Yueliang (Jacques) Lu

Curriculum Vitae

August 2020

Department of Finance (Friday 388), Belk College of Business, University of North Carolina at Charlotte, 9209 Mary Alexander Rd, Charlotte, NC 28262, USA.
jacquesyl.github.io
jacques-yueliang-lu
@JacquesYL
+1-571-325-8197
ylu28@uncc.edu

EDUCATION

2018 - 2023 **Ph.D. in Finance and Economics** — University of North Carolina - Charlotte
Coadivsed by Profs. Yufeng Han & Weidong Tian — *GPA: 4.00/4.00*

2016 - 2017 **M.Sc. in Quantitative Finance** & **Risk Analytics** — Rensselaer Polytechnic Institute
Advised by Prof. Aparna Gupta — *GPA: 3.97/4.00*

2012 - 2016 **B.A. in Finance and Economics** — Beijing Foreign Studies University
Dual degree in English Language & Literature

RESEARCH INTERESTS

– *Asset Pricing*: Empirical Asset Pricing, Anomalies, Derivatives, Quantitative Finance

– *Financial Risk Management*: Systemic Risk, Longevity Risk, Asset-Liability Management

– *Application of Machine Learning in Finance*

PUBLICATIONS

1. "Addressing Systemic Risk Using Contingent Convertible Debt - A Network Analysis" **European Journal of Operational Research** (with Aparna Gupta and Runzu Wang, forthcoming).

- 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 & WORK IN PROGRESS

1. **The Causal Effect of Short-Selling Supply on Anomalies** (*with Yufeng Han, Weike Xu & Guofu Zhou*)

- Presented at Southern Finance Association 2020 Annual Meeting (November, 2020)
- We study the effect of short-selling constraints on asset pricing anomalies by exploiting a plausibly exogenous shock to shorting supply around the dividend record dates. Using a difference-in-differences (DID) framework, we find that anomalies become stronger during dividend record months after JGTRRA. The effect is more pronounced for stocks with higher limits to arbitrage and when investor sentiment is higher. Furthermore, the effect mainly comes from the short sides of the anomaly portfolios. Overall, our results suggest that short-selling supply constraints deteriorate market efficiency.

2. **Forecast Relative Stock Index Returns by Sufficient Historical Data** (with Weidong Tian)

- Presented at International Risk Management Conference 2020 Annual Meeting (October, 2020), INFORMS 2020 Annual Meeting (November, 2020); Accepted (cancelled/postponed later due to COVID-19) by the annual meetings of FMA European 2020 and EFMA 2020.

- This paper presents a new prediction methodology on relative stock index returns - the ratio of the stock index return to the interest rate. This prediction methodology relies on the universal portfolio construction and historical data alone. Following this machine learning approach, the predictive errors for the daily prediction of the relative stock index return in the 2010-2018 period can be as small as 2 percent. We find out that the relative predictive errors depend on the number of historical data and the empirical covariance structure as the theory predicts. This paper presents a surprising application of machine learning to the stock return prediction problem, and this new prediction methodology is promising by our empirical results.

3. **Long-term Asset-Liability Management for Variable Annuities** (with Aparna Gupta)
   - Presented at the Masters' Scholars Research Program, Rensselaer Polytechnic Institute
4. **Certainty Equivalent Interest Rate Parity** (with Lloyd Blenman)

TEACHING EXPERIENCES

University of North Carolina - Charlotte

1. FINN 6216 Quantitative Risk Management, TA for Prof. Weidong Tian — Spring 2020
   - This course offers quantitative techniques and tools for the risk management. Topics include: VaR and Expected Shortfall, univariate and multivariate models, copulas and tail dependence, and back testing.

Rensselaer Polytechnic Institute

1. Math 1010 Calculus I, TA (with recitation session) for Prof. Gina Kucinski — Fall 2017
   - Gave recitation class to 120 undergraduate students, 4 hours per week
   - Assisted in the Math Mentoring Program with the goal that all Engineering and Science students should become proficient in solving calculus and other basic problems

---

HONORS AND AWARDS

Ph.D. Graduate Assistantship, University of North Carolina - Charlotte. 2018 - 2023
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 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
Best Student Paper Award, Beijing Foreign Studies University 2016
Social Service Award, Beijing Foreign Studies University 2014

CONFERENCE AND SEMINARS (*presented by co-authors)

2020 INFORMS Annual Meeting	*Scheduled*
2020 Southern Finance Association Annual Meeting	*Scheduled*
2020 International Risk Management Conference	*Scheduled*
2020 European Financial Management Association Annual Meeting	*Cancelled due to COVID-19*
2020 Financial Management Association European Meeting	*Postponed due to COVID-19*
2019 UNC Charlotte Joint Doctoral Workshop	*Presenter & Discussant*
2018 INFORMS Annual Meeting (Financial Engineering Section)	*Presenter*
2018 INFORMS Annual Meeting (Best Student Paper Competition)	*Presenter*
2018 Financial Management Association Annual Meeting*	
2018 European Financial Management Association Annual Meeting*	
2018 International Risk Management Conference Annual Meeting*	

PROFESSIONAL MEMBERSHIP

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

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.

REFERENCE

Yufeng Han (Co-Chair)
Professor of Finance
Belk College of Business
Friday Building Room 340A
University of North Carolina at Charlotte
9209 Mary Alexander Rd, Charlotte, NC 28262
yhan15@uncc.edu
(704)-687-8773

Weidong Tian (Co-Chair)
Professor of Finance and Distinguished Professor of Risk Management and Insurance
Belk College of Business
Friday Building Room 202A
University of North Carolina at Charlotte
9209 Mary Alexander Rd, Charlotte, NC 28262
wtian1@uncc.edu
(704)-687-7702