SCOTT A. BRAVE
Federal Reserve Bank of Chicago
Research, Policy & Public Engagement
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EMPLOYMENT

Senior Economist & Economic Advisor, Federal Reserve Bank of Chicago	2023-
Head of Economic Analytics, Morning Consult	2022-2023
Senior Economist, Federal Reserve Bank of Chicago	2021-2022
Senior Policy Economist, Federal Reserve Bank of Chicago	2018-2021
Policy Economist, Federal Reserve Bank of Chicago	2015-2018
Senior Business Economist, Federal Reserve Bank of Chicago	2010-2015
Business Economist, Federal Reserve Bank of Chicago	2008-2010
Senior Associate Economist, Federal Reserve Bank of Chicago	2007-2008
Associate Economist, Federal Reserve Bank of Chicago	2003-2005

EDUCATION

M.B.A., University of Chicago Booth School of Business 2005-2008
With Concentrations in Economics, Statistics, and Finance
B.A., University of Chicago 1999-2003
With Honors in Economics

RESEARCH INTERESTS

Applied Econometrics and Forecasting; Business and Credit Cycles; Sports Economics

https://www.linkedin.com/in/scott-brave-895a561a1
https://scholar.google.com/citations?user=vrf896IAAAAJ&hl=en&oi=ao
https://www.researchgate.net/profile/Scott-Brave-2
https://orcid.org/0000-0002-6659-656X

ACADEMIC PUBLICATIONS

"A Practitioner's Guide and Matlab Toolbox for Mixed Frequency State Space Models" (with R. Andrew Butters and David Kelley) – *Journal of Statistical Software,* Vol. 104, No. 10, 2022

"The Perils of Working with Big Data and a SMALL Checklist You Can Use to Avoid Them" (with R. Andrew Butters and Michael Fogarty) – *Business Horizons*, Vol. 65, No. 4, 2022

"Blending Data to Understand the Economic Impact of Covd-19" (with Rebecca Hutchinson, Christopher J. Kurz, Michael Stepner, & Ron Jarmin) – *Business Economics*, Vol. 57, 2022

"Forecasting Unemployment Insurance Claims in Real Time With Google Trends" (with Dan Aaronson, Andrew Butters, Michael Fogarty, Dan Sacks, and Boyoung Seo) – *International Journal of Forecasting*, Vol. 38, No. 2, 2022

"Predicting Benchmarked U.S. State Employment in Real Time" (with Thom Walstrum, Bill Kluender, and Charles Gascon) – *International Journal of Forecasting,* Vol. 38, No. 3, 2021

"Explaining Urban Economic Growth Through Cluster Complementarity" (with Rick Mattoon) – *Growth and Change: A Journal of Urban and Regional Policy,* Vol. 51, No. 1, 2020

"Uncovering the Sources of Team Synergy: Player Complementarities in the Production of Wins" (with R. Andrew Butters and Kevin A. Roberts) – *Journal of Sports Analytics,* Vol. 5, No. 4, 2019

"Forecasting Economic Activity with Mixed Frequency Bayesian VARs" (with R. Andrew Butters and Alejandro Justiniano), *International Journal of Forecasting,* Vol. 35, No. 4, 2019

"The Competitive Effects of Performance Enhancing Drugs: MLB in the Post-testing Era" (with Kevin A. Roberts) – *Journal of Sports Economics,* Vol. 20, No. 6, 2019

"Calibrating Macroprudential Policy to Forecasts of Financial Stability" (with Jose Lopez) – *International Journal of Central Banking*, Vol. 15, No. 1, 2019

"A New "Big Data" Index of U.S. Economic Activity" (with R. Andrew Butters and David Kelley) – *FRBC Economic Perspectives,* Vol. 43, No. 1, 2019

"The Chicago Fed Survey of Business Conditions: Quantifying the Seventh District's Beige Book Report" (with Thomas Walstrum and Jacob Berman), *FRBC Economic Perspectives*, Vol. 39, 2015

"Estimating Marginal Treatment Effects Using Parametric and Semiparametric Methods" (with Thomas Walstrum), *STATA Journal*, Vol. 14, No. 1, 2014

"Nowcasting Using the Chicago Fed National Activity Index" (with R. Andrew Butters), *FRBC Economic Perspectives*, Vol. 38, 2014

"Diagnosing the Financial System: Financial Conditions and Financial Stress" (with R. Andrew Butters), *International Journal of Central Banking,* Vol. 8, No. 2, 2012

"Monitoring Financial Stability: A financial conditions index approach" (with R. Andrew Butters), *FRBC Economic Perspectives,* Vol. 35, 2011

"In Search of a Robust Inflation Forecast" (with Jonas D.M. Fisher), *FRBC Economic Perspectives*, Vol. 28, 2004

POLICY PAPERS

"Measuring the Effects of the Covid-19 Delta Wave on the U.S. Hourly Labor Market" (with Ross Cole and Stephanie Grove), *Chicago Fed Letter, #461*, 2021

"Looking Down the Road with ALEX: Forecasting near-term U.S. GDP" (with R. Andrew Butters and Michael Fogarty), *Chicago Fed Letter,* #447, 2020

