

CONTENTS

Research Workshops:
A list of workshops conducted during 2006-2007.



Current Activities of Center Faculty: A listing of research endeavors by the faculty.

Faculty Research
Papers: Current
working papers since
January 2006

FINANCIAL MARKETS RESEARCH CENTER • 2007

Conference on

Developments in Financial Markets

inancial markets are undergoing dramatic change as they consolidate, introduce new trading technologies, and develop new products. How will the competitive landscape be affected? What are the regulatory implications of these developments? Are there clearing and settlement risks in the OTC derivatives markets as the volume of activity grows? These and other



Reuben Jeffery giving keynote address.

issues were discussed at the 20th annual conference of the Financial Markets Research Center held at Vanderbilt University on April 12 and 13, 2007.

Hans Stoll, Director of the Center, welcomed the participants and introduced the first speaker, Reuben Jeffery, Chairman of the Commodity Futures Trading Commission. Chairman Jeffery spoke on the unparalleled growth and change in the industry regulated by the CFTC. Trading on futures exchanges is now primarily electronic, the ownership of exchanges has changed dramatically requiring a change in governance, new product applications to the CFTC are at an all-time high, futures traders are increasingly institutional investors, and futures markets are global. Globalization, in particular, poses regulatory issues that require cooperation and coordination with foreign counterparts. Chairman Jeffery emphasized the role of the CFTC in fostering competition and innovation so that futures markets can most effectively fulfill their price discovery and risk management functions.

After a short question and answer period, Professor Stoll introduced the panel on the topic, "The Changing Landscape in Futures and Options Markets." Ed Joyce, President and Chief Operating Officer of the Chicago Board Options Exchange, commented on several developments at the CBOE - the benefits of the demutualization currently under way, the success of the CBOE's hybrid market that mixes screen based and open outcry trading, the effect of the penny increment pilot for 13 options, the growth of volatility options, the introduction of the CBOE Stock Exchange which expects to attract stock volume related to option trading, and the advent of portfolio margining for customers. Andreas Preuss, Chief Executive Officer of the Eurex, spoke on developments at the highly successful European exchange. He noted the Eurex's three-pronged strategy - global expansion of access to Eurex, diversification of the product range, and fast, reliable electronic trading technology. He noted that the Eurex would be reducing the message delay from 29 milliseconds to 9 milliseconds (which raised the question, "how long is a millisecond?"). Speaking next was Jeffrey Sprecher, Chief Executive Officer of the IntercontinentalExchange (ICE), Mr. Sprecher commented on the rapid transformation of the ICE since its founding in 2000. In that time ICE acquired the International Petroleum Exchange in London and the New York Board of Trade. It relies on electronic trading technology to service its exchange and OTC trading business. He did not comment on the ICE's current offer to merge with the Chicago Board of Trade, which competes with an offer by the CME. He noted that the ICE is a uniquely global exchange and that cooperation between US regulators (the CFTC) and British regulators (the FSA) in overseeing the ICE is good. The final speaker in this panel, John Damgard, President of the Futures Industry Association, commented on trends in the futures industry, such as the dominance of electronic trading, the globalization of markets, and the need at the regulatory agencies for finance skill.

After a coffee break, the next panel, chaired by Rick Kilcollin, co-founder of Sanborn Kilcollin and former CEO of the Chicago Mercantile Exchange, dealt with new product innovation. The first speaker was David Downey, CEO of OneChicago, the entity established to trade single stock futures. Although not new (they were approved in 2000), single stock futures are still behaving like a new product with relatively low volume. Downey noted the benefits of single stock futures both as a substitute for long position in the underlying stock and as a less costly way to establish a short position. He ascribed their lack of success to the failure of hedge funds and other institutional

FROM THE DIRECTOR

₹he 20th annual conference of the Financial Markets Research



Hans R. Stoll

Center (FMRC) brought together an unprecedented number of key players in the financial markets at a time when these markets are changing dramatically. The

proceedings of the conference are summarized elsewhere in this newsletter. Suffice it to say, the financial markets have changed a great deal in the last 20 years and many of these changes are influenced by, and reflected in, the conferences and research carried out by the FMRC. The Center continues in its mission to support research in financial markets by its conferences and research workshops, by funding faculty research projects, and by maintaining data bases.

We thank our Center members for their financial support. Over 40 organizations (listed elsewhere in this newsletter) have supported the Center in the last 20 years. Current Center members number 12. We welcome first-time members Ramsey Quantitative Systems Inc, The Eurex,

and Whitecap Trading, and we welcome returning members, the NYSE Euronext and the CME Group.

Center faculty currently number 20. Joining the Owen faculty and the Center this year are Jacob Sagi as associate professor of finance, Alexei Ovtchinnikov as assistant professor of finance and Nicole Jenkins as associate professor of accounting. Jacob previously was assistant professor at UC Berkeley. His research focuses on asset pricing and decision theory. He received his PhD from the University of British Columbia. Alexei joins us from Virginia Tech where he has been on the faculty for 3 years after receiving his PhD from Purdue. His research focuses primarily on corporate finance. Nicole joins us from Washington University where she has been on the accounting faculty. She spent four years with PricewaterhouseCoopers prior to receiving her PhD in Accounting from the University of Iowa. She specializes in financial restatements, stock repurchase analysis, and asset market pricing. Leaving the Center are Charu Raheja, assistant professor of finance, who will join the faculty of Wake Forest University, and Mara Faccio, associate professor of finance, who will join the faculty of Purdue University.

GOALS OF THE CENTER

The Financial Markets Research Center at Vanderbilt University fosters scholarly research in financial markets, financial instruments, and financial institutions. Research of the Center examines participants in financial markets, such as brokers, exchanges, and financial intermediaries, businesses needing financing, and appropriate regulatory policy. The Center:

- 1 Provides a mechanism for interaction among industry practitioners, academic researchers, and regulators.
- 2 Identifies critical research issues in financial markets.
- 3 Supports research by faculty members and Ph.D. students at Vanderbilt.
- 4 Maintains data bases.
- 5 Funds research projects.
- 6 Disseminates research about financial markets. ■



VANDERBILT UNIVERSITY OWEN GRADUATE SCHOOL OF MANAGEMENT

Financial Markets Research Center

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Hans R. Stoll, Director Robert E. Whaley, Co-Director J. Dewey Daane, Senior Advisor Paul Chaney, Data Coordinator

Christoph Schenzler, Research Associate and Data Base Manager Pat Scott, Administrator

FUNDING

The Center, founded in 1987, is funded by its members and by outside research grants. Funds are used to maintain financial markets data bases and to support the Center's research projects. Members sit on the advisory board, participate in all activities of the Center, receive research reports, and give advice on the activities and research direction of the Center. Research grants for specific projects are sought from various research sponsors including foundations, government agencies, trade organizations, and corporations.

Members over the past 20 years include the following:

Aeltus Investment Management, Inc. Archipelago, LLC America's Community Bankers Bank Administration Institute Bankers Trust Company

- * Bear, Stearns & Company, Inc. Caterpillar Financial Services Corp.
- * Chicago Board Options Exchange Chicago Mercantile Exchange
- **CME Group Inc. CTS Strategic Investments
- * Eclipse Capital Management, Inc. Equitable Securities Corporation
- **Eurex Frankfurt AG
- * Hirtle, Callaghan & Co. The Hull Group LLC
- ** Interactive Brokers Group
- * International Securities Exchange, Inc.

J. C. Bradford & Company Lavery Consulting Group, LLC Matlock Capital LLC

Merrill Lynch & Company, Inc.

Morgan Stanley Group, Inc.

The Nasdaq Stock Market Educational Foundation, Inc. The National Association of Securities Dealers, Inc.

Nelson Capital Corp.

New York Mercantile Exchange

The New York Stock Exchange, Inc.

**NYSE Euronext Pacific Exchange

**Ramsey Quantitative Systems, Inc.

Refco Group, Ltd. Ronin Capital, LLC

Shayne & Co. LLC

State Street Global Advisors

Susquehanna International Group, LLP

Thales Fund Management, LLC Timber Hill Incorporated **Tudor Investment Corporation

Van Hedge Fund Advisors International, Inc.

- * White Cap Trading LLC Willis Corroon
- * indicates current member
- ** indicates current lead member

Developments in Financial Markets (continued)

investors to switch away from their reliance on their prime broker. Downey argued that long or short positions established via a prime broker were more costly than if established with single stock futures. Speaking next was **Brad Hogatt**, Chief Investment Officer of GuaranteedWeather and a former academic meteorologist. Hogatt described the growth of weather derivatives, the major participants, and the primary contract settlement parameter (temperature). He noted that weather is correlated with a variety of economic activities, such as agriculture, tourism,

Panelists Jeff Sprecher, Andreas Preuss, John Damgard and Ed Joyce prior to their session.

and power use, and hence weather derivatives can serve as a useful hedging vehicle. He also commented on the analytic tools available to help predict weather at least in the short run (and hence make profits). The final speaker in this panel was John Labuszewski, Managing Director for Research and Product Development at the Chicago Mercantile Exchange. He described the new product development process and the factors that have in recent years spurred product development. These include the demutualization of exchanges and their resultant profit orientation, the less restrictive new product approval process at the CFTC, and the advent of electronic trading which lowers the cost of trying out a new product.

After a break for lunch, the conference resumed with a panel, "Changes in Equities Markets," chaired by Jim Cochrane, former Senior Vice President for Research and Planning at the NYSE. The first speaker, Reena Aggarwal, Professor at Georgetown University, spoke on "Changes in equities markets: Trends in ownership, value, and governance." She described the demutualization process and the healthy stock market performance of exchanges going public, and she noted the new regulatory

and governance issues that arise when exchanges are for-profit entities. Paul Bennett, Chief Economist of the newly formed NYSE Euronext, spoke on several developments. He noted that the NYSE, Euronext, and Arca would operate as separate subsidiaries at least for the time being. The NYSE hybrid market is increasingly electronic with a large fraction of the trades completed automatically and only some of the larger orders going to the floor market. Speaking next was Steve Swanson, CEO of Automated Trading Desk, an electronic trading firm

currently responsible for about 6% of aggregate trading volume. The firm specializes in high speed, algorithmic trading and order routing. Swanson, who had feared snafus in the implementation of Rule NMS, the SEC mandated rules on trade-throughs, noted that NMS appeared to be working satisfactorily. Frank

Hatheway, Chief Economist of Nasdaq, described the newly revamped PORTAL trading system

which, under SEC Rule 144A, facilitates secondary market trading in private placed securities among qualified institutional buyers (QIBs). Erik Sirri, Director of Market Regulation at the SEC, commented on various regulatory issues. He noted that a credit derivative swap, although not a security directly subject to SEC oversight, could be subject to insider trading regulations if the swap were based on the underlying security. Trading of foreign securities unregistered in the U.S. is an issue that should be dealt with. Easier screen based access to

such securities for institutional investors and brokers should be considered in view of the fact that trading of foreign securities currently occurs anyway. On the question of shareholder voting and short selling, he noted there were problems of over-voting, under-voting, empty voting, and broker voting, all of which were compounded by a lack of good record keeping.

