

### ANDREW B. MILLER

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## **Educational Background**

- Ph.D. Cornell University, 1999, Economics, GPA 3.98
- European Union Diploma, L'Institut D'Etudes Politiques De Paris, 1999, Honors
- M.S., Stanford University, 1991, Operations Research
- B.S., University of California, Santa Barbara, 1990, Mathematical Sciences, Honors

## **Employment**

- Bank Risk Monitor Founder and CEO, 2023-
- WellFinance CIO, 2014-
- Chicago Partners (a subsidiary of Navigant Consulting) – <u>Managing</u> <u>Director</u>, 2008 – 2011
- NEW YORK UNIVERSITY <u>Adjunct Professor, Department of</u> Economics, 2004 to 2011
- LECG, LLC Director, 2001 2006
- PRICEWATERHOUSECOOPERS, LLP – <u>Manager, San Francisco</u> and New York, 1999 to 2001

Andrew B. Miller Ph.D., founder and CEO of The Bank Risk Monitor, has over 25 years of experience working with financial services companies in valuation and risk management. He is an expert in financial mathematics used to quantify values and measure risk of portfolios, assets/liabilities, and derivatives. He is also a qualified testimonial expert with ability to communicate highly technical quantitative finance to stakeholders including courts of law. He has worked closely with bank executives, inside, and outside counsel on numerous investigations, independent studies, and legal conflicts. He has presented the results of his expert analyses to executives, boards, legal counsel, regulators, and courts. Dr. Miller was previously with Chicago Partners, NYU, and PricewaterhouseCoopers. He has testified in Federal Court and to the SEC.

Dr. Miller was formerly an adjunct faculty member at New York University in the department of economics. Dr. Miller obtained his Ph.D. in economics from Cornell University, a M.S. in operations research from Stanford University, and a B.S. in applied mathematics from the University of California at Santa Barbara. He has lectured at several universities including Cornell, NYU, UC Santa Barbara, and Yale. He has written research in such areas as finance, regulation, law and economics, and complicated dynamic analysis. Dr. Miller has also given seminars related to these and other topics at conferences, universities, law firms and other forums nationally and internationally.





## PROFESSIONAL EXPERIENCE

BANK RISK MONITOR, LLC <u>Founder and CEO</u>, San Francisco, 2023 to present.

Founded the Bank Risk Monitor to house advisory and expert risk management and valuation services to the banking industry. In response to the banking crisis of 2023, I saw a new and critical need for independent expert assessment of bank risk management and valuation. Stakeholders such as legal counsel, executives, boards, investors, and regulators currently need independent expert opinions on what banks have been doing and what they plan on doing regarding management of interest rate risk, liquidity risk, and valuation risk. Company is in start-up mode and in various stages of discussion with banks on coming engagements.

## WELLFINANCE

CIO, Miami/San Francisco, 2014 to present.

Chief Investment Officer for the hedge fund arm of WellFinance, an approximately \$20M home office for wealth management and philanthropy. Oversee all investments concentrated in fixed income and derivatives.

CHICAGO PARTNERS/NAVIGANT CONSULTING, INC. <u>Principal/Managing Director</u>, New York, 2006 to 2011.

Equity owner in the Chicago Partners boutique consulting business with responsibility for opening and building the New York City office. Chicago Partners was recognized as the premier economics and finance consulting firm at the time and included the practices of numerous experts at the University of Chicago and New York University. Developed the New York practice from start-up to over \$20M in annual revenues within two years. Business was sold to Navigant in 2008. Own book of business focused on asset pricing in financial services and hedge funds. Major clients included Citigroup, Deutsche Bank, J.P. Morgan, BlueMountain Capital, AIG and their outside counsel including Wachtell Lipton, Gibson Dunn, Sidley Austin, Kirkland, and Latham. Specialized in risk management and the pricing of illiquid assets and derivatives, particularly swaps, options and forwards. A recognized expert in swaps, testified in the first ever insider trading case involving credit default swaps. Provided testimony to the U.S. Securities and Exchange Commission on the pricing of derivatives, debt





instruments and market functions associated with the Argentine financial crisis of 2001-2002.

## **NEW YORK UNIVERSITY**

<u>Adjunct Professor</u>, Economics, New York University, New York, New York, 2004 to 2011.

