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REFEREED PUBLICATIONS

- "Capital Flows and Income Inequality," (with Zheng Liu and Jingyi Zhang), forthcoming, *Journal of International Economics*, (2023).
- "Fiscal Stimulus and Commercial Bank lending Under COVID-19," (with Joshua Aizenman and Yothin Jinjarek), forthcoming, *Journal of the Japanese and International Economies*, (2023).
- "Competitive Effects of IPOs: Evidence from Chinese Listing Suspensions," (with Frank Packer), forthcoming, *Journal of Money, Credit, and Banking*, (2023).
- "Central Bank Credibility During COVID-19: Evidence from Japan, (with Jens H. E. Christensen), *Journal of International Money and Finance*, 131, Article 102788, March, (2023).
- "Small Business Lending Under the PPP and PPPLF Programs (with Jose A. Lopez), *Journal of Financial Intermediation*, 53, Article 101017, January, (2023).
- "Monetary Reforms and Inflation Expectations in Japan: Evidence from Inflation-Indexed Bonds," (with Jens Christensen), *Journal of Econometrics*, 231, 410-431, (2022).
- "Monetary Policy Spillovers Under COVID-19: Evidence from U.S. Bank Subsidiaries," *Journal of International Money and Finance*, 122, Article 102550, April, (2022).
- "Is China Fudging its GDP Figures?: Evidence from Trading Partner Data," (with John G. Fernald and Eric Hsu), *Journal of International Money and Finance*, 114, Article 102406, February, (2021).
- "Optimal Capital Account Liberalization in China," (with Zheng Liu and Jingyi Zhang), Journal of Monetary Economics, 117, 1041-1061, (2021).

- "Home Currency Issuance in International Bond Markets," (with Galina Hale and Peter Jones), *Journal of International Economics*, 122, 1-16, (2020)
- "Why Have Negative Nominal Rates Had Such a Small Effect on Bank Performance?: Cross Country Evidence," (with Jose Lopez and Andrew K. Rose), *European Economic Review*, 124, 1-17, (2020).
- "Reserve Requirements and Optimal Chinese Stabilization Policy," (with Chun Chang, Zheng Liu, and Jingyi Zhang), *Journal of Monetary Economics*, 103, 33-51, (2019).
- "Sentiments and Economic Activity: Evidence from U.S. States," (with Jess Benhabib), *Economic Journal*, 128, 715-733, February, (2019).
- "Bond Vigilantes and Inflation," (with Andrew K. Rose), *International Journal of Central Banking*, 14, 2, 263-299, (2018).
- "International Transmission of Japanese Monetary Shocks Under Low and Negative Interest Rates: A Global FAVAR Approach," (with Andrew Tai), *Pacific Economic Review*, 23, 1, 51-66, (2018).
- "Measuring the Effects of Dollar Appreciation on Asia: A FAVAR Approach," (with Zheng Liu and Andrew Tai), *Journal of International Money and Finance*, 74, 353-370, (2017).
- "Optimal Monetary Policy and Capital Account Restrictions in a Small Open Economy," (with Zheng Liu), *IMF Economic Review*, 63, 298-324, (2015).
- "Capital Controls and Optimal Chinese Monetary Policy," (with Chun Chang and Zheng Liu), Journal of Monetary Economics, 74, 1-15, (2015).
- "Monetary Policy Effectiveness in China: Evidence from a FAVAR Model," (with John G. Fernald and Eric Swanson, *Journal of International Money and Finance*, 49, 83-103, (2014).
- "Foreign Entry into Underwriting Services: Evidence from Japan's 'Big Bang' Deregulation," (with Jose A. Lopez), *Journal of Money, Credit and Banking*, 46(2-3), 445-468, (2014).
- "Is the United States Decoupling from Asia (Again)?," (with Sylvain Leduc), *Pacific Economic Review*, 18(3), 345-369, (2013).
- "Income and Democracy: Evidence from Nonlinear Estimations," (with Jess Benhabib and Alejandro Corvalan), *Economics Letters*, 118, 489-492, (2013).
- "Dollar Illiquidity and Central Bank Swap Arrangements During the U.S. Sub-Prime Crisis," (with Andrew K. Rose), *Journal of International Economics*, 88(2), 326-340, (2012).

