

MING FANG, PH.D.

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EDUCATION

YALE UNIVERSITY, New Haven, Connecticut
Ph.D., Finance, 2006

UNIVERSITY OF WASHINGTON, Seattle, Washington
Ph.D., Applied Mathematics, 1995

FUDAN UNIVERSITY, Shanghai, China
M.S., B.S., Mathematics, 1985, 1982

PUBLICATION

Fang, M., and K. K. Tung, 1994: Solution to the Charney problem of viscous symmetric circulation. *J. Atmos. Sci.*, **51**, 1261–1272.

Fang, M., and K. K. Tung, 1996: A simple model of nonlinear Hadley circulation with an ITCZ: Analytic and numerical solutions. *J. Atmos. Sci.*, **53**, 1241–1261.

Fang, M., and K. K. Tung, 1997: The dependence of the Hadley circulation on the thermal relaxation time. *J. Atmos. Sci.*, **54**, 1397–1384.

Fang, M., and K. K. Tung, 1999: Time-dependent nonlinear Hadley circulation. *J. Atmos. Sci.*, **56**, 1797–1807.

NON-JOURNAL PUBLISHED WORK

Fang, M., and R. Zhong, 2004: Default Risk, Firm's Characteristics, and Risk Shifting. Available at SSRN: <https://ssrn.com/abstract=560069>.

Fang, M., 2005: Bond Return, Spread Change, and the Momentum Effect in Corporate Bond and Stock Markets. Available at SSRN: <https://ssrn.com/abstract=3184704>

ACADEMIC EXPERIENCE

THE FOX SCHOOL OF BUSINESS at TEMPLE UNIVERSITY, Philadelphia, Pennsylvania

Assistant Professor of Instruction in Finance, 2019/7 - present

Director of Program Development

Teaching for the Master Program of Finance: *Frontier in Quantitative Finance, Machine Learning, Data Science in Finance, Derivative Valuation, Quantitative Risk Management, Quantitative Portfolio Management, Continuous-time Finance, Quantitative Risk Modeling*

Teaching for the undergraduate program in the department of Finance: *Security Analysis and Portfolio Management, Advanced Fixed-Income Portfolio Management*

Help the department and the school in developing the network with financial industry and Chinese universities

NINGBO UNIVERSITY, Ningbo, China

University Adjunct Professor, 2019/12 - present

Develop the curriculum for a joint undergraduate Financial Engineering program with Temple University

Initiate a joint FinTech MS program between Ningbo University and Temple University

COLUMBIA UNIVERSITY, New York, New York

Lecture in the discipline of Actuarial Science, School of Professional Studies, 2018/5 – 2019/6

Developed and taught courses: *Data Science in Finance and Insurance, Quantitative Risk Management, and Investments* for Actuarial Science M.S. Program

YALE UNIVERSITY, New Haven, Connecticut

Teaching Assistant, Yale School of Management, 2002-2005

MBA-level Investment Management (Roger Ibbotson, Spring 2002, Fall 2002, Spring 2003)

MBA-level Financial Engineering (Jonathan Ingersoll, Fall 2003, Fall 2004)

MBA-level Hedge Funds (William Goetzmann, Fall 2005)

Responsibilities: Recitation, occasional lecturing, and grading.

PRINCETON UNIVERSITY, Princeton, New Jersey

Postdoctoral Research Fellow, 1995-1996. Conducted the Guided Monte Carlo simulations and model sensitivity studies on chemical kinetic and transport models in global atmospheric circulation.

UNIVERSITY OF WASHINGTON, Seattle, Washington

Teaching Assistant, Department of Appl Math, 1990-1995

PhD-level Partial Differential Equations

PhD-level Calculus of Variation

PhD-level Ordinary Differential Equations with Application in Physics

Responsibilities: Recitation, occasional lecturing, and grading.

