

# Mai Hakamada

University of California, Santa Cruz

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## Contact Information

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Mobile: (831) 295-2544

Nationality: Japanese (F-1 Visa)  
Gender: Female

## Research Interests

Primary: Monetary Economics, Macro-finance, Macroeconomics  
Secondary: International Macroeconomics

## References

|   |  |                |
|---|--|----------------|
| Professor Carl Walsh (Chair)                | <a href="mailto:walshc@ucsc.edu">walshc@ucsc.edu</a> | (831)-459-4082 |
| Professor Galina Hale (Chair)               | <a href="mailto:gbhale@ucsc.edu">gbhale@ucsc.edu</a> | (831)-459-4745 |
| Professor Michael Hutchison                 | <a href="mailto:hutch@ucsc.edu">hutch@ucsc.edu</a>   | (831)-459-2600 |
| Professor Hikaru Saijo (Teaching Reference) | <a href="mailto:hsaijo@ucsc.edu">hsaijo@ucsc.edu</a> | (831)-459-4453 |

## Education

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| Ph.D. in Economics, University of California, Santa Cruz | June 2022 (expected) |
| M.A. in Economics, University of California, Santa Cruz  | June 2017            |
| M.A. in Economics, Waseda University, Japan              | June 2016            |
| B.A. Law, Keio University, Japan                         | April 2013           |

## Job Market Paper

### “Risk Taking, Banking Crises, and Macroprudential Monetary Policy”

*Conference: 2021 AEA (Macroprudential Policies paper session), 2021 CEA, 2021 WEAI, 2021 EEA, 2021 24th Central Bank Macroeconomic Modelling Workshop*  
*Coverage: World Bank All About Finance blog*

Should a central bank address buildups of bank risk taking and the associated increased probability of financial crises? I address this question by evaluating the macroprudential role of monetary policy in an otherwise standard New Keynesian model in which banks' portfolio risk taking and bank runs are endogenous. Banks accumulate risks on their assets in a so-called “search for yield” when risk premiums shrink due to an accommodative interest rate environment. Consistent with my empirical findings from bank-level balance sheet data, my model predicts that holding riskier assets generates self-fulfilling vulnerability to a financial panic. I then analyze the welfare impacts of an augmented Taylor rule that responds to bank risk taking. A higher interest rate during a financial boom can reduce vulnerabilities to a bank run by unwinding the compression of the risk premium and, hence, excessive risk taking by banks. The optimal augmented Taylor rule trades off the loss from a curtailed credit supply during booms and the gain from the lowered probability of financial panic amid recessions. Under reasonable parameterizations, the net welfare gain from implementing the augmented Taylor rule is larger than the net gain from having a standard Taylor rule policy.

## Working Paper

### “Financial Crises, Investment Slumps, and Output Hysteresis (with Valerie Cerra, and Ruy Lama),” IMF Working Paper (WP/21/170)

*Conference: 2020 AEA (presented by co-author), 2019 IMF ICD seminar*

One of the most puzzling facts in the wake of the Global Financial Crisis (GFC) is that output across advanced and emerging economies recovered at a much slower rate than anticipated by most forecasting agencies. This paper delves into the mechanics behind the observed slow recovery and the associated permanent output losses in the aftermath of the crisis, with a particular focus on the role played by financial frictions and investment dynamics. The paper provides two

main contributions. First, we empirically document that lower investment during financial crises is the key factor leading to permanent losses of output and total factor productivity (TFP) in the wake of a crisis. Second, we develop a DSGE model with financial frictions and capital-embodied technological change capable of reproducing the empirical facts. We also evaluate the role of financial policies in stabilizing output and TFP in response to a financial crisis.

**“The Effects of Financial Heterogeneity on the Bank Balance Sheet Channel of Monetary Policy in a Monetary Union”**

*Conference: 2020 Central Bank Macroeconomic Modelling Workshop, poster session, 2022 AEA, poster session (scheduled)*

In this study, I investigate the impact of heterogeneity in financial frictions across the Eurozone on bank balance sheet dynamics and the bank balance sheet channel of monetary policy. The bank balance sheet channel of monetary policy means the transmission channel of monetary policy through the banks' balance sheet. In particular, when banks' net worth is high due to easing monetary policy, banks supply more credit into the loan market. Using country-level bank balance sheet data, I estimate financial frictions in a two-country, monetary union New Keynesian model with banks. The results indicate that financial frictions in core countries are significantly smaller than peripheral countries in the Eurozone. Having financial heterogeneity, my model predicts financial shocks cause more severe recessions in peripheral countries than in core countries. In addition, the bank balance sheet channel has a weaker stimulus effect in peripheral countries. In light of financial heterogeneities, these research findings have important policy implications for the single monetary authority in the Eurozone. By implementing simulations, I find that asset purchase policies, particularly region-specific asset purchases, can complement the bank balance sheet channel's unequal outcomes inside a region.

