



PETER U. VINELLA, PH.D.

MANAGING DIRECTOR, ADVISOR TO THE BOARD

EXPERTISE

- ✓ Trading and Investments
- ✓ Risk Management
- ✓ Operations
- ✓ Quantitative Analysis
- ✓ FinTech and Project Management
- ✓ Custody, Trust, and Fund Administration
- ✓ Repo and Securities Lending

EDUCATION

University of California, Berkeley
Ph.D. Graduate
Department of Mathematics

University of California, Berkeley
M.A. Mathematics
A.B. Applied Mathematics

EMPLOYMENT HISTORY

PVA Toucan LLC
Managing director
2015-Current

U.C. Berkeley Center for Risk Management Research
Affiliated graduate student
2012-Current

Berkeley Research Group
Managing director
2010-2014

LECG
Managing director
2009-2010

Wilmington Trust Conduit Services, LLC
President and CEO
2006-2009

Toucan Partners/PVA International, Inc.
CEO
1995-2006

Smith Barney Shearson
Trading manager and Arbitrage trader
1993-1995

Peter U. Vinella has more than 35 years of experience in the financial industry as a consultant and as an executive with leading financial institutions and government agencies. Mr. Vinella has extensive testifying experience acting as an expert for both plaintiff and defendant over more than 40 engagements. He has authored over 60 expert reports, declarations, and affidavits and has given over 300 hours of arbitration hearing, trial, and deposition testimony in state and federal court and before international arbitration panels.

He has also provided testimony in the Philippines, the Cayman Islands, and Ireland. He has been qualified to testify in state and federal courts, including testifying at trial and hearings eight times including two jury trials. Mr. Vinella is also currently providing consulting services to central banks and government agencies as well as major financial institutions.

His areas of expertise include trading and investment management, risk management, quantitative analyses, operations, trading and investment-related accounting, technology (including software development), trust administration, fund administration, mathematics, probability, and statistics. He has first-hand experience with a wide range of investment products, including equities, debt instruments, repo and securities lending, listed and OTC derivatives (such as interest rate, total return, asset, and credit default swaps), commercial and consumer loans, and structured credit products such as CDOs and MBS. He has also developed business plans and strategic marketing plans for leading financial institutions and vendors, including JP Morgan, Daiwa Securities, Smith Barney, ADP, Sun Microsystems, Perot Systems, and Sybase. Additionally, he has extensive experience in international markets and has worked extensively outside of the United States.

Prior to forming PVA Toucan with his partner, Dr. Jeanette Jin, Mr. Vinella was a managing director first at LECG and then Berkeley Research Group (BRG) where he provided expert testimony and advisory services in regard to a host of matters primarily involving financial services and technology matters. At LECG, Mr. Vinella was also responsible for managing the firm's financial services practice, which consisted of over 125 individuals and generated 20 percent of the company's profits.

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EMPLOYMENT HISTORY

Berkeley Investment Technologies, Inc. /Drexel Burnham Lambert

Co-Founder and EVP, BIT Director of
Business Development
1990–1993

EVP, Nameloc
1989–1990

Head of Taxable Fixed Income Research,
DBL
1990

Principal and senior scientist, BIT
1986–1989

BARRA

Senior quantitative analyst
1984-1986

California State University Hayward

Lecturer/assistant professor
1982–1984

University of California, Berkeley

Teaching assistant
1980-1981

NASA

Junior research fellow, Computation Fluid
Dynamics Division
1980-1981

Data Dynamics

Senior mathematician
1978–1980

PROFESSIONAL MEMBERSHIP

American Mathematical Society
Society of Industrial and Applied Mathematics
International Association of Quantitative
Finance
Securities Industry and Financial Markets
Association (past)
European Securitization Forum (past)
Loan Syndication and Trading Association
(past)
International Swaps and Derivatives
Association (member of the FpML Loan Agent
Bank Communication Working Group) (past)

