Jason C. Hsu, Ph.D. (jason.hsu@rayliantadvisors.com)

EDUCATION:

Ph.D., Finance UCLA Anderson School of Management

MS Financial Economics Stanford University

B.S., Economics and Applied Physics Caltech (Summa Cum Laude)

PROFESSIONAL APPOINTMENTS:

Rayliant Global Advisors

Founding Partner

CEO/CIO (Jan, 2016—present)

Research Affiliates LLC

Co-Founding Partner

Vice Chairman (Apr., 2014—present)

Chief Investment Officer (Nov, 2008—Apr, 2014)

Managing Director of Research and Investment Management (Dec, 2007—Apr, 2014)

- Co-inventor of the Fundamental Index® methodology
- Co-portfolio manager of the RA sub-advised PIMCO asset allocation funds (\$50B)

Oriental Securities (Far Eastern Group), Taiwan (1998-1999)

Vice President of Derivative Research and Trading

- Built and managed the firm's index arbitrage desk
- Managed the Derivatives Research and Trading group

ACADEMIC APPOINTMENTS:

UCLA, Anderson Business School (July 2008—present)

Adjunct Full Professor in Finance

- Quantitative Asset Management (Masters in Financial Engineering program)
- Corporate Finance and Investment Analysis (EMBA program)

Taiwan National Chengchi University, School of Commerce (Jan 2007—present)

Adjunct Full Professor in Finance

Kyoto University, Finance Department (Aug 2016—present)

Visiting Professor in International Finance

UC Irvine, Merage School of Business (Jan 2004—June 2008)

Adjunct Professor in Finance

BOARD APPOINTMENTS:

UCLA Anderson Business School, MFE Program (since July, 2009)

Board of Directors and Chairman of the International Board

CFA Research Foundation (since Sept, 2015)

Board of Trustees

Financial Analyst Journal (since Jan, 2014)

Editorial Board

Journal of Investment Management (since June, 2014)

Associate Editor

Journal of Index Investing (since May, 2010)

Editorial Board

Journal of Investment Consulting (since Sep, 2012)

Editorial Board

Q-Group

Prize Committee (since Oct, 2010)

Program Committee (since Oct, 2015)

Taiwan Pension and Insurance Association (since Jan, 2012)

Board of Advisors

REPRESENTATIVE PUBLICATIONS/WORKING PAPERS:

- 1. **Fundamental Indexation** with Robert D. Arnott and Philip Moore, 2005, *Financial Analysts Journal*, vol.61, no. 2 (March/April):83–99.
- 2. **New Frontiers in Index Investing** with Carmen Campollo, 2006, *Journal of Indexes*, (January/February):32–37, 58.
- 3. Cap-Weighted Portfolios are Sub-Optimal Portfolios, 2006, *Journal of Investment Management*, vol. 4, no. 3 (Third Quarter):44–53.
- 4. **Merger Arbitrage Profitability in China** with Jason C. Tuan, 2007, Proceeding of the International Conference on Management Science and Engineering.
- 5. **Noise, CAPM and the Size and Value Effects** with Robert D. Arnott, 2008, *Journal of Investment Management*, vol. 6, no. 1 (First Quarter):68–78.
- A Model of R&D Valuation and the Design of Research Incentives with Eduardo Schwartz, 2008, *Insurance: Mathematics and Economics*, vol. 43, no. 3 (December):350–367.
- 7. **A Structural Model for Default Risk** with Pedro Santa-Clara and Jesús Saá-Requejo, 2010, *Journal of Fixed Income*, vol. 19, no. 3 (Winter):77–94.
- 8. **Valuation-Indifferent Weighting for Bonds** with Robert D. Arnott, Feifei Li, and Shane Shepherd, 2010, *Journal of Portfolio Management*, vol. 36, no. 3 (Spring):117–130.
- 9. **Performance Attribution: Measuring Dynamic Allocation Skill** with Vitali Kalesnik and Brett Myers, 2010, *Financial Analysts Journal*, vol. 66, no. 6 (November/December).
- 10. **Does Valuation-Indifferent Indexing Work for the Real Estate Market?** with Vitali Kalesnik and Feifei Li, 2010, *Journal of Investing*, vol. 19, no. 3 (Fall):72–79.
- 11. **An Examination of Traditional Style Indices** with Vitali Kalesnik and Himanshu Surti, 2010, *Journal of Index Investing*, vol. 1, no. 2 (Fall):14–23.
- 12. **Performance Evaluation of Active Managers: An Overview of Current Practice** with Vitali Kalesnik and Russ R. Wermers, 2011, *Investments & Wealth Monitor*.
- 13. **Risk Parity Portfolio vs. Other Asset Allocation Heuristic Portfolios** with Denis Chaves, Feifei Li and Omid Shakernia, 2011, *Journal of Investing*.
- 14. **A Survey of Alternative Equity Index Strategies** with Tzee-man Chow, Vitali Kalesnik, and Bryce Little, 2011, *Financial Analyst Journal*. [2011 CFA Graham and Dodd Scroll Award; 2011 FAJ Readers' Choice Award]

