

# Macro, Money and Banking (Spring 2024)

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This course will cover research topics at the intersection of macro, money, and banking with a special focus on financial frictions and the role of macroeconomic policies. A key goal is to bring you to the research frontier in the area and to develop analytical and quantitative tools that can be helpful for your research projects.

**Office hours.** By appointment.

**Organization.** We meet Wednesday and Friday from 9:00am-10:40am at 4-170 Hanson Hall. I will post relevant material in a dropbox folder. The course evaluation is based on problem sets and class participation.

## List of Topics

The plan is to cover the following topics. We will follow approximately the order outlined and will keep you updated of any changes. The papers marked with \* will be covered in more detail in class. It would be helpful if you can take a look before class.

### I. Financial Crises and Macroprudential Policy

Amador, M. and Bianchi, J. (2024). Bank Runs, Fragility and Regulation. Mimeo, Minneapolis Fed

Arce, F., Bengui, J., and Bianchi, J. (2019). [A macroprudential theory of foreign reserve accumulation](#). NBER Working Paper No. 26236

Bengui, J. and Bianchi, J. (2014). [Macroprudential policy with leakages](#). NBER Working Paper No. 25048

\* Bianchi, J. (2011). [Overborrowing and Systemic Externalities in the Business Cycle](#). *American Economic Review*, 101(7):3400–3426

\* Bianchi, J. and Mendoza, E. G. (2018). [Optimal time-consistent macroprudential policy](#). *Journal of Political Economy*, 126(2):588–634

Bennett, F., Montamat, G., and Roch, F. (2023). Robust optimal macroprudential policy. *Journal of International Economics*, 141:103714

Bianchi, J. and Mendoza, E. G. (2020). [A fisherian approach to financial crises: Lessons from the sudden stops literature](#). *Review of Economic Dynamics*, 37:S254–S283

Bianchi, J. (2016). [Efficient bailouts?](#) *American Economic Review*, 106(12):3607–3659

Bocola, L. (2016). [The Pass-through of Sovereign Risk](#). *Journal of Political Economy*, 124(4):879–926

Gertler, M. and Kiyotaki, N. (2010). Financial intermediation and credit policy in business cycle analysis. In *Handbook of monetary economics*, volume 3, pages 547–599. Elsevier

Kiyotaki, N. and Moore, J. (1997). Credit cycles. *Journal of Political Economy*, 105(2):211–248

Lanteri, A. and Rampini, A. A. (2021). [Constrained-efficient capital reallocation](#). NBER Working Paper No. 28384

Lorenzoni, G. (2008). [Inefficient credit booms](#). *The Review of Economic Studies*, 75(3):809–833

Mendoza, E. G. (2010). Sudden stops, financial crises, and leverage. *American Economic Review*, 100(5):1941–1966

Rojas, E. and Saffie, F. (2022). Non-homothetic sudden stops. *Journal of International Economics*, 139:103680

Reinhart and Rogoff (2008), “This Time is Different”

Sufi, A. and Taylor, A. M. (2021). Financial crises: A survey

Fornaro, L. (2015). [Financial crises and exchange rate policy](#). *Journal of International Economics*, 95(2):202–215

Ottonello, P. (2021). [Optimal exchange rate policy under collateral constraints and wage rigidity](#). Forthcoming, *Journal of International Economics*

**Extras:** [Handout Solution Methods](#)

## II. Aggregate demand externalities

\* Bianchi, J. and Lorenzoni, G. (2021). The prudential use of capital controls and foreign currency reserves. *Handbook of International Economics*, Volume V, edited by Gita Gopinath, Elhanan Helpman and Kenneth Rogoff, North Holland

\* Bianchi, J. and Coulibaly, L. (2021). [Liquidity Traps, Prudential Policies, and International Spillovers](#). Mimeo, Federal Reserve Bank of Minneapolis

Coulibaly, L. (2018). [Monetary policy in sudden stop-prone economies](#). CIREQ Working Paper

Bianchi, J. and Coulibaly, L. (2024). [financial integration and monetary policy coordination](#). Technical report, National Bureau of Economic Research

Eggertsson, G. B. and Krugman, P. (2012). [Debt, deleveraging, and the liquidity trap: A Fisher-Minsky-Koo approach](#). *Quarterly Journal of Economics*, 127(3):1469–1513

