noronha). *Journal of Finance*, August 2004, 59(4), 1901-1929.
 - e. "All Things Considered, Taxes Drive the January Effect" with Honghui Chen. *Journal of Financial Research*, Fall 2004, Vol. 27. This paper won the Best Paper Award for 2004 (\$5,000).
 - f. "Foreign exchange exposure of exporting and importing firms" with Mahesh Pritamani and Dilip Shome. *Journal of Banking and Finance*, July 2004, 28(7), pp. 1697-1710.
 - g. "Financial Health and Product Safety" with Greg Noronha. *Managerial and Decision Economics*, January/February 2004, 25(1), p. 1-16. Lead article.
 - h. "A December Effect with Tax-Gain Selling?" with Honghui Chen. *Financial Analysts Journal*, July/August 2003, 59(4), 78-90.
 - i. "Do Short Sellers Cause the Weekend Effect" with Honghui Chen. *Journal of Investment Management*, 2003, 1(3), 20-35.
 - j. "Speculative Short Sales and the Weekend Effect" with Honghui Chen. *Journal of Finance*, April 2003, 58(2), 685-705.
 - k. "Privatization and Efficiency: Industry Effects of the Sale of British Airways" with Catherine Eckel and Doug Eckel. *Journal of Financial Economics*, February 1997, pp. 275-298.
2. Thesis Committee – Mahesh Pritamani (Chair), Lily Xu (Chair), Saiyid Islam, Cheulho Lee, Douglas Eckel, and Hoang Nguyen.

Research – Media Coverage

My research has been featured in the media as below:

*On television:

Public Broadcasting Corporation (Blue Ridge television, May 25, 2004), CNN-fn (national, December 30, 2003), Channel 7 (local, May 25, 2000 and May 26, 2000);

*On radio:

Detroit Radio (April 22, 2004), Bloomberg Radio (December 26, 2003 and November 10, 2003), Business Radio (Boston/NE, December 10, 2003 and November 15, 2003), Investors Radio Network (Stock Doctor, November 25, 2003), Ottawa Radio (November 7, 2003), Richmond Radio (WRAV – May 26, 2000), Radio Q99.1 (May 2000), National Public Radio (May 2000), and WVTF radio (week of February 9, 1998).

*In prominent newspapers and magazines:

Wall Street Journal (June 3, 2011), Wall Street Journal (April 21, 2008), Wall Street Journal (June 3, 2006), Wall Street Journal (April 13, 2006), Barron's (April 3, 2006), Investment News (May 27, 2007; March 20, 2006 with photo), New York Times (March 12, 2006), SmartMoney (October 2005), Fortune (August 9, 2004), New York Times (July 4, 2004), Pittsburgh Post-Gazette (July 12, 2004), Yahoo! Finance trivia quizzes (May 10-12, 2004, April 29-May2, 2004, April 7-9, 2003), Money magazine (January 2004), SmartMoney (December 2003), Globe and Mail (January 12, 2004), Atlanta Journal-Constitution (November 29, 2003), Newsday (November 9, 2003 and October 2, 2003), Washington Post (January 10, 1998), Chicago Tribune (June 26, 1993), Investor's Business Daily (March 9, 1998 and August 7, 1991), Chronicle of Higher Education (March 13, 1998 with photo), Richmond Times-Dispatch (December 25, 2000 and January 28, 2001).

*In other newspapers and magazines:

Cents (American Airlines Publishing, Winter 2010), Herald Tribune (November 16, 2009), CFA Institute webcast of the paper in the Financial Analysts Journal (one hour long), Business Day (May 30, 2006), IndexUniverse.com (April 14, 2006), Roanoke Times (July 10, 2005), Sunday Times (April 3, 2005), Roanoke Times (January 14, 2005), Del Mar Times (August 27th 2004), Regent News (July 25th, 2004), FPA Journal (June 2004), Sarasota Herald-Tribune (May 30th, 2004), Pamplin MBA magazine (Spring 2004), Spirit - Southwest Airlines' inflight magazine (January 2004), Financial Post (December 9, 2003), CFA Magazine (September/October 2003 on behavioral finance), Times Union (December 1, 2003), Roanoke Times (November 30, 2003), The Daily Gazette (October 27, 2003), The Journal News (September 12, 2003 on mutual fund mispricing and timing), Virginian Pilot (August 21, 2003 regarding corporate dividends), Virginia Tech Magazine (Summer 2003), Pamplin Newsletter (Spring 2003),

Roanoke Times (March 21, 2003), MSN Money (November 21, 2002), Associated Press Newswire (February 13, 2001), MBA Bullet Point (February 15-28, 2000), Roanoke Times (September 15, 1993 and April 4, 1999), Ottawa Citizen (February 28, 1999), International Securities Regulation Report (September 24, 1998), Business Finance (October 1998), Blue Ridge Business Journal (October 1998), New Orleans Times (January 10, 1998), Pamplin Newsletter (1998), and Newark Star-Ledger (October 29, 1997).

