# SANJAY RAJ SINGH April 2024

#### **Contact Information:**

Federal Reserve Bank of San Francisco Phone: (415) 974-3018

Economic Research Email: <a href="mailto:sanjay.singh@sf.frb.org">sanjay.singh@sf.frb.org</a>

101 Market Street Web: <a href="https://www.frbsf.org/economic-research/economists/sanjay-singh/">https://www.frbsf.org/economic-research/economists/sanjay-singh/</a>

Department of Economics Phone: (530) 752-9938
One Shields Ave Email: <a href="mailto:sjrsingh@ucdavis.edu">sjrsingh@ucdavis.edu</a>
University of California Davis Web: <a href="mailto:https://ssingh.ucdavis.edu/">https://ssingh.ucdavis.edu/</a>

Davis, CA 95616

# **Current Employment**

July 2023 – Senior Economist, Federal Reserve Bank of San Francisco

July 2017– Assistant Professor, Department of Economics, University of California Davis

(On-leave at SF Fed: July 2022–June 2023)

**Education**:

2017 Ph.D., Economics, Brown University

Thesis committee: Gauti B. Eggertsson, Neil R. Mehrotra and David N. Weil

2011 B.A. (Honours) Economics, St. Stephen's College, University of Delhi

#### **Research Interests:**

Macroeconomics, Monetary Economics, International Finance, Economic Growth

#### **Published Articles:**

"The Long-Run Effects of Monetary Policy" (with Oscar Jordà and Alan M. Taylor)

The Review of Economics and Statistics, accepted.

"Understanding Persistent ZLB: Theory and Assessment" (with Pablo Cuba-Borda)

American Economic Journal: Macroeconomics, forthcoming.

"Incorporating Diagnostic Expectations into the New Keynesian Framework" (with Jean-Paul L'Huillier and Donghoon Yoo)

The Review of Economic Studies, forthcoming.

"Supply or Demand? Policymakers' Confusion in the Presence of Hysteresis" (with Antonio Fatás)

European Economic Review, January 2024, 161, 104617.

"Currency Areas, Labor Markets, and Regional Cyclical Sensitivity" (with Katheryn N. Russ and Jay C. Shambaugh) *IMF Economic Review* 72, 152–195 (2024).

"Bond Premium Cyclicality and Liquidity Traps"
(with Nicolas Caramp)

The Review of Economic Studies, November 2023, 90(6): 2822–2879.

"Longer-Run Economic Consequences of Pandemics" (with Oscar Jordà and Alan M. Taylor)

The Review of Economics and Statistics, January 2022, 104(1): 166–175.

"Output Hysteresis and Optimal Monetary Policy" (with Vaishali Garga)

Journal of Monetary Economics 117 (2021): 871–886.

"Log-Linear Approximation versus an Exact Solution at the ZLB in the New Keynesian Model" (with Gauti B. Eggertsson)

Journal of Economic Dynamics and Control, 2019, 105 (C):21-43.

"The Effect of Foreign Shocks on the Indian Economy" (with Aeimit Lakdawala)

India Policy Forum 2019 Volume 16:1–47.

"A Contagious Malady? Open Economy Dimensions of Secular Stagnation" (with Gauti B. Eggertsson, Neil R. Mehrotra, and Lawrence H. Summers) *IMF Economic Review* 64, 581–634 (2016).

"Tariffs and the Macroeconomy" (with Xiangtao Meng and Katheryn N. Russ)

Oxford Research Encyclopedia in Economics and Finance, July 2023.

## **Completed Working Papers:**

"Low Risk Sharing with Many Assets" (with Emile A. Marin)

"The Financial Origins of Non-Fundamental Risk" (with Sushant Acharya and Keshav Dogra)

"Distribution of Market Power, Endogenous Growth, and Monetary Policy" (with Yumeng Gu)

"Asset Prices and Credit with Diagnostic Expectations" (with James Cloyne, Oscar Jordà, and Alan M. Taylor)

#### Other: articles, literature reviews, and research summaries

"Does Monetary Policy Have Long-run Effects?"
(with Òscar Jordà and Alan M. Taylor)
Federal Reserve Bank of San Francisco Economic Letter 2023-23, September 5, 2023.