Thursday's final session, "Clearing and Settlement of Derivatives Contracts," was chaired by **Richard Lindsey**, President of the Callcott Group and formerly President of Bear Stearns Securities Corp. Lindsey noted that the explosive growth of OTC derivatives had caused some back office problems that were in process of being corrected. The first speaker Michael Cahill, President of the Options Clearing Corporation, described current developments at the OCC, which clears exchange traded derivatives. Peter Axilrod, Managing Director at the Depositary Trust and Clearing Corporation (DTCC), next described the development of standardized clearing arrangements for OTC credit derivatives. The Trade Information Warehouse of the DTCC maintains the basic record of swap contracts, processes events and messages, and calculates payments due from one side to the other. Unlike clearing houses for exchange traded derivatives, swap contracts are not guaranteed by the DTCC. Pat Parkinson, Deputy Director of the Division of Research and Statistics at the Federal Reserve Board, reported on the latest study of OTC derivatives clearing put out in March 2007 by the Committee on

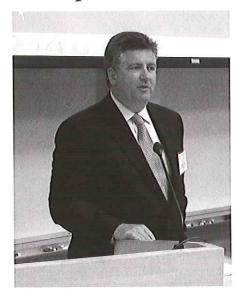
Pat Parkinson reviewing the latest developments in OTC derivatives clearing.

Payments and Settlement Systems of the Bank for International Settlements. He noted that considerable progress had been made to correct the backlog in documentation of credit derivatives and to improve OTC clearing arrangements in general. Further improvement is needed to correct confirmation backlogs in derivatives other than credit

derivatives and to deal with the potential market disruptions when credit derivatives close out.

The first session on Friday morning, chaired by Peter Layton, newly appointed Chairman of the Boston Stock Exchange, examined the topic of short selling. Stewart Mayhew, Assistant Chief Economist at the SEC, summarized the results of an SEC study (carried out with Amy Edwards, Tim McCormick and Allan Zebedee) of a sample of 1000 stocks exempted from short sale restrictions. The removal of short selling

Developments in Financial Markets (continued)



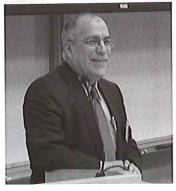
Mike Cahill discussing clearing operations for options.

restrictions increased the volume of short selling (not the short interest) but had no effect on stock

prices or on volatility. Mayhew noted that short sale rules were not very restrictive; hence their removal would not be expected to have a large effect. The second paper in this panel, presented by Ekkehart Boehmer (and co-authored with Charles Jones and Xiaoyan Zhang), was entitled "Which Shorts Are Informed." Based on proprietary NYSE trading data for the period 2000 to 2004 which identified short sales, the authors found that short selling predicts subsequent returns. Large institutional short sales tended to predict larger price declines than other short sales.

The last session of the conference, chaired by **Michael Bickford**, Senior Vice President of the American Stock Exchange, dealt with options trading around ex-dividend days. The paper, "Failure to Exercise Call Options: An Anomaly and a Trading Game," was presented by Bob Whaley, Professor of Finance at the Owen School and Co-director of the FMRC, (and was co-authored with Veronika Pool and Hans Stoll). Deep in the money call options should be exercised before the underlying stock goes exdividend to avoid a drop in the value of the option. Failure to exercise such long call positions hurts the call buyer and benefits the call seller who is not assigned. Whaley showed that call buyers lost in excess of \$280 million (net of transaction costs) from failure to exercise in the years 1996 - 2005. The trading game, played primarily by market makers that have low transaction costs, involves taking large short call positions (hedged by identical long call positions) to increase the chance of not being assigned and hence profiting from the longs' failure to exercise. Option volume on the day before ex-dividend days is extraordinarily large. Eric Noll, Global

> Head of Strategic Relationships at Susquehanna International Group, discussed the paper. He commented that transaction costs, taxes, and monitoring costs could explain much of the failure to exercise calls, and he felt it to be a legitimate function of low cost trading firms to profit from this failure.

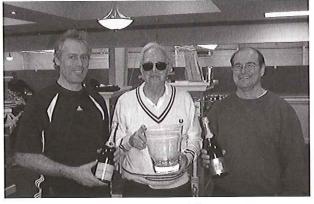


Erik Sirri commenting on global regulatory issues.

Dewey Daane Invitational Tennis Tournament

The tournament took place in the usual round-robin doubles format. After two and one-half hours of battle, interrupted by frequent breaks, a clear winner emerged – Ken Sutrick.

Coming in second was Craig Lewis. Dewey Daane congratulated the winners and awarded the contents of the Daane cup.



Dewey Daane awarding the contents of the Daane Cup to runner-up, Craig Lewis, and winner, Ken Sutrick.

Finance Student Activities

Owen School Finance Association

The goal of the Finance Association is to enhance Owen students' knowledge of current topics in finance as well as provide a link to the financial community. The Owen Finance Association hosts speakers from the finance industry and presents workshops on interviews and resumes. The Association also coordinates recruiting and informational trips to New York's Wall Street. The Association continues to provide career counseling and internship advice for Owen's first year class. Currently, total membership exceeds one hundred students. For more information, see http://www.owen.vanderbilt.edu/studentclubs/academic/finance.

Max Adler Student Investment Fund

The primary purpose of the Max Adler Student Investment Club is the active management of the fund created by the generous gift of Mrs. Mimi Adler in memory of her late husband, the founder of Spencer Gifts. The Fund invests in several sectors including energy, technology, healthcare, retail, and financial services and is one of the largest student-run investment funds in the country. Financial performance is measured against a benchmark of comparable risk and asset size. The Fund constantly strives to balance its primary goals of maintaining solid returns on investment and creating a learning environment for students of all experience levels. For more information, see http://www.owen.vanderbilt.edu/studentclubs /academic/maxadler.

Research Workshops

orkshops conducted at the Owen School throughout the year provide a forum for the exchange and testing of new ideas in areas of current research.

During 2006-2007 the following researchers presented work on finance topics:

8/4/06 – Ronald W. Masulis, Vanderbilt University: "Does Venture Capital Reputation Affect Subsequent IPO Performance?"

8/11/06 – Nicolas P.B. Bollen, *Vanderbilt University*. "Hedge Fund Risk Dynamics: Implications for Performance Appraisal"

8/18/06 - Robert E. Whaley, *Vanderbilt University*. "Cash Dividends and the Failure to Exercise Call Options"

8/24/06 – Cong Wang, Vanderbilt University. "Agency Problems at Dual-Class Companies: Acquirer Returns, CEO Compensation, and Market Value of Cash" 9/1/06 – Alexander W. Butler, University of Texas at Dallas. "Stock Market

Liquidity and the Long-Run Stock Performance of Debt Issuers"

9/8/06 – Alon Bray, Duke University: "The Limits of the Limits of Arbitrage" 9/15/06 – David Parsley, Vanderbilt University: "Understanding Real Exchange

Rate Movements with Trade in Intermediate Products"

9/22/06 – David L. Ikenberry, University of Illinois at Urbana-Champaign. "Share Repurchases as a Tool to Mislead Investors: Evidence from Earnings Quality and Stock Performance"

9/29/06 – Patrick Bajari, *University of Minnesota & NBER*. "Identification and Estimation of a Discrete Game of Complete Information"

10/6/06 – Liuren Wu, Baruch College: "Variance Risk Dynamics, Variance Risk Premia, and Optimal Variance Swap Investments"

10/17/06 – Ronnie Sadka, University of Washington: "Pricing the Commonality across Alternative Measures of Liquidity"

10/20/06 – Richard H. Willis, Vanderbilt University. "Determinants of Superior Stock Picking Ability"

10/27/06 – Francois Derrien, *University of Toronto*: "Currying Favor to Win IPO Mandates"

11/1/06 – Ronald W. Masulis, *Vanderbilt University*: "Seasoned Equity Offerings: Quality of Accounting Information and Expected Flotation Costs"

11/3/06 – Alexei V. Ovtchinnikov, Virginia Tech. "Corporate Political Contributions and Stock Returns"

11/7/06 – Kewei Hou, Ohio State University: "What Factors Drive Global Stock Returns?"

11/10/06 – Jacob Sagi, University of California, Berkeley. "A Liquidity-Based Theory of Closed-End Funds"

11/13/06 – Dechun Wang, *University of Nebnuska*: "The Joint Effect of Investor Protection and Big 4 Audits on Earnings Quality around the World"

11/17/06 – John J. McConnell, *Purdue University*: "Equity Returns at the Turn of the Month"

12/1/06 – Daniel W. Collins, *University of Ioure*. "The Effect of Internal Control Deficiencies and Their Remediation on Accrual Quality"

12/4/06 – Hui Chen, Vanderbilt University: "Regulatory Commitment to Auditing and Pay: Performance Sensitivity"

12/13/06 - Nicole Thorne Jenkins, Washington University: "The Market Pricing of Interest Rate Swaps"

12/15/06 – Cong Wang, Vanderbilt University: "Are Foreign Directors Effective Monitors?"

1/12/07 - Amit Gandhi, *University of Chicago*. "Rational Expectations at the Racetrack: Testing Expected Utility Using Prediction Market Prices"

1/19/07 – Scott Joslin, Stanford University: "Pricing and Hedging Volatility Risk in Fixed Income Markets"

1/26/07 – Phil Davies, Ohio State University: "Reviving the CAPM: A Bayesian Approach for Testing Asset Pricing Models"

2/2/07 – Paul Chaney, Vanderbilt University. "The Quality of Accounting Information in Politically Connected Firms"

2/13/07 – Alex Edmans, MIT: "How Should Acquirers Select Advisors? Persistence in Investment Bank Performance"

2/16/07 – Kenneth R. Ahern, UCLA: "Markets Talk, Firms Listen: The Dynamics of Repeat Acquirers"

2/16/07 – Jinghua Yan, University of Pennsylvania: "Merger Waves: Theory and Evidence"

2/23/07 – Luke Froeb, *Vanderbilt University*: "Mergers among Firms that Compete by Setting Both Price and Promotion"

3/9/07 – Michael Lemmon, *University of Utah*. "The Response of Corporate Financing and Investment to Changes in the Supply of Credit: A Natural Experiment" 3/16/07 – Charu G. Raheja, *Vanderbilt University*. "CEOs vs. Directors: Who Calls the Shots When Firms Underperform?"

3/23/07 - Ronald W. Masulis, *Vanderbilt University*: "Venture Capital Conflicts of Interest: Evidence from Acquisitions of Venture Backed Targets"

4/6/07 – F. Douglas Foster, Australian National University. "Linking Limit Order Books: Managing Free Options on Options"

4/20/07 – Mikhael Shor, Vanderbilt University. "Industry Concentration in Common Value Auctions: Theory and Evidence"

4/27/07 – Nicole Branger, Westfälische Wilhelms-Universität Münster: "Pricing Two Trees When Trees and Investors Are Heterogeneous"

5/18/07 - Suk-Won Kim, Vanderbilt University. "Price Discovery from Peers" ■

Guest Speakers

n important aspect of the education of MBA students and the faculty at the Owen School is the opportunity to listen to and question senior executives from financial industries. Outside speakers are sponsored directly by the Financial Markets Research Center, the Owen Lecture Series, or the Finance Association, or are invited as an integral part of courses such as Monetary and Fiscal Policy and Financial Institutions. Guest speakers during the 2006-2007 academic year were:

Herbert M. Allison, Jr., Chairman, President, and Chief Executive Officer, TIAA-CREE

Roger E. Brinner, Managing Director and Chief Economist, *The Parthenon Group* Thomas G. Cigarran, Chairman, *Healthways*

John V. Faraci, Chairman and Chief Executive Officer, International Paper Richard Fisher, President, Federal Reserve Bank of Dallas

Michael Geitz, Managing Director and Vice Chairman of Investment Banking, Merrill Lynch

Karen H. Johnson, Director, Division of International Finance, Board of Governors of the Federal Reserve System

Donald L. Kohn, Vice Chairman, Board of Governors of the Federal Reserve System

Dino Kos, Executive Vice President, Federal Reserve Bank of New York Jeffrey Lacker, President, Federal Reserve Bank of Richmond Barry Lynn, Economist & Author of Unmade in America

Catherine L. Mann, Senior Fellow, Peterson Institute for International Economics and Professor of Economics, Brandeis University

Donald Marron, Deputy Director, Congressional Budget Office

Martin J. Mauro, Vice President: Fixed Income Strategist, Merrill Lynch

Frank Nash, Retired Managing Director, Head of Global Corporate Finance, Asia Pacific, *Deutsche Bank*, *Hong Kong*

Rudolph G. Penner, Senior Fellow, *The Urban Institute*, (former Managing Director, *Barents Group KPMG*, and former Director, *Congressional Budget Office*)

Neil Ramsey, President and Chief Executive Officer, *Ramsey Quantitative Systems*. Inc.