* Full-length Reviews of Beyond the Random Walk:

Journal of Social, Political, and Economic Studies (2005), Journal of Financial Research (December 2004, pp. 603-604), Virginia Tech Research Magazine (Winter 2004), Financial Analysts Journal (April 2004), FPA Journal (June 2004), Journal of Investment Management (Winter 2004), Globe and Mail (January 12, 2004), and Briefing.com (March 30, 2004).

Teaching - Experience

1. Currently teach the Investments course at the undergraduate level at Virginia Tech.
2. Taught international finance at undergraduate and MBA levels (30 sections of International Finance at the undergraduate level and about 10 sections of International Finance at the graduate level). Taught the Financial Theory course at the Ph.D. level.
3. Taught courses on Financial Environment of Business and Investments in the Executive and Professional MBA programs of Virginia Tech, from their inception in 2004 to 2009.
4. Taught an MBA course on Currencies and Global Finance at the Indian Institute of Foreign Trade, New Delhi, in 2004 and 2005.
5. Taught a one-day Executive Development Program on Currency Risk Management at the Indian Institute of Foreign Trade in August 2004. Taught a one-day Executive Development Program on Market Efficiency and Inefficiencies at IIFT in July 2005.
6. Led two summer study abroad programs to Freiburg, Germany during the summers of 1998 and 1999 where I taught a course on International Finance.
7. Taught Finance courses at the University of Michigan at both undergraduate and graduate levels. For excellence in teaching, I was awarded the Dykstra Fellowship by the University of Michigan and a Letter of Appreciation from the Dean of the Michigan Business School for outstanding teaching.

Teaching – Interests

My teaching interests include investments, introductory finance, and international finance at all levels. As my teaching experience shows, I have taught at the undergraduate, MBA, Executive MBA, and Ph.D. levels. My current area of research corresponds with basic and advanced courses in investments.

Service (Professional) – Editorial Boards

1. Member of the Editorial Board of Financial Analysts Journal from January 2008 to December 2010. Reappointed for the 2011-2013 period.
2. Member of the Editorial Board of Investment Management and Financial Innovations since April 2004.
3. Member of the Editorial Board of International Journal of Portfolio Analysis & Management since September 2011.
4. Member of the Editorial Board on the Financial Management Association's Survey and Synthesis Series (2001 to 2010). The board is responsible for selecting and recommending topics and books for publication.

Service (Professional) – Reviewer and Conference Participation

1. Reviewed journal articles for Journal of Finance (2001, 2002 – twice, 2003, 2008, 2010), Review of Financial Studies (2005, 2006, 2008), Journal of Financial and Quantitative Analysis (2005, 2006, 2007-twice, 2009 – twice, 2011), American Economic Review (2002), Journal of Political Economy (2001), Journal of Business (2001 – twice), Financial Analysts Journal (2004 – twice, 2005 – thrice, 2006 – three times, 2007 – four times, 2008 – four times, 2009 – four times, 2010 – twice, 2011-twice), Journal of Banking and Finance (2000, 2001, 2004, 2005, 2006-four times, 2007, 2008), Journal of International Money and Finance (1999, 2001, 2003), Financial Management (1999, 2008, 2009, 2010), Review of Economics and Statistics (1993, 1997, 2000, 2006), Journal of Corporate Finance (2006), European

Finance Review (2002), Journal of Industrial Economics (1995, 1998), Review of Economic Studies (2010), Journal of Economics and Business (2001), Journal of Financial Research (1993, 1996, 1997, 1998, 2002, 2003, 2004 – twice, 2005, 2006 – twice, 2007), Journal of International Financial Management and Accounting (1999), Financial Review (2000, 2001), Journal of Financial Markets (2004, 2005, 2007), Investment Management and Financial Innovations (2004, 2005) and the Journal of Asian Business (1999).