Fanelli, S. (2020). Monetary policy, capital controls, and international portfolios. Technical report, Mimeo, MIT

Farhi, E. and Werning, I. (2016). [A Theory of Macroprudential Policies in the Presence of Nominal Rigidities](#). *Econometrica*, 84(5):1645–1704

Guerrieri, V. and Lorenzoni, G. (2017). [Credit crises, precautionary savings, and the liquidity trap](#). *Quarterly Journal of Economics*, 132(3):1427–1467

Korinek, A. and Simsek, A. (2016). Liquidity trap and excessive leverage. *American Economic Review*, 106(3):699–738

\* Schmitt-Grohe, S. and Uribe, M. (2016). [Downward Nominal Wage Rigidity, Currency Pegs, and Involuntary Unemployment](#). *Journal of Political Economy*, 124(5)

### III. International Reserves and Foreign Exchange Interventions

Bianchi, J. and Lorenzoni, G. (2021). The prudential use of capital controls and foreign currency reserves. Handbook of International Economics, Volume V, edited by Gita Gopinath, Elhanan Helpman and Kenneth Rogoff, North Holland

Arce, F., Bengui, J., and Bianchi, J. (2019). [A macroprudential theory of foreign reserve accumulation](#). NBER Working Paper No. 26236

\* Bianchi, J., Hatchondo, J. C., and Martinez, L. (2018). International reserves and rollover risk. *American Economic Review*, 108(9):2629–2670

\* Bianchi, J. and Sosa-Padilla, C. (2019). [Reserve Accumulation, Macroeconomic Stabilization and Sovereign Risk](#). (1166). Review of Economic Studies

\* Barbosa Alves, M., Bianchi, J., and Sosa-Padilla, C. (2019). International reserve management under rollover crises. Mimeo, Federal Reserve Bank of Minneapolis

\* Amador, M., Bianchi, J., Bocola, L., and Perri, F. (2020). Exchange rate policies at the zero lower bound. *The Review of Economic Studies*, 87(4):1605–1645

Du, W., Tepper, A., and Verdelhan, A. (2018). Deviations from covered interest rate parity. *The Journal of Finance*, 73(3):915–957

Fanelli, S. and Straub, L. (2020). A theory of foreign exchange interventions. Technical report, National Bureau of Economic Research

Itskhoki, O. and Mukhin, D. (2021). Exchange rate disconnect in general equilibrium. *Journal of Political Economy*, 129(8):2183–2232

Bianchi, J., Hatchondo, J. C., and Martinez, L. (2018). International reserves and rollover risk. *American Economic Review*, 108(9):2629–2670

### IV. Sovereign Debt, Default and Rollover Crises

Auclert, A. and Rognlie, M. (2016). Unique equilibrium in the eaton–gersovitz model of sovereign debt. *Journal of Monetary Economics*, 84:134–146

\* Bianchi, J. and Mondragon, J. (2021). [Monetary independence and rollover crises](#). Forthcoming, Quarterly Journal of Economics

Cole, H. L. and Kehoe, T. J. (2000). Self-fulfilling debt crises. *Review of Economic Studies*, 67(1):91–116

Bocola, L. and Dovis, A. (2019). [Self-fulfilling debt crises: A quantitative analysis](#). *American Economic Review*, 109(12):4343–77

Lorenzoni, G. and Werning, I. (2013). Slow moving debt crises. NBER Working Paper No. 19228

Calvo, G. A. (1988). Servicing the public debt: The role of expectations. *American Economic Review*, 78(4):647–661

Aguiar, M. and Amador, M. (2020). Self-fulfilling debt dilution: maturity and multiplicity in debt models. *American Economic Review*, 110(9):2783–2818

Bocola, L. and Dovis, A. (2019). [Self-fulfilling debt crises: A quantitative analysis](#). *American Economic Review*, 109(12):4343–77

Aguiar, M. and Amador, M. (2014). Sovereign debt: A review. *Handbook of International Economics*, 4:647–687

Aguiar, M., Chatterjee, S., Cole, H., and Stangebye, Z. (2016). Quantitative models of sovereign debt crises. In Taylor, J. and Uhlig, H., editors, *Handbook of Macroeconomics*, volume 2, pages 1697–1755. Amsterdam Elsevier

\* Arellano, C. (2008). Default risk and income fluctuations in emerging economies. *American Economic Review*, 98(3):690–712