Taught Applied Strategy (Game Theory) course in the Economics Master Degree Program. Full responsibility for entire course.

## **LECG**

Director, LECG, New York, 2001 to 2006.

Consulting and expert services for several high-profile securities litigation and forensic accounting matters; expert economic, finance, and accounting services for several ongoing SEC investigations of public registrants; expert valuation services for financial services firms of derivatives; large liability tax controversy matters, commercial damages claims, and tax audits.

## PRICEWATERHOUSECOOPERS, LLP

Manager, PricewaterhouseCoopers LLP, San Francisco and New York, 1999 to 2001.

Performed and reviewed international tax and advisory services for clients in consumer, entertainment, and technology industries. Extensive experience in intangible asset valuation, options pricing, business strategies, litigation support, and intangible property structuring.

# **CORNELL UNIVERSITY**

Lecturer, Economics, Cornell University, Ithaca, New York, 1998.

Taught intermediate microeconomics. Full responsibility for entire course including management of teaching assistant.



## FIELDS OF INTEREST AND EXPERTISE

Risk Management
Pricing and Valuation
Financial and Stock Markets
Derivatives Pricing and Analysis
Financial Accounting
Intellectual Property
Strategy and Governance
Statistical Analysis and Econometrics

## PROFESSIONAL ACTIVITIES

Member, American Economics Association Member, American Finance Association

## RECENT TESTIMONY

- Securities and Exchange Commission v. Jon-Paul Rorech and Renato Negrin, United States District Court Southern District of New York. Report, Deposition, and Trial Testimony.
- ING USA Annuity and ING Investment Management, LLC v. JP Morgan Securities Inc., Superior Court of Fulton County, State of Georgia. Report, Rebuttal Report, Deposition, Rebuttal Deposition.
- In the Matter of Trading in the Securities of Citigroup Inc. (HO-09548). Report.
- Klamath Strategic Investment Fund, LLC v. United States, US District Court, Eastern District of Texas. Report, Deposition, and Trial Testimony.
- Estate of Thomas J. Gonzales II v. Franchise Tax Board, Superior Court of California, County of San Francisco. Report, Deposition, Trial scheduled.

## REPRESENTATIVE CASE AND CONSULTING WORK

• Financial Services Company. Retained as financial expert on multiple matters involving CDS. Retained as consulting expert on matter involving index arbitrage trading in Korea.





- Financial Services Company. Consulting related to RMBS business. Analysis of claims regarding disclosure issues by regulators and investors. Analysis of risk, performance, and pricing of RMBS. Consulting on multiple legal and regulatory matters.
- Financial Services Company. Retained as economic expert in matter concerning debt instruments issued by Australian mining company that filed bankruptcy. Analysis and testimony on damages, causes of bankruptcy, and hedging.
- Hedge Fund. Independent review and assessment of implementation of restructuring plan for premier fund in credit derivatives markets. Analyzed and reported on manager's allocation of a representative portfolio for liquidation to meet short-term redemptions. Portfolio included trading positions in CDS, CDI, interest rate and other swaps and derivatives, bonds, CDOs, CLOs, and other credit and fixed income assets. Analysis of expected liquidity costs based on current market conditions.
- Insurance Company. Analysis of fair value determination of CDS on super senior tranches of CDOs of RMBS and ABS. Review of methodology and results obtained for GAAP accounting under SFAS 133 and SFAS 157. Consulting to counsel on market, terminology, good faith efforts forensically and prospectively. Consulting on investigations.
- Financial Services Company. Analysis of damages allegations by investors in mutual funds with strategies in mortgage-related securities including agencies, CDOs, and RMBS. Assistance in response to regulatory inquiries regarding mutual funds and CDO businesses.
- Financial Services Company. Consulting related to SEC investigation. Assistance to counsel on motions and submissions. Consulting on financial accounting, valuation of investment portfolio, and valuation of debt instruments. Expert report on market liquidity of foreign debt market established that market was not active. Extensive analysis detailing the Argentine financial crisis of 2001-2002 including currency, derivatives, and fixed income assets.
- Financial Services Company. Analysis of CDO structuring and portfolio management of multi-billion dollar CDO reference pool of RMBS, ABS, and CMBS. Analysis of damages alleged to economic structure of CDO, adverse reference selection, and other claims of portfolio mismanagement. Assistance in response to regulatory inquiries regarding CDO business.
- Financial Services Company. Analysis of ISDA-based swap and option derivatives for Market Disruption, Exercise Conditions, Market Quotation, Loss and valuation purposes associated with company's transactional decisions.
- Bond Insurer. Valuation of portfolio assets of asset-backed commercial paper conduit. Valuation of mortgage-backed securities and collateralized debt obligations





representing over 7,000 CUSIPs including subprime assets. Extensive analysis of the structuring, portfolio choices, and portfolio performances of hundreds of CDOs.

