Owen @ Vanderbilt

FINANCIAL MARKETS

CONTENTS

Research Workshops: A list of workshops conducted during 2001-2002. 5

Current Activities of Center Faculty: A listing of research endeavors by the faculty. 6

Faculty Research Papers: Current working papers since January 2001. 9

FINANCIAL MARKETS RESEARCH CENTER • 2002

Conference on

Innovation in Finance

Innovation and change are constant features of financial markets as new technology, changing investor needs, regulation, and other forces affect the way investing and trading are carried out. This fifteenth annual conference of the Financial Markets Research Center, supported by a special grant from the New York Stock Exchange, and held on April 11-12, 2002, dealt with two areas of innovation – innovation in investing and innovation in trading. On the investing side, conference participants examined alternative investment vehicles, namely hedge funds and managed funds. How has the hedge fund industry developed? What types of investing strategies do these funds employ? What has been their investment performance? How are managers compensated? On the trading side, conference participants discussed recent developments in equities markets and futures markets, including regulatory changes. What is the future of innovative trading systems? Of traditional exchanges? Can market quality be accurately measured? How has regulation affected the quality and functioning of equities markets? What will be the effect of the new regulatory framework for futures trading?

Philip McBride Johnson discussing regulatory policy.

The Thursday sessions took place at the conference facilities of Center member, Caterpillar Financial Services, located next to the campus, and the Friday sessions took place at the Owen School. **Jim English**, Executive Vice President of CAT Financial, **Bill Christie**, Dean of the Owen School, and **Hans Stoll**, Center director, welcomed participants to the conference.

The focus of the Thursday sessions was on hedge funds and related investment vehicles. **Rich Lindsey**, President of Bear Stearns Securities Corporation, chaired the first session, "Characterizing Hedge Funds." He noted that Bear Stearns served as prime broker to many hedge funds, an activity which involves custodial services, brokerage, and securities lending. He commented, as did later participants, on the growth in hedge funds and the brain drain of investment talent to the industry. **Steve Lonsdorf**, CEO of Van Hedge Fund Advisors, provided a comprehensive overview of the hedge fund industry. He estimated that 50% of hedge funds are domiciled abroad. He described the structure of most hedge funds as limited partnerships with a limited number of accredited investors and an investment manager who is generally paid a base fee plus an incentive fee of 20% of profits. He provided data on hedge fund performance based on the extensive data base maintained by Van Hedge Fund Advisers. **Vikas Agarwal** of Georgia State University presented the results of a study carried out with Narayan Naik of the London Business School, "Characterizing Systematic Risk of Hedge Funds with Buy-and-Hold and Option-Based Strategies," in which they show that major hedge fund equity investing strategies have important option features. In evaluating hedge funds, the non-linear payoffs, characteristic of options, and the associated risks must be considered.

Jim Klingler commenting on the evolution of hedge funds.

John Damgard, President of the Futures Industry Association, next chaired a panel, "Developments in Hedge Funds and Managed Funds." Before introducing the four panelists, he commented on two recent developments – the regulatory approval of single stock futures and the coming of retail hedge funds. **Jim Klingler**, Senior Vice President of Eclipse Capital, spoke on the historical development of hedge funds, which he dated to the market neutral strategy

continued on page 3

FROM THE DIRECTOR

As the Center completes its 15th year of operation, it is perhaps useful to review its accomplishments over the last 15 years. The Center aims to stimulate and support basic research in financial markets, which it does, in part, by holding annual conferences that bring together practitioners, regulators, and academics and by encouraging research on financial markets issues. The titles of the Center's conferences provide a sense of the issues at the time of the conferences:

Hans R. Stoll

1988 - The Stock Market Crash of 1987: What Have We Learned?
1989 - Dewey Daane Conference on International Financial Policy.
1990 - Volatility and Market Structure.
1991 - Securities Markets Transaction Costs.
1992 - World Trading Markets.
1993 - Risk Management.
1994 - Global Risk.
1995 - Financial Markets Reform.
1996 - Investing Internationally.
1997 - Ten Years since the Crash.
1998 - Financial Markets and the Corporation.
1999 - Coping with Global Volatility.
2000 - Financial Markets, Information Technology, and Electronic Markets.
2001 - Market Quality.
2002 - Innovation in Finance.

Research by Center faculty in the last 15 years has been varied and has had significant impact for regulatory policy. In the 1980s, Center faculty carried out work on derivatives markets, including the triple witching effects of index expirations, the lead lag relation between futures and cash index markets, the term structure of implied volatilities, and the link between market structure and market volatility. In the 1990's, Center faculty studied the Nasdaq Stock Market and provided academic evidence that led to important market reforms in the structure of Nasdaq. Faculty also studied global equity markets and global risk and risk management.

Currently, Center faculty continue with active and influential research on topics such as the measurement of market quality, contagion in financial markets, the sources of the "smile" in implied option volatilities, the sources of busted IPOs, the relative desirability of inside and outside board members, the role of firm characteristics in asset pricing, the effect of underwriter ownership on the under-pricing of IPOs, the sovereign debt market, the stock price effects for Andersen auditing clients of Andersen's role in Enron, and other topics.

Center faculty number 17, augmented this year by Professor Christian Schlag, visiting from Goethe University in Frankfurt Germany. Professor Schlag taught Advanced Derivatives and collaborated on several research projects with Center faculty. The Center's research efforts are very ably supported by Research Associate Christoph Schenzler, who maintains data bases and assists faculty with data retrieval and analysis. Also supporting the research efforts of the Center is an active PhD program under the direction of Professor Ron Masulis. Graduating this year is Xi Li, whose dissertation is on the timely subject of brokerage analysts' performance. ■

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 between representatives of the financial community, researchers in financial markets, and the faculty at Vanderbilt.
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. ■

Owen @ Vanderbilt

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Hans R. Stoll, Director
J. Dewey Daane, Senior Advisor

FUNDING

The Center 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.

Current Center members are:

Aeltus Investment Management, Inc.
Archipelago, LLC
Bear, Stearns & Company, Inc.
Caterpillar Financial Services
Chicago Board Options Exchange
Eclipse Capital Management, Inc.
*The Hull Group, LLC
*Interactive Brokers Group
*Matlock Capital, LLC
Merrill Lynch & Company, Inc.
*The Nasdaq Stock Market, Inc.
*New York Stock Exchange, Inc.
Susquehanna International Group, LLP
*Thales Fund Management, LLC

*Indicates a lead member.

Market Quality *(continued)*

adopted in 1949 by Robert Winslow Jones. **Bill Spitz**, Treasurer of Vanderbilt University, described the university's investment strategy, and noted that 25% of the endowment is in hedge funds. Of this amount, about half is in actively managed low beta hedge funds and about half is in a variety of absolute return hedge funds that follow a market neutral strategy. While transparency of hedge funds has improved, risks remain. These include high leverage, high concentration, and illiquidity of hedge fund portfolios. **Eric Noll**, Associate Director of Susquehanna International Group (SIG), a large market making and proprietary trading firm, noted that his firm follows trading strategies – event arbitrage, convertible arbitrage, and other types of relative value trading – that are followed by hedge funds. Consequently, SIG believes it is well-positioned to provide trading and other services to hedge fund clients. **Jack Gaine**, President of the Managed Funds Association and a long-time observer of the Washington scene, commented on recent political developments, including the anti-money laundering requirement to determine the source of investment funds, the impact of Enron on the regulation of derivatives, the degree to which hedge funds are exempt from registration, and developments at the Commodities Futures Trading Commission.

Paul Bennett noting the importance of market quality and the difficulty of measuring it.

After the lunch break, **Philip McBride Johnson**, of Skadden, Arps, Slate, Meagher and Flom, and former Chairman of the Commodity Futures Trading Commission, in an entertaining and informative talk, questioned the extent of de-regulation under the Commodity Futures Modernization Act of 2000 (CFMA). He argued that de-regulation has gone too far when major institutional investors, central to the functioning of financial markets, are exempt from regulation. He also expressed skepticism about the future success of recently approved single stock futures. Regulatory restriction on allowable margins, taxes, and the dual regulation (by the CFTC and SEC) of these instruments so hamstrings them that they stand no chance of success vis à vis other instruments, such as options, that can be used to achieve equivalent positions.

Jim Cochrane, Senior Vice President of the New York Stock Exchange, chaired a session on "Hedge Fund Risk and Compensation." **David Hsieh**, of Duke University, presented the results of an empirical study (with William Fung), in which the investment styles of different fixed income funds are classified by important underlying strategies (directional versus non-directional and static versus dynamic). The classification provides useful information about the underlying sources of risk. **Martin Gruber**, of New York University, in a study done with Edwin Elton and Christopher Blake, examined the behavior of investment managers of the few registered mutual funds that permit incentive fees. Managers earning incentive fees have better stock selection ability and lower expense ratios than do other managers, however, they have beta coefficients that are less than their benchmark's coefficient. Consequently they under-perform their benchmark. Because incentive fees have a floor and a cap, managers become more conservative after a period of good performance and increase risk after a period of poor performance. **David Sweet**, Quantitative Analyst for Thales Fund Management, described the leptokurtic distribution of daily returns of individual stocks and suggested a procedure of normalizing the distribution. The first day of the conference concluded with a tongue-in-cheek in-class examination on the subject, "Enron and LTCM," administered by **David Modest**, Managing Director of Morgan Stanley and former partner at Long Term Capital. Part I of the exam posed a variety of questions about Enron and LTCM. Part II of the exam followed the Jeopardy format in which the question appropriate for the answer must be provided.