Aguiar, M. and Gopinath, G. (2006). Defaultable debt, interest rates, and the current account. *Journal of International Economics*, 69(1):64–83

\* Bianchi, J., Ottonello, P., and Presno, I. (2019). [Fiscal stimulus under sovereign risk](#). NBER Working Paper No. 26307

Bianchi, J. and Sosa-Padilla, C. (2022). On wars, sanctions and sovereign default. Technical report, National Bureau of Economic Research

Chatterjee, S. and Eyigungor, B. (2012). Maturity, indebtedness, and default risk. *American Economic Review*, 102(6):2674–2699

Eaton, J. and Gersovitz, M. (1981). Debt with potential repudiation: Theoretical and empirical analysis. *Review of Economic Studies*, 48(2):289–309

Hébert, B. and Schreger, J. (2017). The costs of sovereign default: Evidence from argentina. *American Economic Review*, 107(10):3119–3145

Hatchondo, J. C., Martinez, L., and Roch, F. (2022). Fiscal rules and the sovereign default premium. *American Economic Journal: Macroeconomics*, 14(4):244–73

Morelli, J. M., Ottonello, P., and Perez, D. J. (2022). Global banks and systemic debt crises. *Econometrica*, 90(2):749–798

Perez, D. J. et al. (2015). *Sovereign debt, domestic banks and the provision of public liquidity*. Stanford Inst. for Economic Policy Research

## V. Bank Runs and Self-Fulfilling Financial Crises

Allen, F. and Gale, D. (2009). *Understanding financial crises*. Oxford University Press

\* Amador, M. and Bianchi, J. (2024). Bank Runs, Fragility and Regulation. Mimeo, Minneapolis Fed

\* Amador, M. and Bianchi, J. (2021). [Bank Runs, Fragility and Credit Easing](#). Mimeo, Minneapolis Fed

Gertler, M. and Kiyotaki, N. (2015). [Banking, liquidity, and bank runs in an infinite horizon economy](#). *American Economic Review*, 105(7):2011–2043

Diamond, D. W. and Rajan, R. G. (2001). Liquidity risk, liquidity creation, and financial fragility: A theory of banking. *Journal of political Economy*, 109(2):287–327

Egan, M., Hortaçsu, A., and Matvos, G. (2017). Deposit competition and financial fragility: Evidence from the us banking sector. *American Economic Review*, 107(1):169–216

Keister, T. (2016). [Bailouts and financial fragility](#). *Review of Economic Studies*, 83(2):704–736

- \* Bianchi, J. and Coulibaly, L. (2023). A theory of fear of floating. Technical report, National Bureau of Economic Research

Bocola, L. and Lorenzoni, G. (2020). Financial crises, dollarization and lending of last resort in open economies. *American Economic Review*, 110(8)

Lorenzoni, G. (2014). International financial crises. *Handbook of international economics*, 4:689–740

- \* Schmitt-Grohé, S. and Uribe, M. (2016). Multiple equilibria in open economies with collateral constraints. *Review of Economic Studies*

## VI. Banking and Monetary Policy

- \* Bianchi, J. and Bigio, S. (2021). [Banks, liquidity management and monetary policy](#). Forthcoming, *Econometrica*

- \* Bianchi, J., Bigio, S., and Engel, C. (2020). [Scrambling for Dollars: International Liquidity, Banks and Exchange Rates](#). Mimeo, Minneapolis Fed

Eggertsson, G. B., Juelsrud, R. E., Summers, L. H., and Wold, E. G. (2019). Negative nominal interest rates and the bank lending channel. Technical report, National Bureau of Economic Research

Di Tella, S. and Kurlat, P. (2021). Why are banks exposed to monetary policy? Technical Report 4

## VII. Central Banks' Balance Sheets and Monetary Policy

- \* Amador, M. and Bianchi, J. [Helicopter Drops and Liquidity Traps](#). NBER Working Paper No. 31046

- \* Amador, M., Bianchi, J., Bocola, L., and Perri, F. (2016). Reverse speculative attacks. *Journal of Economic Dynamics and Control*, 72:125–137

Bhattarai, S., Eggertsson, G. B., and Gafarov, B. (2022). Time consistency and duration of government debt: A model of quantitative easing. *The Review of Economic Studies*, page rdac063

Krugman, P. (1979). A model of balance-of-payments crises. *Journal of money, credit and banking*, 11(3):311–325