Thomas Ryan, Co-Chief Executive Officer, Integrated Corporate Relations Gary H. Stern, President, Federal Reserve Bank of Minneapolis

Dominique Thormann, Senior Vice President, Administration & Finance, NISSAN North America

Jack Tyrrell, Managing Partner, Richland Ventures

John G. Walsh, Chief of Staff and Public Affairs, Office of the Comptroller of the Currency

Lawrence Yun, Managing Director and Senior Economist, National Association of REALTORS ■

Current Activities of Center Faculty



CLIFFORD A. BALL, Professor (finance and statistics); Director, PhD Program; Faculty Director, MS Finance Program. M.Sc., Nottingham 1975, Ph.D. (mathematics), New

Mexico 1980. Research interests

include portfolio theory, interest rate dynamics, derivatives, volatility and correlation of asset returns, risk management, and equities. Current research includes: multivariate time series and nonlinear filtering methods applied to stochastic covariance estimation and prediction; financial contagion and stochastic interdependence of asset returns. More recent research deals with the modeling and pricing of credit default swap index tranches using copula methods.

Professor Ball teaches statistical and econometric analysis and the intricacies of equities, bonds, options, and futures contracts. His classes also cover empirical testing of financial models; stochastic processes and statistical applications to finance. In Risk Management, Ball covers value-at-risk, credit derivatives, and

capital requirements.

Ball has stepped down from his position as founding director of the one-year Masters Degree in Finance, which was launched by the Owen School in 2005. He currently serves as faculty director of the Finance PhD program. Ball also serves as associate editor for the Journal of Empirical Finance and as referee for numerous other finance and economics journals.



NÍCOLAS P.B. BOLLEN, The E. Bronson Ingram Associate Professor of Finance. M.B.A., Ph.D., Duke 1997.

Research interests include financial markets, derivatives, mutual funds, and hedge funds. Professor Bollen was

named the E. Bronson Ingram Associate Professor in Finance in 2007. He is also the new faculty director of Owen's Master of Science in Finance program, taking over from Professor Cliff Ball, who worked tirelessly to successfully

launch the program.

Professor Bollen's current research agenda is focused on hedge funds. His paper, "Conditional Return Smoothing in the Hedge Fund Industry," co-authored with Veronika Krepely, has been accepted for publication in the Journal of Financial and Quantitative Analysis. The paper studies whether a regulatory agency could use a statistical filter to successfully detect misreported returns in the hedge fund industry. Professors Bollen and Krepely are currently working on another paper on hedge funds that highlights a robust empirical anomaly - the frequency of observing monthly returns just above zero is dramatically higher than the frequency of observing monthly returns just below zero. This result suggests that some hedge fund managers

routinely "round up" their returns above zero to avoid reporting losses. Investors might then underestimate the risk of the fund and the potential for future losses.

Professor Bollen, along with co-author Professor Bob Whaley, has completed a research paper, "Hedge Fund Risk Dynamics: Implications for Performance Appraisal," that studies how to measure time-variation in the risk exposures of hedge funds. The motivation for the paper is that hedge fund managers are free to change their allocation to different trading strategies yet standard approaches to measuring risk-adjusted performance do not allow for timevariation in the loadings on factors that proxy for the trading strategies. As a consequence, measures of risk and risk-adjusted performance are inaccurate. Professor Bollen presented the paper at the CFTC, Emory University, Queens University, and Erasmus University in 2006.



PAUL K. CHANEY, Professor (accounting). M.B.A., Ph.D., Indiana 1983, C.P.A., C.M.A.

Research interests include auditor reputation, the quality of earnings, earnings management, and audit pricing.

Professor Chaney was

an invited discussant at the Journal of Accounting, Auditing, and Finance 2006 Conference on "Accounting Dynamism: Research on Recent Events, Corporate Governance, Regulation and Disclosure" held in New York in September 2006. His remarks will be published in the conference edition of the Journal of Accounting, Auditing & Finance. He was also an invited discussant for the Conference on Financial Economics and Accounting held in Atlanta, Georgia in November 2006. He presented his paper, "A Latent Class Model of Earnings Attributes" (with Debra Jeter and Bruce Cooil), at McMaster University in March 2007, and he presented his paper, "Self-Selection Models in Accounting: The Case of Big Auditor Premiums" (with Debra Jeter and L. Shivakumar), at the College of William and Mary in March 2007. His paper, "Joint Accounting Choices: An Examination of Firms' Adoption Strategies for SFAS No. 106 and SFAS No. 109" (with Debra Jeter and M. Daly), was accepted for publication in the Review of Quantitative Finance and Accounting.

At the 2006 American Accounting Association's annual meeting in Washington DC, Professor Chancy served as a Senior Scholar. This program implemented by the AAA matches a senior faculty member with a recently graduated accounting professor to help mentor them with their research.



WILLIAM G. CHRISTIE, The Frances Hampton Currey Professor of Management, Professor of Law. M.B.A., Ph.D., Chicago 1980, 1989.

Research interests include financial markets, market microstructure, and corporate finance.

Professor Christie serves as Editor of Financial Management, the flagship journal of the Financial Management Association. His paper, "Wall Street Scandals: The Curative Effects of Law and Finance," co-authored with Professor Bob Thompson from the Law School, is forthcoming in the Washington University Law Review. His co-authored paper with Gene Kandel and Jeff Harris, "Tick size, market structure and trading costs," is to be published in an edited volume titled *Liquidity* by John Wiley and Sons. He is currently studying the microstructure of the Pink Sheets market with

Christie serves as the Faculty Director of the Executive MBA program at Owen, Chair of the Research Committee, and continues in his role as faculty advisor to the Max Adler Student Investment Club. He taught in the Ingram Scholars Program this past year, and will be teaching in the MBA and Executive MBA programs in the 2007-2008 academic year. He also serves on the dissertation committees for two doctoral students at Owen.



MARK A. COHEN,

The Justin Potter Professor of American Competitive Enterprise, Professor of Law, and Co-Director of the Vanderbilt Center for Environmental Management Studies. M.A., Ph.D., Carnegie-Mellon 1985.

Research interests

include law and economics, government regulation, white-collar and corporate crime, and environmental management and sustainability.

Professor Cohen is a member of the Stakeholder Council of the Global Reporting Initiative, the Leverhulme Visiting Professor at the University of York (UK), and Senior Fellow and Member of the Executive Committee of the Center for the Americas at Vanderbilt. He serves on the editorial boards of Managerial and Decision Economics and the Journal of Forensic

Professor Cohen recently co-hosted a conference in Washington, D.C. at the American Enterprise Institute entitled, "Is Corporate Social Responsibility Serious Business?" which critically examined the trend by many large, publiclytraded firms to incorporate social responsibility into their strategic plans. He also presented numerous seminars at universities around the world on topics such as the economic costs of crime and racial disparity in auto lending including recent talks at the University of York (UK), Manchester University (UK), Cardiff (Wales), and Tilburg University (Netherlands).



J. DEWEY DAANE, The Frank K. Houston Professor of Finance, Emeritus; Senior Advisor, Financial Markets Research Center. M.P.A., D.P.A., Harvard 1949. Research interests include monetary economics and international finance.

During the spring semester, as part of his Seminar in Monetary and Fiscal Policy, Professor Daane arranged for many of the guest speakers listed elsewhere in this newsletter.

In December of 2006, Professor Daane attended the sixth annual Philadelphia Fed Policy Forum on "Economic Growth and Development: Perspectives for Policymakers." In April 2007, he participated in the 20th annual Financial Markets Research Center conference at Vanderbilt. In May, he attended the 43rd Bank Structure & Competition Conference on "The Mixing of Banking and Commerce" at the Federal Reserve Bank of Chicago. In June, he attended the Federal Reserve Bank of Boston's 52nd Annual Economic Conference on "Labor Supply in the New Century," which was held in Chatham, MA.

Professor Daane is a monthly contributor to the *Wall Street Journals* economic forecast and has earned a spot in their annual US economicforecasting rankings. He also contributes to the *USA TODAY*'s quarterly economic forecast.



MARA FACCIO, Associate Professor (finance). M.Phil, City University Business School (London) 1997, Ph.D., Università Cattolica (Milan) 1999.

Research interests include corporate finance, international finance, mergers and acquisitions, and corporate political

connections. Professor Faccio teaches courses in corporate financial policy, venture capital, and international corporate finance.

Professor Faccio presented her paper, "The characteristics of politically connected firms," at the American Economic Association meetings in Chicago. She presented her paper, "Corporate response to distress: Evidence from the Asian financial crisis," written with Rajdeep Sengupta, at the World Bank. She also presented her paper, "The quality of accounting information in politically connected firms," written with Paul Chaney and David Parsley, at Florida State University, Vanderbilt University, and at the University of Illinois at Urbana-Champaign. Professor Faccio presented another paper, "Sudden deaths: Taking stock of geographic ties," written with David Parsley, at the Third Annual CRES/Washington University Conference on Corporate Finance, Purdue University, Southern Methodist University, the University of Illinois at Urbana-Champaign, and the University of Minnesota. Her paper, "Political Connections and Corporate Bailouts," written with Ronald Masulis and John McConnell, was published in the December 2006 issue of the Journal of Finance.

Professor Faccio is a Research Affiliate of the Centre for Economic Policy Research and a Research Associate of the European Corporate Governance Institute.



LUKE M. FROEB,

The William C. and Margaret M. Ochmig Associate Professor of Entrepreneurship and Free Enterprise. Ph.D., Wisconsin 1983.

Professor Froeb teaches managerial economics and recently stepped down as Chief Economist at the

Federal Trade commission.

In the fall, Professor Froeb gave testimony to the FCC on TV mergers, and again on radio mergers on a panel with Porter Wagoner, Naomi Judd and Big & Rich. He also testified at joint Dept of Justice and FTC hearings on dominant firm conduct, and presented academic papers at Cornell, Washington University, and the IIOC meetings in Savannah. Froeb signed on to three amici briefs to the Supreme Court trying to convince the Justices to use economics, rather than bright line rules, to analyze business practices that can run afoul of the antitrust law. This summer he will travel to Shanghai as the guest of the Chinese to present a paper, and then to Rome to debate a prominent European economist on antitrust policy.

Most significantly, Froeb's textbook, Managerial Economics, finally appeared in print.

According to the publisher:

"This breakthrough text shows MBA's how to use economics to solve business problems. Succinct, fast paced, and challenging, students should be able to read the book from cover to cover and come away with good understanding of how to diagnose business problems, and then fix them."