- "Currency Composition of International Bonds: The EMU Effect," (with Galina B. Hale), *Journal of International Economics*, 88(1), 134-149, (2012).
- "Central Bank Swaps and International Dollar Illiquidity," (with Andrew K. Rose), *Global Journal of Economics*, 1(1), 1-20, (2012).
- "The Causes and Consequences of the 2008 Crisis: Early Warning," (with Andrew K. Rose), *Japan and the World Economy*, 24(1), 1-16, (2012).
- "Cross-Country Causes and Consequences of the Crisis: An Update," (with Andrew K. Rose), *European Economic Review*, 55(3), 309-324, (2011).
- "The Olympic Effect," (with Andrew K. Rose), Economic Journal, 121(553), 652-677, (2011).
- "Do Mega Sporting Events Promote International Trade?," SAIS Review of International Affairs, Winter-Spring, 31(1), 77-86, (2011).
- "The Causes and Consequences of the 2008 Crisis: International Linkages and American Exposure," (with Andrew K. Rose), *Pacific Economic Review*, 15(3), 340-363, (2010).
- "Takeoffs," (with Joshua Aizenman), (2010), Review of Development Economics, 14(2), 177-196.
- "Asset Price Persistence and Real Estate Market Illiquidity: Evidence from Japanese Land Values," (with John Krainer and Nobuyoshi Yamori), *Real Estate Economics*, 38(2), Summer, 171-196, (2010).
- "Moderate Inflation and the Deflation-Depression Link," (with Jess Benhabib), *Journal of Money, Credit and Banking*, 41(4), 787-798, (2009).
- "Monetary and Financial Integration in the EMU: Push or Pull?," *Review of International Economics*, 17(4), 751-776, (2009).
- "Non-Economic Engagement and International Exchange: The Case of Environmental Treaties," (with Andrew K. Rose), *Journal of Money, Credit and Banking*, 41(2-3), 337-363, (2009).
- "Monetary and Financial Integration: Evidence from the EMU," *Journal of the Japanese and International Economies*, 23, 114-130, (2009).
- "International Financial Remoteness and Macroeconomic Volatility," (with Andrew K. Rose), *Journal of Development Economics*, 89(2), 250-257, (2009).

- "Financial Globalization and Monetary Policy Discipline," *International Monetary Fund Staff Papers*, 56(1), 198-221, (2009).
- "Offshore Financial Centers: Parasites or Symbionts?," (with Andrew K. Rose), *Economic Journal*, 117(523), 1310-1335, (2007).
- "Market Price Accounting and Depositor Discipline: Evidence from Japanese Regional Banks," (with Nobuyoshi Yamori), *Journal of Banking and Finance*, 31(3), 769-786, (2007).
- "Quantitative Easing and Japanese Bank Equity Values," (with Takeshi Kobayashi and Nobuyoshi Yamori), *Journal of the Japanese and International Economies*, 20, 699-721, (2006).
- "Institutional Efficiency, Monitoring Costs, and the Investment Share of FDI," (with Joshua Aizenman), *Review of International Economics*, 14(4), 683-697, (2006).
- "Solvency Runs, Sunspot Runs, and International Bailouts," *Journal of International Economics*, 65(1), 203-219, (2005).
- "A Gravity Model of Sovereign Lending: Trade, Default and Credit," (With Andrew K. Rose), *International Monetary Fund Staff Papers*, Vol. 51, Special Issue, 50-63, (2004).
- "Sterilization Costs and Exchange Rate Targeting," (with Kenneth Kletzer), *Journal of International Money and Finance*, 23(6), 897-915, (2004).
- 'The Evolution of Bank Resolution Policies in Japan: Evidence from Market Equity Values," (with Nobuyoshi Yamori), *Journal of Financial Research*, Vol. 27, Spring, 115-132, (2004).
- "Currency Boards, Dollarized Liabilities, and Monetary Policy Credibility," (with Diego Valderrama), *Journal of International Money and Finance*, Vol. 22, 1065-1087, (2003).
- "Financial Turbulence and the Japanese Main Bank Relationship," (with Nobuyoshi Yamori), *Journal of Financial Services Research*, 23, 205-223, (2003).
- "The Impact of Japan's Financial Stabilization Laws on Bank Equity Values," (with Nobuyoshi Yamori), *Journal of the Japanese and International Economies*, Vol. 17, 263-282, (2003).
- "Monetary Union Expansion: The Role of Market Power in Trade," *International Financial Review*, Vol. 2, 233-246, (2001).
- "The Role of Financial Development in Growth and Investment," (with Jess Benhabib), *Journal of Economic Growth*, Vol. 5, 341-360, (2000).
- "Bank Charter Value and the Viability of the Japanese Convoy System," Journal of the Japanese