Day two of the conference turned to issues of trading markets, market quality and trading strategy. Before introducing the two speakers, the chairman of the first session, **Thomas Peterffy**, Chairman and CEO of Interactive Brokers Group, stressed the rapid developments in technology that make possible speedy and low cost trading. Customers also have the facility to add their own front end trading engines for routing orders or automating trading rules. **Paul Bennett**, Chief Economist of the New York Stock Exchange, discussed several issues related to market quality. He summarized the trade management guidelines promulgated in February 2002 by the Association for Investment Management and Research (AIMR) that call for disclosure by brokerage firms of potential conflicts arising from payment for order flow, from new issues allocation, and from related practices. He discussed some difficulties with SEC Rule 11Ac1-5, which requires market centers to provide data on execution quality. In particular, he noted that the rule covers only 31% of NYSE volume, that measures of the effective spreads fail to distinguish trades greater than the quoted depth from trades less than the quoted depth, and that different processors report different summary measures of execution quality given the same underlying data. **Simon Wu**, Economist at the Nasdaq Stock Market, reported

Thomas Peterffy overseeing the discussion.

continued on page 4

Market Quality *(continued)*

the results of a study of order routing and execution quality for orders of less than 2000 shares in 100 Nasdaq and 100 NYSE stocks. Order routing data are taken from the SEC Rule 11Ac1-6 reports of 9 discount brokers and 5 full service brokers. Execution quality, taken from SEC Rule 11Ac1-5, is reported for those market centers receiving order flow. **Matt Gelber**, Senior Vice President of Fidelity Capital Markets, noted that Rule 11Ac1-5 reports of execution quality are useful to him in meeting his responsibilities to route orders to the best market.

Kevin Cronin describing the tasks of the institutional trader.

The final session of the conference on the topic, "Trading Strategies and Trading Venues," was chaired by **Ron Masulis**, of the Owen School. **Ian Domowitz**, Managing Director at ITG Inc., noted that automation is likely to lead to disintermediation of trading in retail orders, which can be handled in an electronic book market. On the other hand, institutional trades will require re-intermediation by electronic intermediaries that can effectively manage the more complex trading needs of institutional clients. **Kevin Cronin**, Senior Vice President of AIM Capital Management responsible for all domestic equity trading, discussed the difficulties of trading large institutional positions and the need for institutions to take direct control of their orders. Modification of NYSE rules that limits direct contact between an institution and a floor broker would enable institutions to have greater control of the trading process. **Joe Lombard**, Executive Vice-President of Archipelago, discussed the growing importance of electronic communications networks (ECNs) and the contributions of ECNs to market liquidity. He compared trading volume of ARCA/Redi, Island and Instinet and examined the quality of ECN markets in exchange traded funds (ETFs). ■

Dewey Daane Invitational Tennis Tournament

The tennis tournament, an integral part of the annual conference since 1992, was as hotly contested as ever with first prize going to **Tom Bond** and runner-up prize going to **Marti Gruber**. Host of the conference, **Dewey Daane**, who has retired neither from his position as Frank Houston Professor of Finance Emeritus, nor from the tennis court, awarded the contents of the Daane Cup. ■

Prior to battle for the contents of the Daane Cup.

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://mba.vanderbilt.edu/owenclubs/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://mba.vanderbilt.edu/owenclubs/maxadler/. ■

Research Workshops

Workshops 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 2001-2002 the following researchers presented work on finance topics:

Rajesh Aggarwal, *Dartmouth College:* "Performance Incentives within Firms: The Effect of Managerial Responsibility "

Ray Ball, *University of Chicago:* "Incentives versus Standards: Properties of Accounting Income in Four East Asian Countries and Implications for Acceptance of IAS"

Brad Barber, *University of California-Davis:* "All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors"

Bernard Black, *Stanford University Law School:* "Delaware's Takeover Law: The Uncertain Search for Hidden Value Market" (joint with Law School)

Janice Breuer, *University of South Carolina:* "The Quest for Purchasing Power Parity with a Series-Specific Unit Root Test Using Panel Data"

Anchada Charoenrook, *Vanderbilt University:* "Change in Consumer Sentiment and Aggregate Stock Returns"

Jeffrey Coles, *Arizona State University:* "Corporate Self-Regulation of Insider Trading"

Joshua Coval, *Harvard Business School:* "Judging Mutual Funds by the Company They Keep: An Improved Performance Metric"

James Cox, *Duke University Law School:* "The Death of the Securities Regulator – Globalization" (joint with Law School)

Greg Crawford, *Duke University:* "Empirical Modeling of Endogenous Quality Choice: The Case of Cable Television"

Laura Field, *Pennsylvania State University:* "Does Disclosure Deter or Trigger Litigation?"

Amar Gande, *Vanderbilt University:* "News Spillovers in the Sovereign Debt Market"

Shingo Goto, *University of California, Los Angeles:* "Time-Varying Markups and Expected Stock Returns"

Gordon Hanka, *Vanderbilt University:* "Liquidity Consequences of Lockup Expirations"

Jarrad Harford, *University of Oregon:* "Merger Waves: Hubris, Herding, or Efficient Response to a Shock?"

Roger Huang, *University of Notre Dame:* "Selective Disclosure and Opportunistic Trading: An Analysis of Discretionary Earnings Announcements"

Eric Hughson, *University of Colorado:* "Cream-Skimming and Payment for Order Flow" and "The Hot Hand Strikes Back"

Kose John, *New York University:* "Design of Corporate Governance: Role of Ownership Structure, Takeovers, Bank Debt and Large Shareholder Monitoring" (joint with Law School)

G. Andrew Karolyi, *Ohio State University:* "Why Are Foreign Firms Listed in the U.S. Worth More?"

Jonathan Karpoff, *University of Washington:* "Takeover Defenses of IPO Firms" (joint with Law School)

Larry LeBlanc, *Vanderbilt University:* "Large-Scale Optimization Models of Financial Systems"

Xi Li, *Vanderbilt University:* "Performance Evaluation of Recommended Portfolios of Individual Financial Analysts"

Francis Longstaff, *University of California, Los Angeles:* "Losing Money on Arbitrages: Optimal Dynamic Portfolio Choice in Markets with Arbitrage Opportunities"

Kenneth Martin, *New Mexico State University:* "Market Reaction to Highly Dilutive Stock Option Plan Proposals and the Subsequent Impact on CEO Compensation" (joint with Law School)

John McConnell, *Purdue University:* "Outside Directors and Corporate Board Decisions: A Natural Experiment" (joint with Law School)

Frederico Nardari, *Arizona State University:* "Daily Cross-Border Equity Flows: Pushed or Pulled?"

David Parsley, *Vanderbilt University:* "Limiting Currency Volatility to Stimulate Goods Market Integration: A Price Based Approach"

Annette Poulsen, *University of Georgia:* "The Choice of Private versus Public Capital Markets: Evidence from Privatizations" (joint with Law School)

J. Mark Ramseyer, *Harvard Law School:* "Directed Credit? Capital Market Competition in High Growth Japan" (joint with Law School)

S. Abraham Ravid, *Rutgers University:* "The Role of Termination in Employment Contracts: Theory and Evidence from Film Directors' Careers" ■

Guest Speakers

An 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 2001-2002 academic year were:

Susan Bies, Member, *Board of Governors of the Federal Reserve System*

Michael Blackburn, Director of Investments, *Petra Capital*

Roger E. Brinner, Managing Director and Chief Economist, *The Parthenon Group*

J. Alfred Broaddus, Jr., President, *Federal Reserve Bank of Richmond*

Lynn Browne, Executive Vice President and Economic Advisor, *Federal Reserve Bank of Boston*

Jack Harrington, Vice President, *Nelson Capital Corporation*

Maureen A. Hendricks, Advisory Managing Director, Global Energy and Power Group, *Salomon Smith Barney*

William Hoagland, Majority Staff Director, *Senate Budget Committee*

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

David Jones, Chairman, *Aubrey Lanston & Co.*

Stephen R. Kahn, Managing Director (Boston), *Advent International*

Donald L. Kohn, Director, Division of Monetary Affairs, *Board of Governors of the Federal Reserve System*

Dino Kos, Executive Vice President, *Federal Reserve Bank of New York*

David A. Lereah, Senior Vice President and Chief Economist, *National Association of Realtors*

Michiel McCarty, Managing Director, *Gleacher & Co. LLC*

Robert McTeer, President, *Federal Reserve Bank of Dallas*

Lawrence H. Meyer, Member, *Board of Governors of the Federal Reserve System*

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

David Smith, Chief Financial Officer, *Tennessee Valley Authority*

Gary H. Stern, President, *Federal Reserve Bank of Minneapolis*

Ray Stone, Co-Founder and Managing Director, *Stone & McCarthy Research Associates*

David M. Walker, Comptroller General of the *United States* ■

Current Activities of Center Faculty

CLIFFORD BALL, Professor (finance and statistics). M.Sc., Nottingham 1975, Ph.D. (mathematics), New Mexico 1980.

Current research interests include equities, bonds, options, and futures contracts; empirical testing of financial models; stochastic processes and statistical applications to finance; the European monetary system; capital requirements, risk management and value-at-risk.

His paper, "True Spreads and Equilibrium Prices" (with Tarun Chordia), was published in the *Journal of Finance*. Ball serves as referee for numerous research journals and is an associate editor of the *Journal of Empirical Finance*.

NICOLAS P.B. BOLLEN, Assistant Professor (finance). M.B.A., Ph.D., Duke 1997.

Research interests include mutual fund performance and the valuation of derivative securities. He has recently found evidence that mutual fund managers possess short-term ability, which suggests that a strategy of actively investing in the prior quarter's top performers may be profitable. He is currently studying the efficiency of the S&P 500 index option market. He teaches courses in equities markets, securities and portfolios, and managerial finance.

Professor Bollen presented his paper, "The Performance of Alternative Valuation Models in the OTC Currency Option Market" (with Emma Raisel), to a group of academics and option traders in April 2002 on Wall Street at Cornell University's 12th annual Derivatives Conference. The paper has been accepted for publication in the *Journal of International Money and Finance*. Professor Bollen's paper, "Does Net Buying Pressure Affect the Shape of Implied Volatility Functions?" (with Robert E. Whaley and Tom Smith), has been accepted for presentation at the January 2003 American Finance Association annual meeting in Washington, D.C.

