

# YUJI SAKURAI

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## PROFESSIONAL EXPERIENCE

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- 2016 – Present: **Federal Reserve Bank of Richmond**, Charlotte, NC  
*Intermediate Financial Economist (Financial Economist II)*
- 2019–Present: Co-lead, Global Market Shock Scenario Design Group: Rates, FX, Commodity
- 2010– 2011: **Bank of Japan, Institute for Monetary and Economic Studies**, Tokyo, Japan  
*Economist*
- 2009– 2010: **Mizuho DL Financial Technology Co., Ltd.**, Tokyo, Japan  
*Financial Engineer*
- 2007– 2009: **JPMorgan Securities Japan Co., Ltd., Quantitative Research**, Tokyo, Japan  
*Analyst*

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## EDUCATION

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- 2011 – 2016: **Ph.D., Finance**, UCLA Anderson School of Management  
Dissertation Committee: Mikhail Chernov (co-chair), Francis Longstaff (co-chair), Andrew Atkeson, Roger Farmer, Eduardo Schwartz
- 2005-2007: **M.S., Mathematical Informatics**, Graduate School of Information Science and Technology, University of Tokyo
- 2001-2005: **B.A., Mathematical Sciences**, Department of Basic Science, College of Arts and Sciences, University of Tokyo

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## PUBLICATIONS

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- “A simulation analysis of systemic counterparty risk in over-the-counter derivatives markets,” with Tetsuo Kurosaki, 2020, *Journal of Economic Interaction and Coordination* (refereed)
- “Rehypothecation dilemma: Impact of collateral rehypothecation on derivative prices under bilateral counterparty credit Risk,” with Yoshihiko Uchida, 2014, *Journal of Banking and Finance* (refereed)
- “When and how US dollar shortages evolved into a full crisis: Evidence from the cross-currency swap market,” with Naohiko Baba, 2011, *Journal of Banking and Finance* (refereed)
- “Predicting regime switches in the VIX index with macroeconomic variables,” with Naohiko Baba, 2011, *Applied Economics Letters* (refereed but no requirement for revision)

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## WORKING PAPERS

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- “How has the relationship between oil and the US stock market changed after the Covid-19 crisis?,” 2020, Working paper.
- “Can burning cash predict increased equity volatility during the Covid-19 crisis?,” 2020, Working paper.

“Pricing catastrophe-contingent residential mortgages," 2019, Working paper.

“Bond portfolio optimization with aversion to black-box machine learning models: neural network as an example," 2019, Working paper, co-authored with Keiichi Goshima

“Stress testing interest rate risk in banking sector under interaction between yield curve and macroeconomic dynamics," 2019, Working paper, co-authored with Azamat Abdymomunov and Jeffrey Gerlach

“Robust stress scenario design in the presence of shadow banking," 2019, Working paper.

“How does the bond market perceive macroeconomic risks under zero lower bound?," 2016, Job market paper.

“A welfare analysis of cross-border OTC swap market fragmentation and introducing a central limit order book," 2015, Working paper.

“Customer suitability risk in structured products: A text-based analysis of Japanese ADR cases of FX derivatives," 2015, Working paper.

“The use of the Black model of interest rates as options for monitoring the JGB market expectations," with Youichi Ueno and Naohiko Baba, 2006, Bank of Japan Working paper

## **P R E S E N T A T I O N S**

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Japanese Association of Financial Econometrics and Engineering, Tokyo (online), August 2020.

International Conference on Fintech & Financial Data Science at University College Dublin, Ireland, September 2019. \*presented by co-author

23rd International Congress on Insurance: Mathematics and Economics, Munich, July 2019

WEAI/IBEFA 15<sup>th</sup> International Conference, Keio University, Tokyo, March 2019

The 14th International Conference on Asian Financial Markets and Economic Development, Kyoto, December 2018

JAFEE workshop on high frequency data and big data, Keio University, Tokyo, October 2018

The 14th Conference of Asia-Pacific Association of Derivatives, Busan, July 2018

The 23rd Annual Workshop on Economic Science with Heterogeneous Interacting Agents, Tokyo, July, 2018

The 30th Australasian Finance and Banking Conference at Sydney, December 2017

Network models, stress testing, and other tools for financial stability monitoring and macroprudential policy design and implementation at the Banco De Mexico, November 2015 (Poster presentation)

The 7th International IFABS Conference, Hangzhou, June 2015

Institute of Monetary and Economic Studies at the Bank of Japan, Tokyo, February 2015

The 27th Australasian Finance and Banking Conference at Sydney, December 2014

The 89th WEAI Conference in Colorado, June 2014

The 6th International IFABS Conference in Lisbon, June 2014

The 25th Australasian Finance and Banking Conference at Sydney, December 2012

Nakanojima Workshop on Financial Engineering at Osaka University, December 2010

The 22<sup>nd</sup> Australasian Finance and Banking Conference at Sydney, December 2009

Nakanojima Workshop on Financial Engineering at Osaka University, December 2008

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### **BOOK CHAPTER**

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“Foreign exchange forwards, futures and swaps,” forthcoming in *Handbook of Exchange Rates*,

Edited by Jessica James, Ian Marsh, and Lucio Sarno, John Wiley and Sons, 2012

Coauthor: Naohiko Baba and Franck Packer

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### **SCHOLARSHIP AWARD**

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**Nozawa Fellowship** *October 2014 – June 2016*

**The Nakajima Foundation** *September 2011 – June 2016*