- 15. What Drives Equity Market Non-Participation? 2012, North American Journal of Finance and Economics.
- 16. **Efficient Algorithms for Computing Risk Parity Portfolio Weights** with Denis Chaves, Feifei Li and Omid Shakernia, 2012, *Journal of Investing*.
- 17. The Risk in Risk Parity: A Factor-Based Analysis of Asset-Based Risk Parity with Vineer Bhansali, Josh David, Graham Rennison and Feifei Li, 2012, *Journal of Investing*.
- 18. **Selling Hope**, 2012, Rotman International Journal of Pension Management.
- 19. **The Investor's Guide to Smart Beta Strategies** with Vitali Kalesnik and Feifei Li, 2012, *American Association of Individual Investors Journal*.
- 20. When Sell-Side Analysts Meet High-Volatility Stocks: An Alternative Explanation for the Low-Volatility Puzzle with Hideaki Kudo and Toru Yamada, 2013, *Journal of Investment Management*.
- 21. **A Framework for Analyzing Asset Allocation Alpha** with Omid Shakernia, 2013, *Journal of Index Investing*. [2013 William F. Sharpe Award for Best Paper]
- 22. **The Surprising Alpha from Malkiel's Monkey and Upside-Down Strategies** with Robert D. Arnott, Vitali Kalesnik and Phil Tindall, 2013, *Journal of Portfolio Management*, [2013 Q-Group Conference Selection; 2013 Jacob-Levy/Fabozzi-Bernstein Outstanding Paper Award]
- 23. What Drives the Value Effect? Risk versus Mispricing: Evidence from International Markets with Denis Chaves, Vitali Kalesnik and Joseph Shim, 2013, *Journal of Investment Management*, [2013 JOIM Conference Selection]
- 24. **A Study of Low-Volatility Portfolio Construction Methods** with Tzee-man Chow, Li-lan Kuo and Feifei Li, 2014, *Journal of Portfolio Management*, [2014 Jacob-Levy/Fabozzi-Bernstein Outstanding Paper Award]
- 25. Value Investing: Smart Beta vs. Style Indexes? 2014, *Journal of Index Investing*, [2014 William F. Sharpe Award finalist].
- 26. **Getting Smarter About Commodities** with Rob Arnott, Denis Chaves, Jodie Gunzberg and Peter Tsui, 2014, *Journal of Indexes*.
- 27. The Folly of Blame: Why Investors Should Care About Their Managers' Culture with Jim Ware and Chuck Heisinger, 2015, *Journal of Portfolio Management*.
- 28. **Two Determinants of Lifecycle Investment Success** with Jonathan Treussard, Vivek Viswanathan and Lillian Wu 2015, *Journal of Retirement*.
- 29. A Framework for Assessing Factors and Implementing Smart Beta Strategies with Vitali Kalesnik and Vivek Viswanathan, 2015, *Journal of Index Investing*. [2015 William Sharpe Award]
- 30. **Option Writing Strategies in a Low Volatility Framework** with Xianfa (Donald) He and Neil Rue, 2015, *Journal of Investing*
- 31. Timing Poorly: a guide to generating poor returns while investing in successful strategies with Brett Myers and Ryan Whitby, 2016, *Journal of Portfolio Management*. [2016 JOIM Conference Selection].
- 32. **The Self Fulfilling Prophecy of Popular Asset Pricing Model** with Bradford Cornell 2016, *Journal of Investment Management*

- 33. Can Noise Create the Size and Value Effect? with Robert D. Arnott, Jun Liu, and Harry Markowitz, 2015, (Forthcoming) *Management Science*. [2008 AFA Conference Selection; 2010 JOIM Conference Selection]
- 34. Will Your Factor Deliver? An Examination of Factor Robustness and Implementation Costs with Noah Beck, Vitali Kalesnik and Helge Kostka, 2016, (Forthcoming) *Financial Analyst Journal*.
- 35. **The Harm in Selecting Funds that Have Recently Outperformed** with Bradford Cornell and David Nanigian, Rayliant Global Advisors, Cal State Fullerton and Caltech White Paper.
- 36. **Dynamic Factor Timing and the Predictability of Actively Managed Mutual Fund Returns** with Brett Myers, Ryan Whitby and Vitali Kalesnik, 2016, Research Affiliates, Utah University and Texas Tech White Paper.
- 37. **Stock Lotteries and Expected Returns: International Evidence** with Benjamin M. Blau and Ryan Whitby, 2016, Research Affiliates and Utah University White Paper.