In May, 2002, Professor Bollen received financial support from the FMRC to purchase a database of mutual fund returns in order to study the impact that decimalization has had on the trading costs incurred by mutual fund managers.

PAUL CHANEY, Associate 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 presented his paper, "Shredded Reputation: The Cost of Audit Failure" (with Kirk Philipich), at the London Business School in June 2002. This paper has also been accepted for publication in the *Journal of Accounting Research*. His paper, "Joint Accounting Choices: An Examination of Firms' Adoption Strategies for SFAS No. 106 and SFAS No. 109" (with Michele Daly and Debra Jeter), was accepted for presentation at the American Accounting Association's annual meeting in August.

ANCHADA CHAROENROOK, Assistant Professor (finance). M.S. (financial engineering), Ph.D (finance), Michigan 2000. M.S., Ph.D. (electrical engineering), Washington.

Current research interests include empirical testing of asset pricing models, theoretical asset pricing, risk management, corporate finance theory as applied to security pricing, and problems in economic modeling. Professor Charoenrook teaches courses in securities and portfolios and fixed-income markets.

WILLIAM G. CHRISTIE, Dean of the Owen Graduate School of Management, Professor (finance), M.B.A., Ph.D., Chicago, 1980, 1989.

Dean Christie's three-year term as a member of Nasdaq's Economic Advisory Board will conclude this year after the October meeting in Washington. He continues in his role as an Academic Director of the Financial Management Association. Christie attended the GMAC (Graduate Management Admissions Council) 2002 MBA Leadership conference in Amelia Island and the 2002 "Development for Deans" conference in Washington, DC, sponsored by the Council for Advancement and Support of Education. He is also an active member of the AACSB Business Accreditation Committee and will be a team member for re-accreditation of Tulane University and the University of Notre Dame.

Christie's article, "Nasdaq Trading Halts: The Impact of Market Mechanisms on Prices, Trading Activity, and Execution Costs" (with Shane Corwin and Jeffrey Harris), was published in the June 2002 issue of the *Journal of Finance*.

MARK A. COHEN, Professor (economics & strategy); Director of the Vanderbilt Center for Environmental Management Studies. M.A., Ph.D., Carnegie-Mellon 1985.

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

Professor Cohen recently chaired a session on "Transparency After 9/11: Balancing the Right-to-Know with the Need for Security" at the 2002 BELL Conference held at the University of California's Bren School of the Environment in conjunction with the World Resources Institute. He also chaired a session on "Environmental Regulation" and presented his paper, "Information Disclosure as Environmental Regulation: A Theoretical Analysis" (with V. Santhakumar), at the Second World Congress of Environmental and Resource Economists held in Monterey, California.

Cohen was recently appointed to the Stakeholder Council of the Global Reporting Initiative (GRI), an international multi-stakeholder effort to create a common framework for voluntary reporting of economic, environmental, and social impact of organizations. The GRI Stakeholder Council will play a central policy and governance role in shaping the future development of the GRI. More details can be found at www.globalreporting.org.

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 on Monetary and Fiscal Policy, Daane arranged for many of the guest speakers listed elsewhere in this newsletter.

In May, Dr. Daane attended the 20th anniversary celebratory reception and dinner of the National Futures Association in Washington, DC. He continues to serve on a Special Committee on Funding of the Board of Directors of the NFA, and in June he attended a meeting of that NFA special committee in Chicago. In April, he participated in the annual Financial Markets Research Center conference held at Vanderbilt. In June, Dr. Daane participated in the Federal Reserve Bank of Chicago's 38th Annual Conference on Bank Structure and Competition, and he also attended (as a member) a Bretton Woods Committee meeting in Washington, DC featuring James Wolfensohn, President of the World Bank, and John Taylor, Undersecretary of the Treasury for International Affairs. Later in June he participated in the Federal Reserve Bank of Boston's 45th Annual Economic Conference held in Chatham, MA. This year's conference focused on "Education in the 21st Century: Meeting the Challenges of a Changing World" including the implications for economic growth.

Dr. Daane received a Lifetime Achievement Award from Owen at the May 2002 Commencement recognizing his almost three decades of service to the School.

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

Research interests include industrial organization, econometrics, mergers, and antitrust policy. Professor Froeb's experience as an antitrust "cop" has many business applications that he teaches to his introductory management classes. He is also the editor of the award winning web site, Antitrust Policy at www.antitrust.org.

Professor Froeb just returned from the Swedish Competition Authority in Stockholm where he and Greg Werden from the U.S. Department of Justice put on a three-day training seminar for 30 European Union economists on "Quantitative Benefit-Cost Analysis of Mergers." Economists from Norway, Finland, Italy, Ireland, England, Germany, Belgium, Denmark, the European Commission, and Brazil learned how to use Froeb's software, SimMerger™, to evaluate the competitive effects of mergers. Colleague Steve Tschantz in the Math Department wrote many of the training exercises used in the program.

Professor Froeb is also participating in Owen's Olin King Entrepreneurial Workshop Series (http://www.biztech.org/vandy-seminar.shtml), taught at a Huntsville-based technology incubator. He is organizing a seminar at the annual gathering of the economists in Washington DC on "What Happens After Merger?" and is writing two chapters for the American Bar Association's treatise on Econometrics, one of them on auctions with Mike Shor. Professor Froeb received the 2002 Dean's Award for Outstanding and Widespread Research Impact.

AMAR GANDE,
Assistant Professor (finance). M.B.A., IIMC 1988, Ph.D., NYU 1997.

Research interests include international finance, corporate finance, and investment banking. Professor Gande teaches courses in International Financial Markets & Instruments, International Corporate Finance, Corporate Value Management for MBA students, and Managing Global Enterprise for Executive MBA students.

In September 2001, Professor Gande discussed a paper, "Strategic Decision Making of The Firm under Asymmetric Information," at the Twelfth Annual Conference on Financial Economics and Accounting at Rutgers University. In October 2001, he discussed a paper, "Executive Pay Practice of Firms With Dominant Shareholder CEOs: Self-Dealing or Improved Monitoring?," at the 2001 Financial Management Association (FMA) annual meetings in Toronto, Canada. In January 2002, he presented a paper, "The Role of Incentives in the Prevention of Financial Crises in Emerging Economies" (with Kose John and Lemma Senbet), in Atlanta. During the summer of 2002, Gande worked with coauthors at Owen (and at other universities) on three different projects that examine the role of institutions in financial crisis in emerging markets, valuation effects of geographic diversification, and the role of incentives on effectiveness of corporate governance.

GORDON HANKA,
Visiting Assistant Professor (finance). M.B.A., Texas, Austin 1989, Ph.D., Chicago 1994.

Research interests are in corporate finance including issues in corporate control, capital structure, and IPO lockups. Hanka teaches corporate value management and corporate financial policy.

Professor Hanka's paper, "Does Insider Trading Impair Market Liquidity? Evidence from Lockup Expirations" (with Charles Cao and Laura Field), was presented at the 2002 Western Finance Association Conference and the 2002 Pacific Basin Finance Conference. His paper "The Expiration of IPO Share Lockups" (with Laura Field), was nominated for the Brattle Prize for best paper in the *Journal of Finance*.

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

Research interests include financial accounting and auditing, with specific interests in earnings management, components of earnings, the market for audit services, audit pricing, and audit opinions.

Professor Jeter has been invited to serve on the Editorial Advisory and Review Board of *The Accounting Review* for another year, as well as the Editorial Board of *Accounting Enquiries*. She presented a paper, "Audit Pricing in Private and Public Firms" (with Paul Chaney and L. Shivakumar), at the annual American Accounting Association conference in Atlanta in August 2001 and at the 13th Asian Pacific Conference on International Issues in October 2001. Professor Jeter presented her paper, "The Effects of Accounting Choice on Analysts' Forecast Errors and Market Response in the Oil and Gas Industry" (with Paul Chaney), at the Ohio AAA meeting in May 2002. She served as a discussant

continued on page 8

Faculty Activities *(continued)*

at the 2002 Mid-Year Auditing Section Conference of the AAA in January and has agreed to be a discussant at the annual AAA meeting in August in San Antonio. In addition, she will be presenting the paper, "Joint Accounting Choices: An Examination of Firms' Adoption Strategies for SFAS No. 106 and 109" (with Michele Daly and Paul Chaney), at the August 2002 AAA meeting.

Professor Jeter was the recipient of the James A. Webb Award for Excellence in Teaching for the 2001-02 academic year.

CRAIG M. LEWIS, Associate Professor (finance). M.S., Ph.D., Wisconsin 1986, C.P.A.

Research interests include equity analyst behavior, the security issue process, and corporate financial policy. Current research topics include herding by equity analysts, the relation between executive compensation and firm performance, and security issue cycles. Lewis has published papers on the topics of the behavior of equity research analysts, information content of 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. This past year he taught all four sections of Managerial Finance. He is co-director of the newly developed Law and Business program where he jointly teaches a class titled "Life Cycle of the Firm" with Professor Randall Thomas of the Vanderbilt Law School. He also has recently served on the dissertation committees of Ingrid Fulmer (Michigan State University), and Xi Li (The University of Miami). Lewis is a past winner of the best teacher awards voted by the regular MBA and Executive MBA programs and the Dean's Award for teaching excellence.

Lewis currently serves as associate editor of the *Journal of Corporate Finance* and the *Journal of Financial Research*, and he serves as referee for numerous academic journals. In 2002, he received the Dean's Award for Research Productivity. His paper, "Following the Leader: A Study of Individual Analysts' Earnings Forecasts" (with Rick Cooper and Theodore Day), received the Fama-DMA Prize (1st Place) for the Best Paper Published in the *Journal of Financial Economics* in the areas of Capital Markets and Asset Pricing in 2001. He recently presented research papers at the Western Finance Association annual meeting, the London School of Business, Penn State University, the University of Texas at Dallas, and Southern Methodist University.

