SEBASTIÁN AMADOR sites.google.com/view/sebastian-amador jsamador@ucdavis.edu +1(530)-760-5008 (Updated July 2024)

## **Education**

Ph.D. in Economics, University of California, Davis, 2024.M.A. in Economics, with honors, Pontificia Universidad Javeriana, 2016.B.A. in Economics, Pontificia Universidad Javeriana, 2012.

## References

Professor Òscar Jordà (Thesis Chair) Department of Economics University of California, Davis Federal Reserve Bank of San Francisco E-mail: ojorda@ucdavis.edu

Asst. Prof. Sanjay Singh Department of Economics University of California, Davis Federal Reserve Bank of San Francisco E-mail: sjrsingh@ucdavis.edu **Professor Alan M. Taylor** Department of Economics University of California, Davis E-mail: amtaylor@ucdavis.edu

Asst. Prof. Nicolas Caramp Department of Economics University of California, Davis E-mail: ncaramp@ucdavis.edu

### Work experience

Assistant Professor, Gatton College of Business and Economics, University of Kentucky (2025).
Research Fellow, London Business School (2024-2025).
Ph.D. Intern, Bank of Finland (2022).
Research Assistant, Professors Katherine Eriksson and Gary Richardson (2022).
Teaching Assistant, University of California, Davis (2019-2024).
Economist, Colombian Central Bank (2012-2018).
Research Assistant, Colombian Central Bank (2011-2012).

# Research

**Primary fields:** Macroeconomics and Monetary Policy. **Secondary fields:** Economic Growth, Economic History, International Economics.

# Job Market Paper

# Vulnerable Technological Adoption

I examine the lasting impact of productivity shocks on technological adoption using a model where firms, which face heterogeneous fixed costs for implementing and operating a technology, must decide whether to adopt or abandon it after an unexpected productivity shock. Due to complementarity in the production of the final good, individual technological choices are interlinked, thereby amplifying and prolonging the effects of large shocks. By merging international cross-country data from three databases and employing a local projections method designed to detect non-linearities without relying on any a priori functional form assumptions, I find that the estimates align closely with the model's predictions. A simplified version of the model, calibrated to match the empirical estimates, reveals that subsidizing the operational costs of the technology leads to welfare improvements by averting harm to the economy's productive potential.

# Working papers

Hysteresis, Endogenous Growth, and Monetary Policy Nominated for best paper award, Delhi Winter School 2021 (CDE and Econometric Society). I provide evidence of substantial hysteresis (i.e., a situation in which temporary shocks have long-run effects) from monetary shocks on two sources of endogenous growth; human capital and technological adoption. This contribution is the first to test for the presence of this phenomenon in direct measures of the supply-side potential of economies, instead of indirect measures, e.g., TFP. To estimate the effects of exogenous monetary policy shocks, I improve on the trilemma identification by incorporating a mean-unbiased instrumental variable estimator. Results show substantial hysteresis in both human capital and technological adoption. Importantly, these are found to be asymmetric, as only contractionary shocks result in long-lasting responses. I evaluate the aggregate importance of monetary hysteresis with a growth accounting exercise. Across the 17 countries in the sample, the accumulated average cost of monetary hysteresis ranges between 1.2 and 9.6% of TFP, for human capital and the adoption of electricity, respectively.

## Work in progress

## Monetary Policy, Growth, and Sectoral Reallocation (with Michaela Elfsbacka-Schmöller) Outstanding paper in ChAMP network, Ph.D. Internship at the Bank of Finland, 2022.

This paper explores the sectoral reallocation effects of monetary policy shocks, and their implications. First using data for 65 industries for the period 1948-2014, we find that monetary policy shocks reallocate resources away from manufacturing. We study the implications of this phenomenon, considering differential sectoral contributions to aggregate total factor productivity (TFP) growth. Previous work on sectoral reallocation has not yet accounted for a key property: sectors have heterogenous growth rates of TFP with direct effects on macroeconomic dynamics and monetary policy. In particular, reallocation between sectors with heterogeneous growth affects endogenous growth of aggregate TFP and thus potential output and, moreover, inflationary pressures through marginal costs. To address this gap in the literature, we develop a multi-sector New Keynesian model with endogenous growth and heterogeneous sectoral contributions to long-run growth. Specifically, we contribute to the literature by (i) examining the role of nominal rigidities under frictional reallocation, (ii) investigating the role of monetary policy under various asymmetric shocks, and (iii) studying the long-run impact of reallocation episodes. Our findings suggest that the reallocation-induced TFP response plays a critical role in the conduct of monetary policy, while monetary policy, in turn, shapes the reallocation process and underlying macroeconomic adjustments.

### **Publications**

**Determinants of housing bubbles' duration in OECD countries** (With Gómez-Gonzalez, J., and Sanin-Restrepo, S.). International Finance, Vol. 21(2), 140-157, 2018.

Finance Neutral Potential Output Economic Systems, Vol. 41(3), 389-407, 2017.

*Mind the Gap: Computing Finance-Neutral Output Gaps in Latin-American Economies* (With Tenjo, F., Gómez-Gonzalez, J., Ojeda, J., and Jaulin, O.). Economic Systems, Vol. 40(3), 335-518, 2016.