"The Longer-Run Economic Consequences of Pandemics" (with Òscar Jordà and Alan M. Taylor)
VoxEu.org, 8 April 2020.

"The Long Economic Hangover of Pandemics" (with Oscar Jordà and Alan M. Taylor)

Finance and Development, June 2020 Vol 57 Number 2: 12–15.

# Refereeing:

American Economic Review, Review of Economic Studies, American Economic Journal: Macroeconomics, Journal of Monetary Economics, Journal of Political Economy Macroeconomics, The Review of Economics and Statistics, Journal of Economic Theory, AER: Insights, Journal of International Economics, The Economic Journal, European Economic Review, Review of Economic Dynamics, IMF Economic Review, Journal of Economic Growth, Economic Letters, Journal of Money Credit and Banking, International Journal of Central Banking, Journal of Economic Dynamics and Control, Journal of European Economic Association, Macroeconomic Dynamics, Journal of Mathematical Economics, Scandinavian Journal of Economics, B. E. Journal of Macroeconomics, Journal of Development Economics, World Development, Health Economics, Economica (LSE), Economic Inquiry, Journal of Economic Surveys, The Journal of the Economics of Ageing

#### **Presentations** (including scheduled)

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2025	National University of Singapore
2024	ECB Workshop on Productivity (Invited Keynote), Berkeley Haas (Finance), Federal Reserve System Committee on International Economic Analysis Annual Conference at Minneapolis Fed, SED Annual Meeting (Barcelona)
2023	AEA Annual Meeting (discussant), San Francisco Fed, Northwestern, 17th Annual Cowles Conference on General Equilibrium and its Applications, University of Nevada Las Vegas, Bank of Finland, CEPR ESSIM – IMF Program, Barcelona Summer Forum (Expectations in Dynamic Macroeconomic Models), CEBRA Annual Meeting, NBER Summer Institute (EFG Program Meeting), Purdue University, Ashoka University Annual Economics Conference
2022	NBER Spring ME (discussant), UC San Diego, Bank of England, Federal Reserve Board DC, IMF, Institute of Economic Growth Delhi—CDE (DSE) Joint Seminar, New York Fed, San Francisco Fed, Barcelona Summer Forum (Financial Intermediation & Risk), Salento Macro 2022, Midwest Macro Fall 2022, 29th Annual Symposium of Society for Nonlinear Dynamics, Theories and Methods in Macroeconomics 2022, UC Davis Faculty Brown Bag, 2022 Financial Stability Conference at the Cleveland Fed, NBER Mid-year EFSF <sup>^</sup> (^co-author presented)
2021	AEA Annual Meeting, UC Berkeley (Economic History), European University Institute, SED (Minneapolis), NBER Summer Institute (EFCE), North American Summer Meeting of Econometric Society, Bank of Canada Workshop on Monetary Policy Research, 24th Central Bank Macroeconomic Modelling Workshop, LACEA-LAMES, Liquidity in Macroeconomics Workshop (Virtual), 16th ACEGD at ISI Delhi, Winter School at Delhi School of Economics, 19th Macroeconomics and Finance Conference at IGIDR Mumbai, UC Davis Macro and Theory Brown Bags
2020	Bank of Finland and CEPR Joint Conference on Monetary Economics and Reality, Banco de México, Econometric Society World Congress, University of Tokyo, UC Davis, Western Economics International Association Conference, Climate Change Pandemics and Monetary Policy Conference by DNB-BBk-Norges Bank, European Meeting of Econometric Society, Winter School at Delhi School of Economics