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

Research interests include investment banking, corporate finance, financial institutions, market microstructure, and international finance. His research on capital structure changes and the security issuance process is widely referenced. Current research projects center on European merger activity and global equity offerings. Masulis teaches mergers and acquisitions, venture capital, and asset pricing. This past year he also co-taught a seminar course on "Corporate Governance and Management Compensation" in a joint offering with the Law School.

Professor Masulis was a discussant at the Corporate Governance in the Banking and Financial Services Industries Symposium sponsored by the Federal Reserve Bank of New York and NYU in November 2001. In December, he presented his paper, "Does Market Structure Affect the Immediacy of Stock Price Responses to News?" (with L. Shivakumar), at Louisiana State University. In February 2002, he was a discussant at the Corporate Governance Conference in Honor of J. Fred Weston at UCLA. Masulis was Visiting Professor of Finance and Research Fellow at the Center for Corporate Governance, Tuck School of Business, Dartmouth College in the Spring of 2002.

Two papers by Professor Masulis have been accepted for publication during the past year. "Does Market Structure Affect the Immediacy of Stock Price Responses to News?" (with L. Shivakumar) is forthcoming in the *Journal of Financial and Quantitative Analysis*, and "Trading Activity and Stock Price Volatility: Evidence from the London Stock Exchange" (with Roger Huang) is forthcoming in the *Journal of Empirical Finance*.

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

Professor Parsley's research interests are in the fields of international finance and macroeconomics. He has concentrated on the macroeconomics of exchange rates, prices, and the relationship between the two. His current research is directed in four main areas: (1) quantifying globalization using prices, including the factors affecting the integration of the goods market, (2) the importance of deviations from the law of one price in determining real exchange rate movements, (3) the relation between aggregate inflation and the variability of relative prices, and (4) how exchange rates affect cross-border pricing.

Professor Parsley was an invited Research Fellow of the Hong Kong Institute of Monetary Research, where he conducted studies on economic exposure and financial market linkages. Professor Parsley was also an invited Visiting Scholar at the International Monetary Fund, where he conducted research on global goods market integration.

Parsley had two papers published during the past year: "Explaining the Border Effect: The Role of Exchange Rate Variability, Shipping Costs, and Geography" (with Shang-Jin Wei) in the *Journal of International Economics*; and "Official Exchange Rate Arrangements and Real Exchange Rate Behavior" (with Helen Popper) in the *Journal of Money Credit and Banking*.

CHARU G. RAHEJA, Assistant Professor (finance). M. Phil, Ph.D., New York University, 2001.

Research interests include theoretical and empirical issues in corporate finance, with specific interests in corporate governance, management compensation, and venture capital.

Professor Raheja teaches corporate finance and financial management. She participated in the 2002 American Finance Association meeting where she presented her paper, "The Interaction of Insiders and Outsiders in Monitoring: A Theory of Corporate Boards." Raheja also presented this paper at the Universidad Carlos III de Madrid: Departamento de Economía de la

Empresa, Madrid in June 2001. Other current research topics include the study of corporate governance structure in firms at the initial public offerings, and in firms that experience distress.

HANS R. STOLL, The Anne Marie and Thomas B. Walker Professor of Finance, Director of the Financial Markets Research Center. M.B.A., Ph.D., Chicago 1966.

Research interests include stock market structure, derivatives, and other aspects of financial markets.

Professor Stoll served on the program committee for the NYSE conference on Practices and Concerns of Institutional Buy-Side Equity Desks in Palm Beach, Florida, in December of 2001. In January 2002, he participated in the Brookings-Wharton Fifth Annual Conference on The Future of Securities Markets in Washington, DC, and he presented his paper, " Measuring Market Quality: The Relation between Quoted and Effective Spreads," at SMU. In March and June, Stoll lectured on market microstructure at the University of Krems, Austria, and in July he attended the Financial Economists Roundtable in Montreal. He continues to serve as a public governor of the Pacific Exchange.

Stoll serves on the editorial boards of nine academic finance journals. His recent publications include "Exchange Rates and Firms' Liquidity: Evidence from ADRs" (with Roger Huang), in the *Journal of International Money and Finance* (2001), "Tick Size, Bid-Ask Spreads and Market Structure" (with Roger Huang), in the *Journal of Financial and Quantitative Analysis* (2001), and "Regulation of Financial Markets: A Focused Approach" in the *Journal of Applied Corporate Finance* (Winter 2002).

MARTIN WEINGARTNER, The Brownlee O. Currey Professor of Finance, Emeritus. M.S., Ph.D., Carnegie Mellon, 1962.

Before his retirement from Owen in January 1998, Professor Weingartner taught courses in negotiation, case studies in finance, financial decision making, and real estate finance. His research over the years focused on the premise that specialty is the financial strategy of organizations – particularly entrepreneurial ventures. He has written extensively on the uses of mathematical models in financial decision making and approaches to capital budgeting and has consulted for major financial institutions and other organizations. Professor Weingartner is a past president of The Institute of Management Sciences and is associate editor of *Management Science*. He has authored *Mathematical Programming and the Analysis of Capital Budgeting Problems* as well as numerous articles. ■

Faculty Research Papers

Current working papers, completed or revised since January 1, 2001, are listed below. Individual copies may be obtained by writing Pat Scott, Owen Graduate School of Management, Vanderbilt University, Nashville, TN 37203 or calling 615-322-3671, or email pat.scott@owen.vanderbilt.edu. There is a charge of $10.00 per paper for non-members of the Center. Academics may request up to five papers free of charge. Some of the papers are available on the Center's web site.

94-05 "Revenues of Immediacy Suppliers versus Execution Costs of Investors: Evidence from the NYSE," by Roger D. Huang and ***Hans R. Stoll.*** *(forthcoming in Bruce Lehmann (ed.) The Legacy of Fischer Black, Oxford University Press)*

The per share revenue of immediacy suppliers is estimated by a measure we term the "realized half-spread." The estimate, based on the complete record of all transactions for 343 New York Stock Exchange stocks that are continuously listed on the S&P 500 in the period 1987 to 1991, is about two to three cents per share. The realized half-spread is compared with per share trading gains of securities firms as calculated from financial reports filed with the SEC. Inferences about the revenues of public limit orders as compared with the revenues of securities firms are made, and they suggest that limit orders are "picked off." The realized half-spread is reconciled with frequently used measures of investor execution costs – the quoted and effective half-spreads. Also examined are the Roll implied spread and a measure termed the perfect foresight half-spread.

96-20 "Margin Adequacy and Standards: An Analysis of the Crude Oil Futures Market," by Theodore E. Day and ***Craig M. Lewis.*** *(forthcoming in Journal of Business)*

This paper proposes two value-based standards for setting initial margin requirements on futures positions. Our approach recognizes that the distributions of the payoffs to futures traders and the potential losses to the futures clearinghouse can be described in terms of the payoffs to barrier options with appropriately defined strike prices and knockout boundaries. Based on this observation, we argue that initial margin requirements are adequate if the initial margin that must be posted is either (1) equal to the ex ante value of the payoffs to the futures position or (2) sufficient to reduce the value of the potential losses absorbed by the futures clearinghouse to zero. Using a numerical valuation approach that incorporates the stochastic volatility of the futures market, we examine the adequacy of margin requirements in the crude oil futures market. Our results suggest that on average the initial margin requirements set by the New York Mercantile Exchange have been in excess of the minimum margins required under our option-based standards for adequacy.

97-01 "Industry Conditions, Growth Opportunities, and Market Reactions to Convertible Debt Financing Decisions," by ***Craig M. Lewis****, R. Rogalski, and J. Seward. (forthcoming in Journal of Banking and Finance)*

Firms that issue convertible debt seem to have high debt- and equity-related costs of external finance. Existing theories of convertible debt finance differ primarily in their identification of the specific causes of the debt- and equity-related costs of external finance. To assess the theoretical issuance motives separately, we propose a simple framework that characterizes how issuers should design convertible debt to efficiently mitigate specific debt- and equity-related costs of external finance. We provide evidence from 536 security offer announcements that supports the hypotheses that convertible debt can be designed to mitigate different combinations of debt- and equity related costs of external finance and that share price reactions depend on the security design decisions. The results also illustrate that the relations between firm value, financial leverage, investment opportunities, and the rate of future

growth are more complex among convertible debt issuers than situations where firms issue standard financial securities.

*97-21 "Does Market Structure Affect the Immediacy of Stock Price Responses to News?," by **Ronald W. Masulis** and L. Shivakumar. (forthcoming in Journal of Financial and Quantitative Analysis)*

This study compares the speed of price adjustments to seasoned equity offering announcements by NYSE/AMEX and NASDAQ stocks. We find that price adjustments are quicker by as much as one hour on NASDAQ. This result is not due to differences in issuer characteristics or announcement effects across the markets, but due to differences in market structures. Greater risk-taking by dealers, more rapid order execution and more frequent informed trading (SOES bandits) on NASDAQ, as well as stale limit orders and a less efficient opening price setting mechanism on the NYSE/AMEX, all contribute to faster stock price adjustments on NASDAQ.

*98-15 "Raising International Capital through ADRs: Evidence from Emerging Markets," by **Amar Gande**. (February 2001)*

Since the last decade, significant amounts of international capital were raised through ADRs by foreign firms, many of whom were first-time issuers from emerging markets. However, little is understood about the extent of underpricing of ADRs and its evolution over time. Based on an extensive data set of emerging market ADRs listed on NYSE, AMEX and NASDAQ between 1991 and 1998, I find that first-time ADR issues are underpriced relative to the after-market traded price, and that later ADR issues from a country are less underpriced relative to earlier issues from the same country. In fact, such a decrease in underpricing is not offset by a similar increase in the underwriter spreads as more ADR issues from the same country are brought to the market. I rationalize this finding in a theoretical framework where investors in the ADR market learn about the country-specific component of the after-market price through sequential issues of ADRs from the same country. Implications for the price impact of new ADR listings on the seasoned ADR issues from the same country are also discussed.

