# Hui Ou-Yang

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# **Employment**

Professor of Finance: December 2010-Febuary 2013 Dean's Distinguished Chair Professor: March 2013-Present Cheung Kong Graduate School of Business (CKGSB)

In 2013, the Hong Kong University of Science and Technology offered me the Fung Chair Professorship as well as the founding directorship of the Institute of Quantitative Finance, unifying all the applied finance functions across the university and reporting directly to the provost (the second highest ranking official of the university).

Managing Director: December 2010-Febuary 2013 (on leave from CKGSB)

UBS AG, Asia-Pacific

Managing Director: October 2008-November 2010

Nomura Securities, Asia-Pacific

Managing Director: December 2007-September 2008 Senior Vice President: July 2005-November 2007

Lehman Brothers, Asia-Pacific

In 2006, the University of North Carolina at Chapel Hill offered me a tenured position with the Benjamin Cone Research Professorship; the finance department at Duke University then voted unanimously to match UNC's tenure offer.

Associate Professor of Finance, June 2005-July 2006 Assistant Professor of Finance, July 2001-May, 2005 Duke University

Assistant Professor of Finance University of North Carolina at Chapel Hill, September 1998-June 2001

Assistant Professor of Physical Chemistry Hong Kong University of Science & Technology, November 1993-August 1994

**Work at CKGSB:** I serve as the Dean's Distinguished Chair Professor of Finance. I also serve as the director of Research Center on Internet Finance and the co-director of Research Center on Financial Innovation and Wealth Management. In addition, I serve as independent directors

and senior advisors at several companies covering wealth management, insurance, internet finance, and the IT industries. I have conducted trainings and consulting work for many prestigious securities firms, banks, and government agencies.

Work at UBS: I headed the Quantitative Solutions team. My mandate was to develop algo products globally as well as provide quantitative solutions to both external clients and internal trading desks. We developed three major products "Tracking and Outperforming Inflation in China, Hong Kong, Korea, Malaysia, Singapore, and Thailand", "Commodity Relative Value Trading Strategies", and "Predictive Signals and Asset Allocation". I led the efforts in the marketing of these products. At the clients' requests, we performed two major projects on optimal debt policies for a large utility company and the hedging of a firm's total expenditures including jet fuel and staff costs for a major airline company, which generated and will still lead to significant revenues. I also provided training and presented research to many major UBS clients.

**Work at Nomura:** I headed Quantitative Strategies, Indexes, and Research Marketing. I worked with all major Nomura clients on customized research, with Nomura trading desks on alpha-generating strategies, as well as with the structuring teams on various products. I also provided training for external and internal clients.

In addition, I served on the operating committee of the fixed income division.

**Work at Lehman:** I headed three functions: Quantitative Portfolio Strategies (QPS), Quantitative Credit Research (QCR), and Lehman Indexes/LehmanLive Marketing.

The QPS team advised fixed-income and some equity investors around Asia-Pacific on asset allocation, benchmark design, index replication, asset/liability management, liquidity management, risk budgeting and diversification, performance attribution, and other quantitative aspects of the management of portfolios. This team provided customized service to central banks, investment/commercial banks, asset managers, insurance companies, and pension funds.

The QCR team developed models on exotic credit risk derivatives for Lehman traders, as well as presented trading strategies on credits and CDOs to major Lehman clients.

Lehman's numerous fixed income indexes and its analytical tool "Point" were heavily used to enhance client relationships for sales and trading. The team on LehmanLive Marketing promoted Lehman research models and products to both internal traders and external clients.

# **Academic Papers**

"Optimal Contracts in a Continuous-Time Delegated Portfolio Management Problem," *Review of Financial Studies*, 16, 173-208, (2003); Awarded the Barclays Global Investors/ Michael Brennan Runner-Up (Second Place) Award for the best paper published in Volume 16

"An Equilibrium Model of Asset Pricing and Moral Hazard," *Review of Financial Studies*, 18, 1219-1251, (2005)

"Incentives and Performance in the Presence of Wealth Effects and Endogenous Risk" (with M. Guo), *Journal of Economic Theory*, 129, 150-191, (2006)

"Prospect Theory and Liquidation Decisions" (with A. S. Kyle and W. Xiong), *Journal of Economic Theory*, 129, 273-288, (2006)

"Estimation of Continuous-Time Models with an Application to Equity Volatility" (with G. Bakshi and N. Ju), *Journal of Financial Economics*, 82, 227-249, (2006)

"Capital Structure, Debt Maturity, and Stochastic Interest Rates" (with N. Ju), *Journal of Business*, 79, 2469-2502, (2006)

"Differences of Opinion of Public Information and Speculative Trading in Stocks and Options" (with H. Cao); Winner of the Society of Quantitative Analysts Award at the 2005 Western Finance Association Meetings, *Review of Financial Studies*, 22, 299-335, (2009)

"A Model of Portfolio Delegation and Strategic Trading" (with A. S. Kyle and B. Wei), *Review of Financial Studies*, 24, 3778-3812, (2011)

