KEITH CHRISTOPHER BROWN

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PERSONAL INFORMATION

ADDRESS:	Department of Finance McCombs School of Business 1 University Station, B6600 University of Texas at Austin Austin, TX 78712
	Voice: (512) 471-6520 Fax: (512) 471-5073 E-mail: keith.brown@mccombs.utexas.edu Web Page: faculty.mccombs.utexas.edu/keith.brown
PLACE OF BIRTH & CITIZENSHIP:	Los Angeles, California United States
EDUCATION:	Ph.D. (Financial Economics), Purdue University, 1981 Dissertation: "Estimation of Seemingly Unrelated Regressions With An Incomplete Set of Data"
	CFA, Institute of Chartered Financial Analysts, 1988
	M.S. (Economics), Purdue University, 1978
	B.A. (Economics), San Diego State University, 1977 Honors: Summa Cum Laude, Phi Beta Kappa, Phi Kappa Phi

ACADEMIC EXPERIENCE

ACADEMIC POSITIONS HELD:	University Distinguished Teaching Professor and Fayez Sarofim Fellow University of Texas at Austin, September 2006 - Present
	Primary responsibilities include developing and implementing an investment management curriculum at the Undergraduate and MBA levels. Courses taught include Empirical Methods in Finance (Ph.D.), Investment Theory and Practice (BBA/MBA/EMBA/MSF), Financial Risk Management (MBA), Portfolio Management & Security Analysis (MBA), Seminar in Security Research (MBA), Investment Theory (BBA), Advanced Portfolio Management (BBA), International Finance (BBA), Financial Management (BBA), and Finance, Fiction, and Film (BA-Plan II).
	Professor of Finance and Fayez Sarofim Fellow, University of Texas at Austin, September 1999 – Present

ACADEMIC POSITIONS HELD: (cont.)	Associate Professor of Finance and Allied Bancshares Centennial Fellow, University of Texas at Austin, September 1991 – August 1999 Assistant Professor of Finance, University of Texas, January 1984 - August 1991 Assistant Professor of Finance, San Diego State University, August 1981 - December 1983 Graduate Instructor of Management, Purdue University, August
	1977 - August 1981
	RESEARCH & PUBLICATIONS
ACADEMIC PUBLICATIONS:	"Construction of Economic Index Numbers With An Incomplete Set of Data" (with K. R. Kadiyala), <i>Review of Economics and</i> <i>Statistics</i> , August 1983
	"The Cash Management Implications of a Hedged Dividend Capture Strategy" (with S. L. Lummer), <i>Financial Management</i> , Winter 1984
	"An Examination of Event Dependency and Structural Change in Security Pricing Models" (with L. J. Lockwood and S. L. Lummer), <i>Journal of Financial and Quantitative Analysis</i> , September 1985
	"The Estimation of Missing Observations In Related Time Series Data: Further Results" (with K. R. Kadiyala), <i>Communications in Statistics</i> , December 1985
	"A Reexamination of the Covered Call Option Strategy for Corporate Cash Management " (with S. L. Lummer), <i>Financial</i> <i>Management</i> , Summer 1986
	Risk Arbitrage and the Prediction of Successful Corporate Takeovers" (with M. V. Raymond), <i>Financial Management</i> , Autumn 1986
	"Hedged Dividend Capture" (with S. L. Lummer), <i>Midland Corporate Finance Journal</i> , Fall 1986
	"Does the Composition of the Market Portfolio Really Matter?" (with G. D. Brown), <i>Journal of Portfolio Management</i> , Winter 1987

ACADEMIC PUBLICATIONS: (cont.) "Dutch Auction Rate Preferred Stock" (with M. J. Alderson and S. L. Lummer), *Financial Management*, Summer 1987

"On the Use of Gold as a Fixed Income Security" (with J. S. Howe), *Financial Analysts Journal*, July-August 1987

"The Benefits of Insured Stocks for Corporate Cash Management" (with M. Statman), *Advances in Futures and Options Research* Vol. 2, 1987

"Market Overreaction: Magnitude and Intensity" (with W. V. Harlow), *Journal of Portfolio Management*, Winter 1988

"Risk Aversion, Uncertain Information, and Market Efficiency" (with W.V. Harlow and S. M. Tinic), *Journal of Financial Economics*, December 1988