For the third year in a row, Professor Froeb was named "Outstanding Professor" of the Vanderbilt Executive MBA program. KARL E.



KARL E.
HACKENBRACK,
Associate Professor
(accounting); Faculty
Director, Master of
Accountancy program; CoDirector, Law and Business
Program. M.B.A.,
Shippensburg 1983; Ph.D.,
Ohio State 1988.

Research interests include audit service production, earnings management, corporate governance, and mandated corporate disclosure. Current research projects include: (1) mandatory disclosure of auditor-sourced non-audit services; (2) audit committee oversight of the auditor-auditee relationship; (3) auditor tenure and earnings management; and (4) local bias in auditor selection.

Professor Hackenbrack attended the Pricewaterhouse Coopers Accounting and Auditing Symposium, KPMG's Audit Committee Roundtable, and the American Accounting Association Annual and Mid-year meetings where he served as a session chair. Karl serves on the editorial board of Auditing: A Journal of Practice and Theory and is a referee for numerous academic journals. He also serves as faculty advisor

to the Owen Law and Business Society and teaches in the Law School. The inaugural class of the new one-year Master of Accountancy program will matriculate in the fall of 2007. As faculty director of the program, Professor Hackenbrack is heavily involved in developing and organizing the program.



DEBRA C. JETER,

Associate Professor (accounting). M.B.A., Murray State 1981, Ph.D., Vanderbilt 1990, C.P.A.

Research interests include financial accounting and auditing, with specific interests in earnings and

audit quality, earnings management, components of earnings, the market for audit services, audit

pricing, and audit opinions.

Professor Jeter teaches financial accounting and accounting for mergers and acquisitions at Owen, and she taught in the summer Accelerator program in 2006 and 2007 and executive programs for TVA and Genesco in 2007. She just finished revising her textbook, Advanced Accounting, with coauthor Paul Chaney, for its third edition (John Wiley & Sons Inc., publishers). She is currently serving on the Editorial Boards of Issues in Accounting Education and of International Journal of Accounting, Auditing, and Performance Evaluation.

Jeter presented her research, "The Investment Opportunity Set and Industry Specialization by Auditors" (with Stephen Cahan, Jayne Godfrey, and Jane Hamilton), at the 18th Asian-Pacific Conference on International Accounting Issues, in October 2006. The paper was awarded the Vernon Zimmerman Best Paper Award at the conference. She was awarded the Outstanding Alumnus Award at Murray State University's Beta Alpha Psi banquet in 2006. She conducted a guest seminar on financial accounting research at the University of Auckland in April 2007. In January 2007, her paper "Regulatory Commitment to Auditing and Pay-Performance Sensitivity" (with Hui Chen, and Ya-wen Yang), was presented at the Midyear Auditing Conference of the American Accounting Association, where she also served as a discussant. Her paper, "Joint Accounting Choices: An Examination of Firms' Adoption Strategies for SFAS No. 106 and SFAS No. 109" (with Paul Chancy and Michele Daly), has been accepted for publication in Review of Quantitative Finance and Accounting, 2007.



CRAIG M. LEWIS, The Madison S. Wiggington Professor of Management (finance). M.S., Ph.D., Wisconsin 1986, C.P.A.

Research interests include equity analyst behavior, the security issue process, corporate financial

policy, and the time series properties of the stock market volatility. Current research topics include herding by equity analysts, bankruptcy, security issue cycles, and the specification of option pricing models when volatility is stochastic. Lewis has published papers on the topics of the behavior of equity research analysts, information content of

Faculty Activities (continued)

implied volatilities, volatility forecasting, capital structure, debt maturity structure, the interaction between debt and lease financing, earnings management, and the design and use of convertible debt.

Professor Lewis primarily teaches corporate finance and will be offering courses in company valuation. In addition to his role as Finance Area Coordinator, Lewis will be the Corporate Finance Track Coordinator in the newly redesigned curriculum. He currently serves on the dissertation committees of Shawn Mobbs

and Cong Wang.

During the past year, Lewis was awarded the Madison S. Wiggington Professor of Management chair. He attended the Financial Management Association meetings in Salt Lake City and Barcelona and the Western Finance Association meetings, where he discussed several papers and served as a session chair. He served as Chairman of the Special Topics Session for this year's Financial Management Association conference. He will also serve on the program committee for Washington University's 2008 Corporate Governance Conference.

Lewis is an associate editor of the *Journal of Corporate Finance* and serves as referee for numerous academic journals.



RONALD W. MASULIS, The Frank K. Houston Professor of Finance, M.B.A., Ph.D., Chicago 1978.

Research interests include corporate finance, corporate governance, executive compensation, investment banking, and

international finance. Professor Masulis teaches courses in mergers and acquisitions, law and finance of mergers & acquisitions, venture capital, and corporate finance theory and evidence.

This spring, Professor Masulis presented "Strategic Investing: Evidence from Corporate Venture Capital" (with Raj Nahata) at the Conference on Financial Contracting: Theory and Evidence, ECGI, and University of Mannheim. He presented "Agency Costs at Dual Class Companies" (with Cong Wang and Fei Xie) at the European Financial Management Meetings in Barcelona and the 13th Mitsui Life Symposium on Value Creation: Financing and Organizing the Firm at the University of Michigan. He presented "Analysis of Acquirer Returns When Targets Are VC-Backed" (with Raj Nahata) at the 2007 Western Finance Association Meetings. He also presented seminars at Notre Dame University, Erasmus University in Rotterdam, the University of Southern California, the University of Washington, Vanderbilt University, the University of Frankfurt, Tulane University, the University of Lancaster, Oxford University and London Business School. He was also a discussant at the American Finance Association Meetings in Chicago and the Conference on Activist Investors, Hedge Funds, and Corporate Governance at the University of Amsterdam.

In fall 2006, Professor Masulis was a keynote speaker at the 19th Annual Australasian Banking and Finance Conference in Sydney. He also presented seminars at the University of Alabama, Vanderbilt University, Pennsylvania State University, the University of Kentucky, and University of Melbourne. He was a discussant at the Corporate Finance of Financial Intermediaries Conference and the Corporate Governance Conference at Washington University, and he chaired a session on corporate governance at the 17th Annual Conference on Financial Economics and Accounting, Georgia State University.

State University.
His paper, "Political Connections and Corporate Bailouts" (with Mara Faccio and John McConnell), which studies corporate bailout activity around the globe and the degree of association between corporate directors and large shareholders to important government officials, was published in the December 2006 issue of the Journal of Finance. His paper, "Corporate Governance and Acquirer Return" (with Cong Wang and Fie Xie), which studies the effects of various corporate governance mechanisms, and especially takeover defenses, on the profitability of acquisitions is forthcoming in the August 2007 issue of the Journal of Finance. His survey paper (with Espen Eckbo and Oyvind Norli) on "Security Offerings" was published in the Handbook of Corporate Finance: Empirical Corporate Finance, E. Eckbo (ed.), North-

He is currently Academic Director on the Board of the Financial Management Association. He serves as associate editor of the *Journal of Financial and Quantitative Analysis* and was recently appointed associate editor of *Pacific Basin Finance Journal* for a three year term, and he is a referee for numerous other finance journals.

Holland/Elsevier, Chapter 13 this spring.

Masulis is chair of the Finance Ph.D.
Program at Owen and is currently serving as chairman of the dissertation committees of Cong Wang and Shawn Mobbs.



DAVID C. PARSLEY, Associate Professor (economics). A.M., Indiana 1979, Ph.D., California, Berkeley 1990.

Research interests are in the fields of international finance and macroeconomics. His

recent research studies links across countries, both in financial markets and in markets for goods and services. The role that exchange rates play in the market integration process is central to this research.

Professor Parsley recently served as visiting scholar at the International Monetary Fund in Washington D.C., and has also recently made presentations at Trinity College-Dublin, and the European Central Bank.

Parsley's paper, "Exchange Rate Pegs and Exchange Rate Exposure in East and South East Asia" (with Helen Popper), was published in the November 2006 issue of the *Journal of International Money and Finance*. In addition, three papers have recently been accepted for publication: one on measuring capital market integration (with Christian Schlag) in the *Journal of Money, Credit, and Banking*, one on

accounting for real exchange rate movements in the *Journal of International Money and Finance*; and another using Big Macs to study real exchange rate movements, in the *Economic Journal*.



CHARU G. RAHEJA, Assistant Professor (finance). M. Phil, Ph.D., New York University, 2002.

Specific areas of expertise include theoretical and empirical issues in corporate finance, with particular focus on corporate governance, corporate boards of directors, management

compensation, venture capital, founders, initial public offerings, and corporate distress.

Professor Raheja has examined how the size and composition of corporate boards affects board monitoring and CEO succession planning, as well as changes in the board structure as a firm moves in its life cycle and when firms under-perform. She has also studied underperforming firms and the changes in corporate governance following underperformance. Professor Raheja is currently working on the CEO influence on directors, the role of founders in corporations, and organizational structure.

In the past year, Professor Raheja presented her work at the Financial Management Association meeting, American University, Claremont McKenna College, Clemson University, University of Delaware, the Federal Reserve Bank of Boston, Michigan State University, University of Iowa, Rutgers University, University of Arizona, University of South Carolina, University of Tennessee, Wake Forest University, University of Wisconsin at Milwaukee, and at Vanderbilt University. She was a discussant at the 2006 Western Finance Association meeting, and she was a panelist on the Investment Company Institute conference on mutual fund corporate governance.

Professor Raheja's paper, "The Determinants of Corporate Board Size and Composition: An Empirical Analysis" (with Audra L. Boone, Laura Casares Field, and Jonathan M. Karpoff), is forthcoming in the *Journal of Financial Economics*. Her article, "Gradually Truncated Log-Normal in Publicly Traded Firm Size Distribution" (with H.J. Gupta, D. Agular, and G. Queriroz), is forthcoming in *Physica A*.



HANS R. STOLL, The Anne Marie and Thomas B. Walker Professor of Finance and Director of the Financial Markets Research Center. MBA, PhD Chicago, 1966.

Research interests include stock market microstructure, derivatives, and other aspects of

financial markets. Stoll teaches courses in derivatives and international finance.

On October 26-27, 2006, Professor Stoll presented a paper, "Execution Quality on the NYSE: The Effect of Time Delay," at a conference honoring Hartmut Schmidt, which was held in Hamburg, Germany. The paper appears in the book, *Boersen, Banken und Kapitalmaerkte*, edited by Wolfgang Bessler. On February 9, 2007, Stoll

traveled to Frankfurt Germany to accept an honorary doctorate degree from the business and economics faculty of Goethe University. Stoll's speech, on the topic "Liquidity," along with other speeches from the ceremony, appears in the April 2007 issue of the German journal, Zeitschrift für Bankrecht und Bankwirtschaft. On April 12-13, a conference on Developments in Financial Markets, organized by Stoll was held at Vanderbilt University. On May 14, 2007, Stoll spoke on "Factors Affecting the Competitive Structure of Securities Markets," at a conference in Paris, France organized jointly by the Autorite des Marches Financiers and the Securities and Exchange Commission. Stoll's recent paper, "Failure to Exercise Call Options: An Anomaly and a Trading Game" (with Veronika Krepely Pool and Robert Whaley) is forthcoming in Journal of Financial Markets.

Stoll is a public director of the Options Clearing Corporation. He serves on the editorial boards of five academic finance journals.