- Hedge Fund. Expert report and testimony regarding the business and implementation of the investment strategy including loans for investment purposes and trading in foreign exchange futures, swaps, and other ISDA-based OTC derivatives. Analysis of Argentine and Hong Kong markets during 2000 to the present. Eastern District of Texas.
- Financial Services Company. Analysis of underwriting and asset management business for CDOs in response to SEC and Attorney General inquiries.
- Federal Housing Finance Board. Valuation of balance sheet of member Federal Home Loan Bank. Analysis and valuation of fixed income assets and liabilities and derivatives. Valuation of mortgage-backed securities (RMBS) including subprime assets representing thousands of CUSIPs.
- Financial Services Company. Consulting related to several securities litigations and NASD arbitrations including assistance on motions practice.
- Financial Services Company. Consulting on internal investigation of portfolio management and financial accounting for closed-end funds related to transaction.
- Clothing Retailer. Analysis of material adverse change clause in a highly leveraged merger transaction.
- Aluminum Product Manufacturer. Consulting advice regarding litigation over supply contract dispute. Analysis of the market for aluminum including forward markets and derivatives.
- Software Company. Expert consulting in Tax Court matter regarding the valuation of intellectual property and cost sharing arrangement with foreign affiliate.
- Satellite Television Company. Consulting on damages claims by minority shareholders and arbitration testimony.
- Spirits Brand Owner. Consulting on brand value and purchase price allocation upon sale of brand for negotiated settlement in suit by minority shareholder claiming fraud and breach of fiduciary duty. Consulting during arbitration.
- Pharmaceutical Company. Draft of expert report in matter of damages claimed due to alleged misconduct in termination of supply contract.
- Investment Bank. Analysis in matter of damages claimed due to alleged misconduct in IPO processes by classes of shareholders.
- Cable Television Company. Securities litigation, complex commercial damages, and forensic accounting analysis.
- Construction Equipment Company. Valuation of intellectual property for tax arbitration matter value of donated technology.
- Diversified Aerospace Company. Provided expert report on valuation of subsidiary company (in fractional ownership jet industry) for shareholder dispute.





- Cable Television Company. Valuation of business enterprise and underlying tangible and intangible assets for IRS Fast Track arbitration.
- Manufacturing Conglomerate. Provided forensic accounting, damages analysis, and draft expert opinion in class action securities litigation matter.
- Financial Services Company. Draft of expert report in matter of damages claimed to alleged misconduct in commercial lending, underwriting, and analyst reporting by class of shareholders.
- Networking Company. Provided forensic accounting, damages analysis, and draft expert opinion in class action securities litigation matter.
- Insurance Company. Valuation of warrants and employee stock options for financial accounting purposes.
- Consumer Goods Company Foods. Valuation of intellectual property for financial accounting and transfer pricing purposes, valuation of acquired business enterprises, assistance with audit-related work.
- Consumer Goods Company Foods. Expert analysis in damages allegation matter concerning accusations of accounting fraud impact on business acquisition transaction.
- Chocolate Company. Valuation of intellectual property (trademarks) for financial accounting and transfer pricing purposes.
- Airline. Draft expert report concerning validity of certain disclosures by CEO and analysis of alleged insider trading scheme.
- Various Individuals and Companies. Expert services for valuation of restricted stock and analysis of reserves for tax disputes. Expert reports submitted to US Tax Court.
- Internet Services Company. Valuation of intellectual property for cost sharing arrangement, audit defense, US transfer pricing documentation.
- Pharmaceutical Company. Valuation of intellectual property for cost sharing arrangement, audit defense, litigation.
- Management Consultancy. Brand and other intellectual property valuation for crossborder transaction, financial accounting and tax purposes.
- Semiconductor Company. Audit related valuation report intellectual property for cost sharing arrangement.
- Semiconductor Company. Audit defense valuation of intellectual property, valuation of intellectual property for acquisitions and incorporation into existing cost sharing arrangement.
- Electronic Design Automation Company. Global transfer pricing documentation, valuation of intellectual property for cost sharing arrangement, advance pricing agreement filing.
- Networking Company. Valuation of intellectual property for cost sharing arrangement.