"Recent Innovations in Interest Rate Risk Management and the Reintermediation of Commercial Banking" (with D.J. Smith), *Financial Management*, Winter 1988

"How Rational Investors Deal With Uncertainty (Or, Reports of the Death of Efficient Markets Theory are Greatly Exaggerated)" (with W. V. Harlow and S. M. Tinic), *Journal of Applied Corporate Finance*, Fall 1989. Also reprinted in *Financial Management Collection*, Fall 1990, *The Revolution in Corporate Finance* 2e, Blackwell Publishers, 1992, and *The New Corporate Finance: Where Theory Meets Practice*, McGraw Hill, 1993

"Understanding and Assessing Financial Risk Tolerance: A Biological Perspective" (with W. V. Harlow), *Financial Analysts Journal*, November-December 1990. Also reprinted in CFA Candidate Readings - Level II, 1992

"Forward Swaps, Swap Options, and the Management of Callable Debt" (with D. J. Smith), *Journal of Applied Corporate Finance*, Winter 1990. Also reprinted in *New Developments in Commercial Banking*, Blackwell Publishers, 1991; *The Financial Derivatives Reader*, Kolb Publishing, 1992, *The Revolution in Corporate Finance* 2e, Blackwell Publishers, 1992, and *The New Corporate Finance: Where Theory Meets Practice*, McGraw Hill, 1993

"The Risk and Required Return of Common Stock Following Major Price Innovations" (with W. V. Harlow and S. M. Tinic), *Journal of Financial and Quantitative Analysis*, March 1993

"Default Risk and Innovations in the Design of Interest Rate Swaps" (with D.J. Smith), *Financial Management*, Summer 1993

"Institutional Demand and Security Price Pressure: The Case of ACADEMIC Corporate Spinoffs" (with W.V. Harlow), Financial Analysts **PUBLICATIONS:** Journal, September-October 1993 (cont.) "An Empirical Analysis of Interest Rate Swap Spreads" (with W. V. Harlow and D. J. Smith), Journal of Fixed Income, March 1994 "On the Use of Implied Stock Volatilities in the Prediction of Successful Corporate Takeovers" (with G. Barone-Adesi and W. V. Harlow), Advances in Futures and Options Research, Vol. 7, 1994 "Of Tournaments and Temptations: An Analysis of Managerial Incentives in the Mutual Fund Industry" (with W. V. Harlow and L. T. Starks), Journal of Finance, March 1996 "Why Constrain Your Mutual Fund Manager?" (with A. Almazan, M. Carlson, and D. Chapman), Journal of Financial Economics, August 2004 "Governance, Incentives, and Industry Consolidations" (with A. Dittmar and H. Servaes) Review of Financial Studies, Spring 2005 "The Right Answer to the Wrong Question: Identifying Superior Active Portfolio Management" (with W. V. Harlow), Journal of Investment Management, Fourth Quarter 2006 "Do Endowment Funds Select the Optimal Mix of Active and Passive Risks?" (with C. Tiu), Journal of Investment Management, First Quarter 2010 "Asset Allocation and Portfolio Performance: Evidence From University Endowments Funds" (with L. Garlappi and C. Tiu), Journal of Financial Markets, May 2010 "How Good are the Investment Options Provided by Defined Contribution Plan Sponsors?" (with W. V. Harlow), International Journal of Portfolio Analysis & Management, Volume 1.1 2012 "The Interaction of Spending Policies, Asset Allocation Strategies and Investment Performance at University Endowment Funds" (National Bureau of Economic Research Working Paper, with C. Tiu), in How the Financial Crisis and Great Recession Affected Higher Education (J. Brown and C. Hoxby, eds.), Cambridge, MA: NBER, 2015

> "In Search of Unicorns: Private IPOs and the Changing Market for Private Equity Investments and Corporate Control" (with K. W. Wiles), *Journal of Applied Corporate Finance*, Summer 2015

