J. CHRIS LEACH

Leeds School of Business University of Colorado Boulder 419 UCB Boulder, CO 80309-0419 2977 Dickens Street Erie, CO 80516 (303) 926-1686 chris.leach@colorado.edu (303) 492-5665

AREAS OF RESEARCH INTEREST:

Corporate and Venture Finance and Valuation, Structure of Securities Markets Real Options, Information Economics and Game Theory

EDUCATIONAL BACKGROUND:

PhD (Finance), Cornell University, 1988
MS, (Management – Economics), Cornell University, 1986
MBA, (Finance Concentration), University of New Mexico, 1985 Summa cum Laude
BS, (Computer Science), Oral Roberts University, 1981 Summa cum Laude

RESEARCH HONORS:

McGraw-Hill/Irwin Distinguished Paper Award, Southwestern Finance Association, "Simple Intuition Gone Awry: Combining Real and Financial Options in Tax Elections," 2013 Inaugural Recipient, Olof Stenhammar Visiting Professor of Financial Entrepreneurship, 2008, Stockholm Institute for Financial Research Research Grant, Co-Principal Investigator, NASDAQ Education Foundation, 2005-2008, "On the Market Impact of Repurchase Trading" Holder of the Hans Dalborg Visiting Professor (research fellowship), 2003-2004, Stockholm Institute for Financial Research Research Grant, Federal Reserve Bank of Cleveland, 2001-2002 Faculty Associate, Burridge Center for Security Analysis and Valuation, 1998-2001 Holder of the Donaldson, Lufkin and Jenrette Term Chair in Finance at the Wharton School of the University of Pennsylvania. Five-year term, 1989-1994 University of Pennsylvania Research Foundation Grant, 1990. Huntsman Center for Global Competition and Leadership Research Grant, 1990 Trefftzs Award for Outstanding Scholarly Achievement, 1988, Western Finance Association American Association of Individual Investors Doctoral Dissertation Award (jointly administered by the Financial Management Association), 1987

TEACHING HONORS:

MBA Teaching Excellence Award, 2016 (finalist for same in 2015) Faculty Teaching Excellence Program Coordinator, Leeds School of Business, 2014-15 Tony Tisone Award for Innovation in and Dedication to Teaching or Research, 2008 Melvin Roberts Banking Faculty Scholar, 2008 MBA Teaching Excellence Award, 2000 Graduate Professor of the Year, MBA Class of 1995, CU Boulder Finalist, Frascona Undergraduate Teaching Award, 2000, 1996, 1995, CU Boulder Andersen, Weinroth and Company Entrepreneurship Teaching Scholar, 1997 Co-recipient, Lehman Foundation Grants for "Seminar in Investment Banking," 1997-2007 Co-recipient, Coleman Foundation Grant for "Entrepreneurship Case Studies," 1997 Nominee, Anvil Award, Wharton School of the University of Pennsylvania, 1990

RECENT ONLINE TEACHING SEMINARS/COLLABORATIONS ATTENDED:

Examity Training (4/23/2020); World of Business Remote Teaching Reflection Session (4/28/2020); Making Videos to Deliver Course Content (6/5/2020); How to Engage Students with Canvas (6/11/2020); Zoom Engagement (6/16/2020); iClicker Cloud and Reef (7/13/2020); Advanced PlayPosit (7/15/2020); Recording at Home (7/17/2020); Intro to Camtasia (7/30/2020)

SERVICE HONORS:

Selected participant, University of Colorado Excellence in Leadership Program, 2012-13 William H. Baughn Faculty Service Award, October 2011 Certificate of Appreciation, Multicultural Business Student Association, 2005

ACADEMIC EMPLOYMENT:

- W.W. Reynolds Capital Markets Program Endowed Chair, 2019 current
- Founder and Tenured Program Sponsor, Hernando de Soto Capital Markets Program (at the Leeds School of Business, CU Boulder), 2015 current
- Robert H. and Beverly A. Deming Family Professor in Entrepreneurship and Professor of Finance, Leeds School of Business, University of Colorado Boulder, 2004 – 2019
- Courses taught at Leeds: World of Business (undergraduate); Social, Moral and Economic Foundations for Business (MBA); Entrepreneurial Finance (undergraduate, MBA, Executive MBA, Evening MBA), Applied Corporate Finance (undergraduate, MBA and Professional/Evening MBA), Financial Management (Executive MBA), Lehman Brothers Seminar in Investment Banking (undergraduate), Dynamic Asset Pricing (PhD), Financial Strategy (CEDIR, TLP Executive Programs), Entrepreneurship Retreat: New Business Feasibility Study (Executive MBA)
- Senior Associate Dean for Faculty and Research, Leeds School of Business, University of Colorado Boulder, July 2011 – August 2016; Direct reports: four academic divisions, four centers (Finance, Real Estate, Entrepreneurship and Social Responsibility) each with an external advisory board, all business doctoral programs, undergraduate curriculum revision design and implementation teams, faculty support services

Visiting professor, Indian School of Business, Mohali campus, January - February: 2013, 2014

- Interim Division Chair of Management and Entrepreneurship, July September 2012
- Division Chair of Finance, Leeds School of Business, University of Colorado, July 2010 July 2011, August 2000 August 2003; Interim Division Chair of Finance, January July 1998
- Olof Stenhammar Visiting Professor of Financial Entrepreneurship, 2008, Stockholm Institute for Financial Research
- FISBF Visiting Professor, Indian School of Business, Hyderabad, January-February, 2005. Courses taught: Entrepreneurial Finance (MBA-level)
- Hans Dalborg Visiting Professor, Stockholm Institute for Financial Research (located at the Stockholm School of Economics), 2003-2004

Associate Professor of Finance, Leeds School of Business, University of Colorado, 1994-2003

Interim Faculty Coordinator for the Entrepreneurship Center, January - June 1999

- Finance Division PhD Program Coordinator, 1994-1998
- Donaldson, Lufkin and Jenrette Term Assistant Professor of Finance, Wharton School of the University of Pennsylvania, 1989-1994; Courses taught: second year MBA case-oriented finance course, executive education
- Visiting Assistant Professor of Industrial Administration, Carnegie Mellon University, 1991-1992; Courses taught: second year MBA case-oriented finance and undergraduate introductory finance
- Assistant Professor of Finance, Wharton School of the University of Pennsylvania, 1988-1994
- Research Assistant, Johnson Graduate School of Management, Department of Finance, Cornell University, 1984-1988; Included three years of teaching assistance to Robert Jarrow for MBA options and futures course, involving development of options pricing software

REFEREED RESEARCH PUBLICATIONS:

- "Crisis and Non-Crisis Short Selling and Bank Enforcement Actions" (with Leslie Boni and Reilly White), forthcoming, *Journal of Banking and Finance*.
- "Why Expertise is Important for the Detection of Abnormal Performance: The Hot Hand Strikes Back" (with David Frame and Eric Hughson), *Journal of Accounting, Auditing and Finance,* Volume 31, Issue 4, 2016
- "Generational Asset Pricing: Rationalizing Equity Puzzles and Cyclicality," (with Alan Guoming Huang and Eric Hughson), *Review of Economic Dynamics,* Volume 22, 2016
- "On the Strategic Use of Debt and Capacity in Rapidly Expanding Markets" (with Nathalie Moyen and Jing Yang), *Journal of Corporate Finance*, Volume 23, Issue C, 2013
- "Debt and Capacity Commitments," (with Nathalie Moyen and Jing Yang), *Review of Finance*, Volume 17, Issue 4, 2013
- "On the Timing of Open Market Repurchases," (with Douglas Cook and Laurie Krigman), *The Review of Financial Studies*, Volume 17, 2004
- "Expandable Orders in the Brokered Interdealer Market for U.S. Treasury Securities," (with Leslie Boni), *Journal of Financial Markets*, Volume 7, 2004
- "An Analysis of SEC Guidelines for Executing Open Market Repurchases," (with Douglas Cook and Laurie Krigman), *Journal of Business*, Volume 76, 2003
- "Supply Contraction and Trading Protocol: An Examination of Recent Changes in the U.S. Treasury Market," (with Leslie Boni), *Journal of Money, Credit and Banking*, Volume 34, 2002
- "Risk Spillovers and Required Returns in Capital Budgeting," (with Sugato Bhattacharyya), *The Review of Financial Studies*, Volume 12, 1999
- "Price Experimentation and Security Market Structure," (with Ananth Madhavan), *The Review of Financial Studies*, Volume 6, 1993
- "Repetition, Reputation, and Raiding," The Review of Financial Studies, Volume 5, 1992