ROBERT E.
WHALEY, The Valere
Blair Potter Professor of
Management (finance)
and Co-Director of the
Financial Markets
Research Center. Ph.D.,
University of Toronto

Research interests include derivatives, asset

pricing, market microstructure, and market volatility.

Much of Professor Whaley's past work focused on investigations of the effects of program trading on stock prices, the expiration day effects of index futures and options, and the valuation of option and futures option contracts and the efficiency of the markets in which they trade. His research has been published in the top academic and practitioner journals, and he is a frequent presenter, chairman, and/or discussant at major conferences and seminars. His journal publications during the past year include "The Persistent Presidential Dummy," coauthored with J.G. Powell, J. Shi, and T. Smith, which appeared in Journal of Portfolio Management and "Ownership, Competition, and Financial Disclosure," coauthored with J.L. Birt, C.M. Bilson, and T. Smith, which appeared in Australian Journal of Management. His textbook, Derivatives: Markets, Valuation, and Risk Management, John Wiley and Sons, Inc., was also published in the past year. He presented his paper, "Failure to Exercise Call Options: An Anomaly and a Trading Game" (with Veronika Krepely Pool and Hans Stoll), at the spring conference of the Financial Markets Research Center. The paper is forthcoming in Journal of Financial Markets.

Whaley holds a number of editorial positions, serves as a referee for many journals and granting agencies, and is a former member of the Board of Directors of the Western Finance Association and the American Finance Association. He is currently a member of the International Advisory Board of the University Centre for Financial Engineering at the National University of Singapore.



RICHARD WILLIS, Associate Professor (accounting). B.S., University of South Alabama, 1983, M.A.S., Ohio State University, 1984, M.B.A. Duke University, 1992, Ph.D. University of Chicago, 1998, CPA (State of Illinois), 1996.

Research interests include security analysts and, in particular, their earnings forecasts, stock recommendations, and target prices. Teaching interests are in managerial accounting and financial statement analysis, courses for which he has won several teaching awards.

Professor Willis's research has been published in top academic journals, including the Journal of Accounting and Economics, the Journal of Financial Economics, and The Accounting Review. His forthcoming paper in The Accounting Review (October 2007), "When Security Analysts Talk, Who Listens?" investigates the effect of analyst recommendations on investor behavior. The research methodology employed compared trading volume in response to analysts' stock recommendations for small and large investors using transaction data from the NYSE, AMEX and NASDAQ markets. Overall, large traders generate statistically significant positive returns for both good and bad recommendations, while small traders generate negative returns following downgrades and insignificant returns following upgrades. A key reason for this behavior, says Willis, is that, while both groups respond to analyst reports, larger, more sophisticated investors tend to consider the content of the reports more carefully before buying or selling stocks, while small traders tend to react to the mere occurrence of a recommendation without more in-depth consideration. According to Willis, these findings support regulators' concerns that analysts may more easily mislead small investors than large ones.

Willis is on the editorial board of *The Accounting Review* and serves as a referee for numerous accounting and finance journals.

Faculty Research Papers

Current working papers, completed or revised since January 1, 2006, are listed below. Many of the papers are available on the Center's web site. www.owen.vanderbilt.edu/fmrc/

"A Case Study in Tick Size Reform," Nicolas P.B. Bollen and William G. Christie, 2006

This paper studies the marketmicrostructure effects arising from the imposition of a tick size schedule in the Pink Sheets market in 2006. Prior to these rule changes, dealers in the Pink Sheets could post quotes in increments of \$0.0001, and execute trades with an increment of \$0.00001. Based on the observed clustering of quotes and prices in the pre-reform period, the Pink Sheets market introduced a tick size schedule that was graduated by price. After a short period of experimentation, the market appears to have adapted to the new tick sizes without any degradation in quality. Thus, the paper studies one of the few examples of a market widening rather than narrowing their pricing increment.

"Hedge Fund Risk Dynamics: Implications for Performance Appraisal," **Nicolas P.B. Bollen** and **Robert E. Whaley**, March 2, 2007

Accurate appraisal of hedge fund performance must recognize the freedom with which managers shift asset classes, strategies, and leverage in response to changing market conditions and arbitrage opportunities. The standard measure of performance is the abnormal return defined by a hedge fund's exposure to risk factors. If exposures are assumed constant when, in fact, they vary through time, estimated abnormal returns may be incorrect. We employ an optimal changepoint regression that allows risk exposures to shift, and illustrate the impact on performance appraisal using a sample of live and dead funds during the period January 1994 through December 2005.

"Conditional Return Smoothing in the Hedge Fund Industry," **Nicolas P.B. Bollen** and Veronika Krepely Pool (forthcoming in *Journal of* Financial and Quantitative Analysis)

We show that if true returns are independently distributed, and a manager fully

reports gains but delays reporting losses, then reported returns will feature conditional serial correlation. We use conditional serial correlation as a measure of conditional return smoothing. We estimate conditional serial correlation in a large sample of hedge funds. We find that the probability of observing conditional serial correlation is related to the volatility and magnitude of investor cash flows, consistent with conditional return smoothing in response to the risk of capital flight. We also present evidence that conditional serial correlation is a leading indicator of fraud.

"Mutual Fund Attributes and Investor Behavior," Nicolas P.B. Bollen (forthcoming in Journal of Financial and Quantitative Analysis)

I study the dynamics of investor cash flows in socially responsible mutual funds. Consistent with anecdotal evidence of loyalty, the monthly volatility of investor cash flows is lower in socially responsible funds than conventional funds. I find strong evidence that cash flows into socially responsible funds are more sensitive to lagged positive returns than cash flows into conventional

funds, and weaker evidence that cash outflows from socially responsible funds are less sensitive to lagged negative returns. These results indicate that investors derive utility from the socially responsible attribute, especially when returns are positive.

"Self-Selection Models in Accounting: The Case of Big Auditor Premiums," Paul Chaney, Debra Jeter and L. Shivakumar, 2007

How to control for endogenous variables is an important issue in accounting research, particularly in cases when economic differences between clients of large versus small auditors are being measured. For instance, prior research has examined audit pricing for both unlisted and publicly held firms and provided mixed evidence regarding the existence of a Big 8 (6 or 5) premium in pricing. The existence of such a premium is often taken as an indication that client firms are willing to pay higher fees to signal their choice of a highly reputed auditor (and, perhaps indirectly, the promise of higher quality earnings reports). However, few papers have acknowledged that clients first must make an auditor choice to employ a large or a smaller auditor. This is an endogenous choice. We examine using a simulation the Heckman twostep technique for controlling for the endogenous variables.

Initially, we use the results from a simulation to determine how sensitive the Heckman model is in the cases where multicollinearity and identification problems exist. We examine the conditions when the Heckman model is expected to perform poorly. In contrast to arguments made in the literature, we find that the Heckman model is well specified even if the same variables are used in both the selection and outcome equations if the range of values from the selection model is not narrow.

Next we use the Heckman model to reexamine whether audit fees paid by clients of Big 5(4) auditors reflected a premium compared to fees paid to smaller auditors. We find that listed clients that select large auditors have a comparative advantage over other clients. These firms would pay lower audit fees relative to firms with similar characteristics regardless of the actual choice of auditor. Non-Big 5(4) clients on the other hand, would pay more for a large auditor. The results are in direct contrast to those presented in Chaney, et al. (2004), who found that audit markets for unlisted U.K. firms were segmented along cost-effective lines.

"A Latent Class Model of Earnings Attributes," Paul Chaney, Bruce Cooil, and Debra Jeter, 2007

We present evidence of the existence of six categories of reporting quality. We find that categories that have the best overall quality of earnings attributes use Big 5 auditors with the greatest frequency. For example, 97% of firms in our highest quality cluster hired Big 5 auditors. We also find that the highest quality clusters are generally associated with longer auditor tenure, inconsistent with the arguments that auditors become complacent or "cozy" with management over time. We present evidence that the lowest quality clusters are associated with higher non-

audit fees (scaled by client assets), suggesting the potential that independence and reporting quality may be jeopardized by excessively high non-audit fees. Finally, we find little evidence of significant differences across groups in the frequency of unqualified audit opinions (although the lowest quality cluster does exhibit the lowest percentage of unqualified audit opinions).

"The Quality of Accounting Information in Politically Connected Firms," Paul Chaney, Mara Faccio, and David Parsley, February 2007

Recent studies have documented systematic exchanges of favors between politicians and firms, and that connected firms, on average gain from political ties. Since these ties are often to a top manager or large shareholder, agency problems are likely more severe for politically connected firms. Moreover, in the case of political ties, the costs of lower quality disclosures may be mitigated. Empirically, we find that the quality of earnings reported by politically connected firms is significantly poorer than that of similar non-connected companies. Additionally, among connected firms, those that have stronger political ties have the poorest accruals quality. This evidence suggests that managers of connected firms appear to be less sensitive to market pressures to increase the quality of information. This choice seems to be justified in that lower quality reported earnings is associated with higher cost of debt only for the non-politically connected firms in the sample.

"Analysts and Audit Quality: Analysts' Forecasts during the Meltdown of Andersen," Steven F. Cahan, Paul K. Chaney, Debra C. Jeter and Wei Zhang, June 4, 2007

The events surrounding the demise of Enron and its auditor Arthur Andersen have been widely debated and analyzed, particularly with respect to their impact on auditors and firm managers. A third group, financial analysts, also came under fire as a result of these events. In this study, we examine the reaction of financial analysts as a group to the Andersen-Enron affair. In their role as information intermediaries, analysts must interpret financial statements, and these interpretations are crucial to their clients' and their own welfare. Since analysts rely heavily on these statements in formulating their earnings forecasts, they have strong incentives to evaluate and monitor the quality of financial reports.

We present evidence of an increase in the frequency of revisions for annual and quarterly forecasts for Andersen clients. Our evidence is particularly strong for downward revisions. For forecast properties, we find somewhat weaker evidence (relative to our evidence on revisions) of differential changes in accuracy and dispersion for Andersen clients relative to the Big 4, and virtually no evidence of differences in forecast bias between Andersen and Big 4 clients. We do find evidence of larger changes in

forecast errors for Andersen clients after October 16, 2001, when Enron first announced a \$1.01 billion after-tax writedown for accounting errors, and January 10, 2002, when Andersen announced that it had shredded documents related to the Enron audit. We also find some evidence of increased forecast dispersion.

Overall, our results suggest that analysts quickly became concerned about the reporting quality of all Andersen clients after Enron's accounting problems surfaced, and responded in a timely fashion. Our results are generally more consistent with the view that analysts were "duped," as they themselves claimed, than that they succumbed to investment banking temptations or other independence threats. Because the behavioral changes of analysts were more intense for Andersen clients than for Big 4 clients in general, our findings are most consistent with a view that analysts relied too heavily on the presumed quality of the auditors' opinion prior to the Enron events, and that when that quality came into doubt, they revised their previous assessments.

"Joint Accounting Choices: An Examination of Firms' Adoption Strategies for SFAS No. 106 and SFAS No. 109," Paul Chaney, Michele Daly, and Debra Jeter (forthcoming in Review of Quantitative Finance and Accounting)

We provide insight into an argument that firms minimize the costs imposed by new accounting standards through their adoption choices. Focusing on two standards with potentially large impacts on both balance sheet and income statement accounts for many firms, we present evidence that firms chose their strategies for SFAS No. 106 (OPEB) and 109 (DTAX) jointly rather than separately. We also provide insight into how firms view recurring versus non-recurring charges, and how they weigh the tradeoff between a large one-time (income decreasing) charge against the smaller, but longer lasting effects of amortization.