	Meeting, ECB International Research Forum on Monetary Policy, UC Davis Theory Brown Bag
2019	Barcelona Summer Forum, NBER (IFM) Summer Institute, University of Wisconsin–Madison, University of Zurich, Federal Reserve Banks of San Francisco and St Louis, Fed Board, Annual Inflation Targeting Conference at Banco Centralo do Brasil, Annual Swiss National Bank Conference, The Changing Economy and the Business Cycle Conference at Norges Bank, SED Annual Meeting, Tsinghua Macro workshop, UC Davis, Delhi School of Economics, Indian Statistical Institute Delhi, Spring Midwest Macro
2018	Fall Midwest Macro, North American Summer Meeting of the Econometric Society, CAFRAL–Reserve Bank of India
2017	Brandeis University, Federal Reserve Banks of Boston and Cleveland, Fed Board, Rutgers University, UC Davis, UC Santa Cruz, Computing in Economics and Finance Workshop, ECB workshop on Monetary policy in non-standard times, Fifth ECB/CBRT conference, Midwest Macro Meetings (Spring), North American Summer Meeting of the Econometric Society
Grants	
2018–24	UC Davis Senate Small Research Grants
2017–24	LIC Davis Canata Dagagnah Tugual Arranda
2017-24	UC Davis Senate Research Travel Awards
Honors and Awards:	OC Davis Senate Research Travel Awards
	Keynote Speaker, European Central Bank Workshop on Possible Impact of Monetary Policy on Productivity and Long-Term Growth
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Honors and Awards: 2024 2021	Keynote Speaker, European Central Bank Workshop on Possible Impact of Monetary Policy on Productivity and Long-Term Growth  Dr. Subir V. Gokarn Best Paper Award for <i>The Long-run Effects of Monetary Policy</i> at 19 <sup>th</sup> Macroeconomics and Finance Conference, IGIDR Mumbai (joint with Oscar Jordà and Alan M Taylor)  Best Paper Award in Macro for <i>Bond Premium Cyclicality and Liquidity Traps</i> at the Delhi Winter School (joint with Nicolas Caramp)
Honors and Awards: 2024 2021 2020 2016–2017	Keynote Speaker, European Central Bank Workshop on Possible Impact of Monetary Policy on Productivity and Long-Term Growth  Dr. Subir V. Gokarn Best Paper Award for <i>The Long-run Effects of Monetary Policy</i> at 19 <sup>th</sup> Macroeconomics and Finance Conference, IGIDR Mumbai (joint with Oscar Jordà and Alan M Taylor)  Best Paper Award in Macro for <i>Bond Premium Cyclicality and Liquidity Traps</i> at the Delhi Winter School (joint with Nicolas Caramp) Brown University Dissertation Fellowship
Honors and Awards: 2024 2021	Keynote Speaker, European Central Bank Workshop on Possible Impact of Monetary Policy on Productivity and Long-Term Growth  Dr. Subir V. Gokarn Best Paper Award for <i>The Long-run Effects of Monetary Policy</i> at 19 <sup>th</sup> Macroeconomics and Finance Conference, IGIDR Mumbai (joint with Oscar Jordà and Alan M Taylor)  Best Paper Award in Macro for <i>Bond Premium Cyclicality and Liquidity Traps</i> at the Delhi Winter School (joint with Nicolas Caramp)

Cancelled due to Covid-19: NBER ME Spring Meeting, NBER Japan Project

#### **Teaching:**

2011

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Topics in Macroeconomics (second year PhD), UC Davis (Spring 2018, Spring 2019, Spring 2020, Winter 2021, Spring 2022, Fall 2023, Fall 2024)

Bank of Tokyo-Mitsubishi (Sanwa Bank) Scholarship, St. Stephen's College

St. Stephen's College *Centenary* Prize & Medal K.C. Nag Economics Prize, St. Stephen's College

Intermediate Macroeconomic Theory, UC Davis (2x Winter 2018, 2x Winter 2019, 2x Winter 2020, Winter 2021, Spring 2021, 2x Winter 2022, Fall 2023)

# PhD Thesis Advising (Year of Graduation, First Placement)

Johannes Matschke, 2021, Federal Reserve Bank of Kansas City Hyundo Joo, 2022, Bank of Korea
Ece Özge Emeksiz, 2023, International Monetary Fund
Yumeng Gu, 2023, International Monetary Fund
Hanguo Huang, 2023, Shandong University (co-chair)
Sebastián Amador, 2024, University of Kentucky
Jinyoung Seo, 2024, Wake Forest University (co-chair)