- and International Economies, Vol. 14, 149-168, (2000).
- "North-South Customs Unions and International Capital Mobility," (with Eduardo Fernandez-Arias), *Journal of International Economics*, Vol. 46, 229-251, (1998).
- "Inequality and Stability," (with Pinto Barbosa and Boyan Jovanovic), *Annales d'Economie et de Statistique*, Vol. 48, 15-40, (1997).
- "Heterogeneity in Bank Valuation of LDC Debt: Evidence from the 1988 Brazilian Debt Reduction Program," (with Asli Demirguc-Kunt and Ishac Diwan), *Journal of Monetary Economics*, Vol. 39, 535-550, (1997).
- "Does State Economic Development Spending Increase Manufacturing Employment?," (with Charles de Bartolome), *Journal of Urban Economics*, Vol. 41, 153-175, (1997).
- "Burden Sharing' in Sovereign Debt Reduction," *Journal of Development Economics*, Vol. 50, Number 2, August, 337-352, (1996).
- "Threshold Effects in International Lending," *Journal of Development Economics*, Vol. 46, Number 2, April, 341-356, (1995).
- "Regional Competition for Domestic and Foreign Investment: Evidence from State Development Expenditures," (with Charles de Bartolome) *Journal of Urban Economics*, Vol. 37, 239-259, (1995).
- "The Role of Human Capital in Economic Development: Evidence from Aggregate Cross-Country Data," (with Jess Benhabib) *Journal of Monetary Economics*, Vol. 34, Number 2, October, 143-174, (1994).
- "Are Buybacks Back?: Menu-Driven Debt-Reduction Schemes with Heterogeneous Creditors," (with Ishac Diwan) *Journal of Monetary Economics*, Vol. 34, Number 2, October, 279-293, (1994).
- "Sovereign Risk Exposure with Potential Liquidation: The Performance of Alternative Forms of External Finance," *Journal of International Money and Finance*, Volume 13, Number 4, August, 400-414, (1994).
- "Concerted Lending: Did Large Banks Bear the Burden?," *Journal of Money, Credit, and Banking*, Vol. 24, No. 4, November, 465-482, (1992).
- "Debt Write-Downs and Debt-Equity Swaps in a Two-Sector Model," (with Linda Goldberg) *Journal of International Economics*, Vol. 33, November, 267-283, (1992).
- "Capital Controls and Deviations from Proposed Interest Rate Parity: Mexico, 1982." *Economic Inquiry*, Vol. 28, April, 239-248, (1990).

WORKING PAPERS

- "Targeted Reserve Requirements for Macroeconomic Stabilization," (with Zheng Liu and Jingyi Zhang), FRBSF Working Paper 2023-13, April, (2023).
- "Modernization and Discrete Measures of Democracy," (with Jess Benhabib and Alejandro Corvalan), FRBSF Working Paper 2014-01, January, (2014).
- "Panel Evidence on the Speed of Convergence," (with Timothy Cogley), FRBSF Working Paper 1997-01, January (1997).

