# Department of Economics, Harvard University

# **Economics 1545: International Financial and Macroeconomic Policy**

### **Professor Kenneth Rogoff**

Time: Fall 2024; M, W, 10:30-11:45 am, location: Littauer M-15

Course Website <a href="https://canvas.harvard.edu/courses/121823">https://canvas.harvard.edu/courses/121823</a>

Office Hours: T.B.A.

Email: <u>krogoff@harvard.edu</u> (N.B. When sending an email pertaining to this course, please put

"1545" in the subject header.)

Teaching Assistant: Jieying Zhang jieyingzhang@g.harvard.edu

**Discussion Sections:** T.B.A.

Staff Assistant: Ursula Ferraro uferraro@fas.harvard.edu

#### Overview:

This is an advanced international finance and macroeconomics course that uses a mix of theoretical, empirical and policy frameworks to analyze topical problems in international finance.

**Prerequisites:** Economics 1011b (preferably) or 1010b (Knowledge of basic calculus will be assumed.)

#### The following is a useful supplement to online article readings

• *Foundations of International Macroeconomics*, by Maurice Obstfeld and Kenneth Rogoff, MIT Press, 1996.

**Readings:** All article readings can be accessed online or are available.. *Primary* readings are denoted by an \* symbol. Supplementary readings will be summarized in class but are not required.

**Group Problem Sets:** Students are encouraged (but not required) to collaborate with others on the problem sets, and it is permissible to hand in a single answer sheet for up to three students, with all three receiving the same group grade.

**Short reading questionnaires:** There will be a handful of very short (one page) questionnaires on select readings during the course

# **Course Requirements:**

- <u>Midterm</u>: Wednesday October 23. Analytical problems on the exam will closely parallel material covered in problem sets and (very) short answer essay problems that will cover other material emphasized in readings and lectures.
- <u>Final</u>: date T.B.A. Final only will have one analytical problem again parallel to homeworks, a very short essays section, and final essay section related to policy papers.
- Group policy paper: You will be asked to write a short policy paper on a topic drawn from a list of questions relating to reform of the international monetary system. (As with the problem sets, a group of up to three may hand in a joint paper.) A one-page outline of your paper is due Tuesday morning, 9 am, October 29, and the complete paper is due at 9 am on Tuesday, November 12. The three policy discussions will be in class on November 25, December 2 and December 4; Attendance at these three student discussion classes is required. The papers are intended to be short and succinct—there is an absolute total page limit of 10 double-spaced (12 pt.) pages (roughly 2500 words): Only figures and references are excluded in this limit. The papers do not need to include any formal analytical or econometric analysis; you may write them in a style you find suitable to the question you are addressing. The final exam will include (a choice of) essay questions relating to the paper topics that you and your classmates have chosen.
- <u>Group Problem Sets</u>: There will be 4 problem sets, due dates September 17, October 1, October 15, and November 19.

**Grades:** Group Problem Sets: 10%, Mid-term: 20%, Group Policy paper: 30%, Final; 30%. Inclass participation 10%.

#### Accommodations for students with disabilities

Students needing academic adjustments or accommodations because of a documented disability must present their Faculty Letter from the Accessible Education Office (AEO) and speak with the professor by the end of the second week of the term. Failure to do so may result in the Course Head's inability to respond in a timely manner. All discussions will remain confidential, although faculty are invited to contact AEO to discuss appropriate implementation.

# AI policy

This course encourages students to explore the use of generative artificial intelligence (GAI) tools such as ChatGPT for all assignments and assessments. Any such use must be appropriately acknowledged and cited. It is each student's responsibility to assess the validity and applicability of any GAI output that is submitted; you bear the final responsibility. Violations of this policy will be considered academic misconduct.

I. The Global Savings Glut and the Determination of the Global Real Interest Rate,

- Obstfeld and Rogoff, pp. 23-25, 31-35
- Bernanke, Ben, "<u>The Global Savings Glut and the US Current Account Deficit</u>," Sandridge Lecture, Richmond Virgina, April 14, 2005.
- Auerbach, Alan, and Lawrence Kotlikoff, 2023. <u>The US Savings Glut and Other Myths</u>. *Mimeo*, Boston University, August.
- Cooper, Richard. "Global Imbalances, Globalization, Demography and Sustainability," Journal of Economic Perspectives 22 (3) Summer 2008, 93-112.
- Robert Triffin, <u>"The International Role and Fate of the Dollar</u>," *Foreign Affairs*, Vol 57, Winter 1978, 269–86.
- Kindleberger, Charles "The Politics of International Money and World Language." Essays in International Finance 61, August 1967.

