CHARLES R SMITH
cr10smith@gmail.com • Linkedin
617-721-9042 • 202 North Blair Street Unit 2, Madison WI 53703

EDUCATION

University of Wisconsin-Madison	Madison, WI
PhD Student in the Joint Economics Finance Program	Aug 2022 | Present
Amherst College	Amherst, MA
B.A., *magna cum laude* in Economics and Mathematics	Sep 2015 | May 2019

RELEVANT PHD COURSEWORK

Microeconomics • Macroeconomics • Econometrics • Industrial Organization • Finance Theory • Computational Economics

RELEVANT UNDERGRADUATE COURSEWORK

Economics: Advanced Econometrics • Advanced Macroeconomics • Advanced Microeconomics • Industrial Organizations • Game Theory • Mechanism Design • Senior Thesis
Mathematics: Multivariable Calculus • Linear Algebra • Real Analysis • Complex Analysis • Stochastic Processes • Abstract Algebra • Lie Algebras

RESEARCH INTERESTS

Industrial Organization • Finance

WORK EXPERIENCE

Federal Reserve Bank of New York	New York, NY
Senior Research Analyst, Financial Stability Oversight Council	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	Amherst, MA
Research Assistant for Professor Jun Ishii	Sep 2016 | May 2018
Amherst College Mathematics	Amherst, MA
Research Assistant for Professor Gabriel Sosa	Jun 2017 | May 2019

TEACHING EXPERIENCE

University of Wisconsin-Madison	Madison, WI
Teaching Assistant for MSFE 721 - Financial Microeconomics	Sep 2023 | Present

PAPERS & BLOG POSTS (BLUE TEXT IS HYPERLINKED)

Congressional Polarization, the Incumbency Advantage, and Campaign Advertising	2019
Advised by Jun Ishii and Christopher Kingston	Senior Thesis

- Awarded The James R. Nelson Prize for its economic analysis of an important question of public policy.
- Developed a tractable model of campaign spending during a two-candidate election in order to explain how changes in advertising markets can simultaneously lead candidates to adopt more polarized campaign positions and weaken the incumbency advantage.

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 both a dynamic term-structure model (DTSM) and a survey-based model.
- Using the DTSM, the term premium is the difference between the fitted yield of a zero-coupon bond and the model's forecast for the average short-term risk-free rate over a horizon equal to the bond's maturity. Using the survey-based model, the short-date term premium is measured as the market-implied path of short-term interest rates from derivatives less the survey-expected path.
- We find both similar dynamics for both measures of short-dated term premia. In particular, 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, the short-dated term premia 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 percent of days from 2004 to 2020.
- We find that the frequency of Law of One Price violations increases 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 increased 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.**

Accolades

On the Spot Vault Award	Federal Reserve Bank of New York
Awarded for contributions to the *U.S. Economy in the a Snapshot*	2021
Propel for Execution Vault Award	Federal Reserve Bank of New York
Award for contributions to policy work during the COVID-19 crisis	2020
The James R. Nelson Prize	Amherst College Economics Department
Awarded to senior thesis for its economic analysis of an important question of public policy	2019
The Sylvia and Irving Lerner Piano Prize	Amherst College Music Department
Awarded to the student who demonstrated the greatest skill and musicianship as a pianist	2019

Leadership Experience

Madison Senior Center	Madison, WI
Background Piano	March 2023 | Present
Upper Manhattan Mutual Aid	New York, NY
Delivery Volunteer	Sep 2020 | Aug 2021
Amherst College Music Department	Amherst, MA
Pianist; Jazz Combo, Jazz Band, Jazz Quartet	Sep 2015 | May 2019

Skills and Interests:

Programming: Julia · MATLAB · LaTeX · LyX · Stata · Python · SAS · SQL · Excel
Interests: Jazz Piano · Classical Piano · Hiking · Running · Reading