"Calibrating Macroprudential Policies for the Canadian Mortgage Market" (with Jose Lopez and Jeremy Kronick, *CD Howe Institute Commentary,* May 2020

"The Stay-at-Home Labor Market: Google Searches, Unemployment Insurance, and Public Health Orders" (with Daniel Aaronson, R. Andrew Butters, and Michael Fogarty), *Chicago Fed Letter,* #436, 2020

"Measuring Detroit's Economic Progress with the DEAI" (with Ross Cole and Paul Traub), *Chicago Fed Letter,* #434, 2020

"A Big Data View of the U.S. Economy: Introducing the Brave-Butters-Kelley Indexes" (with Ross Cole and David Kelley), *Chicago Fed Letter,* #422, 2019

"What Does Labor Market Tightness Tell Us about the End of an Expansion" (with David Kelley), *Chicago Fed Letter*, #403, 2018

"Introducing the Chicago Fed's New Adjusted National Financial Conditions Index" (with David Kelley), *Chicago Fed Letter*, #386, 2017

"Tracking Detroit's Economic Recovery after Bankruptcy with a New Index" (with Paul Traub), *Chicago Fed Letter*, #376, 2017

"Using Private Sector "Big Data" as an Economic Indicator: The Case of Construction Spending" (with Daniel Aaronson and Ross Cole), *Chicago Fed Letter*, #366, 2016

"Is There Still Slack in the Labor Market" (with Daniel Aaronson and David Kelley), *Chicago Fed Letter*, #359, 2016

"Using the Federal Reserve's Beige Book to Track Economic Activity" (with Thomas Walstrum), *Chicago Fed Letter*, #328, November 2014

"Estimating the Trend in Employment Growth" (with Daniel Aaronson), *Chicago Fed Letter*, #312, July 2013

"Estimating the Trend Rate of Economic Growth Using the CFNAI" (with R. Andrew Butters), *Chicago Fed Letter*, #311, June 2013

"Detecting Early Signs of Financial Instability" (with R. Andrew Butters), *Chicago Fed Letter*, #305, December 2012

"A Different Way to Review the Chicago Fed National Activity Index" (with Max Lichtenstein), *Chicago Fed Letter*, #298, May 2012

"Predicting Gross State Product Growth with the Chicago Fed's Midwest Economy Index" (with Norman Wang), *Chicago Fed Letter*, #293, December 2011

"A Snapshot of the Midwest Economy: Past and Present" (with Chenfei Lu), *Chicago Fed Letter*, #280, November 2010

"Chicago Fed National Activity Index Turns Ten – Analyzing Its First Decade of Performance" (with R. Andrew Butters), *Chicago Fed Letter*, #273, April 2010

"The Chicago Fed National Activity Index and Business Cycles", *Chicago Fed Letter*, #268, November 2009

"How Does Labor Adjustment in This Recession Compare with the Past?" (with Daniel Aaronson), *Chicago Fed Letter*, #263, June 2009

"Economic Trends and the Chicago Fed National Activity Index", *Chicago Fed Letter*, #250, May 2008

WORKING PAPERS

"Pulling Back the Curtain on Inflation Psychology with Morning Consult Economic Intelligence (with Kayla Bruun) – Morning Consult White Paper

"Rebuilding Competitive Balance in MLB" (with Levi Bognar, Kevin Roberts, Andrew Butters) – presented at the 2022 SABR Analytics and 2023 MIT Sloan Sports Analytics conference

"The Detection and Prevention of Cheating: Pay and Performance-enhancing Drugs in Minor League Baseball" (with Daniel Aaronson and Ross Cole) – presented at the 2020 SABR Analytics Conference and available on SSRN

"Tracking U.S. Consumers in Real Time with a New Weekly Index of Retail Trade" (with Michael Fogarty, Ezra Karger, Daniel Aaronson, and Spencer Krane), *Federal Reserve Bank of Chicago Working Paper Series, 2021-05*

"The Perils of Working with Big Data and a SMALL Framework You Can Use to Avoid Them" (with R. Andrew Butters and Michael Fogarty), *Federal Reserve Bank of Chicago Working Paper Series, 2020-35* – revision published at *Business Horizons*

"Using the Eye of the Storm to Predict the Wave of Covid-19 UI Claims" (with Daniel Aaronson, R. Andrew Butters, Daniel Sacks, and Boyoung Seo), *Federal Reserve Bank of*

Chicago Working Paper Series, 2020-10 and *CEPR Covid Economics: Vetted and Real-Time Papers* 2020-9 – revision published at *International Journal of Forecasting*

"Predicting Benchmarked U.S. State Employment in Realtime" (with Thom Walstrum, Bill Kluender and Charles Gascon), *Federal Reserve Bank of Chicago Working Paper Series 2019-11* – revision published at *International Journal of Forecasting*

"The Chicago Fed DSGE Model" (with Jeffrey R. Campbell, Jonas D.M. Fisher, and Alejandro Justiniano), *Federal Reserve Bank of Chicago Working Paper Series 2012-02*