Prior to his work in litigation support and dispute resolution, Mr. Vinella was a founder, co-owner, and CEO of Wilmington Trust Conduit Services (WTCS), a subsidiary of Wilmington Trust Corporation, the Federal Reserve–regulated bank holding company of Wilmington Trust Company. He was responsible for overseeing all aspects of WTCS, including business administration, sales, operations, research, production technology, and software development. WTCS provided a wide range of administrative, trustee, custodial, operations, accounting, and risk management services to issuers and managers of and investors in credit and structured credit transactions. WTCS also provided fund administration services to hedge funds and private equity funds investing in loans, distressed assets, and structured products.

Before joining Wilmington Trust in 2006, Mr. Vinella was the founder and CEO of PVA International/Toucan Partners, a New York-based consultancy focused on capital markets and risk management. During his 11-year tenure, PVA/Toucan was engaged in more than 100 projects with more than 50 clients on four continents, including money center banks, international brokerages, central banks, government agencies, and investment managers.

Having begun his career in finance in the early 1980s at the risk management boutique BARRA (now part of Morgan Stanley), Mr. Vinella has also held a number of senior positions at leading Wall Street firms, including trader and trading manager, chief information officer, and head of fixed income research. Earlier in his career, he founded Berkeley Investment Technologies (BIT), an early pioneer in algorithm trading and one of the first financial services firms to employ UNIX-based distributed systems, relational database management systems, object-oriented architecture, and real-time analytical systems.

Mr. Vinella is a member of the U.C. Berkeley Center for Risk Management Research which promotes research in and education about serious issues in the field of financial risk management. He holds a master's degree in mathematics and a bachelor's degree in applied mathematics from the U.C. Berkeley. He holds a Ph.D. in mathematics at U.C. Berkeley where he frequently presents seminars on various aspects of mathematical finance, stochastic dynamical systems, and non-linear analysis. He also taught mathematics at California State University at Hayward and was a NASA Junior Research Fellow.

Mr. Vinella has coauthored two books with Jeanette Jin (the COO of WTCS) on governance and operational risk management, one published through Risk Waters and

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REPRESENTATIVE EXPERT TESTIMONY AND CONSULTING ENGAGEMENTS

- *The Water Works Board of the City of Birmingham, et al., v. US Bank National Association. Civil Action No. 17-4113.* U.S. District Court, District of South Dakota (April 2019–present). Provided expert testimony on behalf of plaintiffs in the form of deposition testimony and two expert reports regarding various aspects of trust administration with regards to fixed-income securities issued by a tribal entity.
- *Trading Technologies International, Inc. v. IBG LL, et al. Case No.: 10 C 715.* U.S. District Court, Northern District of Illinois, Eastern Division (April 2019–present). Provided expert testimony on behalf of defendants in the form of written declarations regarding a patent dispute involving electronic trading systems.
- *Defender Ltd. v. HSBC Institutional Trust Services (Ireland) Ltd. Record No 2013/12439P.* The High Court (Commercial), Dublin, Ireland (August 2017–present). Provided expert testimony on behalf of plaintiffs in the form of an expert report about various aspects of custody services in regard to an investment fund managed by Bernie L. Madoff Securities.
- *Fixed Income Shares: Series M, et al. v. Citibank N.A. Case No. 14-cv-9373-JMF.* U.S. District Court, Southern District of New York (January 2015–present). Provided expert testimony on behalf of plaintiffs in the form of deposition testimony and an expert report regarding various aspects of trust administration, securitization, secondary loan markets, valuation, and custody in regard to a RMBS issuance.
- *Peterson, et al. v. Islamic Republic of Iran, et al. Case No.: 13 CIV 9195 (KBF).* U.S. District Court, Southern District of New York (June 2014–present). Provided expert testimony on behalf of plaintiffs in the form of two declarations regarding various aspects of international payment systems and correspondent banking.
- *Several related patent disputes between Investors Exchange LLC. and Nasdaq, Inc.* before the Patent Trial and Appeal Board of the U.S. Patent and Trademark Office (all November 2018–November 2019). Provided expert testimony on behalf of the patent owner in the form of written declarations and depositions regarding the technical design and functionality of electronic order routing and matching systems.
 - o CBM2018-00029 (patent 7,747,506)
 - o CBM2018-00038 (patent 7,895,112)
 - o CBM2018-00039 (patent 7,933,827)
 - o CBM2018-00041 (patent 8,244,622)
 - o CBM2018-00042 (patent 8,386,362)
 - o CBM2018-00045 (patent 7,647,264)
 - o CBM2019-00001 (patent 8,280,797)
 - o IPR2018-01796 (patent 8,117,609)
- *Several related patent disputes between Miami International Securities Exchange, LLC., et al. and Nasdaq, Inc.* before the Patent and Appeal Board of the U.S. Patent and Trademark Office (all November 2018–2019). Provided expert testimony on behalf of the patent owner in the form of written declarations and depositions regarding the technical design and functionality of electronic order routing and matching systems.
 - o CBM2018-00020 (patent 8,386,371)
 - o CBM2018-00021 (patent 6,618,707)