BOOKS AND OTHER PUBLICATIONS

- "Bank Performance Under Negative Rates," (with Jose Lopez and Andrew Rose), *Voxeu*, https://voxeu.org/article/bank-performance-under-negative-interest-rates, October, (2018).
- "Dollar Appreciation and Asian Economies," (with Zheng Liu and Andrew Tai), *VoxChina*, http://voxchina.org/show-3-6.html, June, (2017).
- Prospects for Asia and the Global Economy, (with R. Glick), (Federal Reserve Bank of San Francisco: San Francisco), (2014).
- Asia's Role in the Post-Crisis Global Economy, (with R. Glick), (Federal Reserve Bank of San Francisco: San Francisco), (2012).
- "Monetary Policy and Capital Mobility," forthcoming in *Encyclopedia of Financial Globalization*, G. Caprio, ed., Elsevier, (2012).
- "Monetary Regimes and Capital Account Volatility Before and After the Global Financial Crisis," in Pontines, Victor and Reza Siregar, eds., *Exchange Rate Appreciation, Capital Flows and Excess Liquidity*, (SEACEN Centre, Kuala Lumpur, Malaysia), Chapter 4, 115-173, (2012).
- "Developing Asian Local Currency Bond Markets: Why and How?," in Kawai, Masahiro, David G. Mayes and Peter J. Morgan, eds., *Implications of the Global Financial Crisis for Financial Reform and Regulation in Asia*, Chapter 11, 221-227, Edward Elgar, (2012).
- "Bond Currency Denomination and the Yen Carry Trade," (with Christopher A. Candelaria and Jose A. Lopez), in Yin-Wong Cheung and Guonan Ma, eds., *Asia and China in the Global Economy*, Chapter 9, 245-282, World Scientific, (2012).

- Asia and the Global Financial Crisis, (with R. Glick), (Federal Reserve Bank of San Francisco: San Francisco), (2010).
- "International Environmental Arrangements and International Commerce," (with Andrew K. Rose), in Peter A. G. Van Bergeijk and Steven Brakman, eds., *The Gravity Model in International Trade*, (Cambridge University Press: Cambridge, United Kingdom), 255-277, (2010).
- "The Olympic Trade Effect," (with Andrew K. Rose), *Finance and Development*, 47(1), 12-13, March, (2010).
- "Could an Early Warning System Have Predicted the Crisis?," (with Andrew K. Rose), *VoxEU.org*, http://www.voxeu.org/index.php?q=node/3834 August 3, (2009).
- "Searching for International Contagion in the 2008 Financial Crisis," (with Andrew K. Rose), *VoxEU.org*, http://voxeu.org/index.php?q=node/4043 (2009).
- "Foreign Bank Lending and Bond Underwriting in Japan During the Lost Decade," (with Jose A. Lopez), in Yin Wong Cheung and Kar Yiu Wong, eds., *China and Asia: Economic and Financial Interactions*, (Routledge: New York), 197-214, (2009).
- "Economic Spillovers from International Environmental Cooperation," (with Andrew K. Rose), *VoxEU.org*, http://www.voxeu.org/index.php?q=node/1350, (2008).
- "Human Capital and Technology Diffusion," (with Jess Benhabib), in Aghion and Durlauf, eds., *Handbook of Economic Growth, Volume 1A*, Chapter 13, 936-966. North-Holland, (2006).
- "Determinants of Voluntary Bank Disclosure: Evidence from Japanese Shinkin Banks," (with Nobuyoshi Yamori), in M. M. Hutchison and F. Westermann, eds., *Japan's Great Stagnation*, (MIT Press), 103-127, (2006)
- "Financial Structure and Macroeconomic Performance Over the Short and Long Run," (with Jose A. Lopez), in L. J. Cho, D. Cho and Y. H. Kim, eds., *Macroeconomic Implications of Post-Crisis Structural Changes*, (Korea Development Institute), (2005).
- "Financial Development and Growth: Are the APEC Nations Unique?," in 2001 APEC World Economic Symposium Proceedings, APEC, 79-106, (2002).
- Financial Crises in Emerging Markets (with R. Glick and R. Moreno), (Cambridge University Press: New York), (2001).
- "Financial Crises in Emerging Markets: Overview," (with R. Glick and R. Moreno), in R. Glick, R. Moreno, and M. M. Spiegel eds., *Financial Crises in Emerging Markets* (with R. Glick and R. Moreno), (Cambridge University Press: New York), 1-32, (2001).

