

## Hulai Zhang

Department of Finance, CentER, Tilburg University  
Warandelaan 2, 5037 AB Tilburg, The Netherlands  
EMAIL: [h.zhang\\_4@tilburguniversity.edu](mailto:h.zhang_4@tilburguniversity.edu)  
WEBSITE: <https://hulaizh.github.io/>

Department of Finance, ESCP Business School  
Champerret, 75017 Paris, France  
PHONE: +33 0758739436

RESEARCH INTERESTS	<b>Empirical Corporate Finance</b> <ul style="list-style-type: none"><li>- The Real Effect of Financial Markets</li><li>- Sustainable Finance: Sustainable Investing, Climate Change</li><li>- Litigation: Securities Law, Discrimination Law</li></ul>
EDUCATION	<b>Tilburg University and ESCP Business School</b> PhD in Finance, joint degree 2021 – Advisors: Luc Renneboog, Jasmin Gider, Alberta Di Giuli  <b>Tilburg University</b> Research Master in Finance 2019 – 2021  <b>London School of Economics</b> MSc in Economics 2016 – 2017  <b>Peking University</b> BSc in Geology and Economics 2012 – 2016
JOB MARKET PAPER	<a href="#">Flow-Driven Corporate Finance: A Supply-Demand Approach</a> (sole author), 2024
WORKING PAPERS	<a href="#">Carbon Firm Devaluation and Green Actions</a> <i>The CICF Best Paper Award</i> (with Darwin Choi, Zhenyu Gao and Wenxi Jiang), 2024  <a href="#">Deciphering Green Preferences and Climate Risk Perceptions: An NLP Approach</a> (with Darwin Choi, Zhenyu Gao, Wenxi Jiang and Yutong Yan), 2024  <a href="#">Corporate Fraud and the Consequences of Securities Class Action Litigation</a> (with Tamas Barko and Luc Renneboog), 2023  <a href="#">Pricing Voluntary Disclosure</a> (with Shuting Hou and Rui Sun), 2024
WORKING IN PROGRESS	<a href="#">Who Cares About Diversity?</a> (with Jasmin Gider and Luc Renneboog), 2024
TEACHING EXPERIENCE	<b>ESCP Business School</b> Instructor - Corporate Finance, Empirical Methods in Finance  <b>Tilburg University</b> TA - Advanced Corporate Finance, Asset Allocation & Sustainable Investing, Economics of Art, Sustainable Finance & Value Creation Bachelor Thesis Supervision

PRESENTATIONS	AFA Doctoral Poster Session 2025	
	2024 YISF Annual Symposium*	
	Johns Hopkins Carey Finance Conference 2023*	
	35th Australasian Finance and Banking Conference*	
	1st CEPR Rising Asia Workshop*	
	ABFER 10th Annual Conference	
	SFS Cavalcade Asia-Pacific 2022	
	The Second Sustainable Finance Forum	
	China International Conference in Finance 2021*	
	ESCP Business School Tilburg University	
	* by coauthors	
EMPLOYMENT	<b>The Chinese University of Hong Kong</b> Research Assistant	2017 – 2019
AWARDS	AFA Doctoral Student Travel Grant	2024
	ESCP PhD Grant	2021 – 2024
	The CICF Best Paper Award	2021
	Koopmans Scholarship	2019
MISCELLANEOUS	LANGUAGES: Chinese (native), English (fluent) PROGRAMMING: Python, Stata, Matlab LAST UPDATED: November 21, 2024	
REFERENCE LETTERS	<b>Luc Renneboog</b> Professor of Corporate Finance Tilburg University <a href="mailto:luc.renneboog@tilburguniversity.edu">luc.renneboog@tilburguniversity.edu</a>	<b>Jasmin Gider</b> Associate Professor of Finance Tilburg University <a href="mailto:j.gider@tilburguniversity.edu">j.gider@tilburguniversity.edu</a>
	<b>Alberta Di Giuli</b> Professor of Finance ESCP Business School <a href="mailto:adigiuli@escp.eu">adigiuli@escp.eu</a>	<b>Wenxi Jiang</b> Associate Professor of Finance The Chinese University of Hong Kong <a href="mailto:wenxijiang@cuhk.edu.hk">wenxijiang@cuhk.edu.hk</a>
	<b>Darwin Choi</b> Associate Professor of Finance The Hong Kong University of Science and Technology <a href="mailto:dchoi@ust.hk">dchoi@ust.hk</a>	

**Flow-Driven Corporate Finance: A Supply-Demand Approach (JMP)**

Integrating firm decisions into demand system asset pricing models, I develop a supply-demand framework to quantify the effects of investor demand for stocks on firm financing and investment. This framework revises the intuitive approach to quantifying the impact of investor flows of dividing the supply elasticity by the demand elasticity of stock prices. I apply [Gabaix and Koijen \(2024\)](#)'s granular instrumental variable method to estimate the multipliers. The results show that a \$1 investor flow to the stock leads to an immediate \$0.012 share issuance and a total of \$0.24 share issuance over two years. A 1% investor flow leads to a 0.19% increase in firm investment over two years. The multipliers are asymmetric: firms respond more strongly to investor inflows than to outflows, and more strongly to investor flows during economic expansions than during recessions.