#### II. WHY MONEY FLOWS FROM NORTH TO SOUTH

- \*Moral Hazard: Obstfeld and Rogoff: pp. 407-419.
- Lucas, Robert E., "Why Doesn't Capital Flow from Rich to Poor Countries," *American Economic Review*, May 1990, pp. 92-96.
- Gertler, Mark, and Kenneth Rogoff. 1990. "North-South Lending and Endogenous Domestic Capital Market Inefficiencies." *Journal of Monetary Economics* 26: 245-266 (NBER working paper version 1987).
- Stancil, Bennett, and Uri Dadush, "The Capital Flow Conundrum," Voxeu July 5, 2011.
- Alfaro, Laura, Sebnem Kalemli-Ozcan, Vadym Volosovych, "Why Doesn't Capital Flow from Rich to Poor Countries: An empirical investigation," *The Review of Economics and Statistics* 90, no. 2 (May 2008): 347-368.
- Gardner, Camille, and Peter Henry, "<u>The Global Infrastructure Gap</u>," *The Journal of Economic Literature* 61(4), December 2023., pp. 1318-58.
- Sachs, Jeffrey and Andrew Warner. "<u>The Curse of Natural Resources</u>." *European Economic Review* 45 (May 2001), pp, 827-38.
- Gaston Nievas and Alice Soldano, "<u>Has the US Exorbitant Privilege Become a Rich World Privilege</u>." World Inequality Lab Working Paper 2024/14

# III. IMPLICATIONS OF LOW REAL INTEREST RATES FOR FISCAL POLICY (I): DEFICITS AND INTEREST RATES: CLOSED AND OPEN ECONOMY OVERLAPPING GENERATIONS FRAMEWORKS

Obstfeld-Rogoff (OR), 129-191, especially 142-143 (generational accounts), 167-174 (public debt and interest rates), 181-193 (dynamic overlapping generations models and intergenerational accounts). See also Appendix 3A, pp. 191-195, on dynamic inefficiency

# IV. SECULAR STAGNATION

- Rachel, Lukasz, and Lawrence Summers "On Secular Stagnation in the Industrialized World," Brookings Papers on Economic Activity, Spring 2019.
- Gordon, Robert J. 2012. "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds." NBER Working Paper 18315.
- Rogoff, Kenneth. "Secular Stagnation versus Debt Supercycle," paper presented to Asian Monetary Policy Conference May 21.
  - Goodhart, Charles and Manoj Pradhan, 2020. *The Great Demographic Reversal: Ageing Societies, Waning Inequality, and an Inflation Revival.* London: Palgrave MacMillan.

#### V. INFLATION

- \*OR 514-530 on the Cagan Model and the Monetary Model of Exchange Rates
- \*OR 634-644 on the Barro Gordon Model
- \*Rogoff, Kenneth. 2022. "<u>The Age of Inflation: Easy Money, Hard Choices</u>." Foreign Affairs November/December.
- Afrouzi, Hassan, Marina Halac, Kenneth Rogoff, and Pierre Yared. Working Paper. "Changing Central Bank Pressures and Inflation." draft for Brookings Papers on Economic Activity, Spring 2024. Brookings Papers version
- Cochrane, John, *The Fiscal Theory of the Price Level*, Princeton University Press 2022.
- Stancheva, Stefanie. "Why do we dislike Inflation?" draft for Brookings Papers on Economic Activity, Spring 2024. <u>Draft for Brookings</u>

# VI The Long Run Behavior of Real Interest Rates

<sup>\*</sup>Handout on overlapping generations

- \*Rogoff, Kenneth S., Barbara Rossi, and Paul Schmelzing. 2024. "Long-Run Trends in Long-Maturity Real Rates." *American Economic* Review forthcoming.
- Obstfeld, Maurice, 2023. "Natural and Neutral Real Rates, Past and Future." Paper prepared for 10<sup>th</sup> Asian Monetary Forum, May.
- Katie Baker, Logan Casey, Marco Del Negro, Aidan Gleich, and Ramya Nallamotu, "<u>The Evolution of Short-Run r\* after the Pandemic</u>" Liberty Street Economics, August 10, 2023
- Holston, Kathryn, Thomas Laubach and John C. Williams, 2023. "Measuring the Natural Rate of Interest after COVID-19." Federal Reserve Bank of New York Staff Report 1063, June.