ACADEMIC PUBLICATIONS:	"Perspectives on the Management of University and College Endowments: Asset Allocation, Spending, and Wealth" (with D. Chambers, M. Lemmon, R. Shiller, and R. Smith), <i>Journal of</i> <i>Applied Finance</i> , Vol. 25.1, 2015
	"Improving the Outlook for a Successful Retirement: A Case for Using Downside Hedging" (with W. V. Harlow), <i>Journal of Retirement</i> , Winter 2016
	"Opaque Financial Contracting and Toxic Term Sheets in Venture Capital " (with K. W. Wiles), <i>Journal of Applied Corporate</i> <i>Finance</i> , Winter 2016
	"Market Risk, Mortality Risk, and Sustainable Retirement Asset Allocation: A Downside Risk Perspective" (with W. V. Harlow), Journal of Investment Management, Second Quarter 2016
	"Health State and the Savings Required for a Sustainable Retirement" (with V. Harlow), <i>Journal of Retirement</i> , Spring 2017
	"The Use and Value of Financial Advice for Retirement Planning" (with V. Harlow & S. Jenks), <i>Journal of Retirement</i> , Winter 2020
	"The Decision to Concentrate: Active Management, Manager Skill, and Portfolio Size" (with C. Tiu & U. Yoeli), <i>Journal of</i> <i>Portfolio Management</i> , Manager Fund Selection 2020
	"The Growing Blessing of Unicorns: The Changing Nature of the Market for Privately Funded Companies" (with K. W. Wiles), <i>Journal of Applied Corporate Finance</i> , Summer 2020
	"Investment Style Volatility and Mutual Fund Performance" (with V. Harlow and H. Zhang), <i>Journal of Investment Management</i> , forthcoming
WORKING PAPERS:	"Spending Policies, Asset Allocation, and Investment Performance of University Endowments" (with C. Tiu), March 2020
	"The Impact of Stochastic Donations on the Asset Allocation and Spending Policies of Endowments and Foundations" (with V. Harlow), December 2019
BOOK CHAPTERS:	"The Use of Stock Index Options in Corporate Cash Management" (with R. Clarke and M. Statman), <i>The Handbook of Stock Index</i> <i>Options and Futures, 2e</i> (F. Fabozzi & R. Kipnis, eds.), Homewood: Dow Jones-Irwin, 1989
	"Plain Vanilla Swaps: Market Structures, Applications and Credit Risk" (with D. J. Smith), <i>Interest Rate Swaps</i> (C. Beidleman, ed.), Homewood: Dow Jones-Irwin, 1990

BOOK CHAPTERS: (cont.)	"Currency Swaps: Market Conventions and Applications" (with D. J. Smith), <i>Cross Currency Swaps</i> (C. Beidleman, ed.), Homewood: Dow Jones-Irwin, 1992. Also reprinted in <i>CFA Candidate Readings - Level III</i> , 1994
	"Interest Rate Swaps and the Management of Current Liabilities and Assets" (with D. J. Smith), <i>Financial Management, 2e</i> (by R. Rao), 1992
	"Perspectives on Integration in the Oil Industry: Innovations from the Financial Markets" (with R. F. Semmens), <i>Oil in the New</i> <i>World Order</i> , Gainesville: U. of Florida Press, 1995
	"Structured Swaps" (with D. J. Smith), <i>The Yearbook of Fixed Income Investing</i> (J. Finnerty and M. Fridson, ed.), Homewood: Irwin, 1995
TEXTBOOKS:	Investment Analysis and Portfolio Management, 11e (with F. K. Reilly and S. J. Leeds), Cengage Learning, Mason, Ohio, 2019
	Interest Rate and Currency Swaps: A Tutorial (with D. J. Smith), Association for Investment Management and Research, Charlottesville, Virginia, 1995
MONOGRAPHS:	The Role of Risk Tolerance in the Asset Allocation Process: A New Perspective (with W. V. Harlow), Institute of Chartered Financial Analysts, Charlottesville, Virginia, 1990
OTHER PUBLICATIONS:	"The Swap-Driven Deal" (with D.J. Smith), Intermarket, March 1989
I UDLICATIONS.	"Mutual Fund Managers" (with L.T. Starks), Discovery, Fall 1994
	"Getting the Compensation Structure Right in the Mutual Fund Industry" (with L. T. Starks), <i>Strategy & Business</i> , Second Quarter 1997
	"The 'Good Banker/Bad Banker' Exercise" (with D.J. Smith), Derivatives Strategy, October 2000
CONFERENCE PROCEEDINGS:	"Derivative Strategies for Managing Portfolio Risk: An Overview,"in <i>Derivative Strategies for Managing Portfolio Risk</i> (K. Brown, ed.), Association for Investment Management and Research, 1994
	"Understanding the Risks in Over-the-Counter Derivative Structures," in <i>Derivative Strategies for Managing Portfolio Risk</i> (K. Brown, ed.), Association for Investment Management and Research, 1994. Also reprinted in <i>CFA Candidate Readings -</i> <i>Level III</i> , 1994 and 1995