"Wall Street Scandals: The Curative Effects of Law and Finance," William G. Christie and Robert Thompson (forthcoming in Washington University Law Review)

This paper studies three scandals that embroiled U.S. financial markets during the past decade, including the Nasdaq market-makers' use only of odd-eighths quotes, the abuse of specialist power on the New York Stock Exchange, and the mutual fund scandal. We attempt to attribute the resolution of these situations to the curative effects of markets versus regulation. We argue that the intervention of the legal system through regulation and/or litigation is often necessary to help resolve the misalignment of incentives needed for markets to accomplish their goal of maximizing value. The paper suggests that there exists an important synergy between financial markets and law that is often overlooked.

"Do Government Agencies Respond to Market Pressures? Evidence from Private Prisons," James F. Blumstein, Mark A. Cohen and Suman Seth, November 2006

This paper examines the role of privatization on the cost of government provided services. We examine data on the cost of housing public and private prisoners from all 50 states over the time period 1996-2004, and find that the existence of private prisons in a state reduces the growth in per prisoner expenditures by public prisons by a statistically significant amount. In 2004, the average Department of Corrections expenditures in states without private prisoners was approximately \$493 million. Our findings suggest that if the "average" state in that group were to introduce the use of private prisons, the potential savings for one year in Department of Corrections expenditures for public prisons could be approximately \$15 to \$18 million for that particular hypothetical state. These savings on public prisons would be in addition to any direct savings from the use of private prisons by

"Imperfect Competition in Auto Lending: Subjective Markups, Racial Disparity, and Class Action Litigation," Mark A. Cohen, December 14, 2006

While the market for auto lending at first appears to be highly competitive, many consumers lack the ability to obtain accurate information about price. In many markets, uninformed consumers can free ride off the knowledge of informed consumers. However, the market for auto lending differs from traditional markets because price ultimately depends upon both the credit worthiness of the individual borrower and the details of the auto loan (e.g. term length, payment-to-income ratio, etc.). Auto dealers in this market act as agents of both consumers (identifying suitable auto lenders for them) and auto lenders (identifying prospective borrowers). Given the asymmetric information about prices facing consumers, this market has been characterized by a wide disparity in the prices paid by consumers. This disparity comes about through a mechanism whereby auto dealers are quoted a risk-based interest rate from the lender and are then authorized to subjectively mark up this rate and charge what the market will bear. While the majority of auto loans are written without any markup, some consumers are charged thousands of dollars in addition to the risk-based interest rate. While charging different prices to different consumers is not illegal, one of the apparent consequences in auto lending is that minority consumers - African-Americans and Hispanics in particular - have systematically been charged a higher markup on auto loans than White borrowers. It is this fact - coupled with federal laws outlawing discrimination in credit markets - that led to a series of lawsuits against auto lending institutions. This paper reviews the theory and evidence of subjective markups on auto loans and examines how class action litigation has changed the auto lending market.

"Corporate Response to Distress: Evidence from the Asian Financial Crisis," Mara Faccio and Rajdeep Sengupta, July 2006

This paper provides a comprehensive examination of the ways in which companies respond to a country-wide crisis through the restructuring of their assets (through asset sales, mergers or liquidations) or liabilities. We find the restructuring of liabilities to be the most common type of response. On the other hand, we argue that firms may be reluctant to engage in major asset sales due to substantial price discounts that need to be applied to these transactions during the crisis. In fact, we document that transaction multiples dropped by 40% during the crisis, compared to a precrisis period. We contrast financial and corporate governance considerations and find strong support for the notion that, during a crisis, financial constraints have a large impact on the restructuring choice. However, we find corporate governance (e.g., control) considerations to matter only marginally both in statistical and economic terms.

"The Characteristics of Politically Connected Firms," Mara Faccio, October 2006

Evidence from firms in 47 countries shows that companies with political connections have higher leverage, lower tax rates, and larger market share than non-connected firms. In spite of these advantages, connected firms underperform non-connected companies on an accounting basis. Differences between connected and unconnected firms are greater when political links are stronger, and when connected firms operate in countries with higher levels of corruption.

"Sudden Deaths: Taking Stock of Geographic Ties," Mara Faccio and David Parsley, February 2007

Many firms voluntarily incur the costs of attempting to influence politicians. However, estimates of the value of political connections have been made in only a few extreme cases. We propose a new approach to valuing political ties that builds on these previous studies. We consider connected to a politician all companies headquartered in the politician's home town, and use an event study approach to value these ties at their unexpected termination. Analysis of a large number of sudden deaths from around the world since 1973 reveals a market adjusted 1.7% decline in the value of geographically connected companies. The decline in value is followed by a drop in the rate of growth in sales and access to credit. Our results additionally show a larger effect for family firms, firms with high growth prospects, firms operating in industries over which the politician has jurisdiction, and firms headquartered in highly corrupt countries.

"Government Control of Privatized Firms," Bernardo Bortolotti, and **Mara Faccio**, May 2007

We study the change in government control of privatized firms in OECD countries. Results indicate that governments typically transfer ownership rights without relinquishing

proportional control. Control is commonly retained by leveraging state investments through pyramids, dual-class shares, and golden shares. Indeed, at the end of 2000, after the largest privatization wave in history, governments retain control of 62.4% of privatized firms. In civil law countries, governments tend to retain large ownership positions, whereas in common law countries they typically use golden shares. However, when we combine these two mechanisms, we find no association between a country's legal tradition and the extent of government control. Rather, we document more prevalent government influence over privatized firms in countries with proportional electoral rules and with a centralized system of political authority.

"Mergers when Firms Compete by Choosing both Price and Promotion," **Luke Froeb**, Steven Tenn, and Steven Tschantz, April 11, 2007

Enforcement agencies have a relatively good understanding of how to measure the loss of price competition caused by merger. However, when firms compete in multiple dimensions, merger effects are not well understood. In this paper, we study mergers in industries where firms compete by setting both price and promotion, and ask what happens if we mistakenly assume that price is the only dimension of competition. To answer the question, we build a structural model of the super-premium ice cream industry, where a 2003 merger between Häagen-Dazs and Dreyer's was challenged by the Federal Trade Commission. A structural merger model that ignores promotional competition under-predicts the price effects of a merger in this industry (5% instead of 12%). About three-fourths of the difference can be attributed to estimation bias (estimated demand is too elastic), with the remainder due to extrapolation bias from assuming post-merger promotional activity stays constant (instead it declines by 31%).

"Post-Merger Product Repositioning," Amit Gandhi, Luke Froeb, Steven Tschantz, and Gregory J. Werden (forthcoming in *Journal of Industrial Economics*)

We study mergers among firms that compete by simultaneously choosing price and location. The merged firm moves its two products away from each other to reduce cannibalization, and the non-merging firms move their products in between the merging firm's products. Postmerger repositioning increases product variety, which benefits consumers, but repositioning also affects post-merger prices in two ways: There is upward pressure on price as products spread out, but the merged firm's incentive to raise prices is reduced as its products are moved away from each other. Either effect can dominate, although the latter is likely to be the more important. We use a novel technique known as the stochastic response dynamic to find equilibria, which does not require the computation of first-order conditions.

"Unilateral Competitive Effects of Horizontal Mergers II: Auctions and Bargaining," **Luke Froeb** and Gregory J. Werden (forthcoming in *Handbook of* Antitrust Economics)

Horizontal mergers give rise to unilateral anticompetitive effects if they cause the merged firm to act less intensely competitive than the merging firms, while non-merging rivals do not alter their competitive strategies. This chapter describes the economic theory underlying unilateral competitive effects from mergers when prices are set through an auction or bargaining process. In the auction context, this chapter also describes the quantitative application of this theory in predicting the unilateral price effects of proposed mergers.

"Mandatory Disclosure of Non-audit Services Is Not Benign," **Karl Hackenbrack**, September 2006

This study advances the auditor independence debate by compiling and analyzing a new dataset uniquely suited to answer the question: Does mandatory disclosure of auditor supplied non-audit services help align managements' purchase decisions with investor preferences? I find that the mandatory disclosure of joint sourcing activities mediates the relationship between current and future purchases of non-audit services in a manner that reflects investors' expressed preferences. This result is important for purposes of assessing the effectiveness and necessity of current disclosure regulations.

"Enabling Auditor-sourced Management Advisory Services," George Drymiotes and Karl Hackenbrack, December 2006

We study how companies manage the risk of compromised auditor independence when the incumbent auditor provides management advisory services. The setting for this study is circa 1980, a time period when both the SEC mandated disclosure of auditor-sourced management advisory services and companies were allowed to choose whether to assign outside directors to the audit committee. Our main finding is audit committee oversight of the financial reporting process is high when purchases of management advisory services are high. Our results help explain why 25 years of research on the effects of auditor-sourced management advisory services rarely report any detrimental effects.

"Auditor Specialization: The Influence of Investment Opportunities," Steven F. Cahan, Jayne M. Godfrey, Jane Hamilton, and **Debra** C. Jeter, May 2006

A report issued by the U.S. General Accounting Office (GAO) in 2003 identified industry specialization as a key driver of consolidation among audit firms and highlighted the extreme levels of auditor concentration in some industries. Like the GAO, we view auditor concentration as a measure of industry specialization, and we examine one feasible explanation for why auditor specialization differs across industries. We posit that the investment opportunity set (IOS) plays an important role in determining

whether an industry is an attractive target for auditor specialization and in creating barriers to auditor entry. We argue that when industryspecific IOS is high, auditors will make costly industry-specific investments that allow them to offer a differentiated product and to create entry barriers for other audit firms. However, when a large component of IOS is specific to individual firms within an industry so that IOS is highly variable within the industry, the auditors' knowledge requirements are highly specific to those firms and it is more difficult to transfer knowledge and spread costs across clients in that industry. Using two different measures of IOS and three alternative industry classification schemes, we present evidence that auditor specialization is increasing in industry IOS levels and decreasing in within-industry IOS variability.

"Regulatory Commitment to Auditing: The Impact of Sarbanes-Oxley on Pay-Performance Sensitivity and Managerial Effort," Hui Chen, Debra C. Jeter, and Ya-Wen Yang, February 8, 2007

The purpose of this paper is to investigate the impact on pay-performance sensitivity of a commitment by regulatory bodies to monitor the auditing of managers' financial reporting. We approach our investigation first by modeling the effects of an imposed mandatory audit of the auditor. We suggest that in a more rigorous audit environment, the reliability of performance measures increases. In motivating employees to work to their maximum potential, investors can rely on these performance measures to better effect. We then test our model in an empirical setting by comparing managers' pay-performance sensitivity before and after the passage of the Sarbanes-Oxley Act of 2002 (SOX). Our model reveals that both managerial effort levels and payperformance sensitivity increase from a laissezfaire environment with the introduction of a regulatory commitment to auditing. Consistent with the model's prediction, our empirical tests of the impact on managerial incentive schemes after SOX reveal that pay-performance sensitivity did in fact increase.

"Asset Specificity and the Ownership of Buildings," **Debra Jeter**, Jilnaught Wong, and Norman Wong, March 2007

This paper examines the impact of asset specificity on the decision of firms to own or lease their buildings. Based on the economic theory of Coase (1937, 1988) and Williamson (1988), we predict and find that firms with highly specific buildings, as indicated by the nature of the industry in which firms operate, are more likely to own, rather than to lease, their buildings. An alternative view of the choice between ownership and leasing is that firms may prefer to keep debt off the balance sheet due to debt covenants, to other financing needs, or simply to make their debt to equity ratio more appealing to future lenders or investors. Whereas a purchase (or capital lease) requires the entire debt to be reflected in the balance sheet, an operating lease has little impact on this important balance sheet item. Thus, if a firm is already heavily leveraged, it might choose to lease rather than buy even if such a choice is not otherwise efficient; i.e., even if the building needs are highly specific.