#### VII Is Debt a Free Lunch?

Blanchard, Olivier, Fiscal Policy Under Low Rates, Cambridge MIT Press, 2023

- Blanchard, Olivier, 2021. "Why low interest rates force us to revisit the scope and role of fiscal policy: 45 takeaways." Peterson Institute for International Economics December.
- \*Yared, Pierre, 2019. "<u>Rising Government Debt: Causes and Solutions for a Decades-Old Trend.</u>" *Journal of Economic Perspectives* 33 (2) Spring, pp. 115-140.
- \*Mauro, Paolo, and Jing Zhou, " $\underline{r} \underline{g} < 0$ : Can We Sleep More Soundly?" Mimeo, forthcoming *IMF Economic Review*, 2020.

#### VIII FINANCIAL REPRESSION

- Ball, Lawrence, 2023. "Did the U.S. Really Grow Out of Its World War II Debt? National Bureau of Economic Research Working Paper 31577, August.
- \*Reinhart, Carmen M. and M. Belen Sbrancia, "The Liquidation of Government Debt," *Economic Policy* 82 (2015): 291-333.

# IX. BANK RUNS AND THE PERSISTENCE OF THE GREAT DEPRESSION

\*Diamond, Douglas and Philip H. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91(3): 401-19, June 1983.

- \*Bernanke, Ben, "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *American Economic Review* 73 (June 1983): 257-76.
- Diamond, Douglas, "Banks and Liquidity Creation: A Simple Exposition of the Diamond Dybvig Model," Federal Reserve Bank of Minneapolis Quarterly, 93(2).
- Michael Goodwin, David Bach, and Joel Bakan, *Economix: How Our Economy Works (and Doesn't Work), in Words and in Pictures*, New York: Abrams ComicArts Books, 2012. (This is a supplementary reading but despite being an illustrated comic book, extremely insightful.) See chapters 3 and 4
- Shlaes, Amity, *The Forgotten Man: A New History of the Great Depression*, New York: Harper Books, 2007. (again, supplementary but an interesting different point of view.)

#### X. SPECULATIVE EXCHANGE RATE ATTACKS

Basic models and empirical issues: Salant-Henderson-Krugman model, multiple equilibria ("generation 2")

\*Obstfeld and Rogoff: pp. 558-567, 635-638, 648-653.

#### XI. DOLLAR DOMINANCE AND THE GLOBAL EXCHANGE RATE SYSTEM: Part I

- \*Gourinchas, Pierre-Olivier, 2021. "The Dollar Hegemon: Evidence and Implications for Policymakers," presented at Asian Monetary Forum.
- \*Bernanke, Ben. 2016 "<u>The Dollar's International Role: An Exorbitant Privilege</u>?" Brookings Commentary, January.
- \*Bertaut, Carol, Bastian von Beschwitz, and Stephanie Curcuru, 2023. ""<u>The International Role of the U.S. Dollar: Post-COVID Edition</u>" FEDs Notes June 23.
- \*Milesi-Ferreti, 2021. "The US is Increasingly a Debtor Nation: Should We Worry?" commentary, Brookings, April 14.
- Coppola, Antonio, Arvind Krishnamurthy and Chenzi Xu, "<u>Liquidity, Debt Denomination, and Currency Dominance</u>" Working paper Stanford University.