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- o *CBM2018-00030* (patent 7,921,051 B2)
 - o *CBM2018-00031* (patent 7,246,093)
 - o *CBM2018-00032* (patent 7,933,827)
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- *UBS Securities LLC and UBS AG. (London Branch) v. Highland Capital Management, L.P. et al. Index Nos. 650097/2009, 650752/2010 and 652646/2011 (I.A.S. Part 60, Friedman, J.)*. Supreme Court of the State of New York, County of New York (January 2013–July 2018). Provided expert testimony on behalf of defendants in the form of two expert reports, deposition testimony, and trial testimony regarding various aspects of trust administration, securitization, secondary loan markets, valuation, and custody in regard to a hybrid CLO warehouse.
 - *Bangko Sentral ng Pilipinas v CCK Financial Solutions Pty Ltd* (May 2017– November 2017). Provided expert testimony on behalf of defendants in the form of two expert reports and hearing testimony regarding a failed software installation.
 - *Lehman Brothers Holdings Inc., in its capacity as Plan Administrator on behalf of Lehman Brothers Special Financing Inc. v. Federal Home Loan Bank of New York, Adv. No. 15-01110 (SCC)*. New York Southern Bankruptcy Court (October 2014–April 2017). Provided expert testimony on behalf of defendants in the form of a declaration, two expert reports, and deposition testimony regarding the replacement value of a portfolio of over 350 interested swaps.
 - *Primeo Fund v. Bank of Bermuda (Cayman) Limited et al. Cause No: FSD 30 OF 2013 – AJJ*. Grand Court of the Cayman Islands (July 2015–January 2017). Provided expert testimony on behalf of plaintiffs in the form of two expert reports and trial testimony about various aspects of custody services in regard to a hedge fund managed by Bernie L. Madoff Securities.
 - *Lynn Tilton, et al, (Respondents). SEC Administrative Proceeding File No. 3-16462* (August 2016–November 2016). Provided expert testimony on behalf of respondents in the form of an expert report and trial testimony on behalf of respondents regarding generally accepted corporate trust customs and practices with regard to CLOs.
 - *Kenneth M. Kryz and Christopher Stride as Joint Liquidators of Sphinx Funds et al. v. Robert Aaron; Guy Casanova; Derivatives Portfolio Management LLC et al., Case No.: 1:14-cv-02098*. U.S. District Court for the District of New Jersey (January 2012–June 2015). Provided expert testimony on behalf of plaintiffs in the form of an expert report and trial and deposition testimony on behalf of plaintiffs regarding various regulatory aspects and standards of care with regard to fund administration.
 - *Jackson Square Partners, LLC. v. Delaware Investment Partners. American Arbitration Association* (May 2015–August 2015). Provided expert testimony on behalf of plaintiffs in the form of declaration in a dispute regarding fund administration industry standards of care in connection with a management buy-out.
 - *Deutsche Bank, N.A. v. Bank of America, N.A. et al. Civil Action No. 09-cv-9784 (RWS) and BNP Paribas v. Bank of America, N.A. et al. Civil Action No. 09-CV-9783 (RWS)*. U.S. District Court, Southern District of New York (January 2010–April 2015). Provided expert testimony on behalf of plaintiffs in the form of an expert report and deposition testimony regarding various aspects of trust administration, securitization, secondary mortgage markets, and custody in regard to a defaulted ABCP program.
 - *Residential Capital, LLC et al. (“Debtors”), Case No. 12-12020 (MG)*. U.S. Bankruptcy Court, Southern District of New York (April 2012–January 2014). Provided expert testimony on behalf of a creditor, Financial Guarantee Insurance Corp (FGIC), in the form of an expert report regarding various aspects of trust administration, securitization, valuation, and monoline insurance in regard to the issuance of 190 CDOs.

