Joanne Im

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Education

2024 exp.	Ph.D., Finance, MIT Sloan School of Management Graduate-level coursework: Asset pricing, time series econometrics, machine learning Programming languages: Python, R, STATA
2021	M.S., Management Research, MIT Sloan School of Management
2016	B.A., Economics, magna cum laude, Princeton University

Work Experience

2023 — Teaching Assistant to MIT Prof. Hui Chen | Cambridge, MA

- Delivered recitations to and wrote codebooks for class of 50+ MIT Master of Finance students covering econometric methods including linear regression, generalized method of moments, event study design

2022 — Research Assistant to MIT Prof. David Thesmar | Cambridge, MA

- Wrote Python code to implement natural language processing (NLP) model for scoring firms' SEC 10Q filings along five dimensions of morality ethical content: care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, sanctity/degradation

2019, 2020 — Teaching Assistant to MIT Prof. Leonid Kogan | Cambridge, MA

- Delivered recitations to class of 100+ MIT Master of Finance students covering stock, bond, forward and futures, options valuation
- Wrote Python code to translate written problem sets to Python scripts that generated randomized, and computer-graded problem sets

2016–2018 — Senior Research Assistant at the Federal Reserve Board's Global Monetary and Sovereign Markets Group | Washington, D.C.

- Ran and maintained code that generated the Fed's dollar forecast and generate the Fed's H.10 exchange rate report and participated in re-design of Board's dashboard for tracking dollar funding conditions
- Contributed to dashboard of financial health and global dollar funding conditions that faced the Federal Reserve Board
- Automated daily estimation and internal publication of nominal, and real zero coupon curves, break-even inflation expectations, and global dollar funding series from market prices

2013–14 — Researcher at Union Square Group | New York, NY

- Contributed to study of bank liquidity, and repo market condition during the Global Financial Crisis using a combination of interviews, review of primary source documents, and market data analysis

2013–14 Research Assistant to Prof. Christopher Sims

- Wrote R code to estimate the effect of credit-to-gdp shocks on real economics variables using a structural VAR

Published Papers

"U.S. Treasury Premium" (2018) with Wenxin Du and Jesse Schreger, **Journal of International Economics**, 112, 167-181. (Link)

Summary: We quantify the difference in the convenience yield of U.S. Treasuries and government bonds of other developed countries by measuring the deviation from covered interest parity between government bond yields. We call this wedge the "U.S. Treasury Premium." We document a secular decline in the U.S. Treasury Premium at medium to long maturities. The five-year U.S. Treasury Premium averages approximately 21 basis points prior to the Global Financial Crisis, increases up to 90 basis points during the crisis, and disap- pears after the crisis with the post-crisis mean at −8 basis points. Meanwhile, the short-term U.S. Treasury Premium remains positive post-crisis. We discuss the impact of sovereign credit risk, foreign exchange swap market frictions, and the relative supply of government bonds on the U.S. Treasury Premium.

Working Papers

"The Climate and Financial Effects of Fossil Fuel Power Plant Sales in the US"
(Job Market Paper Link)

Summary: Recent pressure on publicly traded firms to decarbonize and their decisions to high carbon, "dirty" assets to private firms have sparked concerns about the climate and financial consequences of these sales. Using a dataset of fossil fuel power plant M&A deals between 2000-2022, I estimate sale effects on production and emissions and announcement effects on seller valuations. I find that public to private sales had near zero effects on asset emissions and that these effects were statistically indistinguishable from effects in public to public sales. I then present a simple model of firm production and emissions in which publicly traded firms, but not privately held firms, experience a shock to their private costs of emitting. The results suggest that ESG pressure that lead to firm level emissions reductions via asset sales may have near-zero climate impacts.

"Real Bond Parity"

Summary: I test a set of assumptions that imply the return parity of long- run, real bonds denominated in different currency numeraire. The joint hypothesis is rejected in our post-2009 sample of developing and developed market currencies; however, I document a strong relationship between changes in the log of bilateral, real exchange rate and

real holding period bond returns in the direction of parity, contributing to the Meese-Rogoff puzzle on exchange rate determination.

"Distribution Shifts in Review Classification by BERT and T5 (NLP Models)"
(joint with Sehaj Chawla and Eduardo Boratto)

Summary: We test the generalizability of algorithms that detect fake reviews based on review text by exploring the effects of distribution shifts (with respect to time, industry type, product type, and sentiment) on the performance of four pre-trained and fine-tuned transformer models. The first three models are neural nets built on top of three pre-trained instances of BERT (large, small, and mobile), which generate contextualised embedding of review text in a way that is mechanically independent from our training dataset. Our fourth model is the small T5 transformer.

Works in Progress

"Consumption Volatility and the Social Cost of Carbon"
(joint with Deborah Lucas and Jan Eberly)

Summary: The benchmark model for computing the social cost of carbon, RF-Brerkley GIVE, assumes the appropriate discount factor for discounting climate damages is proportional to the growth rate of aggregate consumption. We quantify the importance of this assumption by considering alternative discount factors that depend on higher order moments of consumption series and sub-population group series.

Other

Referee	Journal of Banking and Finance
Awards	MIT Graduate PhD Fellowship (2018-2023), MIT Presidential Fellowship (2018-2019)
Citizenship	U.S.