

Yueliang (Jacques) Lu, FRM

Curriculum Vitae

October 2022

📍 Department of Finance, Belk College of Business,
University of North Carolina at Charlotte, 9209 Mary
Alexander Rd, Charlotte, NC 28262, USA.
☎ +1-571-325-8197
✉ ylu28@uncc.edu
🏠 Personal Website: JacquesYL.github.io

EDUCATION

Ph.D. in Business Administration (Finance), University of North Carolina at Charlotte 2023 (*Expected*)

- Chairs: [Yufeng Han](#) & [Weidong Tian](#) (Co-Chair)
- Committee Members: [Ethan Chiang](#), [Steven P. Clark](#) and [Christopher M. Kirby](#)
- Informal Advisor: [Guofu Zhou](#) (WashU)

Master of Science in Quantitative Finance and Risk Analytics, Rensselaer Polytechnic Institute 2017

- Advised by [Aparna Gupta](#)

Bachelor of Art in Economics, Major: Finance, Beijing Foreign Studies University 2016

CERTIFICATION

- Certified Financial Risk Manager (FRM), Global Association of Risk Professionals (GARP)
- Chartered Financial Analyst (CFA), Level III candidate
- Bloomberg Market Concepts (BMC) Certified

RESEARCH INTERESTS

- Empirical (and Theoretical) Asset Pricing, Derivatives and Options, 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](#))

- *Financial Management Association (FMA) Best Paper Award in Derivatives & Options (2018)*
- *INFORMS (Finance Section) Best Student Paper Award Finalist (2018)*
- *Global Association of Risk Professionals (GARP) Research Fellowship (2017)*

JOB MARKET PAPER

1. [Macroeconomic Extrapolation, Machine Learning, and Equity Risk Premium Forecast](#) (with [Yufeng Han](#))

- Presentations: [FMA 2022](#) (scheduled), [International Symposium on Forecasting 2022](#)
- Studies on equity risk premium forecasts usually rely on the most recent macroeconomic variables. We present a macroeconomic trend extrapolation approach that utilizes all economic fundamentals of different time periods simultaneously in the aggregate market. We demonstrate that the trend-pooling method statistically and economically outperforms the historical average that assumes a constant equity risk premium, as well as [Rapach, Strauss, Zhou's \(2010\)](#) simple pooling method that ignores the historical information in macroeconomics. We further find that extrapolating via machine learning techniques generates monthly out-of-sample R_{OS}^2 statistics as high as 4%. Extrapolating economic fundamentals with a grid of moving averages more closely tracks important macroeconomic fluctuations and more effectively regulates the forecast variability, thereby generating superior and robust forecasting gains consistently over time.

WORKING PAPERS & WORK IN PROGRESS

1. [Equity Forward Return from Derivatives](#) (with [Weidong Tian](#) & [Steven P. Clark](#))

- Presentations: [CICF 2021](#), [AFA 2022 \(Ph.D. Poster\)](#), [FMA 2022](#) (scheduled),
- This paper develops a theory of forward returns for an equity index. A term structure of forward returns is estimated using information from derivatives markets, including index option prices and gammas, VIX-futures, and prices of VIX-options. We document a pro-cyclical term structure of S&P 500 forward returns and a robust short-term reversal pattern. Moreover, by designing and implementing a market-timing strategy, we demonstrate that forward equity returns provide real-time trading signals with substantial economic value.

2. [Mispricing and Anomalies: An Exogenous Shock to Short Selling from the Dividend Tax Law Change](#) (with [Yufeng Han](#), [Weike Xu](#) & [Guofu Zhou](#))

- Presentations: [SFS Cavalcade North America 2021](#), [AFA 2021 \(Ph.D. Poster\)](#), [MFA 2021](#), [CICF 2022](#)
- Whether anomalies are due to mispricing or risk is an important question. We study the causal effect of short-sale constraints on anomalies by examining an extensive set of 182 anomalies documented in the accounting, finance and economics literature. Our identification strategy relies on a persistent, robust and plausibly exogenous shock to short-selling supply induced by the dividend tax law change in the Job and Growth Tax Relief Reconciliation Act (JGTRRA) of 2003. We find that anomalies become stronger following the dividend record months, driven by stronger overpricing as opposed to underpricing in the post-JGTRRA periods. Interestingly, while the shock magnifies returns to most anomaly types, we find that valuation anomalies seem unlikely to be driven by mispricing.

3. [An On-line Machine Learning Return Prediction](#) (with [Weidong Tian](#))

- This paper presents a new prediction methodology for long-short portfolio return in its multiplicative version. Our method relies on the on-line universal portfolio construction. We derive a closed-form predicting formula whose coefficients are solely determined by historical data. We empirically and robustly demonstrate that the predictive error can be as small as 2%. This methodology provides a promising application of on-line machine learning to portfolio return prediction with a sufficiently large dataset.