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- *EPLG, LLC (as trustee for the QR liquidating Trust) v. Citibank, N.A. and U.S. Bank, N.A. Case No. 09-10589 (MTW), Jointly Administered, Adv. No. 11-50603 (MTW)*. U.S. Bankruptcy Court for the District of Delaware (April–September 2013). Provided expert testimony on behalf of defendants in the form of an expert report and deposition testimony regarding various aspects of municipal securities issuance, credit enhancement, and trust administration in regard to a defaulted obligor of an industrial revenue bond.
- *Leveraged Innovations et al. v. NASDAQ OM Group Inc. et al., Civ. No. 1:11-cv-3203 (KBF)*. U.S. District Court, Southern District of New York (June 2011–February 2013). Provided expert testimony in the form of declarations on behalf of plaintiff with respect to alleged patent violations in regard to leveraged electronic traded funds.
- *Research Associates, LLC v. Wisdom Tree Investments, Inc. et al., Case No. SACV11-01846 DOC (ANx)*. U.S. District Court, Central District of California, Southern Division (June–November 2012). Provided expert testimony in the form of declarations on behalf of plaintiff with respect to alleged patent violations in regard to financial index and portfolio construction based on fundamental data.
- *UFCW et al. v. Wells Fargo, N.A. et al., Case No. 2:2009-cv-00668*. U.S. District Court for the District of New Jersey (August 2011–January 2012). Provided expert testimony in the form of a declaration, reports, and deposition testimony on behalf of plaintiffs regarding various duties and responsibilities with respect to the discretionary investment of complex securities including RMBS and CMBS.
- *Ezra K. Nilson et al. v. JPMorgan Chase Bank, N.A. et al., Case No. 1:09-cv-00121*. U.S. District Court, District of Utah, Northern Division (April 2010–November 2011). Provided expert testimony in the form of a declaration and a deposition on behalf of plaintiffs, regarding various aspects of syndicated loan and loan administration practices and procedures.
- *Lehman Brothers Holdings, Inc. et al., Debtors and Lehman Brothers, Inc., Debtor (Chapter 11. Case No. 08-13555 and Case No. 08-01420 (JMP) SIPA)*. U.S. Bankruptcy Court, Southern District of New York (November 2009–July 2010). Provided expert testimony on behalf of Barclays Capital, Inc. in the form of expert reports and deposition testimony regarding various aspects of SEC Rule 15c3 in support of the Trustee's Motion for Relief Pursuant to Sales Order.
- *Lehman Brothers Holdings, Inc. et al., Debtors and Lehman Brothers, Inc., Debtor (Chapter 11. Case No. 08-13555 and Case No. 08-01420 (JMP) SIPA), Customer Claim No. 900007799 of Westernbank Puerto Rico (Account No. 6670010), Customer Claim No. 900007798 of Westernbank International, a division of Westernbank Puerto Rico (Account No. 6813650)*. U.S. Bankruptcy Court, Southern District of New York (November 2009–May 2010). Provided expert testimony on behalf of Westernbank in the form of declarations regarding various aspects of customer accounts and repurchase in support of the bank's efforts to recover funds seized by the Lehman Brothers' Trustee.
- *Lehman Brothers Holdings, Inc. et al., Debtors and Lehman Brothers, Inc., Debtor (Chapter 11. Case No. 08-13555 and Case No. 08-01420 (JMP) SIPA), Customer Claim No. 900007799 of Westernbank Puerto Rico (Account No. 6670010), Customer Claim No. 900007798 of Westernbank International, a division of Westernbank Puerto Rico (Account No. 6813650)*. U.S. Bankruptcy Court, Southern District of New York (July 2010–July 2011). Provided expert testimony on behalf of the FDIC regarding various aspects of customer accounts and repurchase agreements in support of the bank's efforts to recovery Westernbank funds seized by Lehman Brothers' Trustee.