- "Intertemporal Price Discovery by Market Makers: Active versus Passive Learning," (with Ananth Madhavan), *Journal of Financial Intermediation*, Volume 2, 1992
- "The Relevance of Fiduciary Conflict-of-Interests in Control Versus Issue Proxy Contests," (with Robert Jarrow), *Journal of Financial and Quantitative Analysis*, Volume 26, 1991
- "Bribes, Power, and Managerial Control in Corporate Voting Games," (with Robert Jarrow), *Theory* and Decision, Volume 26, 1989

WORKING PAPERS:

- "Simple Intuition Gone Awry: Combining Real and Financial Options in Tax Elections" (with David C. Brown), 2017, recipient of McGraw-Hill/Irwin Distinguished Paper Award
- "Dark Pool Exclusivity Matters," (with David C. Brown and Leslie Boni), 2013, presented as the WFA annual meetings, June 2012; presented at the Frontiers of Finance 2012 conference (Warwick, UK), and at the Bank of Canada's 8th Annual Central Bank Workshop on Market Microstructure, Ottawa, 2012
- "Multiproduct Markets and Consumer Arbitrage," (with Fredric Sterbenz and Russel Wermers), 2011
- "Patterns of Coauthorship and Research Productivity in Finance Academia," (with Michael Loroz, Ronald Melicher, and Russell Wermers), 2007

"Good and Bad Variance: When are Real Options Really Options?" 1994

OTHER PUBLICATIONS and CASE STUDIES:

- Entrepreneurial Finance, 7th edition (with Ron Melicher), 2021 copyright, Cengage Learning South-Western
- Entrepreneurial Finance, 6th edition (with Ron Melicher), 2018 copyright, Cengage Learning South-Western
- Entrepreneurial Finance, 5th edition (with Ron Melicher), 2015 copyright, Cengage Learning South-Western
- "Exclusive Dark Pools" (with Leslie Boni and David C. Brown), *Review of Financial Regulation Studies*, Center for the Study of Financial Regulation, Winter 2013, Issue 10
- Entrepreneurial Finance, 4th edition (with Ron Melicher), 2012 copyright, Cengage Learning South-Western
- *Entrepreneurial Finance,* 3rd edition (with Ron Melicher), 2009 copyright, Cengage Learning South-Western
- Entrepreneurial Finance, 2nd edition (with Ron Melicher), 2006 copyright, Thomson South-Western
- Entrepreneurial Finance (with Ron Melicher), 2002 copyright, Thomson Southwestern
- "Spatial Technology, Inc," University of Colorado Center for Entrepreneurship, a case study funded by the Coleman Foundation

"Finance at the Crossroads: The Value of Valuation," CU Business Portfolio, Summer 1996

"Investment Banking Career Opportunities," with Ronald W. Melicher, Colorado Business Review, LXII No. 3, May 1997

DOCTORAL DISSERTATIONS CHAIRED:

- David C. Brown, "Investing in Security Price Informativeness: The Role of IPO Underpricing," 2014
- Alan Guoming Huang, "Essays On the Equity Premium Puzzle, Earnings Volatility, and Expected Stock Returns" (co-chair with Eric Hughson), 2005
- Michael Loroz, "Price Barriers in U.S. Equities," 2004
- Jing Yang, "Financial and Real Deterrence: A Theoretical and Empirical Investigation" (co-chair with Nathalie Moyen), 2003
- Leslie Boni, "Why are There Right-of-Refusal Options in the Brokered Interdealer Market For U.S. Treasury Securities?," 2000
- Laurie Krigman, "The Impact of Trading Protocol on Liquidity, Volatility, and Measures of Execution Costs: Detecting Illusory Volume," 1997