2. Refereed and evaluated grants for the National Science Foundation (1997, 1998).

3. Reviewed books: Multinational Business Finance by Eiteman, et al. for Addison-Wesley, International Corporate Finance by Robyn for Addison-Wesley, International Corporate Finance by unknown author for Addison-Wesley, International Finance by H. Kent Baker, Multinational Finance by Kirt Butler, International Finance by James Baker, and two texts on Emerging Markets for Addison-Wesley.

4. Reviewed tenure/promotion cases of faculty at Northeastern University, U. Massachusetts Amherst, Rutgers University, and SUNY Binghamton.

5. Discussant or chair at the following professional meetings: i) American Finance Association Meetings, 2001, ii) Financial Management Association, 2001, 2004 iii) European Financial Management Association, 2002, iv) Allied Social Sciences Association, 1998, v) Conference on Financial Economics - Accounting at New York University, 1992, vi) Eastern Finance Association, 1995, vii) Financial Management Association, 1992.

6. Session organizer for several sessions at the FMA 2002, FMA 2003, FMA 2004, FMA 2006, FMA 2009, and FMA 2010 meetings – reviewed and selected papers for acceptance, and identified the chairpersons and discussants.

Service (Organizational)

1. Head, Department of Finance, from January 2003 to July 2009. As department head, I was responsible for all Finance faculty – their recruitment, promotion and tenure, annual evaluations, compensation, etc.; all Finance programs – the undergraduate program with 300 Finance graduates each year, the Finance part of the MBA program, and the Finance doctoral program; secretarial staff; department's budget including allocation of funds to different activities; curriculum development for all courses at all levels; course assignments and scheduling; coordination with alumni, recruiters, and other stakeholders; and all other aspects related to department's administration.

2. Served as member and chair of committees for several years: Member of College Promotion and Tenure Committee, Member of College MBA Advisory Committee; Member of College Library Committee; Chair and Member of MBA Curriculum Committee; Chair and Member of Faculty Search Committee; Chair and Member of Seminar Series Committee; Chair and Member of Computer Committee; and Member of Department Head Search Committee, and Ph.D. Program Committee.

3. Member, University Commission on Research, 2001 to 2004.

Service (International)

1. Past research and some of my current research is related to international aspects of finance. In particular, I have studied how emerging markets get affected by liberalization of capital flows, how changes in exchange rates affect stock prices, and why forward exchange rates are biased. For more details, please see the listings under Research.

2. Study Abroad Programs: I was responsible for all aspects of the Freiburg Study Abroad program during its first two years including design and development, marketing, organization, and teaching. Awarded the University Certificate for International Programs in 2002.

3. Participated in a panel discussion and presented a paper to an audience of about 600 business people and academics on "Economic Freedom" in Tokyo under the auspices of the University of Tokyo in June 1999.

4. Past industry experience in international business has significantly helped me communicate real life experiences to students of International Finance. In my previous job, I handled several important assignments including i) Negotiating foreign currency syndicated loans; ii) managing foreign exchange risk; iii) Insuring and reinsuring in international markets for assets valued at \$2 billion; and iv) Negotiating and finalizing contracts with shipyards in Norway, Singapore, France, and Japan.

Service (Outreach)

1. Presentation to the Roanoke chapter of the Virginia Tech Alumni Association on Beyond the Random Walk. May 26, 2004.
2. Presentation to the Roanoke Valley Asian Business Owners Association on small business and the financial crisis. March 17, 2009.

Association with the CFA Institute

1. CFA charter-holder since 2002.
2. Chapter 1 of my book Beyond the Random Walk is included in Level I of the CFA Program as one of the required readings. 2006-2010.
3. CFA Program, Level I curriculum, 2011 onwards. The Level I curriculum contains two chapters authored by me on Portfolio Risk and Return - Part I and Portfolio Risk and Return Part - II.
4. Everest Program: assisted in the design of curriculum, chapters, and chapter content for the Investment Foundations certificate program. April 2011.
5. Everest Program: author of four chapters of the Everest program. July – December 2011.
6. Member of Education Advisory Committee Working Body, 2007 – 2010.
7. Member, CFA Level III Standard Setting Group, July 2009.
8. Member of Candidate Curriculum Committee for 2002-03. Responsible for designing the curriculum for 2004 CFA Program. Included in the list of acknowledgements on study guides for the 2004 program.
9. Reviewer for several chapters of the second edition of Quantitative Methods for Investment Analysis during 2003-04. Included in the list of acknowledgements of text book.
10. Reviewer of the 2004 CFA examination prior to administration including review of examination questions, guideline answers, graders' keys, and other analyses.