**Works in Progress**

**“The Effect of Housing Prices on Mortgage Choice (with David Zink)”**

This research investigates the effect of the change in housing prices on the choice of funding methods for mortgage borrowers. The average spread between adjustable-rate mortgage (ARM) and fixed-rate mortgage (FRM) is compressed when housing prices increase in the United States. This is suggestive that more mortgage borrowers shift to borrow in the ARM when housing prices soar to reduce the cost of borrowing. We construct a novel data set, linking the loan-level ARM and FRM rates from the Home Mortgage Disclosure Act (HMDA) and Freddie Mac, together with county-level housing prices, populations, employment, and wages data. We exploit geographic variation in housing prices across counties to measure its impact on ARM-FRM spreads. Results show that housing prices appreciation is predictive of ARM-FRM spread compressions in the early 2000s. The same is true for 2020, when housing prices sharply appreciated amid the COVID-19 pandemic.

**Conference And Seminar**

**2021:** American Economic Association (AEA) annual meeting, Canadian Economics Association (CEA), Western Economic Association International (WEAI), University of Tokyo, European Economic Association (EEA), 24<sup>th</sup> Central Bank Macroeconomic Modeling Workshop, Portland State University  
**2020:** American Economic Association (AEA) annual meeting (by co-author), 23<sup>rd</sup> Central Bank Macroeconomic Modeling Workshop (poster)  
**2019:** International Monetary Fund (IMF) ICD seminar

**Research Experience**

**BIS Ph.D. Fellowship Program (Jun. – Sep 2020)**

- Bank for International Settlements
- Advisors: Dr. Fiorella De Fiore, Dr. Giovanni Lombardo, Dr. Paolo Cavallino
- Project: “Policy Regimes at the Effective Lower Bound”

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|                            | <b>IMF Fund Internship Program (Jul. – Sep 2019)</b> <ul style="list-style-type: none"> <li>• International Monetary Fund</li> <li>• Advisors: Dr. Valerie Cerra and Dr. Ruy Lama</li> <li>• Project: “Financial Crises, Investment Slumps, and Output Hysteresis”</li> </ul>  |                |
| <b>Work Experience</b>     | <b>Citi Group Global Markets Inc., Full-Time Analyst</b> <ul style="list-style-type: none"> <li>• Research, FX dealing, bank treasury, money market trading, and structuring derivative products</li> </ul>  | 2013 – 2014    |
| <b>Referee Service</b>     | <b>Referee for:</b> Economic Modelling, Economics Journal  |                |
| <b>Grants and Awards</b>   | <b>Chancellor’s Dissertation-Year Fellowship</b> <ul style="list-style-type: none"> <li>• Department of Economics, University of California Santa Cruz</li> </ul>  | 2021 – 2022    |
|                            | <b>BIS Ph.D. Fellowship Program</b> <ul style="list-style-type: none"> <li>• Bank for International Settlements, Switzerland</li> </ul>  | 2020           |
|                            | <b>Dissertation Research Grants</b> <ul style="list-style-type: none"> <li>• Department of Economics, University of California Santa Cruz</li> </ul>   | 2020           |
|                            | <b>Eileen Brooks Memorial Award for the best second-year paper</b> <ul style="list-style-type: none"> <li>• University of California Santa Cruz</li> </ul>   | 2019           |
|                            | <b>Tuition and Stipend Teaching Assistantship</b> <ul style="list-style-type: none"> <li>• Department of Economics, University of California Santa Cruz</li> </ul>   | 2018 – present |
|                            | <b>Japan–IMF Scholarship</b> <ul style="list-style-type: none"> <li>• International Monetary Fund, Washington D.C.</li> </ul>  | 2016 – 2018    |
| <b>Teaching Experience</b> | <b>Individual Instructor</b> <ul style="list-style-type: none"> <li>Department of Economics, University of California Santa Cruz</li> <li><i>Graduate Level</i> <ul style="list-style-type: none"> <li>• Advanced Macroeconomics/Microeconomics Theory (Ph.D.)</li> </ul> </li> </ul> <b>Teaching Assistant</b> <ul style="list-style-type: none"> <li>Department of Economics, University of California Santa Cruz</li> <li><i>Graduate Level</i> <ul style="list-style-type: none"> <li>• Macroeconomic Analysis (MS)</li> </ul> </li> <li><i>Undergraduate Level</i> <ul style="list-style-type: none"> <li>• Introduction to Microeconomics</li> <li>• Introduction to Macroeconomics</li> <li>• Intermediate Macroeconomics</li> <li>• Corporate Finance</li> </ul> </li> </ul> | 2018 – 2021    |
| <b>Computer Skills</b>     | MATLAB, Stata, R, Fortran, Python  |                |
| <b>Language</b>            | English (Fluent), Japanese (Native)  |                |