Credit and Business Cycles: An Empirical Analysis in the Frequency Domain (With Gómez-Gonzalez, J., Gaitán, C., Villamizar, M. and Zárate, H.). ESPE, Vol. 33(78), 176-189, 2015.

Loan Growth and Bank Risk: New Evidence (With Gómez-González, J.E. and Murcia, A.). Financial Markets and Portfolio Management, Vol. 27(4), 365-379, 2013.

*El Mercado Mundial del Café y su Impacto en Colombia* (With Caicedo, E., Cano, C., Tique, E. and Vallejo, C.). Book Chapter, Banco de la República, 2013.

#### Selected Policy Documents

*New Keynesian NAIRU and the Okun Law: An application for Colombia.* Borradores de Economía; No. 1034, Banco de la República, 2018.

*Natural Rate of Interest Estimates for Colombia* (With Paula Beltrán). Inflation Report, December 2015, Banco de la República.

A New Estimate of the Non-Inflationary Rate of Unemployment. Inflation Report, March 2017, Banco de la República.

### Awards and achievements

Miguel Vélez Fellowship UC Davis Graduate Studies and Economics Department, 2023.

Research and Travel Award UC Davis Economics Department, 2022 and 2023.

Departmental Fellowship UC Davis, 2018-2019.

Lauchlin Currie Scholarship for Ph.D. Studies Banco de la República, 2017.

Performance Excellence Award Banco de la República, 2017.

Javeriana Order of Academic Excellence, Pontificia Universidad Javeriana, 2016.

7<sup>th</sup> Place National Economics ECAES Exam Economics exam for all undergraduates, ICFES, 2010-II.

Honor Mention for Best ECAES Exam Pontificia Universidad Javeriana, 2010-II. 1<sup>st</sup> Place, Economics Essay Contest Pontificia Universidad Javeriana, 2010 & 2008. Outstanding Academic Performance Pontificia Universidad Javeriana, 2011 & 2008.

### Presentations (including forthcoming)

University of Kentucky, Mar. 2024. Amherst College, Feb. 2024. Banco de México, Feb. 2024. Board of Governors of the Federal Reserve System, Jan. 2024. Bank of Canada, Jan. 2024. American Economic Association Annual Meeting, Jan. 2024 (canceled), Jan. 2023 IEA World Congress, Universidad EAFIT, Dec. 2023 (canceled). 18<sup>th</sup> Annual Economics Graduate Student Conference, WashU, Oct. 2023 Macroeconomics Lunchtime Presentation, UC Davis, Oct. 2023, Feb. 2023, Mar. 2023, Apr. 2021. Economic History Mini-Workshop, UC Davis, Apr. 2023. Midwest Macro Meeting, Southern Methodist University, Nov. 2022. LACEA Meeting, Universidad del Pacifico, Nov. 2022. Latin American Meeting of the Econometric Society, Universidad del Pacifico, Nov. 2022. Researchers' LaUNCH, Bank of Finland, Sep. 2022. Bank of Finland's Villa Research Workshop, Aug. 2022. Winter School, Centre for Development Economics and Econometric Society, Dec. 2021. Economic History Lunchtime Presentation, UC Davis, Apr. 2021. Economics Department Seminar, Universidad Javeriana, Nov. 2017, Jun. 2016. Economics Seminar, Banco de la República, Jul. 2016, Jun. 2016. XX Meeting of CEMLA, Banco Central de la República Dominicana, Oct. 2015.

## Teaching experience

Teaching fields: Macroeconomics, Time series econometrics, Economic history, Development, Finance.

### Graduate level

Time Series Topics: Professor Öscar Jordà (Spring 2021, 2022, 2023).

### Undergraduate level

Principles of Macroeconomics: Professor Nicolas Caramp (Winter 2020).
Intermediate Macroeconomics: Professor Shahar Sansani (Winter 2023).
Economic Development in Weak States: Professor Arman Rezaee (Fall 2020, 2022, 2023).
Economic History of the United States: Professor Mark Siegler (Summer 2020, 2021, 2023; Fall 2021).
Economy of East Asia: Professor Katheryn Russ (Winter 2022).
World Economic History: Professor Christopher Meissner (Spring 2020, 2021).
Money and Banking: Professor Kristin Van Gaasbeck (Summer 2020).
Economics of International Migrations: Professor Santiago Perez (Fall 2019).

# **Other Profesional Information**

Service activities: Macroeconomics Presentation Series Coordinator (UC Davis, 2022-2023), Graduate Student Association Treasurer (UC Davis, 2020-2021), Graduate Program Mentor (UC Davis, 2019-2023). Referee for: Revista de Economía Institucional and Ensayos sobre Política Económica.

**Memberships:** American Economic Association, Econometric Society, Latin American and Caribbean Economic Association, Western Economic Association, MacroFriends, Commission on Wage and Labor Policy Negotiation (Ministry of Labor, Colombia, 2012-2018).

Citizenship: Colombian. Languages: Spanish (native), English (fluent).