Research Assistant for Professor Ka-Kit Tung

Worked on Global Circulation and Ozon Depletion projects supported by NSF and NASA

INDUSTRY EXPERIENCE

Intelligence Analytics Consulting, Scarsdale, New York

CEO, 2018/2 -present

Build up a data analytics consulting company to provide business solutions and trainings in Financial Engineering, Prediction Modeling, Machine Learning and AI application. Clients include Moody's Analytical Learning Solutions, IvyGate International Education, and Ning Bo University (China).

Leaders Capital, Kowloon, Hong Kong, China

Strategic Partner, 2020/7 -present

Investment Strategy and Marketing Strategy.

AIG, New York, New York

Vice President, AIG Investments Analytics, 2012-2018/2

Led a modeling team and worked in corporate functions of strategic asset allocation (SAA), asset liability management (ALM), liability portfolio benchmarking, investment comparison across insurance industry, and investment performance benchmarking and attribution analysis. Designed and implemented multiple risk factor simulation-based SAA and ALM framework and built up portfolio optimization tool to set SAA and risk target for various AIG legal entities. Worked closely with chief investment officer on asset allocation decision-making. Served as permanent invited attendee of regional investment advisory committee. Produced quarterly ALM report for firm's financial risk group.

- Set up benchmarks for various liability portfolios and for each asset class portfolio of AIG investments.
- Implemented firm-wide investment performance attribution analysis system.
- Analyzed and implemented FX and inflation hedging in investment portfolios.
- Performed risk assessment on interest rates and credit spreads for various institutional pension buy-out deals.

ZACKS INVESTMENT MANAGEMENT, Chicago, Illinois

Managing Director and Portfolio Manager, 2008-2011

Led a group of analysts to conduct quantitative equity research and built industry sector-specific multi-factor model for U.S. equity selection, with each sector model composed of three thematic components: valuation, quality, and market sentiment. Worked closely with CEO in new product development and capital allocation process.

- Designed performance attribution module for market neutral portfolios in ZRS 5.0.
- Built risk management process based on portfolio exposure to market factor, systematic factors, and macro-economic factors.
- Created systematic trading process, including pre-trade risk analysis, short availability request, algorithm trading schema selection, post-trade performance analysis, and portfolio position cross-examination and reconciliation.

BREVAN HOWARD U.S. ASSET MANAGEMENT LP, New York, New York

Portfolio Manager, Quantitative Strategies, 2007-2008

Set up company's quantitative equity trading platform with operation group. Managed market neutral US quantitative equity portfolio and achieved annualized return of 9.8% in chaotic market period (AUM \$100 MM).

PARTNERRE ASSET MANAGEMENT CORPORATION, Greenwich, Connecticut

Associate Director in Quantitative Equity, 2006-2007

Led quantitative equity research team in model backtest and portfolio construction. Co-managed domestic quantitative equity portfolio (AUM \$170 MM). The portfolio construction was based on seven value/information signals considering fundamental value, earnings quality, and management information.

YALE UNIVERSITY, New Haven, Connecticut

Research Assistant, Yale School of Management, 2003-2006

Worked on consulting project for GSC Partners, LLP for Prof. Will Geotzmann. Constructed first reliable weekly index for US distressed corporate loan and bond for study of performance attribution and risk characteristics in U.S. distressed debt market.

Citigroup Global Markets, New York, New York

Summer Associate, Quantitative Fixed-Income Research Division, 2004

Constructed statistical model to forecast corporate credit spreads. Improved and implemented statistical forecast model for MBS issuance. Studied relationship between corporate credit spread, interest rates, and Moody's EDF.

SALOMON SMITH BARNEY, New York, New York

Senior Quantitative Analyst, Financial Engineering Group, 1997-1999

Performed Monte Carlo simulations and fixed-income portfolio optimizations in scenario studies. Designed software to analyze corporate liability portfolio for debt refinancing transactions. Modeled and implemented Option Adjusted Spread models. Designed and implemented six hedge products to identify, evaluate, and hedge variety of risks in new debt issuance.