- "Speculative Capital Inflows and Exchange Rate Targeting in the Pacific Basin: Theory and Evidence," (with Ken Kletzer), in R. Glick ed., *Managing Capital Flows and Exchange Rates: Evidence from the Pacific Basin*, (Cambridge University Press: New York), 409-436, (1998).
- "Are Asian Economies Exempt from the 'Impossible Trinity'?: Evidence from Singapore," (with Ramon Moreno), in *Proceedings of the 12th Pacific Basin Central Bank Conference on "The Impact of Financial Market Development on the Real Economy"*, (Monetary Authority of Singapore: Singapore), 9-27, (1997).
- "The Role of Human Capital and Political Instability in Economic Development," (with Jess Benhabib), in Baldassari, M., L. Paganetto, and E. S. Phelps, eds., *International Differences in Growth Rates*, (St. Martin's Press: New York) 55-94, (1994).

BOOK REVIEWS AND PUBLISHED DISCUSSIONS

- "Introduction: Asian Business Cycle Synchronization with the Global Economy," *Pacific Economic Review*, 18(3), 318-320, (2013).
- "Comments on "Expanding Central Bank Domestic Assets: How it Worked in Japan," by Kazumasa Iwata and Shinji Takenaka, in BIS Papers No. 66, "Are Central Bank Balance Sheets Too Large?: Proceedings from the Bank of Thailand-BIS Research Conference on 'Central Bank Balance Sheets in Asia and the Pacific: The Policy Challenges Ahead", 11-13 December, 2011, Chiang Mai, Thailand," September, (2012), 164-167.
- "Asia's Role in the Post-Crisis Global Economy: Conference Summary," (with R. Glick), in R. Glick and M. M. Spiegel, eds., *Asia's Role in the Post-Crisis Global Economy*, (2012), 3-15.
- "Comments on 'The Consumption Terms of Trade and Commodity Prices," by Martin Berka and Mario Crucini, in T. Ito and A. Rose, eds., *Commodity Prices and Markets*, (NBER-EASE volume 20), 147-151, (2011).
- "Comments on 'Identifying the Relationship Between Trade and Exchange Rate Volatility," by Christian Broda and John Romalis, in T. Ito and A. Rose, eds., *Commodity Prices and Markets*, (NBER-EASE volume 20), 114-118, (2011).
- "Asia and the Global Financial Crisis: Conference Summary," (with R. Glick), in R. Glick and M. M. Spiegel, eds., *Asia and the Global Financial Crisis*, (2012), 3-9.
- "Review of Ronen Palan, Richard Murphy, and Christian Chavagneux, Tax Havens: How Globalization Really Works, Cornell University Press," *Journal of International Economics*, 82(2), 249-250, (2010)
- "Comments on 'Financial Globalization and Emerging Market Portfolios,' " by Michael B.

- Devereux, *Bank of Japan Monetary and Economic Studies*, Special Edition, Vol. 25, no. S-1, (2007), 119-128.
- "Conference on Financial Issues in the Pacific Basin: Editors' Introduction," *Journal of the Japanese and International Economies*, Vol. 17, 229-232, (2003).
- "Review of Malaysian Eclipse: Economic Crisis and Recovery," K. S. Jomo, ed., *Journal of Comparative Economics*, 31, 593-594, (2003).
- "Uncertainty and the Disappearance of International Credit: Discussion," in R. Glick, R. Moreno, and M.M. Spiegel eds., *Financial Crises in Emerging Markets*, (Cambridge University Press: New York), 191-195, (2001)
- "Review of Debt Games: Strategic Interaction in International Debt Rescheduling," by Vinod Aggarwal, *Journal of Economic Literature*, Vol. 35, no. 4, 2054-2055, (1997).