RESEARCH-RELATED ACTIVITIES:

- Invited Research Presentations: Helsinki School of Economics, Hanken School of Economics, Waterloo University, University of Colorado Law School, Claremont McKenna, Babson College, Indian School of Business, University of Amsterdam, Tilburg University, Stockholm School of Economics, Stockholm Institute for Financial Research, Indiana University, University of Arizona, SEC (Washington and Denver), University of Wyoming, University of Colorado, University of Iowa, University of Florida, Federal Reserve Cleveland, Case Western University, Carnegie Mellon, University of Maryland, University of British Columbia, University of North Carolina, University of Texas, Vanderbilt, Ohio State University, Wharton, New York University, Georgia Tech
- Paper Presentation, Southwestern Finance Association Annual Meetings, March 2013, "Simple Intuition Gone Awry: Combining Real and Financial Options in Tax Elections" given by coauthor David C. Brown
- Paper Presentation, Western Finance Association Annual Meetings, June 2012, "Dark Pool Exclusivity Matters" given by coauthor David C. Brown
- Paper Presentation, Financial Management Association Annual Meetings, October 2011, "Generational Asset Pricing: Rationalizing Equity Puzzles and Cyclicality" semifinalist for a best paper award, presentation given by coauthor Alan G. Huang
- Conference Organizer, Burridge Conference 2011 "Post-Crisis: Opportunities, Threats and Perspectives" <u>http://leeds.colorado.edu/event/217</u>
- Paper Presentation, Front Range Finance Conference, September 2011, "Complicated, Interacting Real Options: The Value of Waiting With Limited Reversibility" given by coauthor David C. Brown

- Paper Presentation, Western Finance Association Annual Meetings, June 2004, "On the Strategic Use of Debt and Capacity" given by coauthor Nathalie Moyen
- Discussant, Western Finance Association Annual Meetings, June 2003; Discussed "Optimal Toeholds in Takeover Contests" by Eitan Goldman and Jun Qian
- Session Chair, Western Finance Association Annual Meetings, Park City, 2002, "Empirical Banking"
- Conference Organizer, Burridge Conference, 2001, "Valuation and Portfolio Strategies"
- Paper Presentation, 2001 JMCB-Federal Reserve Bank of Cleveland Conference on Declining Treasury Debt, "Supply Contraction and Trading Protocol: An Examination of Recent Changes in the U.S. Treasury Market" with Leslie Boni), October 2001
- Paper Presentation and Discussant, 2000 NASDAQ Notre Dame Microstructure Conference, "Depth Discovery in a Market with Expandable Limit Orders" given by co-author; Discussed "Can Strategic Market Making Explain Asset Pricing?" by Massimo Massa and Andrei Simonov
- Discussant, Western Finance Association Meetings, June 2000, "Cash Flow Shocks, Investment, and Financial Constraint: Evidence from a Natural Experiment," by Jarrad Harford and G. David Haushalter
- Paper Presentation, Western Finance Association Meetings, June 1999, "On the Timing of Open Market Repurchases"
- Paper Presentation, Financial Management Association meetings, Chicago, October 1998, "The Impact of Publishing with Dissertation Advisors on Research Careers in Finance" given by co-author Ron Melicher
- Paper Presentation, American Finance Association meetings, Chicago, January 1998, "Safe Harbor or Smoke Screen?: Compliance and Disclosure Under SEC Rule 10b-18"
- Paper Presentation, Financial Management Association meetings, Honolulu, October 1997, "Research Productivity in Finance: Empirical Evidence on the Value of Mentoring Versus Peer-Collaboration," given by co-author
- Paper Presentation, Securities and Exchange Commission, Washington, D.C., Topic: Valuation for Innovative Firms
- Paper Presentation, Program Committee Member, Session Chair and Discussant, Financial Management Association Annual Meetings, New Orleans, 1996; Presented "Corporate Repurchase Programs: Execution Strategy and the Competing Market Maker Effect"; Discussed "Disclosure Rules, The Political Costs of Accounting Policy, and Executive Compensation" by Cinthia Easterwood, Anju Seth and John Easterwood; Session Chair for "Information Acquisition and Use in Markets"
- Discussant, Conference on Derivatives and Intermediation, Federal Reserve Bank of Cleveland, November, 1995; Discussed "Financial Innovation Under Uncertainty" by Nikunj Kapadia and Manju Puri
- Paper Presentation, Securities and Exchange Commission, Denver Office, Spring 1995; Topic: Derivatives