CONFERENCE PROCEEDINGS: (cont.)	"Analyzing the Credit Risk of Swaps," in <i>Credit Analysis: The Key to Effective Valuation of Nontraditional Debt Securities</i> (J. Hammond, ed.), Association for Investment Management and Research, 1995
ABSTRACTS:	"The Cash Management Implications of a Hedged Dividend Capture Strategy" (with S. L. Lummer), <i>CFA Digest</i> , Summer 1985
	Risk Arbitrage and the Prediction of Successful Corporate Takeovers" (with M. V. Raymond), <i>CFA Digest</i> , Spring 1986
	"Does the Composition of the Market Portfolio Really Matter?" (with G. D. Brown), <i>CFA Digest</i> , Summer 1987
	"Dutch Auction Rate Preferred Stock" (with M. J. Alderson and S. L. Lummer), <i>CFA Digest</i> , Fall 1987
	"Market Overreaction: Magnitude and Intensity" (with W. V. Harlow), <i>CFA Digest</i> , Summer 1988
	"Risk Aversion, Uncertain Information, and Market Efficiency" (with W.V. Harlow and S. M. Tinic), <i>CFA Digest</i> , Summer 1989
	"Understanding and Assessing Financial Risk Tolerance: A Biological Perspective" (with W. V. Harlow), <i>CFA Digest</i> , Spring 1991
	"The Risk and Required Return of Common Stock Following Major Price Innovations" (with W. V. Harlow and S. M. Tinic), <i>CFA Digest</i> , Fall 1993
	"Default Risk and Innovations in the Design of Interest Rate Swaps" (with D.J. Smith), <i>CFA Digest</i> , Fall 1993
	"An Empirical Analysis of Interest Rate Swap Spreads" (with W.V. Harlow and D.J. Smith), <i>CFA Digest</i> , Summer 1994
	"Of Tournaments and Temptations: An Analysis of Managerial Incentives in the Mutual Fund Industry" (with W. V. Harlow and L. T. Starks), <i>Financial Management Collection</i> , Spring/Summer 1996; <i>CFA Digest</i> , Fall 1996; and <i>Contemporary Finance Digest</i> , Summer 1998
	"The Right Answer to the Wrong Question: Identifying Superior Active Portfolio Management" (with W. V. Harlow), <i>CFA Digest</i> , May 2007

PRESENTATIONS:	American Finance Association 1995, 2001
	Financial Management Association 1982,1984,1985,1986,1987,
	1988,1989,1990,1991,1992,1993,1994,1995,1996,1997,
	1998,2006
	National Bureau of Economic Research 2000,2011,2012
	Financial Management Association-Europe 2000,2001,2002,
	2005,2008,2011,2012,2015,2018
	Federal Reserve Bank of Atlanta Conference 2004
	European Finance Association 1988,1989,1994
	American Statistical Association 1982,1983,1984
	Western Finance Association 1983,1986,1988,2001,2007
	FTSE World Investment Forum 2012,2013,2015,2016,2017,2018
	Q Group 1997
	Cantor Fitzgerald ETF Conference 2017
	Endowment Asset Management Conference 2014
	Erasmus Asset Management Conference 2009
	Conference on Financial Economics and Accounting 1999,2000
	Ibbotson Associates Decision Conference 1997
	Southwestern Finance Association 1985,1990
	Eastern Finance Association 1986
	Southern Finance Association 1986,1990
	American Institute of Decision Sciences 1982,1983
	Texas Finance Festival 1988
	Association for Investment Management and Research 1991,1993 1994,1997