FEDERAL RESERVE PUBLICATIONS

- "Small Business Lending and the Paycheck Protection Program," (with Jack Mueller), Federal Reserve Bank of San Francisco Economic Letter, 2023-10, April 10, 2023.
- "COVID-19 Fiscal Expansion and Inflation Expectations in Japan," (with Jens H.E. Christensen), Federal Reserve Bank of San Francisco Economic Letter, 2022-20, August 3, 2022.
- "Capital Flow Surges and Rising Income Inequality," (with Renuka Diwan and Zheng Liu), Federal Reserve Bank of San Francisco Economic Letter, 2021-09, March 29, 2021.
- "Small Business Lending During COVID-19," (with Jose A. Lopez), Federal Reserve Bank of San Francisco Economic Letter, 2020-35, November 23, 2020.
- "Commercial Banks Under Persistent Negative Rates," (with Remy Beauregard), Federal Reserve Bank of San Francisco Economic Letter, 2019-26, September 28, 2020.
- "How Severe is China's Slowdown? Evidence from the China CAT," (with Neil Gerstein and John G. Fernald), Federal Reserve Bank of San Francisco Economic Letter, 2019-26, October 7, 2019.
- "Negative Interest Rates and Inflation Expectations in Japan," (with Jens Christensen), Federal Reserve Bank of San Francisco Economic Letter, 2019-22, August 28, 2019.
- "How Persistent Are the Effects of Sentiment Shocks?," (with Jess Benhabib and Ben Shapiro), Federal Reserve Bank of San Francisco Economic Letter, 2018-22, October 1, 2019.

- "Is GDP Overstating Economic Activity?," (with Zheng Liu and Eric Tallman), Federal Reserve Bank of San Francisco Economic Letter 2018-14, May 29, 2018.
- "Is Boomer Retirement Still Weighing Down US Equity Markets?," (with Zheng Liu), Federal Reserve Bank of San Francisco SF Fed Blog, March 5, 2018.
- "Reserve Requirements as a Chinese Macro Policy Tool," (with Zheng Liu), Federal Reserve Bank of San Francisco Economic Letter 2017-15, May 22, 2017.
- "China's IPO Activity and Equity Market Volatility," (with Frank Packer), Federal Reserve Bank of San Francisco Economic Letter 2016-18, June 6, 2016.
- "Do Local Bonds Help Fight Inflation?," (with Andrew K. Rose), Federal Reserve Bank of San Francisco Economic Letter 2016-10, March 28, 2016.
- "Global Fallout from China's Industrial Slowdown," Federal Reserve Bank of San Francisco Economic Letter 2015-35, November 23, 2015.
- "Global Aging: More Headwinds for U.S. Stocks?," (with Zheng Liu and Bing Wang), Federal Reserve Bank of San Francisco Economic Letter 2014-38, December 22, 2014.
- "Has China's Economy Become More "Standard?," (with John G. Fernald and Eric Hsu), Federal Reserve Bank of San Francisco Economic Letter 2014-26, October 6, 2014.
- "Prospects for Asia and the Global Economy," (with Reuven Glick), Federal Reserve Bank of San Francisco Economic Letter 2014-26, September 9, 2014.
- "Home Currency Issuance in Global Debt Markets," (with Galina Hale and Peter Jones), Federal Reserve Bank of San Francisco Economic Letter 2014-24, August 18, 2014.
- "On the Reliability of Chinese Output Figures, (with John Fernald and Israel Malkin), Federal Reserve Bank of San Francisco Economic Letter 2013-08, March 25, 2013.
- "External Shocks and China's Monetary Policy," (with Zheng Liu), Federal Reserve Bank of San Francisco Economic Letter 2012-36, December 3, 2012.
- "Is China Due for a Slowdown?," (with Israel Malkin), Federal Reserve Bank of San Francisco Economic Letter 2012-31, October 15, 2012.
- "Asia's Role in the Post-Crisis Global Economy," (with Reuven Glick), *Federal Reserve Bank of San Francisco Economic Letter* 2012-24, August 13, 2012.
- "Boomer Retirement: Headwinds for U.S. Equity Markets?," (with Zheng Liu), Federal Reserve Bank of San Francisco Economic Letter 2011-26, August 22, 2011.