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- *Prophet Capital Management, LTD v. Prophet Equity, LLC and Robert Epstein, Civil Action No. A 09 CA 316 LY*. U.S. District Court, Western District of Texas, Austin Division (July 2010–March 2011). Provided expert testimony on behalf of plaintiffs in the form of reports and deposition testimony regarding name confusion, prime brokerage, risk management, and trading related to hedge funds.
- *Citadel Investment Group et al. v. Mikhail Malyshev and Jace Kohlmeier. American Arbitration Association* (December 2009–August 2010). Produced hearing and deposition testimony on behalf of plaintiffs in a dispute regarding misappropriation of intellectual property and trade secrets by ex-employees. Testified before the arbitration panel and in depositions. Specific issues for opinion included: finance theory and underlying mathematical techniques supporting high-frequency trading, trading and risk management strategies, software development, and trading management.
- *Jeffery E. Schuss et al. v. Penfield Partners, L.P. et al (C.A. No 3132-VCP)*. Chancery Court of the State of Delaware, New Castle County (November–December 2009). Provided expert testimony on behalf of defendants in the form of a report and a deposition with regard to an alleged breach of fiduciary duties on the part of a hedge fund's managing partner concerning payment-in-kind distributions.
- *Several related Controladora Comercial Mexicana matters*. Provided expert testimony through affidavits, declarations, and expert reports on behalf of defendant with regard to the defendant's defaulting on a number of exotic derivative transactions. Spoke to the appropriateness of such transactions, their inherent risk and return, and general market practices regarding derivatives sales to corporate clients. Additionally, developed over a dozen exotic valuation models in connection with verifying plaintiffs' damages claims. The work was performed in connection with the following suits (all September 2009–September 2010):
 - o *Barclays Bank PLC v. Controladora Comercial Mexicana S.A.B. DE C.V.* Supreme Court of the State of New York, County of New York
 - o *J. Aron and Company v. Controladora Comercial Mexicana S.A.B. DE C.V.* Supreme Court of the State of New York, County of New York
 - o *JPMorgan Chase v. Controladora Comercial Mexicana S.A.B. DE C.V.* Supreme Court of the State of New York, County of New York
 - o *Merrill Lynch Capital Markets AG and Merrill Lynch Capital Services, Inc. v. Controladora Comercial Mexicana S.A.B. DE C.V.* Supreme Court of the State of New York, County of New York
- *Cantor Fitzgerald, L.P. v. Iris Cantor, Market Data Corporation, Rodney Fisher, and CFI*. Chancery Court of the State of Delaware, New Castle County (November 1998–August 1999). Provided expert testimony in court and through depositions on behalf of the defendants with regard to the alleged theft and improper use of intellectual property. Defendants were accused of improperly copying the designs and specifications of an automated bond and financial futures trading system.
- *O'Connor and Associates v. David Garbaze et al.* U.S. District Court, Northern District of Illinois (August 1988). Provided expert testimony in court and through depositions on behalf of the defendants with regard to the alleged theft and improper use of intellectual property by ex-employees. Defendants were accused of improperly copying and using option valuation and risk management algorithms along with system designs and specifications.