ACADEMIC SERVICE

EDITORIAL ASSIGNMENTS:	Associate Editor, Journal of Behavioral Finance (formerly Journal of Psychology and Financial Markets), 2000 - Present Associate Editor, Journal of Investment Management, 2002 - Present Associate Editor, International Journal of Portfolio Analysis & Management, 2011 - 2013 Associate Editor, Journal of Restructuring Finance, 2003 - 2006 Associate Editor, Financial Analysts Journal, 1993 – 2002 Associate Editor, CFA Digest, 1992 – 1998
ACADEMIC ASSOCIATION INVOLVEMENT:	 Board of Directors, Southwest Region, Financial Management Association, 1989 - 1991 Program Committee, Western Finance Association 2006,2015, 2016,2017,2018,2019 Program Track Chairperson, Financial Management Association 1996 Program Committee, Financial Management Association 1989,1990,1991,1992,1993,1994,1995,1996,1997,1998, 2000,2002,2003,2006

ACADEMIC ASSOCIATION	Program Committee, European Financial Management Association 1998,2000,2001,2003,2006,2009,2011,2013
INVOLVEMENT: (cont.)	Program Committee, Eastern Finance Association 1992
MEETING PARTICIPATION:	 Discussant, Southwestern Finance Association 1985 Discussant, Western Finance Association 1986 Discussant, Financial Management Association 1987,1988, 1989,2006 Discussant, European Financial Management Association 2000,2001,2002,2008,2011 Session Chairman, Western Finance Association 2006 Session Chairman, Financial Management Association 1990,1992,1995,1996,1997,1998 Session Chairman, European Financial Management Association 2000,2001,2002,2005
	Discussant, Financial Economics and Accounting Conference 1999
ARTICLES REVIEWED FOR:	Journal of Finance 1992,1995,1996,1998,1999,2000,2001, 2004,2005,2006,2007,2008,2009,2014,2015 Journal of Financial and Quantitative Analysis 1985,1986,1988, 1989,1992,1993,1997,1998,2000,2004,2005,2008,2011,2013, 2019 Review of Financial Studies 2007,2008,2009,2010,2011,2014
	Journal of Financial Economics 2008,2010,2019 Journal of Business 2003,2004 Journal of Banking and Finance 1993,1994,1995,1997,1998, 1999,2001,2002,2003,2004,2006 Financial Analysts Journal 1993,1994,1995,1996,1997,1998, 1999,2000,2001,2002,2005 Financial Management 1985,1986,1987,1988,1989,1990,1991, 1992,1994,1995,1996,1998,1999,2000
	Journal of Investment Management 2003,2004,2005,2006,2007, 2008,2009,2010,2011,2012,2013,2014,2015,2016,2017,2018, 2019,2020 American Economic Review 2015 Econometrica 2004 Review of Economics and Statistics 1982,1983,1985 Journal of Behavioral Finance 2000,2001,2002,2003,2004, 2005,2006,2008,2009,2010,2011,2015,2016 Journal of Investing 2005 Journal of Financial Markets 1998,1999 Journal of Financial Intermediation 1995 Journal of Financial Research 1984,1993,1996,1999,2001,2007 Journal of Financial Services Research 1992,1993,1994,1999 Financial Review 1986,1987,1992,1993 CFA Digest 1991,1992,1993,1994,1995,1996,1997,1998 Financial Practice and Education 1995 Quarterly Journal of Finance 2017

ARTICLES REVIEWED FOR: (cont.)	Quarterly Review of Business and Economics 1986 Journal of Business and Economic Statistics 1988 Journal of Midwest Finance Association 1989 Journal of Business Research 1984,1985,1989 Journal of Economics and Business 1990,1993 International Review of Economics and Finance 1992,1997
COURSES TAUGHT:	 Empirical Methods in Finance (Ph.D. Seminar, Core) Investment Theory and Practice (MBA/BBA, Elective) Portfolio Management & Security Analysis (MBA, Elective) Finance, Fiction, and Film (Plan II, Elective) Seminar in Security Research (MBA, Elective) Financial Risk Management (MBA, Elective) Managerial Economic Theory (MBA, Core) Advanced Portfolio Management (BBA, Elective) Introduction to Investment Theory (BBA, Elective) Intermediate Microeconomic Theory (BBA, Core) Fundamentals of Financial Management (BBA, Core) Introduction to Statistical Methods (BBA, Core) Introductory Economic Theory (BBA, Core) Introductory Economic Theory (BBA, Core) Introductory Economic Theory (BBA, Core) Portfolio Management (Management Development) Portfolio Management and Asset Allocation (Management Development) Portfolio Management (Management Development) Principles of Capital Markets (Management Development) Exposure Risk Management (Management Development) Fixed Income Securities and Markets (Management Development) Fixed Income Portfolio Strategies (Management Development) Fixed Income Portfolio Strategies (Management Development) Fixed Income Securities and Markets (Management Development) Company Analysis and Equity Valuation (Management Development) Company Analysis and Equity Valuation (Management Development) Economic Foundations of Security Analysis (Management Development) Development)
	<u>PROFESSIONAL SERVICE</u>
PROFESSIONAL POSITIONS HELD:	 Senior Partner, Fulcrum Financial Group, Austin, Texas, July 1990 - Present Co-founder and chief executive of a portfolio management, business valuation, and investment advisory firm. To date, this position has involved all aspects of the management of three dedicated fixed-income portfolios totaling