# XII. DOLLAR DOMINANCE AND THE GLOBAL EXCHANGE RATE SYSTEM: Continued

- \*Kindleberger, Charles P. 1967. "<u>The Politics of International Money and World Language</u>." Princeton Essays in International Finance No. 61, August.
- \*Triffen, Robert, 1978. "Gold and Dollar Crisis: Yesterday and Tomorrow." Princeton Essays in International Finance 132. December.
- \*Ilzetzki, Ethan, Carmen M. Reinhart, and Kenneth S. Rogoff. 2019. "<u>Exchange Arrangements Entering the 21st Century: Which Anchor Will Hold?</u>" *Quarterly Journal of Economics* 134 (2): 599-646.
- \*Farhi, Emmanuel, and Maggiori, Matteo, 2018. "A Model of the International Monetary System," *Quarterly Journal of Economics* 133 (1): 295-355.
- Michael Goodwin, David Bach, and Joel Bakan, *Economix: How Our Economy Works (and Doesn't Work)*, in *Words and in Pictures*, New York: Abrams ComicArts Books, 2012. See chapter 5.
- \*Rey, Helene, "Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence," <u>Proceedings of Kansas City Federal Reserve Symposium, 2013</u> (Jackson Hole). (More recent version: NBER working paper 21162, May 2015.)
- \*Gopinath, Gita, "The International Price System," <u>Proceedings of Kansas City Federal Reserve Symposium</u>, 2015 (Jackson Hole).
- Ilzetzki, Ethan, Carmen M. Reinhart, and Kenneth S. Rogoff, 2020. "Why is the Euro Punching Below its Weight?" *Economic Policy*, July.
- Ilzetski, Ethan, Carmen Reinhart, and Kenneth Rogoff. 2020. "Will The Secular Decline In Exchange Rate And Inflation Volatility Survive Covid-19?" Brookings Papers on Economic Activity. Edited by Janice Eberly and James Stock Fall.
- Maggiori, Matteo, Brent Neiman and Jesse Schreger, 2020. "<u>International Currencies and Capital Allocation.</u>" *Journal of Political Economy* 128 (6), June.
- Gopinath, Gita, Emine Boz Camila Casas Federico Diez Pierre-Olivier Gourinchas Mikkel Plagborg-Moller. 2020. "Dominant Currency Paradigm." American Economic Review 110 (3): 677-719.
- Miranda-Agrippino, Silvio and Helene Rey, 2020. "<u>US Monetary Policy and the Global Financial Cycle,</u> *he Review of Economic Studies*, Volume 87, Issue 6, November 2020, Pages 2754–2776,"
- Eichengreen, Barry, Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System, London: Oxford University Press, 2011.

#### XIII. PERFORMANCE OF EXCHANGE RATE REGIMES

- \*Rose, Andrew, "One Money, One Market: Estimating the Effects of a Common Currency on Trade," *Economic Policy* 15(30), April 2000, 7-45.
- \*Du, Wenxin, and Jesse Schreger. 2022 "<u>CIP Deviations, the Dollar and Frictions in International Capital Markets"</u> in *Handbook of International Economics vol. 6* (Gita Gopinath, Elhanan Helpman and Kenneth Rogoff, eds.), 2022 Elsevier.
- Ilzetski, Ethan, Carmen Reinhart, and Kenneth Rogoff. "Rethinking Exchange Rates Regimes." Handbook of International Economics, edited by Gita Gopinath, Elhanan Helpman, and Kenneth Rogoff. Vol. 5. North Holland: Elsevier, 2022
- Glick, Reuven and Andrew Rose, 2016. "Currency Unions and Trade: A Post-EMU Reassessment." *European Economic Review* 87 (August): 78-91.
- Lane, Phillip, 2021. "The Resilience of the Euro," *Journal of Economic Perspectives* 35 (2), Spring 2021, 3-22.

#### XIV. SOVEREIGN RISK AND DEFAULT

- \*Obstfeld and Rogoff, chapter 6, 363-401.
- \*Meyer, Joseph, Carmen M. Reinhart and Cristoph Trebesch, 2021. "Sovereign Bonds since Waterloo." Quarterly Journal of Economics,
- \*Kose, Ayhan, Franziska Ohnsorge, Carmen Reinhart and Kenneth Rogoff, "The Aftermath of Debt Surges," *Annual Review of Economics* 2022
- Hebert, Benjamin and Jesse Schreger, "The Costs of Sovereign Default: Evidence from Argentina," American Economic Review 107 (10) October 2017. 3119-45.
- Reinhart, Carmen M, Vincent Reinhart, and Kenneth Rogoff. 2015. "Dealing with Debt," *Journal of International Economics* 96, Supplement 1 (July), S43-S55.

#### XV. CHINA

- Rogoff, Kenneth S., and Yuanchen Yan. 2023. "<u>A Tale of Tier 3 Cities</u>." February 2023. (Earlier version published as NBER working paper 30519, September 2022). <u>NBER</u>
- Rogoff, Kenneth, and Yuanchen Yang. Forthcoming. "Rethinking China's Growth." Economic Policy 2024.

Prasad, Eswar, 2023. "<u>Has China's Growth Model Gone from Miracle to Malady?</u>" Brookings Papers on Economic Activity, Spring 2023.

