

Hulai Zhang

Department of Finance, CentER, Tilburg University
Warandelaan 2, 5037 AB Tilburg, The Netherlands
EMAIL: 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	Empirical Corporate Finance <ul style="list-style-type: none">- The Real Effect of Financial Markets- Sustainable Finance: Sustainable Investing, Climate Change- Litigation: Securities Law, Discrimination Law
EDUCATION	Tilburg University and ESCP Business School PhD in Finance, joint degree 2021 – Advisors: Luc Renneboog, Jasmin Gider, Alberta Di Giuli Tilburg University Research Master in Finance 2019 – 2021 London School of Economics MSc in Economics 2016 – 2017 Peking University BSc in Geology and Economics 2012 – 2016
JOB MARKET PAPER	Flow-Driven Corporate Finance: A Supply-Demand Approach (sole author), 2024
WORKING PAPERS	Carbon Firm Devaluation and Green Actions <i>The CICF Best Paper Award</i> (with Darwin Choi, Zhenyu Gao and Wenxi Jiang), 2024 Deciphering Green Preferences and Climate Risk Perceptions: An NLP Approach (with Darwin Choi, Zhenyu Gao, Wenxi Jiang and Yutong Yan), 2024 Corporate Fraud and the Consequences of Securities Class Action Litigation (with Tamas Barko and Luc Renneboog), 2023 Pricing Voluntary Disclosure (with Shuting Hou and Rui Sun), 2024
WORKING IN PROGRESS	Who Cares About Diversity? (with Jasmin Gider and Luc Renneboog), 2024
TEACHING EXPERIENCE	ESCP Business School Instructor - Corporate Finance, Empirical Methods in Finance Tilburg University 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 **The Chinese University of Hong Kong**
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 **Luc Renneboog** **Jasmin Gider**
LETTERS Professor of Corporate Finance Associate Professor of Finance
Tilburg University Tilburg University
luc.renneboog@tilburguniversity.edu j.gider@tilburguniversity.edu

Alberta Di Giuli **Wenxi Jiang**
Professor of Finance Associate Professor of Finance
ESCP Business School The Chinese University of Hong Kong
adigiuli@escp.eu wenxijiang@cuhk.edu.hk

Darwin Choi
Associate Professor of Finance
The Hong Kong University of Science
and Technology
dchoi@ust.hk

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.