- Consumer Electronics Company PDAs. Valuation of intellectual property for cost sharing arrangement, US transfer pricing documentation.
- Semiconductor Equipment Manufacturer. Global transfer pricing documentation, valuation of intellectual property, state and local tax planning advice.
- Semiconductor Company. Valuation of intellectual property for cost sharing arrangement.
- Internet Services Company. Valuation of intellectual property for cost sharing arrangement.
- Consumer Goods Company. Provided economic analysis and consulting advice in support of Advance Pricing Agreement request.

#### PREVIOUS ACADEMIC EXPERIENCE

Teaching Assistant, graduate microeconomics (three terms), Cornell University, 1995-97

Teaching Assistant, intermediate microeconomics, Cornell University, 1997

*Intern,* Resources For the Future, Summer 1993

Research Assistant, Charles Kolstad, UC Santa Barbara, 1992-93

Teaching Assistant, introductory macroeconomics, UC Santa Barbara, 1992-93

Teaching Assistant, intermediate microeconomics, UC Santa Barbara, 1992-93

Teaching Assistant, intermediate macroeconomics, UC Santa Barbara, 1992-93

Teaching Assistant, graduate microeconomics (two terms), UC Santa Barbara, 1992-93

Teaching Assistant, graduate econometrics, UC Santa Barbara, 1992-93

### AWARDS AND HONORS

Honors, European Union Diploma, Institut D'Etudes Politiques De Paris, 1999

Joseph L. Fisher Doctoral Dissertation Award, 1998-99

AERE Travel Fellowship for 1998 World Congress

Louis K. Walinsky Fund, Outstanding Teaching Assistant, Cornell University, 1996-97

Sage Fellowship, Cornell University, 1997-98

Sage Fellowship, Cornell University, 1994-95

Distinction, Macroeconomics Qualifying Examination, Cornell University, 1995

Regent's Fellowship, UC Santa Barbara, 1992-93

Honors, B.S. Degree, University of California, Santa Barbara, 1990



## RESEARCH AND DEVELOPMENT

"The Roles of Recidivism and Liability in Regulation (Fines vs. Jail - What Makes Companies Behave?) (November 21, 2003). http://ssrn.com/abstract=471841.

"Regulatory Actions, Executive Wealth, and Firm Performance,"

"Valuation of Restricted Stock Options – A Lattice Model for Employee Stock Options" Software for valuation analysis.

"Stock Option Analysis for the 2003 Treasury Regulations on Cost Sharing" (October 11, 2003). http://ssrn.com/abstract=483923.

"Strategies for Surviving in Markets for Intellectual Property".

Transfer Pricing For Technology Industries, book manuscript in progress.

"Complexities in Competitive Joint Exploitation" (November 21, 2003). http://ssrn.com/abstract=471881.

"Regulation and the Firm"

"Social Norms in Firms," with Hodaka Morita and Joergen Weibull

## LECTURES, CONFERENCES, AND INVITED SEMINARS

Adjunct faculty member, Department of Economics, New York University.

Seminar, several law firms, "The Credit Crisis and Economic Fallout", August 2008.

Seminar, several law firms, "Economics of Auction-Rate Securities", May 2008.

Seminar, several law firms, "Financial Accounting and Valuation of Structured Credit Derivatives", March 2008.

Conference presentations, United Nations European Committee on Economics, Advisory Group on Intellectual Property Rights, Moscow, Russia October-November 2002.



# Andrew B. Miller Ph.D.

Conference presentations, AERE World Congress, Venice, Italy, June 25-27, 1998.

Seminars, UC Berkeley, U of Maryland, U of Iowa, "The Roles of Recidivism and Liability in Regulation," Spring 1999.

Various lectures in political economy, Institut D'Etudes Politiques De Paris, Summer 1999.

March 2023