Because firms in those industries that are most likely to reflect asset specificity are also likely to be firms that are highly leveraged (manufacturing firms, for example), this view of the influence of accounting rules on the choice creates an opportunity for us to differentiate between the accounting-based (opportunistic) and the economic-based (efficiency) theories. We find that firms in industries requiring more specific buildings are more likely to own, consistent the theoretical link between asset specificity and asset ownership as argued in the economics literature.

"Auditor Industry Specialist Fee Premiums: Tests of some Alternative Explanations," David Hay and **Debra Jeter**, June 2007

A large number of recent research papers examine the impact of industry specialization by auditors on audit fees in a variety of contexts. Some propose that auditors who specialize in an industry are able to perform higher quality audits, which are recognized and valued by financial statement users and/or by managers to the extent that higher audit fees are warranted and paid to such specialists. Evidence consistent with this proposition has been presented in some studies, though not with uniform consistency. To the extent that specialist premiums are supported this result is a satisfying one for auditors, as it suggests that managers value high quality audits and view audit services as something more than a "necessary evil." In this study, we partition companies into various market segments to consider possible benefits of hiring a specialist auditor, and whether (and when) such benefits justify higher audit fees. We find that audit premiums for specialization apply principally to larger client firms, non-issuers and low-risk companies. The results are not inconsistent with the reputation explanations proposed in previous studies, but suggest that the premiums charged involve a fairly complex interaction between demand and supply concerns.

"Shareholder Initiated Class Action Lawsuits: Shareholder Wealth Effects and Industry Spillovers," Amar Gande and Craig M. Lewis, July 2007

This paper documents significantly negative stock price reactions to shareholder initiated class action lawsuits. We find that shareholders partially anticipate these lawsuits based on lawsuit filings against other firms in the same industry and capitalize part of these losses prior to a lawsuit filing date. Consequently, we show that filing date effects understate the magnitude of shareholder losses on average by approximately a third. We demonstrate that prior expectations about the likelihood of being sued are important determinants of the losses anticipated prior to the filing of an actual lawsuit, and on the lawsuit filing date.

"Information, Selective Disclosure, and Analyst Behavior," Anchada Charoenrook and Craig M. Lewis (forthcoming in *Financial Management*)

This paper examines whether the prohibition of selective disclosures to equity research analysts mandated by Regulation FD alters the amount

of information and the manner in which it is revealed to the market. In addition to documenting empirical results that are broadly consistent with prior work, the paper makes two new contributions. First, we show that the equity research analysts are more responsive to information contained in company-initiated disclosures after Reg. FD, suggesting that regulation has affected the importance of various channels of communication. Second, the study presents direct evidence in support of the notion that the regulation has changed the role played by earnings guidance for corporate managers. In the pre-FD world, earnings guidance was used by managers on an infrequent basis mainly to correct large discrepancies in information between the managers and the analyst community. In the post-FD world, firms appear to use earnings guidance to maintain a steady flow of information.

"Do Underwriters or Venture Capitalists Restrain Earnings Management by IPO Issuers?" Gemma Lee and **Ronald W. Masulis**, October 2006

This study examines the degree of earnings management by companies going public, and investigates whether financial institutions participating in the IPO process play a significant role in reducing earnings management by implicitly certifying the quality of financial reporting. More specifically, we examine whether earnings management around an IPO is negatively related to the reputation of underwriters and venture capital (VC) firms involved. We find that more reputable investment banks are associated with significantly lower earnings management. Surprisingly, after controlling for the potential endogeniety of VC-backing, VC involvement does not significantly affect earnings management. This result holds both for more reputable and less reputable VCs.

"Seasoned Equity Offerings: Quality of Accounting Information and Expected Flotation Costs," Gemma Lee and Ronald W. Masulis, January 2007

Flotation costs represent a significant loss of capital to firms and are positively related to information asymmetry between managers and outside investors. We measure a firm's information asymmetry by its accounting information quality based on two extensions of the Dechow and Dichev earnings accruals model (2002), which is a more direct approach to assessing the information available to outside investors than the more commonly used proxies. Our main hypothesis is that poor accounting information quality raises investor uncertainty about a firm, which lowers demand for its new equity, thereby raising underwriting costs and risk. Using a large sample of seasoned equity offerings, we show that poor accounting information quality is associated with higher flotation costs in terms of (1) larger underwriting fees, (2) larger negative SEO announcement effects, and (3) a higher probability of SEO withdrawals. These results are robust to joint determination of offer size and flotation cost components and to adjustments for sample selection bias.

"Agency Costs at Dual-class Companies," Ronald W. Masulis, Cong Wang and Fei Xie, March 2007

We use a sample of U.S. dual-class companies to examine how the divergence between insiders' control rights and cash-flow rights affects managerial extraction of private benefits of control. We find that as the insider control-cash flow rights divergence becomes larger, (i) dualclass acquirers experience lower acquisition announcement-period abnormal stock returns, (ii) CEOs receive higher levels of compensation, (iii) corporate cash holdings are worth less to outside shareholders, and (iv) capital expenditures contribute less to shareholder value. These findings support the hypothesis that managers with greater control rights in excess of cash-flow rights are prone to waste corporate resources to pursue private benefits at the expense of shareholders. As such, they contribute to our understanding of why firm value is decreasing in the insider control-cash flow rights divergence.

"Venture Capital Conflicts of Interest: Evidence from Acquisitions of Venture Backed Targets," **Ronald W. Masulis** and Rajarishi Nahata, April 2007

We examine several reasons acquisitions of privately held firms are more profitable than acquisitions of public companies. Since many of privately held companies are also venture backed, we examine the effects of venture capital (VC) backing on the profitability of acquisitions and document that VC-backing leads to significantly higher acquirer announcement returns, even after controlling for endogeneity in venture funding. To help explain these results, we evaluate four hypotheses involving VC conflicts of interest with entrepreneurs and other venture investors. We find higher acquirer returns and lower target purchase price-to-book value ratios in acquisitions of targets backed by VC funds nearing maturity and VCs with close financial ties to acquirers, situations that create potential VC conflicts with other target investors. Acquisitions of targets backed by corporate VCs also exhibit higher acquirer announcement returns, which is consistent with corporate VCs having strategic goals that can be in conflict with maximizing financial returns. We also find evidence suggesting shifting strategic objectives of CVC parents and their weak commitment to the VC market result in rapid exits from their portfolio companies causing higher wealth gains for acquirers. In summary, VC conflicts of interest can affect acquisition prices and outweigh any negotiating expertise or certification benefits the VCs may provide to their portfolio companies during the acquisition negotiation process.

"Does Venture Capital Reputation Matter? Evidence from Subsequent IPO Issuer Performance," C.N.V. Krishnan, Ronald W. Masulis and Ajai Singh, June 2007

Reputation of a venture capitalist (VC) is based on experience, expertise and past performance. We investigate the relation between several alternative VC reputation measures and subsequent IPO issuer performance. We measure

long-run firm performance using four widely used measures, namely industry-adjusted operating performance, market-to-book ratio, long-run listing survival and long-run abnormal stock returns, and also examine two long-run growth measures. Of the VC reputation measures examined, the market share of VC-backed IPOs dominates the other VC reputation measures in terms of its predictive power for the long-run performance of subsequent IPOs backed by the same VC.

"Strategic Investing and Financial Contracting in Start-ups: Evidence from Corporate Venture Capital," **Ronald W. Masulis** and Rajarishi Nahata, June 2007

We empirically investigate the strategic incentives of corporate venture capitalists (CVCs) and the implications for the structure of financial contracts with start-up investors. Since the strategic goals of CVCs can be economically beneficial or damaging to start-ups, we find CVCs that bring in complementary operational skills are more likely to be involved. Second, when CVC parent corporations are potential competitors, start-up entrepreneurs commonly limit CVC influence by awarding them lower board power, while retaining higher board representation for themselves. Third, lead CVCs tend to have lower board representation relative to their more traditional counterparts, which is consistent with the entrepreneurs' desire to limit the influence of strategic investors, particularly at the earliest stages of a start-up's lifecycle. Fourth, start-up entrepreneurs are able to extract higher valuations from CVCs with potentially competitive parents, a result consistent with standard bargaining theory. Overall, our findings indicate that the potential synergies that some strategic CVC investors offer can raise their likelihood of participation in VC syndicates and that CVC board representation and share pricing are related to the complementary or competitive nature of their strategic relationships with start-ups.

"Corporate Venture Capitalists, Strategic Alliances, and the Governance of Newly Public Firms," Vladimir Ivanov and **Ronald W. Masulis**, June 2007

We examine the effect of investments by corporate venture capitalists (CVCs) on the governance structures of venture backed IPOs. One of the main differences between CVCs and traditional venture capitalists (TVCs) is that the former often invest for strategic reasons and enter into various types of strategic alliances with their portfolio firms that last well beyond the IPO. We argue that the presence of such strategic alliances will have a significant impact on the governance structure of CVC backed firms when they go public and in the following years. Using a sample of venture backed IPOs, we evaluate several hypotheses concerning the role of CVCs in the corporate governance of newly public firms. We find that strategic CVC backed IPOs have weaker CEOs and more outsiders on the board and on the compensation committee than a carefully selected sample of matching firms. In addition, the probability of forced CEOs

turnover is higher for strategic CVC backed IPOs, while at the same time these firms use staggered boards more frequently. In contrast, the governance structures of purely financial CVC backed IPO firms and their matching firms do not exhibit any significant differences.

"Do Venture Investments by Financial Institutions Affect the IPO Underwriting Process?" Xi Li and Ronald W. Masulis, June 2007

We find that venture investments of equity and loans by classes of financial institutions occur in a majority of venture-backed IPOs in the 1990s. Given that each class of financial institutions has its own investment criteria and expertise and access to customer information, their investments are likely to have additive and independent effects that are of distinctly different magnitudes. As a result, we examine the effects on the IPO underwriting process of venture investments in these issuers by commercial banks, investment banks and insurance companies, individually and collectively, and distinguish between loans and equity investments. We find that venture ownership by financial institutions is associated with reduced IPO underpricing and absolute offer price revisions and better long-term operating performance. This evidence is consistent with these institutional investments providing certification of issuer quality. We also find that the impacts of debt and equity investments by several classes of financial institutions are largely additive, consistent with an incremental certification effect from each venture investment by another class of financial institutions. Moreover, the size of financial institution ownership in an issuer is more informative than is its presence alone and ownership size subsumes the latter effect.

"Corporate Governance and Acquirer Returns," **Ronald W. Masulis**, Cong Wang, and Fei Xie (forthcoming in *Journal of Finance*)

We examine whether corporate governance mechanisms, especially the market for corporate control, affect the profitability of firm acquisitions. We find that acquirers with more anti-takeover provisions experience significantly lower announcement-period stock returns than other acquirers. We also find that acquiring firms operating in more competitive industries or separating the positions of CEO and chairman of the board experience higher abnormal announcement returns. Our results support the hypothesis that managers protected by more anti-takeover provisions face weaker discipline from the market for corporate control and thus, are more likely to indulge in empire-building acquisitions that destroy shareholder value. They provide a partial explanation for why antitakeover provision indices of Gompers, Ishii and Metrick and others are negatively correlated with shareholder value.