CONGRESSIONAL TESTIMONY AND ADVISORY

- *Government Accountability Office* (October 2008–January 2009). Facilitated several conferences with GAO staff helping to educate them on various economic and operational aspects of structured financial products in connection with the Troubled Asset Purchase Program.

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- *Government Accountability Office* (November 2001–March 2002). Performed research and analysis for the GAO in regard to the September 11 terrorist attacks and the resulting impact on the U.S. financial system and infrastructure.
- *House Subcommittee on Communications Technology and the Internet* (November 2001). Prepared a whitepaper on the vulnerability of the U.S. financial system to terrorist attack. Read into the Congressional Record by Congressman Ed Markey (D-MA).
- *House Subcommittee on Telecommunications* (September 1995). Testified before the committee on the uses of over-the-counter derivatives in regards to possible regulation.

REPRESENTATIVE PUBLICATIONS

- (1) *Survey of the Mathematical Foundations of Continuous-Time Finance*, master's thesis, University of California, Berkeley, December 2015.
- (2) *Corporate Governance and Operational Risk Management – A Practical Guide*, Peter Vinella and Jeanette Jin, J. Wiley and Sons (not released).
- (3) *Operational Risk—Practical Approaches to Implementation*, Ellen Davis (ed.), with Jeanette Jin (Chapter 6), Risk Books, March 2005.
- (4) Reprint of the *Operational Risk 101 Series* (translated into Chinese), Banking Today (Hong Kong), November 2005.
- (5) Reprint of the *Operational Risk 101 Series, Derivatives Portal* (online journal), June 2005.
- (6) Reprint of the *Operational Risk 101 Series, Banking Risk* (online journal), June 2005.
- (7) *Operational Risk 101 – Management by Fact* (part 6 of a series), GT News, April 2005.
- (8) *Operational Risk 101 – Roles and Responsibilities* (part 5 of a series), GT News, March 2005.
- (9) Solicited Comments to the Draft Agency White Paper on the Sound Practices to Strengthen the Resilience of the U.S. Financial U.S. System, GT News, March 2005.
- (10) *Operational Risk 101 – Tackling Basel II* (part 4 of a series), GT News, February 2005.
- (11) *Operational Risk 101 – Operational Risk in terms of Operational Performance* (part 3 of a series), GT News, January 2005.
- (12) *Operational Risk 101 – Demystifying KPI and KRI* (part 2 of a series), GT News, December 2004.
- (13) *Operational Risk 101 – Basic Definitions* (part 1 of a series), GT News, November 2004.
- (14) *Describing a Formal Foundation for KPI and KRI*, Operational Risk, November 2004.
- (15) *Protecting the U.S. Financial System from Terrorist Attacks*, Bank Systems and Technology (Reprint). Read into the Congressional Record by U.S. Congressman Edward Markey during a hearing the House Subcommittee on Finance and Telecommunications, March 2002.
- (16) *Protecting the U.S. Financial System from Terrorist Attacks*, GT News (reprint), February 2002.
- (17) *The Trading and Risk Management ASP Directory*, Derivatives Strategy, December 2000.
- (18) *Online Risk Management: A Theory of eVolution*, MiddleOffice, Spring 2000.
- (19) *One e Too Many*, FOW, March 2000.
- (20) [No title], FOW, December 1999.
- (21) *Whoaaaah*, MiddleOffice, Winter 1999.
- (22) *Bank Bashing*, FOW, October 1999.
- (23) *Rio Aggrandisement*, FOW, September 1999.
- (24) *Joseph Jett's Phantom Bets*, Derivatives Strategy, May 1999.
- (25) *Mathematica for Dummies*, Derivatives Strategy, February 1999.
- (26) *So, You're in the Market for a Risk Management System*, FOW, September 1998.
- (27) *Black and White on Wall Street Review*, Derivatives Strategy, April 1998.

