# Yueliang (Jacques) Lu Ph.D., FRM

November 2023

Clemson University Wilbur O. and Ann Powers College of Business Department of Finance 164 Chandler L. Burns Hall, Clemson, SC 29634, USA.

Email: yuelial@clemson.edu

A Personal Webpage: JacquesYL.github.io

#### **ACADEMIC POSITION**

Clemson University, Wilbur O. and Ann Powers College of Business

• Clinical Assistant Professor of Finance

2023 - Present

#### **EDUCATION**

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

2023

- Ph.D. Advisors: Yufeng Han and Weidong Tian
- Informal Advisor: Guofu Zhou (WashU)

M.S. in Quantitative Finance and Risk Analytics, Rensselaer Polytechnic Institute

2017

#### FIELDS OF INTEREST

Asset Pricing, Derivatives and Options, Machine Learning in Finance, Return Predictability

#### REFEREED JOURNAL PUBLICATIONS

- "An On-line Machine Learning Return Prediction" Pacific-Basin Finance Journal 79, 2023, 102049 (with Weidong Tian)
  - INFORMS Seth Bonder Foundation Ph.D. Grant (2020)
- 1. "Addressing Systemic Risk Using Contingent Convertible Debt A Network Analysis" **European Journal of Operational Research** 290(1), 2021, 263–277 (with Aparna Gupta and Runzu Wang)
  - FMA Best Paper Award in Derivatives & Options (Winner, 2018)
  - INFORMS Finance Section Best Student Paper Award (Finalist, 2018)
  - Global Association of Risk Professionals (GARP) Research Fellowship (2017)

## **WORKING PAPERS & WORK IN PROGRESS**

- 4. Market Risk Premium Expectation: Combining Option Theory with Traditional Predictors (with Hong Liu, Weike Xu & Guofu Zhou)
  - Presentations: 2024 AFA (scheduled), 2023 CUHK-RAPS (scheduled), 2023 CFEA, 2023 Wolfe Research
  - Abstract: The market risk premium is central in finance, and has been analyzed by numerous studies in the time-series predictability literature and by growing studies in the options literature. In this paper, we provide a novel link between the two literatures. Theoretically, we derive a lower bound on the market risk premium in terms of option prices and state variables. Empirically, we show that combining information from both options and investor sentiment significantly improves the out-of-sample predictability of the market risk premium versus using either type of information alone, and adding an economic upper bound raises predictability further.
- 3. Macroeconomic Trends and Equity Risk Premium (with Yufeng Han & Guofu Zhou)
  - Presentations: 2023 Hong Kong Conference for Fintech, AI and Big Data in Business, 2022 FMA

- Abstract: In this paper, we find that macroeconomic trends, which are important for monetary policies, are also important as predictors for the stock market risk premium. In linear predictive models with pooling information by machine learning, the macro trends add substantial value both statistically and economically for predicting the aggregate market returns, beyond the common predictors of the literature in which only the most recent values of the macros are used to predict the future. Moreover, in nonlinear models with neural networks, the macro trends help to achieve an out-of-sample  $R_{OS}^2$  of up to 1.7%, almost tripling the value of the standard combination forecast. Our study shows that, by accounting for both macro trends and nonlinearity, the predictability of the stock market returns is much greater than commonly believed. Furthermore, it suggests that, consistent with monetary policy making, the macro trends tend to remove uncertainty associated with the current data and hence they help to improve predictability.
- 2. Equity Forward Return from Derivatives (with Weidong Tian & Steven P. Clark)
  - Presentations: 2023 Wolfe Research, 2022 AFA (Poster), 2022 FMA, 2021 CICF (China International Conference in Finance)
  - Abstract: This paper develops a theory of forward returns for an equity index. We obtain the forward returns 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&P500 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.
- 1. Mispricing and Anomalies: An Exogenous Shock to Short Selling from JGTRRA (with Yufeng Han, Weike Xu & Guofu Zhou)
  - Presentations: 2022 CICF, 2021 SFS Cavalcade North America, 2021 MFA, 2021 FMA
  - Abstract: 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.