"Understanding Real Exchange Rate Movements with Trade in Intermediate Products," **David C. Parsley** and Helen Popper, August 2006

This paper reexamines decompositions of the real exchange rate that apportion its movements

into a part that reflects international deviations from the law of one price and a part that reflects the relative prices of traded and nontraded goods within countries. Using Japanese and U.S. data, we first show that in such decompositions the traded/nontraded distinction is irrelevant at the consumer level. Next, motivated by a model of trade in intermediate products, we use implied import weights and find that relative traded/nontraded price changes, appropriately defined, can account for much of the real exchange rate's variation. These findings contrast sharply with earlier results that attribute real exchange rate movements to deviations in the law of one price; and, they provide fresh support for traditional real exchange rate models which rely on the distinction between the open and closed sectors of the economy.

"In Search of a Euro Effect: Big Lessons from a Big Mac Meal?" **David C. Parsley** and Shang-Jin Wei, June 2007

Using highly disaggregated price data of the Big Mac Meal and its ten ingredients from twenty-five European countries since 1993, we investigate two questions related to the effects of the adoption of the Euro on prices. First, was the changeover to the euro accompanied, as many believe, by an increase in prices in member countries? Second, does the adoption of the euro promote goods market arbitrage in the form of a faster speed of convergence to a common price? On the first question, in order to net out global or regional effects on prices not related to the adoption of the euro, we compare the experience of eurozone countries to non-euro European countries in a 'difference-in-differences' specification. We perform statistical tests over different time horizons, and conclude that there is no evidence of significant price increases associated with the adoption of the euro even for food items. On the second question, we examine the trend in price dispersion as well as the persistence of deviations from the law of one price. Once After properly accounting for possible non-linearities, we find little systematic evidence of a significant improvement in goods market integration following the introduction of the euro. On these two questions (at least), there is no euro effect to be found.

"A Prism into the PPP Puzzles: The Microfoundations of Big Mac Real Exchange Rates," **David Parsley** and Shang-Jin Wei (forthcoming in *The Economic Journal*)

We match Big Mac prices with prices of its ingredients as a unique prism to study real exchange rates (RERs). This approach has several advantages. First, the levels of the Big Mac RER can be measured meaningfully. Second, as the exact composition of a Big Mac is known, the contributions of its tradable and non-tradable components can be estimated relatively precisely. Third, the dynamics of the RER can be studied in a setting free of several biases inherent in CPI-based RERs. Finally, a large cross-country dimension allows us to overturn the Engel result on what drives RERs.

"Measuring Financial Integration via Idiosyncratic Risk: What Effects Are We Really Picking Up?" **David C. Parsley** and Christian Schlag (forthcoming in *Journal of Money, Credit, and Banking*)

We study the method proposed by Flood and Rose (FR, 2004, 2005) for checking for financial integration by estimating the risk-free rate using the idiosyncratic component of individual stock returns. Performing simulations with data with a known return generation process, we find that the FR methodology produces poor estimates of the risk-free rate, and hence the FR method fails to accept integration when true. We then show analytically that the FR method actually provides an estimate of the market return, and conclude the FR methodology would also falsely accept integration as long as the market returns in the two markets do not differ widely.

"Accounting for Real Exchange Rate Changes in East Asia," **David Parsley** (forthcoming in Journal of International Money and Finance)

This study measures the proportion of real exchange rate movements that can be accounted for by movements in the relative price of non-traded goods using the framework employed by Engel (1999). Among the twenty-one bilateral Asian-Pacific real exchange rates considered here, that proportion is found to be trivially small for all possible horizons that the data allow – from one month up to 25 years. This pattern appears unaffected by the cross-sectional variation in either income level, or the degree of openness present among these Pacific-Rim economies. The only qualifications occur when considering fixed (or semi-fixed) exchange rate regimes.

"CEOs vs. Directors: Who Calls the Shots When Firms Underperform?" John C. Easterwood and Charu G. Raheja, April 10 2007

We study the evolution of the board among firms experiencing a sudden negative performance shock and highlight the influence of the CEO in determining the changes. Over 40% of the original directors depart the board and boards become more independent in the three years following underperformance. The proportion of directors who work as consultants and of directors who are executives in other firms increases, while the proportion of directors in the financial industry, directors who hold multiple board seats, and directors representing large shareholders decreases. Influential CEOs are associated with smaller increases in board independence and less director turnover than less influential CEOs. Changes in the percentage of directors who are executives in other firms and directors who represent large shareholders are also negatively related to CEO influence. Together, these results show that influential CEOs continue to maintain their influence over the board following underperformance while less influential CEOs lose even more of their original influence. CEO influence and board changes are not related to subsequent changes in firm performance and the likelihood that firms will experience a financial restructuring event. We conclude that firms adjust their boards based on their own specific managerial and firm requirements.

"The Determinants of Corporate Board Size and Composition: An Empirical Analysis," Audra L. Boone, Laura Casares Field, Jonathan M. Karpoff, and Charu G. Raheja (forthcoming in Journal of Financial Ecomomics)

Many theories have been proposed to explain how corporate boards are structured. This paper groups these theories into three hypotheses and tests them empirically. We utilize a unique panel dataset that tracks corporate board development from the time of a firm's IPO through 10 years later. The data indicate that: (i) board size and independence increase as firms grow in size and diversify over time; (ii) board size - but not board independence - reflects a trade-off between the firm-specific benefits of monitoring and the costs of such monitoring; and (iii) board independence is negatively related to the manager's influence and positively related to constraints on such influence. These results are consistent with the view that economic considerations - in particular, the specific nature of the firm's competitive environment and managerial team - help explain cross-sectional variation in corporate board size and composition. Nonetheless, much of the variation in board structures remains unexplained even when all three hypotheses are combined, suggesting that idiosyncratic factors affect many individual boards' characteristics.

"Failure to Exercise Call Options: An Anomaly and a Trading Game," Hans R. Stoll, Veronika Krepely Pool and Robert E. Whaley (forthcoming in *Journal of Financial Markets*)

In the U.S., exchange-traded options are unprotected from cash dividend payments on the underlying stock. Consequently, it may become optimal to exercise deep in-the-money call options just prior to the ex-dividend day. In this study, we examine the extent to which option holders fail to exercise their call options on the day prior to an ex-dividend day when it is optimal to do so. Using a sample of call options on stocks with quarterly dividends of at least a penny per share during the period January 1996 through April 2006, we find that more than half of outstanding long positions go unexercised. We estimate that this failure to exercise has caused call option holders to lose over \$491 million over a ten-year period. We also show how market makers capture the lion's share of the proceeds by using a dividend spread trading strategy.

"Political Regimes, Business Cycles, Seasonalities, and Returns," John G. Powell, Jing Shi, Tom Smith, and **Robert E. Whaley**, May 21, 2007

This paper provides a method for testing for regime differences when regimes are long-lasting. Standard testing procedures are generally inappropriate because regime persistence causes a spurious regression problem - a problem that has led to incorrect inference in a broad range of studies involving regimes representing political, business, and seasonal cycles. The paper outlines analytically how standard estimators can be adjusted for regime dummy variable persistence. While the adjustments are helpful asymptotically, spurious regression remains a problem in small

samples and must be addressed using simulation or bootstrap procedures. We provide a simulation procedure for testing hypotheses in situations where an independent variable in a time-series regression is a persistent regime dummy variable. We also develop a procedure for testing hypotheses in situations where the dependent variable has similar properties.

"Regulation Fair Disclosure and the Cost of Adverse Selection," Baljit Sidhu, Tom Smith, Robert E. Whaley, and Richard Willis, July 2007

Regulation FD, imposed by the Securities and Exchange Commission in October 2000, was designed to create a level playing field by prohibiting disclosure of material private information to selected market participants, such as financial analysts. Exactly what informational advantage such recipients gain is unclear. If multiple "insiders" receive identical information, the information is immediately incorporated in price and the expected profit of each insider is zero. If, on the other hand, Regulation FD has curtailed the flow of information from firms to the investment public, private information becomes longer-lived and more valuable. Hence, with increased risk in providing immediacy to potentially informed traders, market makers will demand increased compensation by widening the adverse selection component of the bid/ask spread. To test this proposition, we identify the cost components of the bid/ask spread for a sample of NASDAQ stocks in the period surrounding the implementation of Regulation FD. After controlling for other factors affecting the market maker's spread, we find that Regulation FD has led to an increase in adverse selection costs of approximately 36 percent. We interpret our finding as Regulation FD failing to achieve one of its desired objectives.

"Determinants of Superior Stock Picking Ability," M. Mikhail, B. Walther, X. Wang, and Richard Willis, September 2006

Prior research demonstrates that analysts whose recommendation revisions earned the most (least) positive excess returns in the past continue to outperform (underperform) other analysts in the future. We extend this work by investigating the determinants of persistent stock picking ability. We find that the best analysts, based on the profitability of their stock recommendations, tend to follow fewer industries and have better resources at their disposal. Analysts classified as superior, also tend to issue their recommendations before their peers, are more likely to issue recommendations within days of a quarterly earnings announcement, and are less likely to issue revisions that skip recommendation categories. Finally, superior analysts have a greater ability to predict which firms are more likely to experience deterioration in their future performance following downgrades. The number of firms followed and the ability to distinguish between firms within an industry do not appear to play an important role in determining persistent stock picking ability.

"Security Analysts, Cash Flow Forecasts, and Turnover," S. Pandit, Richard Willis and L. Zhou, March 2007

We examine the relation between security analysts turnover and the relative accuracy of their annual earnings and cash flow forecasts. We find that issuing a cash flow forecast, regardless of its accuracy, reduces the probability of experiencing turnover. Moreover, relatively more accurate earnings and cash flow forecast accuracy reduce the probability of turnover, with earnings forecasting accuracy decreasing the probability of turnover more than cash flow forecasting accuracy. Consistent with agency theory, cross-sectional results suggest that earnings forecasting accuracy further reduces the probability of turnover when earnings forecasting accuracy is potentially more informative regarding analysts' talent and/or effort.

"When Security Analysts Talk, Who Listens?" Michael B. Mikhail, Beverly R. Walther, and Richard H. Willis (forthcoming in *Accounting Review*)

Regulators' interest in analyst reports stems from the belief that small investors are unaware of the conflicts sell-side analysts face and may, as a consequence, be misled into making suboptimal investment decisions. We examine who trades on security analyst stock recommendations by extending prior research to focus on investor-specific responses to revisions. We find that both large and small traders react to analyst reports; however, large investors appear to trade more than small traders in response to the information conveyed by the analyst's recommendation and earnings forecast revision (proxied by the magnitudes of the recommendation change and the earnings forecast revision, respectively). We also find that small investors do not fully account for the effects of analysts' incentives on the credibility of analyst reports, as captured by the type of recommendation (i.e., upgrade versus downgrade or buy versus sell). In particular, small investors not only trade more than large investors following upgrade and buy recommendations, but also trade more following upgrade and buy recommendations than they do following downgrade and hold/sell recommendations. Furthermore, we observe that, on average, small traders are net purchasers following recommendation revisions regardless of the type of the recommendation; large traders tend to be net sellers following downgrades and sells. Consequently, large traders generate statistically positive returns from their trading, while small traders generate statistically negative returns from their trading. These findings are consistent with large investors being more sophisticated processors of information, and provide some support for regulators' concerns that analysts may more easily mislead small investors.



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