# Aditya Chaudhry

**University of Chicago Booth School of Business**

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## EDUCATION

**University of Chicago** 2018 – Present

**Booth School of Business** – Ph.D. Finance

- *Committee:* Ralph Koijen (Co-Chair), Stefan Nagel (Co-Chair), Lars Hansen, Niels Gormsen

**University of Virginia** 2018

**McIntire School of Commerce** – B.S. Commerce (*Finance Concentration*)

**College of Arts and Sciences** – B.A. Mathematics (*Financial Math Concentration*)

## HONORS and AWARDS

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| SoFiE Prize for the Best Paper at Early-Career Scholars Conference | 2022 |
| Stevanovich Student Fellowship | 2022 |
| Yiran Fan Memorial Prize | 2022 |
| Liew Fama-Miller PhD Fellowship for Best 3rd Year Paper | 2021 |
| Fama-Miller Research Development Fellowship | 2021 |
| Liew Fama-Miller PhD Fellowship for Best 2nd Year Paper | 2020 |
| Arnold Zellner Doctoral Prize | *2020* |
| National Science Foundation Graduate Research Fellowship Recipient | 2018 |
| Joseph Goldstein Distinguished Award in Finance (top finance graduate) | 2018 |
| Global Commerce Scholars Award | 2018 |
| Raven Society, Beta Gamma Sigma, Echols Scholar | 2018 |

## RESEARCH INTERESTS

**Asset Pricing, Macro-Finance**

## WORKING PAPERS

**Do Subjective Growth Expectations Matter for Asset Prices? (Job Market Paper)**


**Abstract:** I find the causal effect of subjective growth expectations on asset prices is far smaller than suggested by standard models. To quantify this causal effect, I develop an asset demand model in which Bayesian investors learn from analysts and other signals. A 1% rise in annual investor growth expectations raises price only 7 to 16 basis points, an order of magnitude less than in standard models. This small causal effect arises from the limited passthrough of beliefs to asset demand and is consistent with small price elasticities of demand. To reconcile this small causal effect with the strong correlation of growth expectations and prices, I provide evidence of reverse causality. Using flow-induced trading to instrument for prices, I find prices cause growth expectations.


**Presentations**: SFS Cavalcade North America 2022, 14th Annual SoFiE Post-Conference, Transatlantic Doctoral Conference 2022, Machine Learning in Economics Summer Institute 2022, Chicago Joint Program and Friends Conference, Chicago Booth Finance Brownbag

**The Causal Impact of Macroeconomic Uncertainty on Expected Returns**

**In Revision**, Reject and Resubmit at *Review of Financial Studies*


**Abstract:** I quantify the causal impact of macroeconomic uncertainty on expected returns. The exogenous timing of macroeconomic announcements provides an instrument for uncertainty. Using realized returns and daily measures of macroeconomic uncertainty, I find announcements resolve uncertainty, which causes expected returns to fall. Under weak assumptions, macroeconomic uncertainty explains at most 32% of expected return variation. Under the additional, empirically justified assumption that other expected return drivers do not correlate with announcement timing, macroeconomic uncertainty explains 10% of expected return variation and a one standard deviation increase in macroeconomic uncertainty raises long-run expected returns by 173 basis points.

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**Presentations**: AFA 2022 Annual Meeting, 13th Annual SoFiE Pre-Conference, Transatlantic Doctoral Conference 2021, Chicago Joint Program and Friends Conference, Chicago Booth Finance Brownbag.

**High-Frequency Expectations from Asset Prices: A Machine Learning Approach**

(with Sangmin Oh)

**Abstract:** We propose a novel reinforcement learning approach to extract high-frequency aggregate growth expectations from asset prices. While much expectations-based research in macroeconomics and finance relies on low-frequency surveys, the multitude of events that pass between survey dates renders identification of causal effects on expectations difficult. Our method allows us to construct a daily time-series of the cross-sectional mean of a panel of GDP growth forecasts. The high-frequency nature of our series enables clean identification in event studies. In particular, we use our estimated daily growth expectations series to test the "Fed information effect." Extensions of our framework can obtain daily expectations series of any macroeconomic variable for which a low-frequency panel of forecasts is available. In this way, our method provides a sharp empirical tool to advance understanding of how expectations are formed.

**Presentations**: 13th Annual SoFiE Conference, 2021 SoFiE Machine Learning Virtual Conference, Bank of England Conference on Modeling with Big Data & Machine Learning: Measuring Economic Instability, 2020 Bergen FinTech Conference, Chicago Booth Finance Brownbag, Chicago Macro/Monetary Reading Group.

## PUBLICATIONS

**Uncertainty Assessment and False Discovery Rate Control in High-Dimensional Granger Causal Inference**

(with Pan Xu and Quanquan Gu)

Proc. of the 34th International Conference on Machine Learning (ICML), Sydney, Australia, 2017.

## TEACHING EXPERIENCE

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| **Asset Pricing II (Chicago Booth Ph.D.)** | Teaching Assistant for Ralph Koijen & Lars Hansen | 2022 |
| | Teaching Assistant for Ralph Koijen & Stefan Nagel | 2021 |
| **Statistics (Citadel LLC)** | Teaching Assistant for Jeffrey Russell | 2021 |
| **Investments (Chicago Booth MBA)** | Teaching Assistant for John Heaton | 2020 |
| **Investments (Citadel LLC)** | Teaching Assistant for John Heaton | 2020 |

## RESEARCH EXPERIENCE

Research Assistant for Niels Gormsen 2019

## PROFESSIONAL EXPERIENCE

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| **Summer Research Analyst** | AQR Capital Management – Greenwich, CT | Summer 2017 |
| **Data Science Intern** | FiscalNote – Washington, D.C. | Summer 2016 |
| **Data Analyst Intern** | Novetta – McLean, VA | Summer 2015 |

## LEADERSHIP AND SERVICE

**Reviewer**

Reviewer for *Journal of Finance*

**Workshop Organizer**

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| Organizer of Fama-Miller Center Seminar for Research Professionals | 2021-2022 |
| Founding Organizer of Booth Asset Pricing Working Group (with Ralph Koijen and Stefan Nagel) | 2021-2022 |
| Founding Organizer of Booth Machine Learning in Finance Reading Group (with Sangmin Oh) | 2020-2022 |
| Organizer of Booth Finance Student Brownbag | 2020-2021 |

## SKILLS

**Languages**: Python, R, MATLAB, Stata, Mathematica, Java, C++, SQL, VBA, Android SDK, HTML, JavaScript