**Carbon Firm Devaluation and Green Actions**

We construct a market-based, forward-looking measure—the price valuation gap between high- and low-emission firms—to capture the multifaceted effects of climate change on publicly-listed firms. We validate the measure by showing that high-emission firms have lower price valuation ratios than low-emission firms in the same country, especially in recent years. This gap is linked to improved climate policies and increased awareness following local natural disasters. Under price pressure, high-emission companies reduce carbon emissions, enhance green innovation, and downsize operations. Private high-emission firms do not exhibit similar trends. Our findings clarify the ongoing debate regarding the productivity of sustainable investing.

**Deciphering Green Preferences and Climate Risk Perceptions: An NLP Approach**

We employ Natural Language Processing (NLP) to scrutinize regulatory filings, identifying institutional investors' climate change preferences and risk perceptions. These preferences and risk perceptions grow over time and are stronger after a fund has signed for the Principles for Responsible Investors (PRI) or if it is located in regions with stronger global warming beliefs. Investors preferring green assets tend to decrease their portfolio weights on environmentally-unfriendly stocks, reflecting a desire to align their investments with their values. However, the relationship between climate risk perceptions and portfolio weights of brown stocks is varied due to their diverse investment strategies. Investors with higher climate risk perceptions are more likely to support environmental shareholder proposals but those with climate preferences are not. These findings offer valuable insights into sustainable investing behavior under different motivations.

**Corporate Fraud and the Consequences of Securities Class Action Litigation**

We analyze class action litigation as a corporate governance device. Firms that have lower internal governance standards and those with fewer external monitors are more likely to be indicted. Lawsuits announcements are salient information to the market, as firms, on average, lose 12.3% without a reversal up to three years following the first court date, which points at a substantial reputation loss. Indicted firms readjust their operations, meanwhile sophisticated investors decrease their positions. Stock market activity surges for firms suspected of fraud, and a conservative trading strategy yields significant returns over the subsequent period. Lawsuits also affect competitors both through competitive and contagion channels.

**Who Cares About Diversity?**

This paper studies the consequences of negative corporate diversity shocks to companies as captured by litigation about discrimination based on gender, race, disability,

and age for a broad set of corporate stakeholders. Despite the direct legal costs, potential settlement costs, and potential reputational damage firms face, the disclosure of the litigation event does not result in any immediate or future damages to their share price. This is surprising as the (alleged) discrimination problems are also picked up by the press and hence salient, as reflected on decreasing press-based corporate reputation scores. Furthermore, the information about litigation related to discrimination relates to the governance (G) and social (S) factors within the ESG sustainability performance framework and is therefore included in firms' sustainability ratings, which decline. While the financial markets (both stock and bond markets) seem to disregard discrimination law suits, we study whether other types of stakeholders respond. We examine the (internal) labor market and document that (former) employees of a sued firm do not evaluate their (former) employer differently after a discrimination case. The exception, however, are highly skilled employees (contributing to a firm's R&D) who are more likely to leave the firm subsequent to a discrimination event. Especially female top researchers leave after a gender-related conflict. The study of consumer reactions, captured by scanner data of consumer retail spending, reveals a modest decline in sales of litigated firms in the quarter of the litigation filing. Most households do not change their consumption patterns, with the exception of older people, white people, households frequently consuming bioproducts, and households likely to vote for the Democrat party. We also study whether related firms (in the supply chain) decrease their business dealings with the litigated firm and find that there is no effect. Finally, sued firms do not suffer from a reduction in subsidy applications with the federal and state governments. We do find some evidence that discrimination incidents trigger adjustments to the internal corporate governance: firms are making gender- and race-related adjustments to the board of directors, increasingly adding female directors and those belonging, and we show anecdotic evidence that DEI-related responsibilities are added to officers' task packages. In sum, discrimination incidents have some repercussions on the labor market and on consumer spending, but as only small fractions of the labor force and consumers are sensitive to discrimination litigation, the overall impact on the firm (as impounded in prices) is limited.

### **Pricing Voluntary Disclosure**

Many firms make non-regulatory information disclosure, such as ESG reporting, to the market. We develop and estimate a dynamic stochastic general equilibrium model to analyze firm's voluntary disclosure behaviors. Our estimation suggests that firms refrain from voluntary disclosure when the households think the disclosure uncertainty is high. Additionally, it indicates that households ought to reduce their consumption and stock market investments as the uncertainty in disclosure increases. Our findings show an increase in both the risk premium and volatility of stocks with rising disclosure uncertainty.