

Yueliang (Jacques) Lu

Curriculum Vitae

September 2021

📍 Department of Finance (Friday 388), Belk College of Business, University of North Carolina at Charlotte, 9209 Mary Alexander Rd, Charlotte, NC 28262, USA.
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EDUCATION

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| 2018 - 2023 | Ph.D. in Finance and Economics Co-advised by Profs. Yufeng Han & Weidong Tian | University of North Carolina - Charlotte GPA: 4.00/4.00 |
| 2016 - 2017 | M.Sc. in Quantitative Finance & Risk Analytics Advised by Prof. Aparna Gupta | Rensselaer Polytechnic Institute GPA: 3.97/4.00 |
| 2012 - 2016 | B.A. in Finance and Economics Dual degree in English Language & Literature | Beijing Foreign Studies University |

PROFESSIONAL POSITIONS

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| 2021 - 2023 | Lecturer of Finance , Department of Finance, UNC Charlotte |
| 2018 - 2023 | Research/Teaching Assistant , Department of Finance, UNC Charlotte |
| 2019 | Summer Research Assistant , Department of Management, UNC Charlotte |
| 2017 | Teaching Assistant , Department of Mathematical Sciences, Rensselaer Polytechnic Institute |
| 2017 | Summer Research Assistant , Lally School of Management, Rensselaer Polytechnic Institute |
| 2017 | Research Fellow , Global Association of Risk Professionals (June 2017 - December 2017) |

RESEARCH INTERESTS

- *Asset Pricing*: Empirical (and Theoretical) Asset Pricing, Anomalies, Derivatives and Options, Recovery
- *Financial Risk Management*: Systemic Risk, Longevity Risk, Asset-Liability Management
- *Big Data/Machine Learning in Finance*

PUBLICATIONS

1. [Addressing Systemic Risk Using Contingent Convertible Debt - A Network Analysis](#), *European Journal of Operational Research*, 2021, Vol 290, Issue 1, pp. 263-277 (with [Aparna Gupta](#) and [Runzu Wang](#)).

- **Best Paper Award, FMA Annual Meeting, 2018**
- Best Student Paper Award Finalist, INFORMS Annual Meeting, 2018
- [Masters Research Fellowship, Global Association of Risk Professionals \(GARP\), 2017](#)

WORKING PAPERS

1. [Serial Dependence in the Stock Market: What Can We Learn from Derivatives?](#) (with [Weidong Tian](#))
 - Presented at [AFA 2022 \(Ph.D. Poster, Scheduled\)](#), [2021 CICF \(China International Conference in Finance\)](#), 7th International Young Finance Scholars' Conference, 2021 World Finance Conference, UNC Charlotte Finance Seminar
 - We derive a model-free expression of the serial dependence coefficient of the stock market return in terms of the prices of available index options, VIX futures, and VIX options. As a result, we obtain a time-series market autocorrelation and beta coefficients between market returns over two consecutive periods. From a forward-looking perspective, we demonstrate short-term reversal for monthly returns robustly. Moreover,

we show that the fading memory belief based on historical observation yields comparable market autocorrelation and beta coefficients from the derivative market. Furthermore, we show that the derivative data reject the risk-neutral belief. Finally, we demonstrate that the derivative information helps to improve the predictability of the market return.

2. [Mispricing and Anomalies: An Exogenous Shock to Short Selling from JGTRRA](#) (with [Yufeng Han](#), [Weike Xu](#) & [Guofu Zhou](#))
 - Presented at [SFS Cavalcade North America 2021](#), [FMA 2021 \(Scheduled, October 20-23\)](#), [MFA 2021](#), [AFA 2021 \(Ph.D. Poster\)](#), CIRF 2021, SFA 2020, WashU Olin Finance Brownbag, and UNC Charlotte Finance Seminar
 - Whether or not anomalies are due to mispricing or risk is an important question. We examine the causal effect of a novel shock to short selling, the Job and Growth Tax Relief Reconciliation Act (JGTRRA) of 2003, on an extensive set of 182 anomalies. We find that anomalies become stronger after the dividend record months in the post-JGTRRA periods, driven by stronger mispricing in the dividend record months, mainly from the overpriced stocks. Overall, our results support the idea that anomalies are mostly due to mispricing, and the persistence of mispricing is likely caused by arbitrage barriers such as JGTRRA.
3. [An On-line Machine Learning Return Prediction](#) (with [Weidong Tian](#))
 - Presented at [INFORMS 2020](#), [International Risk Management Conference 2020](#)
 - This paper presents a new prediction methodology on relative stock index return - the ratio of a stock index return to an interest rate. The prediction methodology relies on the on-line universal portfolio construction. We derive a closed-form predicting formula whose coefficients are solely determined by historical data and demonstrate that the average daily predictive error in 2010-2018 can be as small as 2 percent. This approach provides a promising application of on-line machine learning to return prediction.