- Paper Presentation and Discussant, European Finance Association Meetings; Copenhagen, 1993; Presented "Product and Financial Market Interactions: Risk Spillovers and the Valuation of Rents"; Discussed "An Empirical Investigation of Observed Smile Patterns (in option implied volatilities)," by Ronald Heynan
- Discussant, Western Finance Association Meetings; San Francisco, 1992, "Trading on the Forecast of Noise vs. Trading on Fundamentals," by Zhiming Zhang
- Discussant, Econometric Society Meetings; New Orleans, 1992, "The Role of Information Intermediaries in Decentralized Markets" by Daniel C. Quan
- Paper Presentation and Discussant, European Finance Association Meetings; Rotterdam, Netherlands, August 1991; Presented "Good and Bad Variance in Valuing Production and Technological Investment"; Discussed "Optimal Contracting and the Design of Securities" by S. Abraham Ravid and Matthew Spiegel
- Discussant, Western Finance Association Meetings; Jackson, Wyoming, June 1991; Discussed "Beliefs About Beliefs: The Effect on Equilibrium of Non-Payoff-Relevant Uncertainty" by Alan Kraus and Max Smith
- Paper Presentation and Discussant, American Finance Association Meetings; Atlanta, December 1989; Presented "Price Experimentation and Market Structure"; Discussed "The Optimal Design of a Team," by John Minahan and John Parsons
- Paper Presentation and Discussant, European Finance Association Meetings; Stockholm, August 1989; Presented "Price Experimentation and Market Structure"; Discussed "Initial Margin Requirements and Stock Returns Volatility: Another Look," by Paul Kupiec
- Paper Presentation, Western Finance Association Meetings, Seattle, June 1989, "Intertemporal Price Discovery by Market Makers: Active versus Passive Learning"
- Paper Presentation, Western Finance Association Meetings, Napa, California, June 1988, "Repetition, Reputation and Raiding"; awarded Trefftzs Award
- Paper Presentation, TIMS-ORSA National Meetings, Washington, D.C., April 1988, "Bribes, Power, and Managerial Control in Corporate Voting Games"

INTERNAL SERVICE LEADERSHIP EXPERIENCE:

Founder and Tenured Program Sponsor, Hernando de Soto Capital Markets Program, Senior Associate Dean for Faculty and Research including leading a successful comprehensive undergraduate curriculum revision, Chair of Full Professors; Chair of Bylaws Revision Committee; Finance Division Chair (three terms); Interim Division Chair of Management and Entrepreneurship, Coordinator, Finance PhD Program; Chair, Masters Curriculum and Policy Committee; Chair and member, CU Real Estate Board of Governors; Governor, Burridge Center for Security Analysis and Valuation; Member, Deming Center for Entrepreneurship Executive Committee; Elected At-Large Faculty Representative, Leeds Executive Committee; Member, Leeds School Personnel Advisory Committee (college-level promotion and tenure); Member, Research Standards Committee; Member, Budget Task Force Committee; Leeds School Representative, university due diligence team to investigate international student recruiting joint venture (INTO); Leeds school representative on CU Faculty Affairs committee addressing the creation of a non-tenure-track "Teaching Professor" rank; Member of CU Boulder Salary Equity Grievance Committee, Member of Leeds Dean Search Committee (multiple terms), Member, Undergraduate Initiatives Taskforce

SUCCESSFUL EXTERNAL FUNDRAISING LEADERSHIP:

Hernando de Soto Capital Markets Program (endowed and operating), Undergraduate Curriculum Revision (operating), Undergraduate Honors Program (operating), Business Minor (operating), Wall Street Trek and NYC Alumni Events (operating), Finance Elite Curriculum Fund (operating), CU Real Estate Center (endowed and operating), Deming Center for Entrepreneurship (endowed and operating), Burridge Center for Finance (endowed and operating), Lehman Brothers Investment Banking Seminar (operating) and various faculty lines (endowed and operating)

PROFESSIONAL ASSOCIATIONS and ACTIVITIES:

Western Finance Association Program Committee Member, 1999-current

- European Finance Association Program Committee Member, 2013-current
- Financial Management Association Meetings, Program Committee Member 2005; Program Committee Member and Session Organizer, 2004; Track Chair and Member of Corporate Finance Award Committee, 2003

Presenter, Monetary Policy and Bank Management Program, 1999-2000, Economics Institute

Distinguished Judge, Ernst and Young Entrepreneur of the Year 1998, Rocky Mountain Region

- Faculty Sponsor, Venture Capital Investment Competition, 2000 (Finalist), 2001, 2005 (Finalist), 2006 (Finalist, Entrepreneurs' Choice Award), 2007 (Finalist, Entrepreneurs Choice Award), 2008, 2009 (Finalist), 2010 (Finalist, Entrepreneurs' Choice Award), 2011 (Finalist), 2012 (Champion); 2013 (Finalist), 2014 (Finalist), see http://www.vcic.unc.edu/
- Faculty Advisor, Deming Center Venture Fund, 2009 current, http://cudcvf.org/

Faculty Sponsor, Student Participation in "Venture Capital in the Rockies Conference" 1996-2001

- Lecturer, Bioscience Business 101, "Now We've Created It Business Valuation," sponsored by UCHSC Technology Transfer Office and Colorado Venture Centers, April 14, 1998
- Current or Previous Associations: American Finance Association, Financial Management Association, Western Finance Association, Financial Executives Institute, Society for Financial Studies, Econometric Society, American Economic Association, Beta Gamma Sigma, Phi Kappa Phi
- Referee: Journal of Finance; The Review of Financial Studies; Review of Finance, Journal of Business; Journal of Financial and Quantitative Analysis; Journal of Financial Intermediation; Journal of Money, Credit and Banking; Rand Journal of Economics; The Journal of Economic Dynamics and Control; Journal of Economics and Management Strategy; International Journal of Industrial Organization; Quantitative Finance; Journal of Financial Markets; European Finance Review; Financial Review; Journal of Financial Research; Mathematical Finance; Journal of Banking and Finance; Journal of Corporate Finance; Journal of Real Estate Finance and Economics, Journal of Energy Finance and Development, Finance Research Letters

Reviewer: Irwin McGraw-Hill, Oxford University Press

PROFESSIONAL EXPERIENCE:

Executive Education and Consulting: Dassault Systemes Spatial (strategic planning consulting), Hypo Real Estate Capital Corporation (litigation consulting) AT&T Broadband (litigation consulting), Qualcomm (litigation consulting), CEDIR Program (executive education), GE Access New Frontiers Program (executive education), Proprietary Capital LLC (startup consulting), Banking and Financial Markets Program (banking and derivatives executive education funded by USAID, the Economics Institute), ITESM Banking Program II (banking and derivatives executive education, the Economics Institute), ICG Corporation (executive education), Bankers Trust Associate Training Program (derivatives executive education), Wharton (executive education), Pennsylvania Ballet (member, Wharton financial consulting task force), John Hancock Mutual Life Insurance Company (information systems consulting)

Chairman of the Board and Founder, ITM Corporation, 1993-1998. Albuquerque, New Mexico

Hancock/Dikewood Services, wholly-owned subsidiary of John Hancock Mutual Life Insurance Company, January 1981 - June 1984; Titles held - Programmer/Analyst, Senior Programmer Analyst, Manager, EDP Planning and Special Projects; Duties included mainframe and microcomputer software development (applications and data communications), project costing and valuation, proposal preparation, special project consulting, computerized economic modeling and long-range planning

PERSONAL INFORMATION:

Date of Birth: 1-6-1960 Citizenship: USA Male Married 40 years, two adult children