"Feedback Trading between Fundamental Information and Non-fundamental Information," (with M. Guo), *Review of Financial Studies*, 28, 247-296 (2015)

"Informationally Efficient Markets in Grossman and Stiglitz (1980)," (with W. Wu), *Journal of Economic Theory*, Conditionally accepted with very minor revisions

"Beauty Contests, Risk Shifting, and Bubbles" (with H. Cao), submitted

"How Board Quality Affects Executive Pay" (with H. Kang, C Lee, and W. Seok), submitted

### **Industrial Papers**

"Predictive Signals and Asset Allocation" (with Z. Wei and H. Zhang)

"LBO Risk and Expected Stock and Bond Returns," (with H. Kang and J. Kim)

# Research and Teaching Awards

Barclays Global Investors/ Michael Brennan Runner-Up (Second Place) Award for the best paper published in Volume 16 of the *Review of Financial Studies* for "Optimal Contracts in a Continuous-Time Delegated Portfolio Management Problem"

Outstanding Professor Award (Professor of the Year), Global Executive MBA, 2004

The Society of Quantitative Analysts Award at the 2005 Western Finance Association Meetings for "Differences of Opinion of Public Information and Speculative Trading in Stocks and Options" (with H. Cao)

The third place award for the best paper presented at the 2004 China International Finance Conference for "Differences of Opinion of Public Information and Speculative Trading in Stocks and Options" (with H. Cao)

# **Doctoral Supervision**

Co-chair (with Jennifer Conrad), Navneet Arora's Ph.D. dissertation committee (2001); Navneet received offers from Tulane and Georgia State but decided to join KMV in San Francisco. He is now a managing director at BGI/Blackrock.

Supervisor, Wu Weili's Ph.D. dissertation at Peking University (2015); Weili is now an assistant professor at the Central University of Finance and Economics (中央财经大学)

Member, Ph.D. dissertation committees of Paisan Limratanamongkol (2001), Tao Lin (2003), Ge Zhang (2003), Julia Anatolievna (2004), Haofei Chen (2005, at CICC), Ed Fang (2005), Ming Guo (2005), Bo Jiang (2005), and Si Li (2005)

#### **Invited Seminars**

Duke, Maryland, and Texas, 2000
AFA, Princeton, UNC, and Wharton, 2001
AFA, Caltech, Columbia, HKU, HKUST, PKU, and UCLA, 2002
Wash U. and Yale, 2003
AFA, Hitotsubashi-Tokyo, Lehman, NBER, and NYU, 2005
Caltech, Kyoto, and Econometric Society Meetings, 2007
Michigan and HKUST, 2008
Shanghai Advanced Institute for Finance, China, 2009
HKUST, 2013

#### Education

U.C. Berkeley, Haas School of Business, Ph.D. in Finance, 1998

California Institute of Technology, Postdoctoral Fellow, 1990-1993

Tulane University, Ph.D. in Chemical Physics, 1990

Beijing University (China), M.S. in Quantum Chemistry, 1985

Hunan Normal University (China), B.S. in Physical Chemistry, 1982

### **Personal Information**

Born December 10, 1962; Married with two children

### **Other Publications**

- H. Ou-Yang and M. Levy, "Theorem for Exact Exchange Potential," *Physical Review Letters*, **65**, 1036 (1990)
- M. Levy and H. Ou-Yang, "Exact Properties of the Pauli Potential for the Square Root of the Electron Density and the Kinetic Energy Functional," *Physical Review*, A 38, 625, (1989)
- H. Ou-Yang and M. Levy, "On Path-Dependence of the Exchange Potential in Density Functional Theory, *Physical Review*, **A 41**, 4038 (1990)
- H. Ou-Yang and M. Levy, "Nonuniform Coordinate Scaling Requirements in Density Functional Theory," *Physical Review*, A **42**, 155 (1990)
- M. Levy and H. Ou-Yang, "Nonuniform Coordinate Scaling Requirements for Exchange-Correlation Energy," *Physical Review*, **A 42**, 651 (1990)
- H. Ou-Yang and M. Levy, "Theorem for Functional Derivatives in Density Functional Theory," *Physical Review*, **A 44**, 54 (1991)
- H. Ou-Yang and M. Levy, "Approximate Noninteracting Kinetic Energy Functionals," *International Journal of Quantum Chemistry*, **40**, 379 (1992)
- H. Ou-Yang, B.C. Kallebring, and R.A. Marcus, "Surface Properties of Solids Using a Semi-Infinite Approach and the Tight-Binding Approximation," *Journal of Chemical Physics*, **98**, 7405 (1993)
- H. Ou-Yang, B.C. Kallebring, and R.A. Marcus, "A Theoretical Model of Scanning Tunneling Microscopy," *Journal of Chemical Physics*, **98**, 7565 (1993)
- H. Ou-Yang, R.A. Marcus, and B.C. Kellebring, "Scanning Tunneling Microscopy Theory for an Adsorbate," *Journal of Chemical Physics*, 100, 7814 (1994)
- \* Mel Levy is a fellow of American Physical Society
- \* Rudy Marcus is a Nobel Laureate