Awards and Honors

1. Appointed to titled professorship: J. Gray Ferguson Professor of Finance in recognition of outstanding contribution to research and teaching.
2. Virginia Tech Scholar of the Week. Week of September 26, 2005. One researcher is chosen every week from among 1500 faculty members.
3. Awarded the University Certificate for International Programs in 2002.
4. Awarded the College Certificate of Teaching Excellence and University Certificate of Teaching Excellence, in 1998.
5. Ranked 43rd in the world based on research productivity by an independent survey in 2005.
6. Elected to Sapient Corporation's Board of Directors (from June 2008).
7. Selected by the Fulbright Commission as a Fulbright Senior Specialist. Senior specialists are selected by a review panel based on the applicants' research and teaching records. I visited Nepal in September 2007 as a Senior Specialist for assisting (KEC) interested in expanding into business and in collaborating with a U.S. university. I studied the educational system, and met with leaders of several other institutions including Tribhuvan University and Kathmandu University. Based on my understanding of the educational system and KEC, I made several recommendations that the institution intends to consider over the next few years.
8. Awarded the Dykstra Fellowship by the University of Michigan for excellence in teaching.
9. Letter of Appreciation from the Dean of the Michigan Business School for outstanding teaching.

Industry Experience

1. June 1977 to August 1987. Oil and Natural Gas Corporation, India. Joint Director of Finance. Supervised a group of 30 people responsible for providing financial services to the Bombay Offshore project. Special assignments included i) Negotiating foreign currency syndicated loans and managing

foreign exchange risk; ii) Insurance in the international market for ONGC's assets valued at \$2 billion; iii) Negotiation and finalization of contracts with shipyards in Norway, Singapore, France, and Japan; iv) Marketing and negotiation of contracts for sale of natural gas; v) Setting up and managing a computer group for management reporting and payroll; and vi) Preparation of feasibility reports for board approval, and financial evaluation of bid packages for all major purchases.

2. July 2003 to December 2008. Member, Board of Trustees, New River Funds, Radford, VA.

New River Funds was started as a complex of three mutual funds by an entrepreneur (RJ Kirk) to expand his investment management expertise into a money management enterprise, also designed to raise capital for investment in private firms. In 2003, New River Funds bought two ongoing money management firms, one investing in small cap stocks and the other in large cap stocks and bonds. The funds were managed through sub-advisors (one in Memphis, TN and the other in Rochester, NY) under the control of New River Advisors.

As an independent trustee on the Board of Trustees, I was responsible for evaluating fund performance with reference to their benchmarks, ensuring that funds' investment strategy was consistent with the stated policies of the Funds, and that the operation of the Funds was consistent with the law and investment regulations. The board met 4 times a year in person. I was a member of the Audit Committee, and designated a financial expert. The New River Funds complex was profitably sold as a going concern to another company in Tennessee in 2008.

3. June 2008 - current. Sapient Corporation, Boston, MA (Ticker: SAPE). Member, Board of Directors; Chair, Risk Committee; Member, Audit Committee (also a financial expert); Member, Governance and Nominating Committee.

Sapient is a global services firm that helps clients compete, evolve and grow in an increasingly complex marketplace. It provides brand and marketing strategy expertise and business and IT strategy services. Clients include Coke, Mars, Citigroup, Travelers, JC Penney, Target, UBS, Chevron, Vodafone, Sony Electronics, Chrysler and Verizon. Its 7,000 employees span the globe with about 60% located in India. Although diverse in demography and functional expertise, the board of directors is a cohesive group discussing strategic issues carefully and effectively. Based on my background and expertise, I have been able to contribute directly to areas like cash management, dividends and stock repurchases, currency risk management including hedging strategies through futures, options and natural hedging, and managing Indian operations especially with significant differences in culture and expectations. As a board team, we have been effective in keeping costs under control while strategically making acquisitions and expanding into high growth areas like government services and trading and risk management. The Board meets 4 times a year in person and about 6-7 times telephonically.

4. April 2004 – current. Consultant, Castle Financial, Edison, NJ. I assist the company in designing and implementing investment strategies based on my financial experience and investment research.