CONFERENCE AND SEMINARS (*presented by coauthors)

- 2022** American Finance Association (AFA) annual meeting (Ph.D. Poster, *Scheduled*),
- 2021** SFS Cavalcade North America*, *Virtual*
 China International Conference in Finance (CICF), *Virtual*
 Financial Management Association (FMA) annual meeting, Denver CO (*Scheduled*)
 World Finance Conference, *Virtual*
 China International Risk Forum, *Virtual*
 International Young Finance Scholars' Conference, *Virtual*
 Midwest Finance Association (MFA) annual meeting*, *Virtual*
 American Finance Association (AFA) annual meeting (Ph.D. Poster), *Virtual*
 UNC Charlotte Finance Seminar (x2 papers)
- 2020** Southern Finance Association annual meeting, *Virtual*
 Washington University in St. Louis Olin Finance Brownbag
 INFORMS annual meeting, *Virtual*
 International Risk Management Conference, *Virtual*
 European Financial Management Association annual meeting (*Cancelled due to COVID-19*)
 Financial Management Association European annual meeting (*Postponed due to COVID-19*)
- 2019** UNC Charlotte Joint Doctoral Workshop
- 2018** INFORMS annual meeting, Phoenix AZ
 Financial Management Association (FMA) annual meeting*, San Diego CA
 European Financial Management Association annual meeting*, Milan Italy
 International Risk Management Conference annual meeting*, Paris France

PROFESSIONAL SERVICE

Conference Discussant

2021: World Finance Conference

2020: Financial Management Association Meeting, Southern Finance Association Meeting

Conference Session Chair

2020: Financial Management Association Meeting, Southern Finance Association Meeting

Conference Paper Reviewer

2021: Southern Finance Association Meeting, Eastern Finance Association Meeting

FELLOWSHIPS, GRANTS, AND AWARDS

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| Ph.D. Graduate Assistantship, University of North Carolina at Charlotte | 2018 - 2023 |
| Belk College Summer Research Grant, University of North Carolina at Charlotte | 2021 |
| Seth Bonder Foundation Student Registration Grant , INFORMS Annual Meeting | 2020 |
| Ph.D. Travel Grant, American Finance Association (AFA) Annual Meeting | 2020 |
| Summer Research Assistantship, University of North Carolina - Charlotte | 2019 |
| Best Paper Award, Financial Management Association (FMA) Annual Meeting | 2018 |
| Best Student Paper Award Finalist, INFORMS Annual Meeting (Finance Section) | 2018 |
| Highlighted on RPI Admissions Website as Outstanding Graduate Scholar (Links) | 2018 |
| Masters Research Fellowship Award, Global Association of Risk Professionals (GARP) | 2017 |
| Graduate Teaching Assistantship, Rensselaer Polytechnic Institute | 2017 |
| Summer Research Assistantship, Rensselaer New Knowledge and Innovation Program | 2017 |
| Masters' Scholars Research Program Award, Lally School Rensselaer Polytechnic Institute | 2017 |

TEACHING

University of North Carolina at Charlotte

Lecturer of Finance

- FINN 3120 Financial Management Summer & Fall 2021
 - Key topics include: The Time Value of Money, Interest Rates and Bond Valuation, Equity Markets and Stock Valuation, Risk and Return, and Cost of Capital

Guest Lecturer

- FINN 6216 Quantitative Risk Management (with Prof. Weidong Tian) Spring 2021
 - Topic 1: Volatility Trading: Implied volatility, VIX options, VIX futures, and Volatility derivatives pricing
 - Topic 2: Historical Simulation in the risk management (Value-at-Risk), Back testing, Stress testing
 - Topic 3: Credit Risk: Structural (Merton) model, Reduced-Form model, and Altman's Z-Score method
 - Recitation class: 2-hour class, and four times per semester
- FINN 3226 Financial Theory & Practice (with Prof. Lloyd Blenman) Spring 2021
 - Topic 1: Binomial Lattices and American Option Pricing

Teaching Assistant

- BPHD 8220 Financial Economic Theory II (Second-year Ph.D. course) Fall 2020

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| 2. BPHD 8200 Financial Economic Theory I (First-year Ph.D. course) | Fall 2020 |
| 3. FINN 6216 Quantitative Risk Management (M.S. in Math Finance) | Spring 2021, 2020 |
| 4. FINN 3226 Financial Theory & Practice | Spring 2021 |
| 5. FINN 3233 International Financial Management | Spring 2020, 2019 |

Rensselaer Polytechnic Institute

Teaching Assistant with Recitations

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| 1. Math 1010 Calculus I (with 4-hour recitation class to 120 students per week) | 2017 |
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SKILLS AND CERTIFICATIONS

- Certifications** FRM Passed Part I and Part II, CFA Level III Candidate, Bloomberg Market Concept Certified.
- Technical Skills** Numerical/Simulation Analysis, Computational Optimization, Stochastic Calculus, Network Science, Bayesian/Time Series Analysis, Machine Learning.
- Programming** R, MATLAB, Python, Jupyter Notebook, Stata, Neo4j, Gephi, AMPL, and \LaTeX .
- Languages** Native in Chinese, fluent in English, and active learner in Spanish.

PROFESSIONAL MEMBERSHIP

American Finance Association (AFA)
 Society for Financial Studies (SFS)
 Financial Management Association (FMA)
 Global Association of Risk Professionals (GARP)
 Institute for Operations Research and the Management Sciences (INFORMS)

REFERENCE

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Dr. Weidong Tian (Co-Chair)
 Professor of Finance and Distinguished Professor of
 Risk Management and Insurance
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