4. Reconciling Forecasts (under empirical analysis stage)

5. Options and the Expected Market Return (under empirical analysis stage)

CONFERENCES AND SEMINARS

2022 FMA (**x2 papers**), CICF, AFA (Ph.D. Poster), International Symposium on Forecasting

2021 SFS Cavalcade North America, CICF, AFA (Ph.D. Poster), MFA, FMA

2020 WashU Brownbag, SFA, INFORMS, IRMC

2018 FMA, INFORMS, EFMA, IRMC

TEACHING

University of North Carolina at Charlotte

Lecturer and Guest Lecturer

1. FINN 3226 Financial Theory and Practice (Advanced topics for the finance major students)
2. FINN 3120 Financial Management
3. FINN 6216 Quantitative Risk Management (with Prof. Weidong Tian) + Review Sessions
4. FINN 3223 International Financial Management (with Prof. Lloyd Blenman)

Course Evaluations — University of North Carolina at Charlotte

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Term	Course Number (Level)	Title	# of Students Enrolled	Response Rate	Score (Max of 5): Instructor was an Effective Teacher (Fin-section mean)	Score (Max of 5): Overall, I learned a lot in this course (Fin-section mean)
Summer 2022	FINN 3226 (Undergrad)	Financial Theory & Practice	9	100%	4.78 (4.36)	4.78 (4.39)
Spring 2022	FINN 3120 (Undergrad)	Financial Management	61	92%	4.25 (4.09)	4.45 (4.22)
Fall 2021	FINN 3120 (Undergrad)	Financial Management	65	85%	4.29 (4.18)	4.35 (4.25)
Summer 2021	FINN 3120 (Undergrad)	Financial Management	30	67%	4.35 (4.15)	4.40 (4.20)

FELLOWSHIPS, GRANTS, AND AWARDS

- UNC Charlotte Belk College Summer Research Grant
 - Project: "Macroeconomic Extrapolation, Machine Learning, and Equity Risk Premium Forecast" 2022
 - Project: "What is the Time Series Regression of the Stock Market Return?" 2021
- AFA Ph.D. Travel Grant 2020
- [INFORMS Seth Bonder Foundation Ph.D. Student Grant](#) 2020
 - Paper: "An On-line Machine Learning Return Prediction"
- [FMA Best Paper Award in Options and Derivatives](#) 2018
 - Paper: "Addressing Systemic Risk Using Contingent Convertible Debt — A Network Analysis"
- INFORMS Best Student Paper Award Finalist (Finance Section) 2018
 - Paper: "Addressing Systemic Risk Using Contingent Convertible Debt — A Network Analysis"
- [Global Association of Risk Professionals \(GARP\) Research Fellowship](#) 2017
 - Paper: "Addressing Systemic Risk Using Contingent Convertible Debt — A Network Analysis"

PROFESSIONAL SERVICE

Journal Referee

International Review of Economics & Finance

Conference Discussant & Chair

2022: Financial Markets and Corporate Governance (FMCG) annual conference (x2 papers)
 2021: Financial Management Association Meeting (x2 papers)
 2020: Financial Management Association Meeting, Southern Finance Association Meeting

Conference Paper Reviewer

2021: Southern Finance Association Meeting, Eastern Finance Association Meeting

REFERENCES

Yufeng Han (Chair)

Professor of Finance
Belk College of Business
University of North Carolina at Charlotte
✉ yhan15@uncc.edu
☎ (704)-687-8773

I-Hsuan Ethan Chiang

Associate Professor of Finance
Belk College of Business
University of North Carolina at Charlotte
✉ ichiang1@uncc.edu
☎ (704)-687-5473

Christopher M. Kirby

Professor of Finance and Economics
Belk College of Business
University of North Carolina at Charlotte
✉ ckirby10@uncc.edu
☎ (704)-687-0845

Weidong Tian (Co-Chair)

Professor of Finance and Distinguished Professor of
Risk Management and Insurance
Belk College of Business
University of North Carolina at Charlotte
✉ wtian1@uncc.edu
☎ (704)-687-7702

Steven P. Clark

Associate Professor of Finance
Belk College of Business
University of North Carolina at Charlotte
✉ spclark@uncc.edu
☎ (704)-687-7689

Guofu Zhou

Frederick Bierman and James E. Spears Professor of
Finance
Olin Business School
Washington University in St. Louis
✉ zhou@wustl.edu
☎ (314)-935-6384