Co-founder and chief executive of a portfolio management, business valuation, and investment advisory firm. To date, this position has involved all aspects of the management of three dedicated fixed-income portfolios totaling approximately \$60.0 million, including an economic and strategic analysis of the clients' needs, implementation of recommended trading and management procedures, execution of the selected security acquisitions and sales, and a periodic review and reporting of the portfolios' investment performance. Also serve as an advisor to the Board of Trustees of Teacher Retirement System of Texas, one of the ten largest pension funds in the United States, University of Texas/Texas A&M Investment Management Company, and served as a member of the Investment Committee of LBJ Family Wealth Advisors.

PROFESSIONAL POSITIONS HELD: (cont.) Principal, Brown Consulting, Austin, Texas, July 1988 – Present Sole proprietor of a firm providing financial consulting and training services to multinational corporations and institutional investment firms. This position involves creating and delivering custom-tailored educational programs on topics ranging from portfolio management and investment strategies to financial risk management with swaps and other derivative products. Client list includes J.P. Morgan Chase Bank (New York, Los Angeles, San Francisco, Houston, Dallas), Merrill Lynch (New York), Chase Manhattan Bank (New York, London, Tokyo, Hong Kong, Singapore), Chemical Banking Corp. (New York, London, Singapore, Sao Paulo, Hong Kong, Mexico City), Chase Securities (Houston, Dallas), Chase Bank of Texas (Houston, Dallas, Austin, El Paso), USAA Investment Management (San Antonio), Manufacturers Hanover Trust Co. (New York, London, Hong Kong, Buenos Aires, Singapore), Shearson Lehman Hutton (New York), Lehman Brothers (New York), Union Bank of Switzerland (Zurich), Security Commission of Malaysia (Kuala Lumpur), BMO Nesbitt Burns (Toronto), Fidelity Investments/Econsult (Santiago, Lima, Austin), Commonfund Institute (New Haven), FTSE Russell (Sea Island, Napa, Newport Beach, Deer Valley), CFA Institute (Charlottesville, Los Angeles, Philadelphia, Chicago), Savant Investment Group (Oakland), XRoads Solutions Group (New York), Beacon Group (New York), AFORE Citibanamex (Mexico City), Motorola (Austin), Halliburton (Austin), and Financial Analysts Review (Raleigh).

President and Chief Executive Officer, The MBA Investment Fund, L.L.C., Austin, Texas, March 1994 – May 2004 & May 2011 – August 2017

Served as one of two founding officers of a privately funded investment company managed by a group of MBA students at University of Texas. Primary responsibility involves overseeing the day-to-day trading operations of the Fund, which consists of two equity portfolios containing approximately \$20 million in assets held by approximately 45 investors and one endowment fund containing over \$5 million in equity, fixed-income, commodity, and real estate assets. Additional responsibilities included serving as one of the Fund's academic advisor and developing the Financial Analyst Program (FAP) for undergraduate students.

Research Director, Research Foundation of the Institute of Chartered Financial Analysts, Charlottesville, VA, January 1995 – August 1999 Responsible for defining the research mission and selecting the specific projects that constitute the "final product" of the CFA Institute's Research Foundation. These monographs, commissioned from leading academic and professional researchers in the investment management community, are made available to the Association of Investment Management and Research's worldwide membership, including the Chartered Financial Analysts candidate program.