*99-01 "What Is the Spread without Rounding? A Monte Carlo Markov Chain Approach," by **Clifford A. Ball** and Tarun Chordia. (June 2001)*

This paper exploits Markov Chain Monte Carlo sampling methods to study the effects of the discrete tick size on quoted spreads and prices for a sample of large, New York Stock Exchange listed stocks. A model of discretization is developed where the market maker rounds the 'true' ask (bid) up (down) to the nearest tick. The effect of rounding is severe; parameter estimates are shown to be biased if this rounding is ignored. Quoted spreads are, at the very least, more than twice as large as spreads that would prevail without discretization, suggesting institutionally-mandated excess market maker profits. The adverse selection component of the spread is also far smaller than the quoted spread. The evidence suggests that reducing the tick size will result in significantly lower quoted spreads.

*99-08 "The Long-Run Performance of Firms Adopting Compensation Plans Based on Economic Profits," by Chris Hogan and **Craig Lewis**. (July 2001)*

Proponents of compensation plans based on economic profits, defined as net operating profits after tax less the cost of all capital used to generate those profits, argue that these plans control for deficiencies in stock-based or earnings-based bonus plans and thereby better align managers' and shareholders' interests. We examine whether compensation plans based on economic profits do in fact produce better investment decisions. We use a sample of 65 firms adopting economic profit plans between 1983 and 1995 to examine compensation, ownership, and governance structures, and long-run operating and stock price performance. While we document significant improvements in operating performance subsequent to adoption of the compensation plans, a sample of nonadopting matched firms shows similar significant improvements. There is no significant difference in the stock price performance of the two groups in the four-year period following an adoption. We conclude that economic profit plans are no better than traditional plans that provide a blend of earnings-based bonuses and stock-based compensation in terms of their ability to create shareholder wealth.

*99-09 "Trading Activity and Stock Price Volatility: Evidence from the London Stock Exchange," by Roger D. Huang and **Ronald W. Masulis**. (forthcoming in Journal of Empirical Finance)*

Prior analyses of Nasdaq show that stock price volatility is associated with the number of trades but not with trade size in apparent contradiction with existing market microstructure models. This study examines the relation between stock price volatility and trading activity on the London Stock Exchange. The analysis is based on transactions data for individual stocks comprising the FTSE 100 index. Similar to the daily volatility evidence documented for Nasdaq stocks, when daytime price volatility in the London market is regressed against both the number of trades and average trade size, only the number of trades is statistically significant. However, when hourly trades are separated into size categories, both the number of small trades and their average size significantly impact price volatility. When we further split the small trade category into relatively smaller and larger trades, we find that only for larger trades, close to the maximum guaranteed depth of existing quotes, are there significant positive impacts on stock price volatility from both the trade frequency and average trade size. For relatively smaller trades, neither trade activity variable is significant. Our evidence suggests that while London stocks appear to have a price-volatility relation similar to that found for Nasdaq, the London results can be explained in terms of liquidity trading, dealer inventory adjustments to large trades, and strategic models of informed trading, which subject traders and dealers to costly adverse selection effects.

*99-11 "Second-Price Auctions with Mixtures of Power-Related Distributions," by **Luke Froeb**, Steven Tschantz, and Phillip Crooke. (February 21, 2001)*

We analyze a class of parametric second-price auction models where asymmetry is modeled by allowing bidders to take different numbers of draws from the same distribution. We compute the closed-form distribution of price and construct likelihood and method-of-moments estimators to recover the underlying value distribution from observed prices. We derive a Herfindahl-like formula that predicts merger effects and find that merger effects depend on the shares of the merging bidders, the variance, and the "shape" of the distribution. We generalize the model by allowing bidders to mix over power-related distributions. The dominant strategy equilibrium implies that an auction among bidders who mix over distributions can be expressed as a mixture of auctions. This implies that an auction among bidders with potentially correlated values can be expressed as a mixture over independent power-related auctions.

*99-15 "Bertrand Competition with Capacity Constraints: Mergers among Parking Lots," by **Luke Froeb**, Steven Tschantz, and Philip Crooke. (forthcoming in Journal of Econometrics)*

In this paper, we simulate the effects of mergers in an industry of firms facing capacity constraints. In equilibrium, each firm prices where marginal revenue equals marginal cost or, if the constraint is binding, where expected demand equals capacity. We develop an algorithm to compute Nash equilibrium. Capacity constraints on the merging firms attenuate merger effects, and capacity constraints on the non-merging firms amplify merger effects. In a retail industry where products are differentiated by location, we find that the former effect is bigger than the latter.

*99-26 "Can Ownership Restrictions Enhance Security Value? An Examination of Emerging Market Debt," by **Amar Gande** and Manju Puri. (July 2001)*

This paper examines the role of ownership restrictions in raising capital from niche clienteles. Extant literature suggests that limiting availability of securities to only certain classes of investors constricts demand, and hence decreases prices. We argue that ownership restrictions can have positive implications for prices when viewed in the overall context of security design. We present a model and provide empirical evidence through an in-depth analysis of a quasi-experiment: an actual event of capital raising by an emerging market company with ownership restrictions, namely $4.2 billion of Resurgent India Bonds offered by India's largest bank, State Bank of India exclusively to Indians living abroad at approximately 150 basis points below

comparable benchmarks. This is an intriguing issue because it raises the question, how can an emerging market issuer with junk bond ratings obtain such yields? The main reason for a higher valuation is that the investor clientele has a broader relationship with the issuer, they value the underlying collateral more, and are also important for the ongoing activities of the issuer. Restricting the ownership to a homogenous class of investors also lowers the renegotiation costs and serves as a precommitment to ensuring an efficient ex-post renegotiation in the potential default states, resulting in a lower ex-ante offering yield (and a higher offer price). Our results suggest that firms with niche clienteles can benefit from designing securities with ownership restrictions, by offering new securities exclusively to investors who value them the most.

*00-04 "Tick Size, Market Structure and Trading Costs," by **William G. Christie**, Jeffrey H. Harris, and Eugene Kandel. (June 2002)*

In July 1997 tick size on Nasdaq declined from 1/8th to 1/16th of a dollar. March 2001 brought a further decline to one cent. This paper analyzes these events and contributes to our understanding of the interactions between the tick size, stock characteristics, and market structure. From the change in 1997, we isolate the effects of the SEC-mandated Order Handling Rules (OHR) and test several hypotheses on the effects of the tick size on competitive quoting behavior in various trading environments. We find that stocks trading in a pure dealer market under the old OHR were practically unaffected by the changes, and in some cases the effect was detrimental. In contrast, stocks trading in a hybrid dealer market under the new OHR (where dealers and limit orders interact) experienced small declines in quoted and effective spreads. Comparable NYSE stocks trading in a continuous auction market experienced more substantial declines, which is consistent with findings of Goldstein and Kavajecz (2001). The most active hybrid market and auction market issues both experienced dramatic decline in quoted and effective spreads. These results suggest that tick size interacts strongly with both stock and market characteristics and that a 1/8th tick sizes prevented spreads from attaining their competitive level. Using the same sample of stocks (those that are still traded in 2001) we show that these effects persist under penny ticks. Even penny tick sizes represent binding constraints for the most active stocks. The sharp declines in spreads for the largest stocks suggest that the previous component estimates of adverse selection and inventory costs may be markedly overstated.

*00-05 "Joint Accounting Choices: An Examination of Firms' Adoption Strategies for SFAS No. 106 and SFAS No. 109," by Michele Daly, **Debra Jeter**, and **Paul Chaney**. (March 2002)*

This paper investigates interactive choices made in the adoption of newly mandated accounting standards. Specifically, we consider whether firms' adoption strategies for SFAS No. 106 and SFAS No. 109 were linked, in addition to considering the interaction between choices related to adoption method and timing for each standard separately. The evidence presented is consistent with adoption strategies being associated with incentives to smooth income and to reduce political costs, and with adoption strategies for the two standards being chosen jointly. The paper also provides some 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.

*00-10 "The Role of Incentives in the Prevention of Financial Crises in Emerging Economies," by **Amar Gande**, Kose John and Lemma W. Senbet. (July 2002)*

We examine the role of the incentives of the decision-makers in corporations and banks in financial crises. We propose incentive-based mechanisms toward the prevention rather than an ex post resolution of these crises. We show that private incentives for risk shifting in the local economy at the corporate and banking sectors could ultimately produce distorted economic performance and financial instability that propagate a financial crisis. However, this effect depends on how diverse the economy is in terms of the investment opportunities. We also show that currency risk associated with the foreign-currency denominated debt leads to aggravated risk-shifting, which when undertaken in coordination by many firms can magnify into a "contagion". The channel for our solution mechanisms to prevent a financial crisis is predicated on their role to mitigate distorted incentives arising from explicit or implicit bailouts, which in turn mitigates a country's vulnerability to a financial crisis. These mechanisms alter the structure of the after-tax cash flows to residual claimants in the corporate and banking sectors and change the incentives in the right direction. When banks act as "relationship monitor" to the corporations, then an appropriately designed taxation of the banks or offering of warrants on the bank's common stock to an external intermediary is able to induce optimal investment by the corporate sector. Issues of implementation of the proposed mechanisms are also discussed.

*00-12 "Audit Pricing in Private Firms," by **Paul Chaney**, **Debra Jeter**, and L. Shivakumar. (January 24, 2002)*

Prior research has examined audit pricing for publicly held firms and provided some evidence of a Big 8 premium in pricing. We investigate audit pricing among private firms for the first time, and we compare audit pricing for private and listed clients. The relatively great degree of dispersion in auditor choice (between Big 5 and non-Big 5 auditors) in our large sample of privately held audit clients allows us the opportunity to estimate the predicted auditor choice for each firm. We present evidence that when the auditor choice variable is separated into an expected and a surprise component, the expected component shows no evidence of a Big 5 premium while the surprise component bears such a premium for small and mid-sized private firms. We suggest that then the choice variable is not separated into these components, the endogeneity of audit fees and audit attributes is likely to result in parameter identification and/or estimation bias problems, which prevents meaningful interpretation of variable coefficients. Based on the methodology applied, we conclude that the majority of Big 5 clients (large or small) do not pay a premium for their auditor choice, but only those clients making unexpected or surprising auditor choices. This evidence is inconsistent with the reputation and deep pockets arguments for the existence of a Big 5 premium.