# XVI. GLOBAL CAPITAL MARKET INTEGRATION: DEVELOPING COUNTRIES

- \*Kose, M. Ayhan, Eswar Prasad, Kenneth Rogoff and Shang-Jin Wei, "Financial Globalization, A Reappraisal," <u>IMF Staff Papers</u> 56(1), 2009.
- Rogoff, Kenneth. 2022. "Emerging Market Sovereign Debt in the Aftermath of the Pandemic." Journal of Economic Perspectives 36 (4) Fall, pp. 147-166.
- Acharya, Viral, 2023. "India at 75: Replete with Contradictions, Brimming with Opportunities, Saddled with Challenges." Brookings Papers on Economic Activity, Spring 2023.

# XVII: GLOBAL FINANCIAL CRISIS

- \*Reinhart, Carmen and Kenneth Rogoff, *This Time Is Different: Eight Centuries of Financial Folly*, Princeton University Press, 2009, chapters 13-17.
- Reinhart, Carmen and Kenneth Rogoff, 2014. "Recovery from Financial Crises: Evidence from 100 Episodes." *American Economic Review: Papers and Proceedings* 104 (5): 50-55.
- Schularick, Moritz and Alan Taylor, "Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870-2008," *American Economic Review* 102 (2), April 2012, 1029-61.
- Fernald, John, Robert Hall, James Stock and Mark Watson, 2017. "The Disappointing Recovery of Output After 2009," *Brooking Papers on Economic Activity*, Spring 2009.
- Romer, Christina and David Romer, 2017. New Evidence on the Aftermath of Financial Crises in Advanced Countries, Appendix A: Derivation of the New Measure of Financial Distress, Appendix B: Additional Narrative Evidence on Financial Distress in Key Episodes, Appendix C: Additional Empirical Results, American Economic Review, October 2017

# XVIII. IMPLICATIONS OF PERSISTENT LOW REAL INTEREST RATES FOR MONETARY POLICY

\*Eggertsson, Gauti and Paul Krugman, "Debt, Deleveraging and the Liquidity Trap: A Fisher-Minsky-Koo Approach," *The Quarterly Journal of Economics* (2012), 1469-1513.

- Holston, Kathryn, Thomas Laubach and John C. Williams, 2017. "Measuring the Natural Rate of Interest: International Trends and Determinants. *Journal of International Economics* 108 (May): S59-S75.
- Eberly Janet, James Stock and Jonathan Wright, 2019 <u>The Federal Reserve's Current Framework for Monetary Policy: A Review and Assessment</u>. Paper presented to Federal Reserve Board Conference, June.
- \*Rogoff, Kenneth. 2017. "<u>Dealing with Monetary Paralysis at the Zero Bound</u>." *Journal of Economic Perspectives* 31 (3): 47-66.
- Bernanke, Ben. 2020. "<u>The New Tools of Monetary Policy</u>." American Economic Association Presidential Address, January.

#### XVII: GLOBAL FINANCIAL CRISIS, PART II

- \* Reinhart, Carmen M, and Kenneth S Rogoff. 2014. "<u>Financial and Sovereign Debt Crises:</u>
  <u>Some Lessons Learned and Those Forgotten,</u>" in *Financial Crises: Causes, Consequences, and Policy Responses*, edited by S. Claessens, M.A. Kose, L. Laeven, and F. Valencia. (Also, <u>IMF Working paper WP/13/266.</u>)
- Reinhart, Carmen and Kenneth Rogoff, "From Financial Crash to Debt Crisis," <u>American</u>
  <u>Economic Review</u>, August 2011. <u>DATA</u>. Also available as <u>NBER working paper 15795</u>,
  March 2010.
- Jordà, Oscar, Katharina Knoll, Dmitry Kuvshinov, Mortiz Schularick and Alan Taylor "The Rate of Return on Everything, 1870–2015" w24112.pdf Quarterly Journal of Economics Volume 134, Issue 3, August 2019, Pages 1225–1298

# XVIII CAPITAL FLOWS AND EXCHANGE RATES

- Lilley, Andrew, Matteo Maggiori, Brent Neiman and Jesse Schreger, 2020. "<u>The Exchange Rate Reconnect</u>," mimeo, Harvard University, December.
- Maggiori, Matteo, Brent Neiman and Jesse Schreger, 2019. "<u>International Currencies and Capital Allocation.</u>" Mimeo University of Chicago.
- Gourinchas, Pierre-Olivier and Helene Rey, 2007, "International Financial Adjustment," <u>Journal of Political Economy</u> 115(4), 665-703.
- Gabaix , Xavier and Matteo Maggiori, 2015. "<u>International Liquidity and Exchange Rate Dynamics.</u>" *Quarterly Journal of Economics* 13 69-1420.