- "Asia and the Global Financial Crisis: Conference Summary," (with Reuven Glick), *Federal Reserve Bank of San Francisco Economic Letter* 2010-08, March 15, 2010.
- "Predicting Crises, Part II: Did Anything Matter (to Everybody)?, Federal Reserve Bank of San Francisco Economic Letter 2009-29, September 28, 2009.
- "The EMU Effect on the Currency Denomination of International Bonds," *Federal Reserve Bank of San Francisco Economic Letter* 2008-30, September 26, 2008.
- "The Role of Relative Performance in Bank Closure Decisions," (with Kenneth Kasa), *Federal Reserve Bank of San Francisco Economic Review*, 17-30, (2008).
- "Did Quantitative Easing by the Bank of Japan 'Work'?," Federal Reserve Bank of San Francisco Economic Letter 2006-04, October 20, 2006.
- "External Imbalances and Adjustment in the Pacific Basin: Conference Summary," *Federal Reserve Bank of San Francisco Economic Letter* 2006-04, March 10, 2006 (with Glick).
- "The Bretton Woods System: Are We Experiencing a Revival? Symposium Summary," *Federal Reserve Bank of San Francisco Economic Letter* 2005-32, November 25, 2005 (with Glick).
- "A Look at China's New Exchange Rate Regime," Federal Reserve Bank of San Francisco Economic Letter 2005-23, September 9, 2005.
- "Easing Out of the BOJ's Monetary Easing Program," Federal Reserve Bank of San Francisco Economic Letter 2004-33, November 19, 2004.
- "Monetary and Financial Integration: Evidence from the EMU," Federal Reserve Bank of San Francisco Economic Letter 2004-20, August 6, 2004.
- "Japanese Foreign Exchange Intervention," Federal Reserve Bank of San Francisco Economic Letter, #03-36, December 12, (2003).
- "What Monetary Regime for Post-War Iraq?," Federal Reserve Bank of San Francisco Economic Letter, #03-13, May 9, (2003).
- "The Disposition of Failed Japanese Bank Assets: Lessons from the U.S. Savings and Loan Crisis," *Federal Reserve Bank of San Francisco Economic Review*, 1-16, (2002).
- "Argentina's Currency Crisis: Lessons for Asia," Federal Reserve Bank of San Francisco Economic Letter, #02-25, August 23, (2002).
- "Towards a Sovereign Debt Restructuring Mechanism," Federal Reserve Bank of San Francisco Economic Letter, #02-19, June 28, (2002).

- "The Return of the Japan Premium: trouble Ahead for Japanese Banks?," *Federal Reserve Bank of San Francisco Economic Letter*, #01-06, March 9, (2001).
- "Short-term International Borrowing and Financial Fragility," *Federal Reserve Bank of San Francisco Economic Letter*, #00-26, September 8, (2000).
- "Inflation Targeting for the Bank of Japan?" Federal Reserve Bank of San Francisco Economic Letter, #00-11, April 7, (2000).
- "Moral Hazard under the Japanese 'Convoy' Banking System," Federal Reserve Bank of San Francisco Economic Review, No. 3, 3-13, (1999).
- "Dollarization in Argentina," *Federal Reserve Bank of San Francisco Economic Letter*, #99-29, September 24, (1999).
- "Bank of Japan Purchases of Risky Assets: Lessons from Colonial America," *Federal Reserve Bank of San Francisco Economic Letter*, #99-17, May 21, (1999).
- "Central Bank Independence and Inflation Expectations: Evidence from British Index-Linked Gilts," *Federal Reserve Bank of San Francisco Economic Review*, No. 1, 3-14, (1998).
- "A Currency Board for Indonesia?," Federal Reserve Bank of San Francisco Economic Letter, #98-09, March 20, (1998).
- "British Central Bank Independence and Inflation Expectations," *Federal Reserve Bank of San Francisco Economic Letter*, #97-36, November 28, (1997).
- "Fiscal Constraints in the EMU," Federal Reserve Bank of San Francisco Weekly Letter, #97-23, August 15 (1997).
- "The Costs of Managing Speculative Capital Inflows in the Pacific Basin," (with Ken Kletzer) Federal Reserve Bank of San Francisco Weekly Letter, #97-09, March 28 (1997).
- "Fixed-Premium Deposit Insurance and International Credit Crunches," *Federal Reserve Bank of San Francisco Economic Review*, No. 2, 3-15, (1996).
- "Why is the Philippines Repurchasing its Brady Bonds?," Federal Reserve Bank of San Francisco Weekly Letter, #96-32, November 1, (1996).
- "Collective Action Difficulties in Foreign Lending: Banks and Bonds" (1996) Federal Reserve Bank of San Francisco Weekly Letter, #96-24, August 23.
- "On the Efficiency Effects of Tax Competition for Firms," (with Joe Mattey), Federal Reserve Bank of Minneapolis: The Region, July (1996).

