

XIN (SOFIA) YUAN

Vrije Universiteit Amsterdam ◊ De Boelelaan 1105 ◊ 1081 HV Amsterdam
x.yuan@vu.nl ◊ <https://yuanxin817.github.io>

Placement Director: Prof. Eric Bartelsman, e.j.bartelsman@vu.nl, +31 20 598 6167

SUPERVISORS

Prof. Iman van Lelyveld
Vrije Universiteit Amsterdam
iman.van.lelyveld@vu.nl

Dr. T. Artiga Gonzalez
Vrije Universiteit Amsterdam & Tinbergen Institute
t.artigagonzalez@vu.nl

EDUCATION

PhD Candidate in Finance 09/2022 – expected til 08/2027
Tinbergen Institute and Vrije Universiteit Amsterdam, Amsterdam, the Netherlands

Supervisors: I. and T.

Visiting PhD Student 01/2026 – 10/2026
Stockholm University, Stockholm, Sweden
Host: Gustav Martinsson

M.Sc. in Financial Econometrics 07/2019 – 08/2020
Johns Hopkins University, Washington, D.C., United States of America

B.A. in Finance and Russian Literature 09/2015 – 07/2019
University of International Business and Economics, Beijing, China

Exchange Semester (part of B.A.) 09/2017 – 12/2017
Southern Federal University, Rostov-on-Don, Russia

RESEARCH INTERESTS

Corporate Finance, Banking, Sustainable Finance, Corporate Governance, Financial Intermediation

JOB MARKET PAPER

Knowledge Without Control: Examination Delay and Green-Patent Acquisitions

Abstract: United States public firms bought 11.2% of the green patents they obtained between 1996 and 2021. I show that firms buy green patents when examination delay leaves them with knowledge but no right to exclude others while a product-market rival files in the same technology class. Instrumenting delay with examiner slowness, I find that a one-standard-deviation increase in delay raises the probability of a purchase in the following twelve months by 11.7 percentage points, against a base rate of 16.3%. Firms without such a rival show no significant response, and accelerated examination under the Green Technology Pilot Program reduced purchases. The patents bought have claims closer to the firm's pending claims than other patents traded in the same technology subclass and year, which indicates a demand for legal protection rather than for knowledge. The response is concentrated in green technology, whose inventions combine more technological fields. After green purchases, funds oriented toward green innovation are less likely to exit the buyer, and emissions from purchased energy are lower when the patents cover production processes.

WORKING PAPERS

Grouping the State: Reporting Boundaries and Exposure Concentration, with I.

Central Bank Reserves and Bank Stock Returns around ECB Decisions, with I.

Private Engagement, Public Votes: Evidence from Shareholder Engagement Disclosures, with T.

Green Patents as Collateral

CONFERENCES AND SUMMER SCHOOLS

Presentations

- 2026 Annual Meeting of the Swiss Society for Financial Market Research (SGF), Zurich, Switzerland
- 2025 International Risk Management Conference, Bari, Italy
- 2024 PhD Seminar, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

Summer Schools

- 2024: Finance and Product Markets: Theory, Evidence, and Measurements (*Laurent Fresard* and *Gordon Phillips*)

EXPERIENCE

De Nederlandsche Bank – Dutch Central Bank

Research Assistant

07/2025 – now

Amsterdam, Netherlands

- Worked with bank-level supervisory data at the Dutch Central Bank (DNB), focusing on exposure concentration and banks' sensitivity to monetary policy. Processed large-exposure reports and reconciled differences in how banks grouped state-linked counterparties, assessing their implications for concentration measures and comparisons across banks. Linked supervisory balance-sheet data with high-frequency stock prices to evaluate how central-bank reserve holdings shaped bank equity responses to ECB policy surprises. Applied econometric methods to quantify these relationships and contributed to two working papers on banking supervision and monetary policy transmission.

Board Secretary at East Money Information Co., Ltd

Chief Officer Assistant

04/2021 – 06/2022

Shanghai, China

- Contributed to the preparation of corporate disclosures and annual reports; supported investor communications and annual shareholder meetings; engaged in regular one-on-one meetings with major banks, facilitating the exchange of perspectives on industry trends and policy developments; acted as an intermediary by synthesizing insights across institutions in a context where direct peer communication was limited; liaised with fund companies' research and sales divisions; and supported strategic planning initiatives.

China Securities Co., Ltd

Internship in Financial Engineering Department

09/2020 – 11/2020

Shanghai, China

- Applied machine learning and asset pricing models to develop quantitative investment strategies; conducted backtesting and valuation analysis; produced equity research reports with investment recommendations; engaged in investor roadshows to present research findings.

PUBLICATIONS

Green Gains: The Impact of REITs’ Environmental Performance on Sustainability-Linked Loan Interest Rates, with Capera Romero, L. M., Artiga Gonzalez, T., Karmaziene, E.

SCHOLARSHIPS AND AWARDS

Research on Double Taxation Avoidance Laws in Kazakhstan (RMB 40,000) <i>with Dr. Yongmei Wang</i>	2017 – 2019
Meritorious Winner in the Interdisciplinary Contest in Modeling (ICM)	2018
Integrated Third-Class Scholarship <i>University of International Business and Economics</i>	2015 – 2018
Distinguished Academic Achievement Awards <i>University of International Business and Economics</i>	2016 – 2017

TEACHING EXPERIENCE

Vrije Universiteit Amsterdam

· Bachelor Thesis Supervision (number of theses: 55)	2022, 2023, 2024, 2025, 2026
· Finance (Undergraduate Level)	2022, 2023, 2024, 2025, 2026
· Corporate Finance: Theory and Empirics (Master Level)	2024
· Stochastic Processes: the Fundamentals (Master Level)	2025, 2026

Johns Hopkins University

· Financial Modeling and Valuation (Master Level)	2022
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SKILLS

Languages	Chinese (<i>native</i>), English (<i>fluent</i>), French (<i>intermediate</i>), Russian (<i>intermediate</i>)
Computer Skills	Python, MATLAB, SQL, R, L ^A T _E X, Stata, R programming, SPSS
Certificate	CFA Level 1