

CHARLES R SMITH

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617-721-9042 • 202 North Blair Street Unit 2, Madison WI 53703

EDUCATION

University of Wisconsin-Madison

PhD Student in the Joint Economics Finance Program

Madison, WI

Aug 2022 | Present

Amherst College

B.A., *magna cum laude* in Economics and Mathematics

Amherst, MA

Sep 2015 | May 2019

RELEVANT PHD COURSEWORK

Economics: Microeconomics • Macroeconomics • Econometrics

RELEVANT UNDERGRADUATE COURSEWORK

Economics: Advanced Econometrics • Advanced Macroeconomics • Advanced Microeconomics • Industrial Organizations • Game Theory • Mechanism Design • Money and Economic Activity • Senior Thesis

Mathematics: Multivariable Calculus • Linear Algebra • Real Analysis • Complex Analysis • Stochastic Processes • Abstract Algebra • Lie Algebras

RESEARCH INTERESTS

Industrial Organizations • Finance

WORK EXPERIENCE

Federal Reserve Bank of New York

Senior Research Analyst, Financial Stability Oversight Council

New York, NY

Jul 2021 | Jul 2022

- Conducted research with economist Richard Crump and assisted with the production of the Financial Stability Oversight Council's Annual Report.

Senior Research Analyst, Capital Markets

Jul 2019 | Jul 2021

- Conducted research with economists Fernando Duarte and Peter Van Tassel.

Summer Analyst, Capital Markets

Jun 2018 | Aug 2018

- Conducted research with economist Peter Van Tassel.

Amherst College Economics

Research Assistant for Professor Ishii

Amherst, MA

Sep 2016 | May 2018

Amherst College Mathematics

Research Assistant for Professor Sosa

Amherst, MA

Jun 2017 | May 2019

ACCOLADES

On the Spot Vault Award

Awarded for contributions to the *U.S. Economy in the a Snapshot*

Federal Reserve Bank of New York

2021

Propel for Execution Vault Award

Award for contributions to policy work during the COVID-19 crisis

Federal Reserve Bank of New York

2020

The James R. Nelson Prize

Awarded to senior thesis for its economic analysis of an important question of public policy

Amherst College Economics Department

2019

The Sylvia and Irving Lerner Piano Prize

Awarded to the student who demonstrated the greatest skill and musicianship as a pianist

Amherst College Music Department

2019

PAPERS & BLOG POSTS (BLUE TEXT IS HYPERLINKED)

Congressional Polarization, the Incumbency Advantage, and Campaign Advertising

Advised by Jun Ishii and Christopher Kingston

2019

Senior Thesis

- Awarded The James R. Nelson Prize for its economic analysis of an important question of public policy (at Amherst College).
- Developed a tractable model of campaign spending during a two-candidate election demonstrating how changes in advertising markets can simultaneously encourage candidates to adopt more polarized campaign positions and benefit new entrants.

Short-Dated Term Premia and the Level of Inflation

2022

With Richard Crump and Peter Van Tassel

FRBNY Blog Post

- We measure short-dated term premia using a DTSM model and a new model as the difference between the derivative price and the Blue Chip Financial Forecast (BCFF) mean prediction.
- We find that the short-dated term premia was higher during periods of high inflation and low during the past decade. Despite this historic relationship, it has remained low despite the rise of inflation in 2022.

The Law of One Price in Equity Volatility Markets

2021

With Peter Van Tassel

FRBNY Blog Post

- Using our option database, we identify that VIX future prices exceed their option-implied upper bounds (indicating Law of One Price violations) on 12
- We find that the frequency of Law of One Price violations increase in times of market distress, including the 2020 pandemic.

Equity Volatility Term Premia

2021

With Peter Van Tassel

FRBNY Blog Post

- We estimate the realized variance and implied volatility term premia, a measure of the cost of insuring against volatility.
- The term premia increase during times of distress and in response to VIX shocks.

NOTABLE RA CONTRIBUTIONS (* IN PROGRESS OR UNCREDITED)

Cattaneo, Matias., Crump, Richard., Farrell, Max., and Feng, Yingjie., [On Binscatter](#) (2021). *Federal Reserve Bank of New York Staff Reports 881.**

Crump, Richard., Eusepi, Stefano., Giannoni, Marc., and Sahin, Aysegul., [The Unemployment-Inflation Trade-Off Revisited: The Phillips Curve in COVID Times](#) (2022). *NBER Working Paper No. w29785.*

Duarte, Fernando and Eisenbach, Thomas M., [Fire-sale Spillovers and Systemic Risk](#) (2021). *Journal of Finance.*

Duarte, Fernando and Jones, Collin., [Empirical Network Contagion for U.S. Financial Institutions](#) (2017). *Federal Reserve Bank of New York Staff Report No. 826.**

Duarte, Fernando and Rosa, Carlo., [The Equity Risk Premium: A Review of Models](#) *Federal Reserve Bank of New York Economic Policy Review.**

Van Tassel, Peter., [The Law of One Price in Equity Volatility Markets](#) (2020). *Federal Reserve Bank of New York Staff Report No. 953.**

Van Tassel, Peter., [Equity Volatility Term Premia](#) (2020). *Federal Reserve Bank of New York Staff Report No. 867.**

Diamond, William and Van Tassel, Peter., [Risk-Free Rates and Convenience Yields Around the World](#) (2022). *Jacob Levy Equity Management Center for Quantitative Financial Research Paper.**

LEADERSHIP EXPERIENCE

Madison Senior Center

Backboard Piano

Upper Manhattan Mutual Aid

Delivery Volunteer

Amherst College Music Department

Pianist; Jazz Combo, Jazz Band, Jazz Quartet

Madison, WI

New York, NY

Amherst, MA

March 2023 - Present

Sep 2020 - Aug 2021

Sep 2015 | May 2019

SKILLS AND INTERESTS:

Programming:

Excel • MATLAB • L^AT_EX • LyX • R • Python • SAS • SQL • Stata

Interests:

Jazz Piano • Classical Piano • Hiking • Running • Reading