"Federal Reserve Policies and Financial Market Conditions During the Crisis" (with Hesna Genay), *Federal Reserve Bank of Chicago Working Paper Series 2011*-05

"Gathering Insights on the Forest from the Trees: A New Metric for Financial Conditions" (with R. Andrew Butters), *Federal Reserve Bank of Chicago Working Paper Series 2010-07* – revision published at *International Journal of Central Banking*

"Competition within a Cartel: Correction" (with Donald G. Ferguson and Kenneth G. Stewart), *University of Victoria Econometrics Working Paper Series*

BOOK CHAPTERS

"A Closer Look at the Chicago Fed's Activity Indexes" Ch. 3 of Alternative Economic Indicators. Hueng, C. James, ed. 2020. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. https://research.upjohn.org/up_press/263/

BLOGS

"Initial UI Claims and Google Trends in the Post-Pandemic Era" (with Levi Bognar and Andrew Butters), *Chicago Fed Insights*, June 1, 2023
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2023/ui-claims-google-trends

"Introducing CARTS: A New Index Tracking National Retail Spending" (with Ross Cole, Michael Fogarty, Ezra Karger, and Liam Puknys), *Chicago Fed Insights*, July 12, 2021
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2021/introducing-carts

"A First Look at the Employment Response by Industry to Covid-19 Vaccine Take-Up" (with Stephanie Grove), *Chicago Fed Insights*, July 1, 2021
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2021/industry-employment-and-covid-vaccination

"What Does Detroit's 2019 Per Capita Income Growth Tell Us About the City's Pre-Pandemic Renaissance?" (with Ross Cole, Elizabeth Kepner, Leslie McGranahan, and Paul Traub), *Michigan Economy Blog*, May 6, 2021
https://www.chicagofed.org/publications/blogs/michigan-economy/2021/detroit-pre-pandemic-pci-growth

"What Can Revisions to the NFCI Tell Us About Stock Market Volatility?" (with Ross Cole and Michael Fogarty), *Chicago Fed Insights,* May 4, 2020.
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2020/nfci-revisions

"Measuring the Decline in Economic Activity During the Covid-19 Pandemic" (with Ross Cole), *Chicago Fed Insights*, June 15, 2020.
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2020/measuring-decline-in-economic-activity

"A Closer Look at the Correlation Between Google Trends and Initial Unemployment Insurance Claims" (with R. Andrew Butters and Michael Fogarty), *Chicago Fed Insights*, June 17, 2020.
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2020/closer-look-google-trends-unemployment

"Another Look at the Correlation Between Google Trends and Initial Unemployment Insurance Claims" (with R. Andrew Butters and Michael Fogarty), *Chicago Fed Insights*, July 7, 2020.
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2020/another-look-google-trends-unemployment

"Measuring the Recovery in Economic Activity During the Covid-19 Pandemic" (with Ross Cole), *Chicago Fed Insights*, August 5, 2020.
https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2020/measuring-recovery-in-economic-activity

CONFERENCES

Presented (P), Session Chair (SC), Discussant (D), Program Committee (SPC), Co-Chair (CC)

2022 – NABE Annual Conference (P)
Paris School of Economics Nowcasting Workshop (P)

2021 – 15th International Conference on Computational and Financial Econometrics (SC,P)
NABE Tec Conference (P)
15th International Conference on Computational and Financial Econometrics (P)

2020 – 14th International Conference on Computational and Financial Econometrics (CC)
17th NABE Economic Measurement Seminar (P)

2019 – EIA Workshop on Financial and Physical Energy Market Linkages (D)
13th International Conference on Computational and Financial Econometrics (SPC,P,SC)

2018 – Annual International Journal of Central Banking Research Conference (P)

2017 – 23rd International Conference on Computing in Economics and Finance (P,SC)
International Banking, Economics, and Finance Annual Meeting (P)
Society for Economic Measurement Annual Conference (P)
European Banking Authority Research Workshop (P,D)

2016 – 10th MIT Sloan Sports Analytics Conference (P)
KDD Conference (P)
CIRET Conference (P,D)

2015 – International Banking, Economics, and Finance Annual Meeting (D)
9th International Conference on Computational and Financial Econometrics (P,SC)
Chicago Chapter of the ASA Prediction and Forecasting Conference (P)

2013 – 7th International Conference on Computational and Financial Econometrics (P,SC)

2012 – 6th International Conference on Computational and Financial Econometrics (P)

2011 – 17th International Conference on Computing in Economics and Finance (P,SC)
Midwest Finance Association Annual Meeting (P)

2010 – International Banking, Economics, and Finance Annual Meeting (P)

PROFESSIONAL ACTIVITIES

Referee – Journal of Applied Econometrics, Journal of Money, Credit, and Banking; International Journal of Forecasting; Empirical Economics; Journal of Financial Stability; Journal of Business Cycle Research; Journal of Sports Economics; STATA Journal
Member – Society for Economic Measurement

AWARDS

Federal Reserve Bank of Chicago President's Award for Excellence, 2021 & 2009
Federal Reserve Bank of Chicago Agility Award, 2020
Western Michigan University Werner Sichel Series Honorary Lecturer, 2018-19