#### **Discussions:**

- 1. *Monetary Non-Neutrality in the Cross-Section*, E. Rubbo, Macroeconomics and Monetary Policy Annual Conference of Federal Reserve Bank of San Francisco, 2024.
- 2. Food, Fuel, and Facts: Distributional Effects of Global Prices, S. Bhattarai, A. Chatterjee, and G. Udupa, CAFRAL conference on Financial System and Macroeconomy in Emerging Economies, 2023.
- 3. Can Today's and Tomorrow's World Uniformly Gain from Carbon Taxation? F. Kubler, L. Kotlikoff, A. Polbin, and S. Scheidegger, FRBSF and European Economic Review conference on "The effects of climate on the business cycle and the economy", 2023.
- 4. Market Power and Monetary Policy Transmission. R. Duval, D. Furceri, R. Lee and M. Tavares, ASSA 2023
- 5. Assessing Central Bank Commitment to Inflation Targeting: Evidence from Financial Market Expectations in India. V. Garga, A. Lakdawala and R. Sengupta, CAFRAL conference on Financial System and Macroeconomy in Emerging Economies, 2022
- 6. Diagnostic Business Cycles. F Bianchi, C Ilut, and H Saijo, NBER Monetary Economics Spring 2022
- 7. Dissecting Mechanisms of Financial Crises: Intermediation and Sentiment. A Krishnamurthy and W Li, CESifo Macro, Money and International Finance, 2021
- 8. Foreign-currency exposures and the financial channel of exchange rates: Eroding monetary policy autonomy? G Georgiadis and F Zhu, CEBRA-IFM Annual Conference, 2019
- 9. Zombie Credit and (Dis-)inflation: Evidence from Europe. V Acharya, M Crosignani, T Eisert and C Eufinger, Bank of Finland and CEPR Joint Conference on Monetary Economics and Reality, 2019
- 10. Zombie Firm Dynamics and China's Monetary Policy. W Guo, D Jia and TW Li, 11th Tsinghua Workshop in Macroeconomics, 2019
- 11. Taking away the Punch Bowl: Monetary Policy and Financial Instability. KD Sheedy, XXI Annual Inflation Targeting Conference, 2019
- 12. Golden Fetters and the Causal Effects of Countercyclical Monetary Policy. KJ Mitchener and G Pina, West Coast Workshop in International Finance, 2018
- 13. Multinational Firms, Trade, and the Trade-Comovement Puzzle. G Udupa, CAFRAL conference on Financial System and Macroeconomy in Emerging Economies, 2018

#### **Conference/Workshop Organization**

Co-Organizer for the Biennial Pacific Basic Research Conference, Federal Reserve Bank of San Francisco, November 2024

Program Committee for the Third, the Fourth, and the Fifth Annual Conference on "Financial System and the Macroeconomy in Emerging Economies" organized by CAFRAL (RBI), December 2022, December 2023, and December 2024

Co-Organizer for "Liquidity in Macroeconomics Workshop", Virtual on 12/04/2020, 04/23/2021, 11/19/2021, in-person in Vancouver on 09/24/2022, in-person at FRBSF on 05/19/2023, in-person at St. Louis Fed on 09/29/2023, in person at UC Davis in Fall 2024

Co-Organizer for International/Macro Workshop at UC Davis, Fall 2018, Winter 2019, Fall 2020

# **Department Service at UC Davis**

2019-present	Honor Committee
2018-present	Visiting Scholars Coordinator
2018–2019	International/Macro reading group co-organizer
2017-present	IT Committee
2017-present	PhD Qualifying Exam Committee, Department of Economics and Department
	of Agricultural & Resource Economics, University of California, Davis

#### **Professional Society Affiliations/Memberships:**

American Economic Association, Macro Finance Society, Econometric Society

#### **Academic Visits**

2018–2021	Visiting Scholar at the Federal Reserve Bank of San Francisco
December 2019	Short-term Visitor at the CAFRAL (RBI) Mumbai
2019-2022	Short-term Visitor at the Federal Reserve Board of Governors (IFD)
May 2022	Short-term Visitor at the Federal Reserve Bank of Cleveland
May 2023	Short-term Visitor at the Federal Reserve Bank of New York
May 2023	Short-term Visitor at the Bank of Finland
2022–2023	Visiting Fellow at the Federal Reserve Bank of San Francisco

#### **Non-Academic Speaking Engagements**

2024 Thomson Reuters Institute 2024 Legal Executive Briefing

Other Personal Information Citizenship: India. Born: May 6, 1990