*00-14 "How Much Information Is Required to Accurately Predict Merger Effects?" by **Luke Froeb** and Steven Tschantz. (June 25, 2001)*

To answer the question "how much information is required to accurately predict merger effects?" we develop a homotopy method for tracing a continuous path from the observed pre-merger equilibrium to the unobserved post-merger equilibrium. The path is defined by a sequence of "partial" mergers. We present a methodology for extrapolating along this homotopy path and, by considering information only at the observed pre-merger equilibrium, we identify parameters that determine merger effects. We show that the path is almost linear in price, which gives us a basis for arguing that the linear extrapolation is likely to give good estimates of post-merger prices, or equivalently, that information on demand first and second derivatives is enough, in most cases, to accurately predict merger effects. We present a closed-form merger predictor from which confidence intervals can be computed.

*01-04 "Inflation and Relative Price Dispersion in Equity Markets and in Goods and Services Markets," by **David C. Parsley** and Helen A. Popper. (May 2001)*

We examine the link between inflation and the variability of relative prices in U.S. equity markets and in U.S. goods and services markets. We find strong, comparable links in both sets of markets. This finding represents a puzzle since conventional wisdom – derived from menu cost or imperfect information models – is not compelling in equity markets. We next examine whether we can attribute the results to small sample biases. We do find an important but generally overlooked bias that is present in many existing studies. However, the bias is too small to explain our own findings, and the puzzle remains.

*01-05 "Accounting for Real Exchange Rate Changes in East Asia," by **David C. Parsley**. (May 2001)*

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 among twenty-one bilateral

continued on page 12

Asian-Pacific real exchange rates. Following Engel (1999), the decomposition is done at all possible horizons that the data allow – from one month up to 25 years. Evidence presented here is consistent with that from U.S. dollar based real exchange rates from high-income countries. In particular, relative prices of non-traded goods appear to account for virtually none of the mean squared error of East Asian real exchange rates. This pattern holds (mostly) across fixed and flexible regimes, and is unaffected by the cross-sectional variation in either income level, or the degree of openness present among these Pacific-Rim economies. However, movements in the relative price of non-traded goods do appear to account for a substantial portion of the drift in one-third of the bilateral real exchange rates studied.

*01-06 "Flotation Costs of Underwritten Common Stock Offerings: A Study of Foreign Issues on US Exchanges," by **Ronald W. Masulis.** (November 30, 2001)*

Flotation costs of GDR stock offers in the US over the 1990-2000 period are examined. Underwriter spreads and offer price discounts and their determinants are studied, including the effect of prior private placements of stock. Underwriter spreads are influenced by risk measures, economies of scale, issuer size and location, underwriter competition, stock liquidity and seasoning. Offer price discounts are influenced by scale economies, return volatility, issuer size and location, market conditions and a prior public offer of stock. Prior Rule 144A private placements of stock can marginally lower underwriter spreads and offer price discounts, but in neither case is the result statistically significant in our sample of 344 ADR offers. In addition, there is no evidence that prior private placements or public offers significantly increases the size of subsequent public offers of ADRs. Finally, we also perform a matched sample analysis to more carefully assess the importance of prior Rule 144A private placement activity. Using this approach, we find some evidence that prior 144A private placements can reduce underwriter spreads, but to a lesser extent than prior public offers with similar characteristics.

*01-07 "The Role of Capital Structure in Tests of Asset-Pricing Models," by **Anchada Charoenrook.** (February 2001)*

In a multifactor model of expected equity return of a levered firm, the equity beta equals firm beta multiplied by the elasticity of equity price with respect to firm value. This elasticity is, in general, increasing in leverage and it is time varying due to time variation in leverage ratio (the capital structure effect). This paper examines, theoretically and empirically, the hypothesis that the capital structure effect causes the following empirical regularities reported in existing literature: (1) the cross-sectional relation between size, book-to-market, and average equity return and (2) reversal in long-horizon and momentum in medium-horizon equity returns. The capital structure effect is measured and distinguished from other existing explanations mainly by comparing tests of equity and firm returns of the same set of firms. We find that firm returns are not related to size or book-to-market; 50% of the explanatory power of size and 0% of the explanatory power of book-to-market for average equity returns are due to the capital structure effect. Moreover, the capital structure effect explains away reversal in long-horizon equity returns, and it explains 40% of momentum in medium-horizon equity returns.

*01-11 "Price Impacts of Option Volume," by Christian Schlag and **Hans Stoll**. (March 27, 2002)*

The price impacts of signed option volume are investigated with transactions data for options and futures on the DAX index. If informed investors congregate in the option market, their trading would have permanent price effects and their volume would precede volume in the DAX index. While option trading has a significant price effect of the predicted sign, the effect has a large temporary component. Signed option volume does not lead signed futures volume but signed futures volume leads signed option volume. This evidence suggests that options traders are more likely to be noise traders than informed traders and that price discovery is more likely to occur in the futures market than in the option market.

*01-12 "Exchange Rate Pass-Through in a Small Open Economy: Panel Evidence from Hong Kong," by **David C. Parsley**. (June 2001)*

This paper presents estimates of exchange rate pass-through derived from a panel of very disaggregated import unit-values to Hong Kong. The estimation approach builds on that utilized by Knetter (1989, 1993) to study export pricing and pricing to market. The three-dimensional data set examined comprises Hong Kong's top eight floating exchange rate trading partners, and twenty-one of the top 5-digit SITC imports since 1992. Pass-through estimates for Hong Kong imply relatively faster import price adjustment than is typically found for larger, less open economies. These estimates are robust to a number of sensitivity tests. Finally these results confirm, from a different perspective, findings by Parsley (2001) that deviations from the law of one price play a relatively smaller role in real exchange rate movements for Hong Kong, than for other East Asian countries.

*01-13 "Limiting Currency Volatility to Stimulate Goods Market Integration: A Price Based Approach," by **David C. Parsley** and Shang-Jin Wei. (July 2002)*

This paper empirically studies the effect of instrumental and institutional stabilization of the exchange rate on the integration of goods markets. An instrumental stabilization of the exchange rate is accomplished through intervention in the foreign exchange market. An institutional stabilization is an adoption a currency board or a common currency. In contrast to the literature that employs data on the volume of trade, an important novelty of this paper is the use of a 3-dimensional panel of prices of 95 very disaggregated goods (e.g., light bulbs) in 83 cities from around the world from 1990 to 2000. We find that goods market integration is increasing over time and is inversely related to distance, exchange rate variability , and tariff barriers. In addition, the impact of an institutional stabilization of the exchange rate provides a stimulation to goods market integration that goes far beyond an instrumental stabilization. According to our estimates, the effect of the euro (over 1999-2000) is an order of magnitude bigger than merely reducing exchange rate volatility from the sample average to zero. However, relative to the U.S. benchmark, Europe can go still further towards an integrated goods market.

*01-14 "The Effect of Merger Synergies on Consumers of Differentiated Products," by, **Luke Froeb,** Steven Tschantz, and Gregory Werden. (June 20, 2001)*

Defending a challenged merger on the basis of synergies requires an analysis of the likely pass through to consumers of associated marginal cost reductions. This paper explores the nature and extent of that pass though with differentiated consumer products. Pass-through rates are shown to depend on demand curvature and idiosyncratic properties of particular demand functions. The marginal cost reductions necessary to fully compensate for the price-increasing effects of a merger, however, do not depend on these things. This implies a close relationship between pass-through rates and the price effects of mergers absent synergies and indicates that pass through should not be addressed as a discrete issue in merger cases. Finally, the paper examines ways in which the degree of competition can affect the three pass through effects; contrary to persistent contentions, greater competition easily may result in less pass through.

*01-15 "Pass-Through Rates and the Price Effects of Mergers," by **Luke Froeb**, Steven Tschantz, and Gregory Werden. (June 25, 2001)*

We investigate the relationship between the price effects of mergers in Bertrand oligopoly and the rates at which merger synergies are passed through to consumers in the form of lower prices. Our main conclusion is that pass-through rates and price effects are closely related. In particular, when a merger would cause large price increases absent synergies, the pass-through rate is high. This close relationship implies that pass-through and price effects should not be addressed independently in any phase of a merger investigation. We show that in a leading merger case, the low estimated pass-through rate and the relatively large predicted merger effect most likely were inconsistent.

*01-16 "Market Microstructure," by **Hans R. Stoll**. (forthcoming in Handbook of the Economics of Finance)*

The field of market microstructure deals with the costs of providing transaction services and with the impact of such costs on the short

run behavior of securities prices. Costs are reflected in the bid-ask spread (and related measures) and commissions. The focus of this chapter is on the determinants of the spread rather than on commissions. After an introduction to markets, traders and the trading process, I review the theory of the bid-ask spread in section II and examine the implications of the spread for the short run behavior of prices in section III. In section IV, the empirical evidence on the magnitude and nature of trading costs is summarized, and inferences are drawn about the importance of various sources of the spread. Price impacts of trading from block trades, from herding or from other sources, are considered in section V. Issues in the design of a trading market, such as the functioning of call versus continuous markets and of dealer versus auction markets, are examined in section VI. Even casual observers of markets have undoubtedly noted the surprising pace at which new trading markets are being established even as others merge. Section VII briefly surveys recent developments in U.S securities markets and considers the forces leading to centralization of trading in a single market versus the forces leading to multiple markets. Most of this chapter deals with the microstructure of equities markets. In section VIII, the microstructure of other markets is considered. Section IX provides a brief discussion of the implications of microstructure for asset pricing. Section X concludes.