# **CONFERENCE PRESENTATIONS (\*by co-author, \*\*scheduled)**

2024 American Finance Association Annual Meeting (AFA), San Antonio \*\*

2023 CUHK-RAPS Conference on Asset Pricing and Investment, Hong Kong\*\*
Conference on Financial Economics and Accounting (CFEA), Rutgers-New Brunswick
China International Risk Forum, Shanghai

Financial Management Association Annual Meeting (FMA), Chicago\*\*

Financial Markets and Corporate Governance, Virtual

Hong Kong Conference for Fintech, AI and Big Data in Business, Hong Kong\*

PKU-NUS International Conference on Quantitative Finance and Economics, Virtual

2022 American Finance Association Annual Meeting (Poster), Virtual

China International Conference in Finance (CICF), Virtual\*

China International Risk Forum (2 papers), Virtual

Derivatives Youth Forum, Virtual

Financial Management Association Annual Meeting (FMA, 2 papers), Atlanta\*

Financial Markets and Corporate Governance (2 papers), Virtual

International Symposium on Forecasting, Oxford England\*

PKU-NUS International Conference on Quantitative Finance and Economics (2 papers), Virtual

2021 American Finance Association Annual Meeting (Poster), Virtual

China International Conference in Finance (CICF), Virtual

Financial Management Association Annual Meeting (FMA), Denver

Midwest Finance Association Annual Meeting (MFA), Virtual\*

SFS Cavalcade North America, Virtual\*

2020 INFORMS Annual Meeting, Virtual

International Risk Management Conference, Virtual

Southern Finance Association Annual Meeting, Virtual

2018 Financial Management Association Annual Meeting (FMA), San Diego\* INFORMS Annual Meeting, Phoenix

## **INVITED SPEAKER**

- 2023 Wolfe Research Options in Investment Management Half Day Conference, NYC University of Mississippi
- 2020 Washington University in St. Louis Olin Finance Brownbag

#### **SERVICE**

Referee: Computational Economics

Emerging Markets Finance and Trade International Review of Finance

International Review of Economics & Finance

Paper Discussion: China International Risk Forum, 2022

Financial Management Association Annual Meeting, 2020–2021, 2023 Financial Markets and Corporate Governance Conference, 2022–2023

Southern Finance Association Annual Meeting, 2020

Program Committee: Eastern Finance Association Annual Meeting, 2021

Southern Finance Association Annual Meeting, 2021, 2023

Industry Service: Volunteer FRM Exam Writer for Global Association of Risk Professionals, 2023

# **TEACHING** (\*as guest lecturer)

Investment Analysis (FIN 3050, Clemson University)	2023 - Present
Real Estate Principles (FIN 3070, Clemson University)	2023 - Present
Financial Management (FINN 3120, University of North Carolina at Charlotte)	2021 - 2022
Financial Theory and Practice (FINN 3226, University of North Carolina at Charlotte)	2022
Quantitative Risk Management (FINN 6216, University of North Carolina at Charlotte)*	2020 - 2023

## **AWARDS, GRANTS AND FELLOWSHIPS**

Financial Management Association (FMA) Best Paper Award Finalist	2023
UNC Charlotte Belk College Summer Research Grant	2021, 2022
American Finance Association (AFA) Ph.D. Travel Grant	2022
INFORMS Seth Bonder Foundation Ph.D. Grant	2022
UNC Charlotte Summer Research Assistantship	2022
Financial Management Association (FMA) Best Paper Award Winner	2022
INFORMS Finance Section Best Student Paper Award Finalist	2022
Global Association of Risk Professionals (GARP) Research Fellowship	2022
Rensselaer Polytechnic Institute Summer Research Assistantship	2017

### **CERTIFICATIONS**

Fintech: Foundations & Applications of Financial Technology, Certificate by Wharton Online	2023
Machine Learning Specialization, Certificate by DeepLearning.AI & Stanford Online	2023
Certified Financial Risk Manager (FRM), Global Association of Risk Professionals (GARP)	2022
Chartered Financial Analyst (CFA), Level II Passed	2018
Bloomberg Market Concepts (BMC) Certificate	2017

#### **REFERENCES**

Yufeng Han, Professor of Finance

Belk College of Business, University of North Carolina at Charlotte

E-mail: yhan15@uncc.edu Phone: (704)-687-8773

Weidong Tian, Professor of Finance and Distinguished Professor of Risk Management and Insurance

Belk College of Business, University of North Carolina at Charlotte

E-mail: wtian1@uncc.edu Phone: (704)-687-7702

Guofu Zhou, Frederick Bierman and James E. Spears Professor of Finance

Olin School of Business, Washington University in St. Louis

E-mail: zhou@wustl.edu Phone: (314)-935-6384