Senior Consultant, Corporate Professional Development Dept., Manufacturers Hanover Trust Co., New York, March 1987 -July 1988

Primary responsibility involved designing and implementing a curriculum of Capital Markets and Risk Management with Derivatives courses for training senior corporate account officers in the worldwide system of a money center commercial bank. The execution of this assignment required knowledge of and travel to capital markets located in New York, Los Angeles, London, Paris, Tokyo, Hong Kong and Singapore. Other duties included serving as an *ad hoc* consultant for the structuring and pricing of various credit-related and derivative-linked deals.

J. P. Morgan Chase Bank, New York, Dallas, Houston, San Antonio, **CONSULTING:** San Francisco, Los Angeles 2001,2002,2003,2004 Fidelity Investments/Econsult, Santiago Chile, Lima Peru 2005 2007,2008,2009,2010,2011,2012,2013,2015,2016 Merrill Lynch, New York 2000 Chase Manhattan Bank, New York, London, Tokyo, Hong Kong Singapore 1994,1995,1996,1997,1998,1999,2000 Chemical Banking Corp., New York, London, Singapore, Hong Kong, Sao Paulo, Mexico City 1992,1993,1994,1995 FTSE World Investment Forum, Sea Island, Napa, Newport Beach Deer Valley, Austin 2012,2013,2015,2016,2017,2018,2020 AFORE Citibanamex/Atlas CapGlo, Mexico City 2019,2020 Apollo Global Management, New York 2020 BMO Nesbitt Burns, Toronto 2001,2002 Union Bank of Switzerland, Zurich 1991,1992,1993 Manufacturers Hanover Trust Co., New York, London, Hong Kong, Buenos Aires, Los Angeles 1987,1988,1989,1990,1991 Lehman Brothers, New York 1994 Shearson Lehman Brothers, New York 1991,1992,1993 Shearson Lehman Hutton, New York 1989,1990 Teacher Retirement System of Texas 1999,2000,2001,2002,2003 2004,2005,2006,2007,2008,2009,2010,2011,2012,2013,2014, 2015,2016,2017,2018,2019,2020 University of Texas Investment Management Company 2004,2005 2006,2007,2008,2009,2010,2011,2012,2013,2014,2015,2016, 2017,2018,2019,2020 Savant Investment Group, Oakland 2018,2019,2020 LBJ Family Wealth Advisors 2004,2005,2006,2007,2008,2009 2010,2011,2012,2013,2014,2015 Commonfund, New Haven, Orlando 2010,2011,2012,2015,2016 USAA Investment Management, San Antonio 2000 Montgomery Insurance Ltd., Grand Cayman 1990, 1991, 1992, 1993 1994,1995,1996,1997,1998,1999,2000,2001,2002,2003,2004, 2005,2006,2007,2008,2009,2010,2011,2012,2013,2014,2015, 2016,2017,2018,2019 Security Commission of Malaysia, Kuala Lumpur 1997 Chase Bank of Texas, Houston, Dallas 1998, 1999, 2000 Texas Commerce Bank, Houston, Dallas, Austin, El Paso 1992,1993,1994,1995,1996,1997 The Beacon Group, New York 1996 Contran Corporation, Dallas 2000,2001,2002,2003,2004,2005, 2006,2007,2008,2009,2010,2011,2012,2013,2014 Financial Analysts' Review, Raleigh, North Carolina 1989,1990,1991,1992,1993 Motorola & Halliburton, Austin 1991,1992 Hilgers & Watkins P.C., Austin 1991 First City Bank, Houston 1985,1990,1991