*01-18 "Pricing in International Markets: A 'Small Country' Benchmark," by **David C. Parsley**. (April 2002)*

This study examines exchange rate pass-through in a 'small-country' context. The study uses a panel of disaggregated exports from Hong Kong to its major flexible exchange rate destinations since 1992. Most existing evidence on pass-through is taken from G7 countries and finds that export prices (in the importing currency) respond less than fully to exchange rate changes. The notable exception is for exports from the United States. Existing evidence suggests that exporters from the U.S. apparently do not mitigate export prices in response to exchange rates, while other countries' exporters routinely pass-through less than 100% of exchange rate changes. This study provides a benchmark by which to interpret the puzzling behavior of U.S. export prices. Empirically, Hong Kong's export price behavior overwhelmingly supports the competitive paradigm. In only a few cases is there evidence of less than complete pass-through by Hong Kong's exporters. The panel data set also allows an additional question to be addressed. In particular, there is no evidence of differences in pass-through across export destinations. Thus, by inference, near complete pass-through by U.S. exporters suggests similar competitive behavior.

*01-20 "Short-term Persistence in Mutual Fund Performance," by **Nicolas P.B. Bollen** and Jeffrey A. Busse. (February 2002)*

Using daily data, we find evidence of short-term persistence in mutual fund performance. We estimate parameters of standard stock selection and market timing models every quarter, rank funds by abnormal return, and then measure the performance of each decile the following quarter. In contrast to Carhart (1997), we find that superior performance persists after controlling for momentum. The annualized average post-ranking abnormal return of the top decile is 1.5 percent. The post-ranking abnormal return disappears when funds are evaluated over longer periods. These results suggest that superior performance is a short-lived phenomenon that is observable only when funds are evaluated several times a year.

*01-21 "The Performance of Alternative Valuation Models in the OTC Currency Option Market," by **Nicolas P.B. Bollen** and Emma Rasiel. (forthcoming in Journal of International Money and Finance)*

We compare option valuation models based on regime-switching, GARCH, and jump-diffusion processes to a standard "smile" model, in which Black and Scholes (1973) implied volatilities are allowed to vary across strike prices. The regime-switching, GARCH, and jump-diffusion models provide significant improvement over a fixed smile model in fitting GBP and JPY option prices both in-sample and out-of-sample. The jump-diffusion model achieves the tightest fit. A time-varying smile model, however, provides hedging performance that is comparable to the other models for the GBP options. This result suggests that standard option valuation techniques may provide a reasonable basis for trading and hedging strategies.

*01-22 "Optimal Contract Design: For Whom?" by **Nicolas P.B. Bollen**, Tom Smith, and Robert E. Whaley. (July 5, 2002)*

In designing a derivative contract, an exchange carefully considers how its attributes affect the expected profits of its members. On November 3, 1997, the Chicago Mercantile Exchange halved the denomination of its S&P 500 futures contract and doubled its tick size, providing a rare opportunity to examine empirically the search for an optimal contract design. This paper measures changes in the trading environment that occurred after the changes were made. We find that the contract redesign caused a reduction in trading volume, no meaningful change in dollar trade size, a discernible change in price clustering, and an increase in the bid/ask spread. These results suggest that the contract redesign did not increase accessibility but did increase both brokerage and market maker revenue. We also develop an option-based measure of the cost of supplying liquidity, however, and find that, despite the increase, the bid/ask spread of the S&P 500 futures contract remains below theoretical market making costs. These results suggest that the decision to double the tick size was a justifiable effort to increase the bid/ask spread's lower bound.

*01-24 "Compensation and Capital Structure Incentives for Risk-Averse Managers," by **Charu G. Raheja**. (July 2001)*

This paper studies managerial incentive contracts and capital structure choices that maximize the value of the firm. Top management is assumed to be risk averse and all the claim holders of the firm are assumed to be risk neutral. I examine in detail the management project choices when the external claims in the firm are (1) all equity, and (2) equity and risky debt. I find that when a manager is risk averse, his incentives are more aligned with the interests of debt holders. Increasing the pay-for-performance sensitivity of the manager's compensation contract does not always increase the incentives of the manager to increase the expected level of risk of the project. This result is contrary to previous belief that higher levels of equity compensation would cause the manager to risk-shift. I also compare the benefits and costs of paying managers with options instead of giving them equity in the firm.

*01-25 "The Interaction of Insiders and Outsiders in Monitoring: A Theory of Corporate Boards," by **Charu G. Raheja**. (July 2002)*

This paper presents a theoretical model of the interaction of inside and outside members of a corporate board by examining the board's monitoring of firm projects and its involvement in CEO succession decisions. I show that board structure affects the flow of information and the effectiveness of the corporate board and I endogenously derive the optimal board size and composition. Inside directors are better informed than outsiders regarding firm investment projects. Outside directors use their CEO succession votes to create a competition among insiders. This provides incentives for insiders to inform the board. The structure and the effectiveness of the optimal board vary with firm characteristics. For example, firms where it is difficult for outsiders to verify firm projects optimally require a majority proportion of insiders on the board. Further, there is some residual agency cost in firms even with the optimal board. This residual agency cost can be used to evaluate the ability of corporate boards to monitor firms.

*01-27 "Does Net Buying Pressure Affect the Shape of Implied Volatility Functions?" by **Nicolas P.B. Bollen** and Robert E. Whaley. (July 2002)*

This paper examines the relation between net buying pressure and the shape of the implied volatility function (IVF) of S&P 500 index options and options on twenty individual stocks. We find that time variation in the implied volatility of an option series is directly related to net buying pressure from public order flow. We also find that movements in implied volatility in the index option market are most strongly

continued on page 14

affected by buying pressure for index puts, while call options tend to dominate in stock option markets. Simulated delta-neutral trading strategies that sell options generate abnormal returns that match the deviations of the IVFs from historical volatility levels. Index option abnormal returns decrease monotonically across exercise prices and are significant, while stock option abnormal returns are symmetric, smaller, and insignificant. When vega risk is also hedged in the simulations using index options, however, the abnormal returns go from positive to negative, indicating that the steeply sloped IVF for index options does not present a profitable arbitrage opportunity once the costs of hedging have been considered.

01-28 "News Spillovers in the Sovereign Debt Market," by ***Amar Gande*** *and* ***David Parsley.*** *(July 2002)*

We examine the extent of cross-border financial market linkages by focusing on the transmission of news events (specifically sovereign credit rating changes) concerning one country, to sovereign bonds of other countries. Our sample consists of a multi-country panel of dollar denominated sovereign debt covering the period 1991 through 2000. We document the existence of asymmetric spillovers: positive ratings events abroad have no discernable impact on sovereign spreads, whereas negative ratings events are associated with an increase in spreads. On average, a one-notch downgrade of a sovereign bond is associated with a 12 basis point increase in spreads of sovereign bonds of other countries. We also find the response to be non-linear. That is, the magnitude of spillovers following a negative ratings change is amplified by recent ratings changes in other countries. Conceptually, we distinguish between common information and competitive components of spillovers. While common information events imply that sovereign spreads move in tandem, competitive spillovers are expected to result in a differential effect of ratings events across countries. We find that competitive spillovers exist among countries with highly negatively correlated capital flows or trade flows (vis-à-vis' the U.S.). That is, spreads in these countries generally fall (relative to other countries) in response to a downgrade of a country with highly negatively correlated capital or trade flows. Finally, we find that these results do not seem to depend on cultural or institutional linkages (e.g., common language, formal trade blocs, common-law legal systems), physical proximity (distance, or adjacency), or on rule of law traditions across countries.

01-29 "Pricing of Initial Audit Engagements for Listed and Unlisted Clients," by ***Paul K. Chaney, Debra C. Jeter,*** *and L. Shivakumar. (July 2001)*

Because of concerns that price cutting might lead to impaired audit quality, the discounting of initial audit engagements, sometimes referred to as low-balling, has long been of concern to accounting theorists and researchers, as well as to standard setters and various users of accounting data. Results of prior studies investigating the issue, however, are inconsistent in several respects. Our study offers certain advantages over the existing literature. Our sample includes unlisted as well as listed firms, and it is larger and more comprehensive than that used in any of the prior studies. Our firms cover a wide range of SIC codes, and we examine all four types of auditor switches, non-Big to non-Big, Big to Big, Big to non-Big, and non-Big to Big. We find no evidence of discounting for upgrades, but some evidence of discounting for most other categories of switches. Further, we show that the evidence is consistent with our theoretical framework.

01-30 "Regime Shifts in Short Term Riskless Interest Rates," by ***Clifford A. Ball*** *and Walter Torous. (June 2001)*

Numerous studies have provided evidence consistent with the presence of nonlinearities in the dynamics of short term interest rates as well as stochastic volatility and shifts in regime. This paper examines the dynamics of the components of short term interest rates: the expected rate of inflation and lagged nominal rates. The paper proposes a bivariate stochastic model for inflation and nominal rates that includes many of the nonlinearities outlined in the literature. Estimation is completed using Monte Carlo Markov Chain models.

01-31 "The Rights Offer Puzzle: Clues from the 1930s and 1940s," by Tim Burch, ***William G. Christie,*** *and Vikram Nanda. (November 2001)*

We study the offer choice between rights and firm commitments for a sample of industrial firms issuing equity in the 1930's and 1940's. Unlike existing studies, our sample is drawn from a time period when rights were as common an offer method for industrial firms as were firm commitments. This sample allows us to perform out-of-sample tests of existing theories of offer choice. Our analysis indicates that firms choosing rights were larger, healthier firms with lower leverage and higher cash flow liquidity. Firms electing the firm commitment method experienced significantly negative size-adjusted returns during the 12 months following the offer, consistent with recent evidence for SEO's. In striking contrast, firms issuing equity through rights were not subject to negative post-offer returns, suggesting that firm commitments were timed to exploit overvaluation while rights offers were not. Finally, we investigate a number of long term factors that could have contributed to the decision to migrate from rights issues to firm commitment.