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- (28) *JP Morgan's FourFifteen*, Derivatives Strategy, December 1996.
- (29) *Suggestion for Financial Derivative Regulation and Legislation*, PVA White paper. Presented to the House of Representatives Subcommittee on Finance and Telecommunications, June 1994.

REPRESENTATIVE PRESENTATIONS

- (1) *The Challenges of LIBOR-Related Litigation*, Association of Corporate Counsel, April 24, 2012
- (2) *LIBOR – What is It, How Does it Work, and Why is it Important?* Financial Institutions Committee, State Bar of California, August 8, 2012
- (3) Panelist, *The Future of Structure Products “What’s Next?”* European CLO and Structured Product Summit, October 2008, Monte Carlo, Monaco
- (4) Panelist, *Investor Reporting and Deal Surveillance*, Global ACBP and SIVs Summit, September 2007, Paris, France
- (5) Panelist, *Basel II Impact on CDOs, Credit Derivatives and Structured Credit Products in Europe*, European CDOs, Credit Derivatives and Structured Credit Products Summit, September 2007, London, England
- (6) Panelist, *Views on the Loan Market and Trends in Collateral*, CDO World 2007, March 2007, New York, NY
- (7) Conference co-chair and panelist, *The CDO Secondary Market: Liquidity and Transparency*, European CLO and Structured Product Summit, October 2008, Monte Carlo, Monaco
- (8) Panelist, 7th Annual CDO Summit, December 2007, Dana Point, CA
- (9) Panelist, 6th Annual CDO Summit, December 2006, Dana Point, CA
- (10) *Corporate Governance as a Key Value Driver*, SAS Financial Services Executive Summit, June 2005, Cary, NC
- (11) Integrating Corporate Governance and Operational Risk Management, Enterprise Risk Management Symposium, May 2005, Chicago, IL
- (12) *Establishing a Formal System of Internal Control for Modeling Operational Risk*, Financial Engineering Practitioners Seminar (Columbia University), March 2005, New York, NY
- (13) *Op Risk Management and Streamlining Trade Processing*, BEA Financial Services Seminar, February 2004, New York, NY
- (14) *September 11th and the Possible Regulatory Response*, Wall Street and Technology’s Disaster Recovery and Business Continuity Conference, February 2002, New York, NY
- (15) *The Need to Apply Quality Systems to Risk Management Practices*, 3rd Annual Derivatives Expo, May 2001, New York, NY
- (16) Panelist, 2000 Derivatives Hall Fame Roundtable, August 2000, New York, NY
- (17) Personal remarks, Managed Funds Association – Annual Forum, July 2000, Chicago, IL
- (18) Panelist, Derivatives Strategies ASP Roundtable, May 2000, New York, NY
- (19) *Will the Internet Put You Out of Work? (Oh Yeah and Sooner Than You Think)*, 9th Annual International Derivatives Exhibition, March 2000, Frankfurt, Germany
- (20) *The Global Risk Management Decision*, Merrill Lynch Risk Conference, January 1999, New York, NY
- (21) *Risk Management Issues – Part 2*, Informix Risk Management Seminar, November 1998, New York, NY
- (22) *Risk Management Issues*, Informix Executive Dinner, December 1997, New York, NY
- (23) Presentation to the FIS Sales Force and Account Management Team, ADP/ICI iMPACT Product Premier, September 1996, New York, NY
- (24) *Betting the Ranch*, Risk Management Seminar – Securities Industry Institute, Wharton Business School, University of Pennsylvania, March 1996, Philadelphia, PA
- (25) *Automated Trading and Pre-Trade Compliance*, NASDR Technology Forum, December 1995, Washington, DC