- "New Evidence on State Economic Development Spending and Manufacturing Employment," Federal Reserve Bank of San Francisco Weekly Letter, #96-05, February 2, (1996).
- "Sterilization of Capital Inflows through the Banking Sector: Evidence from Asia," *Federal Reserve Bank of San Francisco Economic Review*, No. 3, 17-34, (1995).
- "Raising Reserve Requirements in Response to Asian Capital Inflow Surges," *Federal Reserve Bank of San Francisco Weekly Letter*, #95-41, December 1, (1995).
- "Is State and Local Tax Competition Harmful?," (with Joe Mattey), Federal Reserve Bank of San Francisco Weekly Letter, #95-26, August 4, (1995).
- "Rules vs. Discretion in New Zealand Monetary Policy," Federal Reserve Bank of San Francisco Weekly Letter, #95-09, March 3, (1995).
- "Determinants of Long-Run Productivity Growth: A Selective Survey with Some New Empirical Results," (1995) background paper for World Development Report 1995: Workers in an Integrating World, World Bank (Washington DC).
- "Gradualism and Chinese Financial Reforms," Federal Reserve Bank of San Francisco Weekly Letter, #94-44, December 30, (1994); reprinted in China Business Times and International Business, Fall 1995, Brown and Benchmark (Guilford, CT).

EXPERIENCE

2019-	Senior Policy Adviser, Economic Research Federal Reserve Bank of San Francisco, San Francisco, CA
2017-2019	Vice President, International and Financial Research Federal Reserve Bank of San Francisco, San Francisco, CA
2010-2017	Director, Center for Pacific Basin Studies, Federal Reserve Bank of San Francisco Center for Pacific Basin Studies
2005-2017	Vice President, International Research Federal Reserve Bank of San Francisco, San Francisco, CA
2003-2005	Senior Research Advisor Federal Reserve Bank of San Francisco, San Francisco, CA
1994-2003	Senior Economist Federal Reserve Bank of San Francisco, San Francisco, CA

1988-1994 Assistant Professor
Department of Economics, New York University, New York, NY

VISITING POSITIONS

2015-2017	Lecturer, School of Business Administration, University of Wisconsin, Madison
2000	Visiting Assistant Professor
	Department of Economics, University of California, Berkeley, CA
1995,96,98	Lecturer
1000 01 04	Walter Haas School of Business, University of California, Berkeley, CA
1989,91,94	Consultant Debt and International Finance Division, World Bank, Washington D.C.
	Debt and international Finance Division, World Bank, Washington D.C.
1993	Visiting Professor
	School of Business Administration, Bocconi University, Milan, Italy

EDUCATION

1988	Ph.D. Economics, University of California, Los Angeles
1984	M.A. Economics, University of California, Los Angeles
1983	B.A. Economics, University of California, Berkeley

GRANTS AWARDS, AND OTHER POSITIONS HELD

2020-	Editor, Journal of International Money and Finance, Elsevier Press.
2018	Associate Editor, Journal of International Money and Finance, Elsevier Press.
2016	2016 Sun Yefang Award (top China economic prize), for Chang, Liu, and Spiegel, "Capital Controls and Optimal Chinese Monetary Policy."
2013	2013 Best Paper Award, <i>Pacific Economic Review</i> , for Rose and Spiegel, "Cross-Country Causes and Consequences of the 2008 Crisis: International Linkages and American Exposure."
2013	Organized special section on Asian business cycle synchronization, <i>Pacific Economic Review</i> , 18(3), 318-430.
2011-	Editorial Board, Global Journal of Economics

2006-2012	Associate Editor, Japan and the World Economy, Elsevier Press.
1999-2001	Chairman, Federal Reserve System Committee for International Economic Analysis
1991	New York University Research Challenge Fund grant.
1988	Sloan Foundation Fellowship.