Member, Candidate Curriculum Committee, CFA Institute, PROFESSIONAL 1992 - 1996 ASSOCIATION CFA Examination Grading Staff, CFA Institute, 1993 - 1996 **INVOLVEMENT:** Research Award Committee, Toronto Society of Financial Analysts 1993, 1994, 1995, 1996, 1998 Research Award Committee, Investment Analysts Society of Chicago 1995,1996,1997,1998,1999 HONORS AND AWARDS Graham & Dodd Award for "Understanding and Assessing RESEARCH Financial Risk Tolerance: A Biological Perspective" (with AWARDS: W. V. Harlow), Financial Analysts Journal 1990 Smith Breeden Distinguished Paper Award for "Of Tournaments and Temptations: An Analysis of Managerial Incentives in the Mutual Fund Industry" (with W. V. Harlow and L. T. Starks), Journal of Finance 1996 Best Paper Award for "Roll-Ups: Performance and Incentives for Industry Consolidating IPOs" (with A. Dittmar and H. Servaes), 2001 Financial Management Association European Conference, Paris France Best Paper Award for "Investment Style Volatility and Mutual Fund Performance" (with V. Harlow and H. Zhang), 2011 Financial Management Association European Conference, **Oporto Portugal** Harry Markowitz Award-Special Distinction for "Market Risk, Mortality Risk, and Sustainable Retirement Asset Allocation: A Downside Risk Perspective" (with W. V. Harlow), Journal of Investment Management 2016 CBA Foundation Award for Assistant Professors, University of TEACHING Texas 1987 **AWARDS:** CBA Foundation Award for Teaching Innovation, University of Texas 1989 Jack G. Taylor Award for Excellence in Teaching, University of Texas 1991 Graduate Business Council Outstanding Professor-MBA Program, University of Texas 1994 CBA Foundation Award for Teaching Innovation, University of Texas 1995 Jack G. Taylor Award for Excellence in Teaching, University of Texas 1998 Graduate Business Council MBA/MPA Honor Roll, University of Texas 2000

TEACHING AWARDS: (cont.)	Graduate Business Council MBA/MPA Honor Roll, University of Texas 2001
AWARDS. (Cont.)	Graduate Business Council MBA/MPA Honor Roll, University of
	Texas 2002 (Spring) Graduate Business Council MBA/MPA Honor Roll, University of
	Texas 2002 (Fall) El Paso Energy Foundation Faculty Award, University of Texas
	2002
	Graduate Business Council MBA/MPA Honor Roll, University of Texas 2003
	Graduate Business Council MBA/MPA Honor Roll, University of Texas 2004
	Alpha Kappa Psi Outstanding Professor-Undergraduate Program, University of Texas 2005
	Academy of Distinguished Teachers, University of Texas 2006
	Undergraduate Business Council Faculty Honor Roll, University of Texas 2006
	Excellence in Education Award, University of Texas 2007
	Regents' Outstanding Teaching Award, University of Texas System 2009
	Provost's Teaching Fellow, University of Texas, 2013
	Texas Blazers Faculty Appreciation Award, University of Texas 2014
TEACHING AWARD	Outstanding Professor-MBA Program, University of Texas 1984, 1985,1986,1987,1990,1991,1993,1994,1997,2002,2004
NOMINATIONS:	CBA Foundation Award for Assistant Professors, University of Texas 1986
	Excellence in Education Award, University of Texas 2001,2005
	Academy of Distinguished Teachers, University of Texas 2001, 2002,2003,2005
	Business Professor the Year, Economist Intelligence Unit 2012 University of Texas System Academy of Distinguished Teachers,
	2015,2017
PROFFESSORSHIPS & FELLOWSHIPS:	University Distinguished Teaching Professor, University of Texas, September 2006 - Present
	Provost's Teaching Fellowship, University of Texas, September 2013 – May 2016
	Provost's Teaching Senior Fellowship, University of Texas, June 2016 – May 2018
	Jack S. Josey Professorship in Energy Studies, University of Texas, September 2006 – August 2008

PROFFESSORSHIPS & FELLOWSHIPS: (cont.)	 Fayez Sarofim Fellowship in Finance, University of Texas, June 2004 – Present Allied Bancshares Centennial Fellowship in Finance, University of Texas, September 1989 – June 2004
RESEARCH & TEACHING GRANTS:	 David Ross Research Grant, Purdue University 1980 Krannert Dissertation Grant, Purdue University 1981 M.D. Anderson Foundation Grant, University of Texas 1985 University of Texas Research Institute, Summer Grant 1986 EDS Financial Trading and Technology Center Development Grant, University of Texas, 1996,1997 The Institute for Quantitative Research in Finance (Q-Group) 2007 CBA Foundation Summer Grant, University of Texas 1986,1988, 1989,1990,1992,1993,1994,1998,1999,2000,2001,2002, 2004,2005,2006,2007,2008,2009,2010,2011,2012
HONOR SOCIETIES:	Phi Beta Kappa 1977 Who's Who Among College Students 1977 Phi Kappa Phi 1976 Omicron Delta Epsilon 1976