BOOKS, BOOK CHAPTERS and BOOK PROJECTS:

- 1. **The Fundamental Index:** A Better Way to Invest with Robert Arnott and John West, 2008, John Wiley & Sons. [This book has been translated into Japanese, Simplified Chinese and Traditional Chinese]
- 2. **Risk-Managing the Uncertainty in VaR Model Parameters** with Vitali Kalesnik, 2009, in *The VAR Implementation Handbook*, Chapter 18, Greg Gregoriou, ed., New York: McGraw-Hill.
- 3. **Cyclicality in Stock Market Volatility and Optimal Portfolio Allocation** with Feifei Li, 2009, in *Stock Market Volatility*, Chapter 10, Greg Gregoriou, ed., Florida: Chapman & Hall/CRC.
- 4. **Model Risk for Market Risk Modeling** with Vitali Kalesnik and Shane Shepherd, 2010, in *The Risk Modeling Evaluation Handbook: Rethinking Financial Risk Management Methodologies in the Global Capital Markets*, G. Gregoriou, C. Hoppe, and C. Wehn, eds., New York: McGraw-Hill.
- 5. **Shadow Banks and the Financial Crisis of 2007–2008** with Max Moroz, 2010, in *The Banking Crisis Handbook*, Chapter 3, Greg Gregoriou, ed., Florida: CRC Press.
- 6. Business Cycles in Economics: Types, Challenges and Impact on Monetary Policies, 2014, Nova Press.
- 7. **The Duality of Value and Mean Reversion** with Noah Beck, Shingo Goto and Vitali Kalesnik, 2015 (Forthcoming), in *Celebrating 50 Years of Jack Treynor*, Guerard, John B., Jr. ed.
- 8. **Low Volatility Anomaly and the Preference for Gambling** with Vivek Viswanathan, 2015 Elsevier, in *Risk-Based and Factor Investing, 1st Edition*, Jurczenko, Emmanuel ed.

AWARDS:

| 2015 | Institutional Investor William F. Sharpe Award for Best Paper |
|------|--------------------------------------------------------------------|
| 2015 | Journal of Portfolio Management 2014 Jacobs-Levy/Fabozzi-Bernstein |
| | Outstanding Paper Award |
| 2014 | Journal of Portfolio Management 2013 Jacobs-Levy/Fabozzi-Bernstein |
| | Outstanding Paper Award |
| 2013 | Institutional Investor William F. Sharpe Award for Best Paper |

| 2012 | Financial Analyst Journal Reader's Choice Award |
|------|--------------------------------------------------------------------------|
| 2012 | CFA Institute 2011 Graham and Dodd Scroll Award for Outstanding Research |
| 2009 | Outstanding Service Award, UCLA Anderson Business School MFE Program |
| 2008 | Institutional Investor 20 Rising Stars of Hedge Funds |
| 2005 | William F. Sharpe Award for Best New Index Research Paper |

NOTABLE RECENT SPEAKING ENGAGEMENTS:

| 2016 | FTSE World Investment Forum, Sea Island |
|------|---------------------------------------------------------------------------|
| 2016 | IMCA/FPA Advanced Strategist Conference, San Francisco |
| 2016 | Morningstar Institutional Conference, Amsterdam |
| 2016 | JOIM Special Conference on Behavioral Finance, Napa Valley |
| 2016 | S&P Dow Jones Conference on Smart Beta, Miami |
| 2016 | Inside ETF Annual Conference, Hollywood |
| 2016 | CFA London, CFA Orange County |
| 2015 | CFA Research Foundation 50 Anniversary Forum, New York |
| 2015 | Korean National Pension Services Smart Beta Teach-in, Seoul |
| 2015 | China SAFE Smart Beta Teach-in, Beijing |
| 2015 | Morningstar ETF Conference, Chicago |
| 2015 | PIMCO Institute APAC Smart Beta Teach-in, Hong Kong |
| 2015 | IMCA Advanced Strategist Conference, Washington DC |
| 2015 | JOIM Conference, La Jolla |
| 2015 | CFA Beijing, CFA Hangzhou, CFA Hong Kong, CFA San Francisco, CFA |
| | Copenhagen, CFA Amsterdam, CFA/SAAJ Tokyo, CFA London |
| 2014 | Morningstar ETF Conference, London |
| 2014 | Global Indexing Conference, Scottsdale |
| 2014 | Kyoto University Annual Conference on Finance, Kyoto |
| 2014 | European Pension Fund Investment Forum, Edinburgh |
| 2014 | Norges Bank Smart Beta Teach-in, London |
| 2014 | London Stock Exchange/FTSE Seminar on Smart Beta Investing, London |
| 2014 | Institutional Investor Conference on Smart Beta, Chicago |
| 2014 | Financial Investigator Special Conference in Factor Investing, Amsterdam |
| 2014 | Swedish Institute for Financial Research Seminar on Smart Beta, Stockholm |
| 2014 | O-Group Conference, Scottsdale |

PATENT AWARDED:

1. System and method for dynamic value added attribution. U.S. Patent 8,533,081, filed October 23, 2008 and issued September 10, 2013

EDITORIALS and COLUMNS:

- 1. Regular column in China Times on Finance and the Macro Economy
- 2. Regular editorials appearing in the Taiwan Pension and Insurance Association magazine
- 3. Regular editorials appearing in the Taiwan Stock Exchange quarterly magazine
- 4. Regular editorials appearing in the Taiwan Economics Daily
- 5. Regular editorials appearing in China Finance Weekly