# YUHAO ZHU

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#### WORK EXPERIENCE

#### Ph.D. Candidate in Finance at Erasmus University Rotterdam

2015 to present

Research interests: Executive Compensation, Behavioral Finance, Corporate Finance, Asset Pricing

Modelling on financial topics, e.g., options, executive contracts, risk, and stock markets

Statistical analysis on big data sets, e.g., census data from German Federal Employment Agency

Calibrating financial models with Python programs using data sets for U.S. companies

Data visualization with Python and R, e.g., charts and choropleth maps

Collecting, pre-processing, cleaning, and merging data sets from different sources Participating and presenting papers at seminars and conferences around the world.

Teacher of graduate level courses at Erasmus University Rotterdam

2015 to 2018

Teaching courses "Seminar Advanced Corporate Finance"

Giving lecture on "Basic Econometrics for Data Analysis"

Giving lecture on "Data Analysis with STATA"

Thesis Supervisor at Erasmus University Rotterdam

2015 to 2018

Supervisor of 1 Bachelor and 28 Master Students

Supervising topics on Corporate Finance, Executive compensation, M&A, and Banking

Teaching Assistant for graduate level courses at Tinbergen Institute

2014 and 2015

Teaching assistant for "Corporate Finance Theory" and "Statistics"

#### EDUCATIONAL EXPERIENCE

#### VU University Amsterdam & Tinbergen Institute

2013 to 2015

M.Phil. in Economics (Finance track), cum laude, GPA: 8.0/10.0

University of Groningen

2011 to 2013

BSc (Honors) in Economics and Business Economics, GPA: 8.5/10.0

Fudan University, China

2009 to 2013

BA in Economics, GPA: 3.78/4.00

#### TECHNICAL STRENGTHS

Working skills Econometrics, Large data set analysis, Model calibration, Data visualization

Financial modeling, Game Theory, Mathematics, Analytical solution

**Programming skills** Python (numpy, scipy and pandas for scientific calculation and data analysis),

Java, Matlab, STATA, Object Pascal, VBA for Excel, LATEX

Git for version control. GitHub repositories on https://github.com/forFudan. HTML for building websites. Personal website on http://www.zhuyuhao.com.

Certificates CFA Level II Candidate, Preparing for FRM in Nov 2018, GRE (V:154, Q:170)

Languages Chinese (native), English (proficient), Dutch (basic, A2), Japanese (basic)

#### PAPERS AND PROJECTS

### "Probability-weighting CEOs and optimal contracts"

- I establish a model in which the CEO is not only risk-averse but also probability weighting.
- Because options protect CEO from downside risk, her risk attitude results in positive options holding in her optimal compensation package (increasing pay-performance-sensitivity).
- I use Python to write programs to calibrate my model with data on U.S. CEOs contracts.
- The numerical solution also supports my model and analytical solution.
- Firms can provide more incentive pay instead of fixed salary to managers to save costs.

### "The real costs of CEO compensation - the effect of behindness aversion of employees"

Joint work with Ingolf Dittmann and Christoph Schneider. Available on SSRN.

- We analyze the big data sets from the German Federal Employment agency using remote access.
- We manually collect the compensation data on CEOs in German firms.
- We establish a behavioral model where workers are inequality-averse.
- We design natural experiment to show that higher CEO pay results in higher workers pay.
- The implication is that the CEO compensation actually brings extra costs.

#### "Wage gap and stock returns"

Joint work with Ingolf Dittmann and Maurizio Montone.

- We manually collect data from annual reports and construct a database on German executive compensation.
- We use the big data sets from the German Federal Employment agency using remote access.
- We identify the wage gap between top managers and normal workers.
- We establish an asset-pricing model with noise traders and inequality-averse traders.
- We find that firms with higher wage gap has positive risk-adjusted returns (alpha's).

#### PRESENTATIONS AT SEMINARS & CONFERENCES

(planned) China International Conference in Finance, Tianjin, China	Jul. 2018
Sloan School of Management, Massachusetts Institute of Technology	
(planned) Global Finance Conference, Paris, France	Jul. 2018
Global Finance Association	
(planned) Behavioral Finance Working Group Conference, London, the UK	Jun. 2018
Queen Mary, University of London	
(planned) Tinbergen Institute Ph.D. Lunch Seminar, Rotterdam	May. 2018
Tinbergen Institute	
12th Conference on Asia-Pacific Financial Markets (CAFM) Seoul, Korea	Dec. 2017
Korean Securities Association	
IFABS 2017 Conference Ningbo, China	Sep. 2017
International Finance and Banking Society	_
Tinbergen Institute Ph.D. Lunch Seminar, Rotterdam	Aug. 2016
Tinbergen Institute	
Erasmus Finance Brown Bag Seminar, Rotterdam	Nov. 2016
Erasmus University Rotterdam	
Tinbergen Institute Ph.D. Lunch Seminar, Rotterdam	Oct. 2016
Tinbergen Institute	

## AWARDS AND GRANTS

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