Zhuolu Gao

Frankfurt School of Finance & Management
Adickesallee 32–34
60322 Frankfurt am Main, Germany

z.gao@fs.de
+45-91958223
www.zhuolugao.com

ACADEMIC POSITION

Postdoctoral Researcher 2025–2027
Frankfurt School of Finance & Management

RESEARCH INTERESTS

Empirical Asset Pricing, Financial Intermediation, Fixed Income and Credit Markets

EDUCATION

Ph.D. in Finance 2020–2025
Copenhagen Business School
Visiting Ph.D. Student, University of Zurich (Spring 2023)

MSc in Advanced Economics and Finance 2018–2020
Copenhagen Business School

BSc in Finance 2011–2015
Southeast University

JOB MARKET PAPER

The On-the-Run Discount, with Sven Klingler

The on-the-run premium is one of the most widely studied phenomena in fixed-income markets. Contrary to this phenomenon, we document that the most recently issued (on-the-run) Treasury bills trade at a *discount* relative to older bills of comparable maturities. We link this *on-the-run discount* to short sellers' preference for seasoned bills, driven by the regular and predictable reopening auctions of Treasury bills. Borrowing demand for Treasury bills increases as they age and explains up to 71% of the variation in the on-the-run discount. The on-the-run discount affects the measurement of Treasury convenience premiums and the portfolio allocations of money market funds.

Award: NFA 2026 Best Paper Award in Asset Pricing
Presentations*: Aarhus Finance Forum 2026, Armenian Economic Association Conference 2026*, Bundesbank*, Copenhagen Business School, FMA Annual Meeting 2026*, FMA European Conference 2026, Frankfurt School of Finance & Management, NFA Annual Meeting 2026*

WORKING PAPERS

Why Do Firms Pay More for Bank Loans? The Role of Renegotiation, solo-authored [SSRN]

Firms borrowing from both banks and the corporate bond market pay a substantial premium on bank loans, raising questions about firms' bargaining power and banks' competition. In this paper, I show that a large portion of this premium compensates banks for facilitating out-of-court restructurings. I estimate the loan premium and use a 2014 US court ruling, which impeded out-of-court restructurings, as a

natural experiment. Following the ruling, affected firms experienced an 80–90 bps reduction in the loan premium, due to reduced restructuring opportunities and a diminished potential to avoid bankruptcy costs. These findings suggest that the renegotiation flexibility provided by banks is a key driver of the loan premium, highlighting the unique value that bank lending offers beyond the capital market.

Award: The Brattle Group Ph.D. Candidate Awards For Outstanding Research
***Presentations**: AFA poster 2025, BIGFI, Erasmus School of Economics, FIRS 2024, Fudan University, Nordic Finance Network PhD Workshop 2024, NFN Young Scholars Workshop, SFI PhD Workshop, Shanghai Advanced Institute of Finance, Tri-City Day-Ahead Workshop 2024, WFA 2025*

Bank Equity Risk, with Jens Dick-Nielsen and David Lando [SSRN]

Bank leverage has fallen since the Global Financial Crisis, yet bank equity risk has remained high. We develop a model that combines franchise value with separate regulatory buffer and resolution boundaries and decomposes equity risk into franchise-value and regulatory-boundary components. Empirically, banks closer to the buffer have higher equity volatility, beta, and implied cost of equity, even after controlling for leverage and market-to-book. This relation becomes stronger as banks approach the buffer. We also find that debt risk is more closely related to the resolution boundary than to the buffer boundary. Thus, equity and debt respond to different regulatory thresholds.

***Presentations**: Aalto*, Aarhus University*, Bank of England*, Bloomberg*, CICF 2023, Copenhagen Business School, Danish Finance Institute*, Deloitte*, EFA Annual Meeting 2023*, European Banking Authority*, European Central Bank*, Luiss Finance Workshop 2026*, New York Fed*, NHH, Norges Bank, Swedish House of Finance, University of Zurich*

Forgiven but Not Forgotten: Emerging Market Credit Spreads Following Debt Relief, with Mikkel Vittrup Hauerberg, David Lando, and Aleksander Koldborg Tetzlaff [SSRN]

R&R at: Journal of Money, Credit and Banking

We examine yield spreads of government debt issues from countries that have received large-scale debt relief through the Heavily Indebted Poor Countries (HIPC) program and the Multilateral Debt Relief Initiative (MDRI). Using data from more than 3,000 bond issues and after controlling for macroeconomic, political, and geographical factors, we find that HIPC governments pay an average yield spread premium of close to 1.5% on USD-denominated and non-USD-denominated bonds compared to similar countries which have not received relief. Markets seem to rationally anticipate a deterioration in the credit quality of relieved countries.

***Presentations**: BI Oslo (online)*, Copenhagen Business School, EFA Annual Meeting 2020 (online)*, ESADE Business School (online)**
(presented by co-authors)*

TEACHING

Financial Intermediation (Masters): 2021, 2022, 2024

Quantitative Methods (Masters): 2021, 2022, 2023, 2024

Master Thesis (Main Supervisor): 2024, 2025

INDUSTRY EXPERIENCE

China Construction Bank 2015–2018

LANGUAGES

Mandarin (Native), English (Fluent)

PROGRAMMING

R, Python, MATLAB, Bloomberg, SAS

HONORS AND SCHOLARSHIPS

NFA Best Paper Award in Asset Pricing	2026
The Brattle Group Ph.D. Candidate Awards For Outstanding Research	2025
AFA PhD Travel Grant	2024
EFA PhD Travel Grant	2024
FIRS PhD Travel Grant	2024

REFERENCES

David Lando
Professor of Finance
Copenhagen Business School
dl.fi@cbs.dk

Jens Dick-Nielsen
Professor of Finance
Copenhagen Business School
jdn.fi@cbs.dk

Sven Klingler
Associate Professor of Finance
Frankfurt School of Finance & Management
s.klingler@fs.de

Last updated: November 2, 2026