02-02 "Measuring Market Quality: The Relation between Quoted and Effective Spreads," by ***Hans R. Stoll*** *and* ***Christoph Schenzler.*** *(January 16, 2002)*

As the number of trading markets has increased so has the importance of measuring the quality of execution in different markets. Yet, in the Nasdaq market, the relation between two frequently used measures of market quality – the quoted and the effective spread – has changed dramatically. In the period 1993 – 2000, as quoted spreads declined in Nasdaq, effective spreads began to exceed quoted spreads, particularly for actively traded stocks, so much so that by 1999 the average daily effective spread almost always exceeds the average daily quoted spread. No such trend is observed for NYSE stocks. We document the increasing frequency with which Nasdaq transactions are reported to be outside the quotes. We investigate the extent to which such out-trades are the result of trade reporting delays or reflect actual trades outside the quotes.

02-03 "The Effects of Accounting Choice on Analysts' Forecast Errors and Market Response in the Oil and Gas Industry," by ***Paul K. Chaney*** *and* ***Debra C. Jeter.*** *(January 2002)*

A long-standing controversy exists over whether the two acceptable methods of accounting for certain assets in extractive industries (primarily oil and gas) should continue to be allowed. This paper considers how the choice between full costing (FC) and successful efforts (SE) in extractive industries affects the degree of accuracy and bias in analysts' forecasts of earnings. When such characteristics as firm size, diversification and leverage are controlled for, multivariate findings reveal that the choice of the FC method leads to smaller absolute errors and less upward bias in forecasts. By allowing full costing as an alternative, the standards enable a set of firms electing that method to increase the predictability of reported earnings through accounting choice, thereby accomplishing to a degree what other (generally larger) firms may accomplish through more frequent disclosures, diversification, or other means.

02-04 "Certification or Conflicts of Interest: Underwriter Ownership and Underpricing in Venture-Backed IPOs," by ***Ronald W. Masulis*** *and* ***Xi Li.*** *(March 15, 2002)*

We study the impact on IPO pricing when underwriters have prior equity investments in issuers. Since prior shareholders benefit from higher offer prices, examining the decisions of underwriters who are also shareholders provides a unique opportunity to test whether share ownership creates a serious conflict of interest between underwriters and outside investors. We find that lead underwriters' prior equity ownership significantly reduces IPO underpricing, which does not support the importance of the bank's conflict of interest with outside investors, but does support an underwriter certification effect. We find that the benefit of reduced underpricing is partly offset by larger underwriter spreads. We find the probability that IPO aftermarket prices fall below their offer prices in the period immediate after the IPO is unrelated to prior underwriter stock ownership. Thus, this short horizon evidence does not support overpricing of IPOs due to conflicts of interest between equity investors and underwriters. We also find a stronger certification effect for IPOs with higher investor uncertainty about offer value. Overall, these results support a dominant certification role for prior underwriter share ownership in IPO issues. Controlling for an endogeneity effect does not change our conclusions.

02-05 "Shredded Reputation: The Cost of Audit Failure," by ***Paul K. Chaney*** *and Kirk L. Philipich. (forthcoming in Journal of Accounting Research)*

In this paper we investigate the impact of the Enron audit failure on auditor reputation. Specifically, we examine Arthur Andersen's clients' stock market impact surrounding various dates on which Andersen's audit procedures and independence were under severe scrutiny. On the three days following Andersen's admission that a significant number of documents had been shredded, we find that Andersen's other clients experienced a statistically negative market reaction, suggesting that investors downgraded the quality of the audits performed by Andersen. We also find that audits performed by Andersen's Houston office suffered a more severe decline in abnormal returns on this date. We are not able to show that Andersen's independence was questioned by the amount of non-audit fees charged to its clients.

02-06 "Change in the Consumer Sentiment Index and Aggregate Stock Returns," by ***Anchada Charoenrook****. (January 2002)*

This study finds yearly changes in the consumer sentiment index to be negatively related to future aggregate excess stock market returns. Changes in consumer sentiment reliably predict excess stock market returns at one-month and one-year horizons over 1979-2000 and 1955-2000 periods. Changes in consumer sentiment predict future excess stock returns after controlling for dividend yield, the book-to-market ratio of the Dow Jones Industrial Average, the slope of the term structure, the yield spread between Baa and Aaa bonds, the short rate yield, and lagged excess market returns. Empirical results support the explanation that a change in the consumer sentiment is an indicator of investor beliefs that is related to over- or under- valuation of stocks, while the time-varying expected returns explanation cannot be completely dismissed. The primary result is robust with respect to small-sample bias.

02-09 "Mergers among Bidders with Correlated Values," by ***Luke Froeb*** *and Steven Tschantz. (forthcoming in Measuring Market Power)*

In the private-values, second-price auction framework, we propose a simple parametric model to analyze the effects of mergers when bidders' values are correlated. Correlation is induced by allowing bidders to draw from a mixture of distributions belonging to a power-related family. For example, if two bidders draw from "high" distributions at the same time, then their values are positively correlated. The dominant strategy equilibrium of second-price auctions implies that if bidders draw correlated values from a mixture of power-related distributions, then winning bids can be expressed as a mixture over prices in independent power-related auctions. The closed-form expressions of independent power-related auctions facilitate estimation and analysis.

02-10 "Information Disclosure as Environmental Regulation: A Theoretical Analysis," by ***Mark A. Cohen*** *and V. Santhakumar. (January 2002)*

Governments around the world are beginning to embrace a new form of environmental regulation – mandatory disclosure of information. While information disclosure programs appear to have an impact on subsequent firm behavior – often resulting in lower levels of pollution – little is known about the costs and benefits of these programs and whether or not they enhance social welfare. This paper presents a simple bargaining model where mandatory information disclosure is used to overcome a lack of information on the part of the public. We characterize the conditions under which information disclosure will lead to a reduction in emissions, and ultimately, the conditions under which it will enhance social welfare. Several extensions of the model are briefly explored, including the effect of two sources of pollution - only one of which is subject to information disclosure.

02-11 "Vertical Restraints and the Effects of Upstream Horizontal Mergers," by ***Luke Froeb****, Steven Tschantz, and Gregory Werden. (March 27, 2002)*

This paper investigates how monopoly retail sector ``filters" the price effects of mergers among upstream Bertrand competitors. Three alternative game-theoretic treatments of the relationship between the retailer and manufacturers are considered . In one the retail sector is "transparent"– the price effects of a merger of competing manufacturers are exactly those that would occur if the manufacturers sold directly to consumers. In a second, the retail sector is "opaque"– consumer prices do not change following a merger, which merely shifts rents from the retailer to the merged firm. In the third, the price effects of a manufacturer merger are affected in various ways by the retail sector, and the retail prices of competing products sold by non-merging firms may decrease as a result of the merger.

02-12 "Modeling the Bid/Ask Spread: Capturing the Effects of Hedging Costs," by ***Nicholas P.B. Bollen****, Tom Smith, and Robert E. Whaley. (July 3, 2002)*

The need to understand and measure the determinants of market maker bid/ask spreads is crucial in evaluating the merits of competing market structures and security designs. After providing a detailed review of past work, this study develops a simple, parsimonious model for the market maker's spread that accounts for the effects of order-processing costs, inventory-holding costs, adverse selection, and competition. The inventory-holding cost and adverse selection components of spread are modeled as an option with a stochastic time to expiration. This "insurance premium" embedded in the spread covers the hedging costs the market maker expects to face while the security is held in inventory. The model is tested empirically on a sample of NASDAQ stocks over three distinct tick size regimes and is shown to perform well.

02-14 "Real Options for Real Firms: Valuing a Heterogeneous Set of Call Options with Suboptimal Exercise Decisions," by ***Gordon Hanka****. (March 2002)*

If the fixed parameters of the Black-Scholes model are replaced with prior distributions, the result is a closed formula for the value of a draw from a heterogeneous set of European calls. This option pricing approach easily accommodates quantity risk, uncertain strike price, and suboptimal exercise decisions. This represents a parsimonious analytical solution to a common but heretofore unsolved problem: translating abstract measures of forecast accuracy (e.g., standard error, R2, and bias) into concrete measures of expected wealth creation when choosing from a large and diverse set of investment opportunities. A natural application is to quantify the firm-wide expected costs of common frictions such as cash flow forecast noise, capital rationing, hubris, empire building, ratio fixation, and overreaction. The pricing equation is demonstrated by deriving some rough rules of thumb for when managerial overinvestment and overreaction are costly enough to be worrisome.

02-15 "Simple Limits on Liquidity Hedging with Futures," by ***Gordon Hanka****. (April 2002)*

Here it is shown that, if the motive for hedging is to protect liquidity reserves against long-term income shocks that can have either positive or negative sign, then an ideal static futures hedge can deliver, at most, the same protection that would be obtained by doubling the firm's liquid reserve. To obtain greater protection, the firm must adopt a dynamic strategy of chasing past returns, reducing futures positions that lose money and increasing positions that make money.

02-16 "Does Insider Trading Impair Market Liquidity? Evidence from IPO Lockup Expirations," by Charles Cao, Laura Casares Field, and ***Gordon Hanka****. (April 3, 2002)*

We test the hypothesis that insider trading impairs market liquidity, by analyzing intraday trades and quotes around 1,497 IPO lockup expirations in the period 1995-1999. We find that, while lockup expirations are associated with considerable insider trading for some IPO firms, they have little effect on effective spreads. By contrast, two other liquidity measures, quote depth and trading activity, improve substantially. In the 23 percent of lockup expirations where insiders disclose share sales, spreads actually decline. These findings indicate that a large body of well-informed, blockholding insider traders can enter a market from which they had previously been absent, and substantially change trading volume and share price, without impairing market liquidity. ■

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