

# THE FINANCIAL CRISIS AND THE GREAT RECESSION EC 1746 SPRING 2020

This course will explore what lessons we can draw from the experience of the U.S. economy during the financial crisis and Great Recession. We will look at research on what factors precipitated the boom and bust in the housing market and how the resulting mortgage crisis rippled through the global financial system and ultimately generated the most severe economic downturn since the Great Depression. We will learn not only about the macroeconomic consequences of these events but also about the high human costs. We will analyze the policies the government used to stabilize the financial system, mitigate foreclosures, and provide fiscal and monetary support to the economy. The course will conclude by considering the lessons in the context of the current state of the U.S. economy, with an emphasis on what we will need to do to fight the next economic downturn.

**Instructor:** Professor Karen Dynan

kdynan@fas.harvard.edu

https://scholar.harvard.edu/kdynan

Office hours: Wednesdays 3:15pm-5:15pm (https://harvard.zoom.us/j/717926924)

Sign up at: https://karendynanofficehours.as.me/schedule.php

Teaching fellow: Anna Stansbury

annastansbury@g.harvard.edu

Apratim Gautam

apratim\_gautam@student.hks.harvard.edu

Staff assistant: Eric Unverzagt, Economics Department, Littauer 316, North Yard

eunverz@fas.harvard.edu

**Course schedule:** Monday and Wednesday 1:30pm-2:45pm

(https://harvard.zoom.us/j/130987715)

Course website: <a href="https://canvas.harvard.edu/courses/65578">https://canvas.harvard.edu/courses/65578</a>

**PREREQUISITES.** Ec 1011B or Ec 1010B recommended. Students should be familiar with models of business cycle dynamics such as the IS-LM or IS-MP model. It will help to have some background in econometrics as well, so that you can comfortably read and critique the empirical papers on the reading list.

**SECTIONS.** Recommended. Time and place to be arranged.

**READINGS**. Only the readings marked with \*\* are required. The other readings are key pieces that I draw from for the class lectures and will be useful for students who want to do a deeper dive on these topics (the slides will have hyperlinks to yet further studies of interest). Harvard students can access all journal articles on the reading list through the links on the syllabus. Some of the news articles are on websites that require a paid subscription, but Harvard students should be able to access them all by following the instructions here.

**REQUIREMENTS AND GRADING.** There will be four short (1-3 page) writing assignments for which students will be asked, for example, to describe a policy that would address a specific challenge or summarize and critique an empirical paper. These assignments will account for 30% of the course grade. You may confer with others as you prepare assignments, but your thoughts must be written up independently. The midterm exam will account for 30% of the grade and the final exam will account for 40% of the grade. I encourage participation and will adjust grades upwards for those who contribute to constructive discussions that rely on facts and economic principles.

#### ASSIGNMENT DUE DATES.

Assignment 1—due Monday February 10 Assignment 2—due Monday March 2 Assignment 3—due Monday April 6 Assignment 4—due Monday April 27

MIDTERM. Monday March 9

FINAL. Saturday May 16 at 2pm

**COMMUNICATION.** I will hold regular office hours at the time listed above except when I am traveling (in these cases I will try to rebook office hours for a different time that week). In addition, feel free to reach me by email with concerns and questions. I will make every effort to get back to you in a timely fashion, but if you do not hear back within 48 hours, please write again to make sure that I did not lose track of your email. I also encourage you to check the course website for news and to post course-related questions, observations and suggestions there.

**CODE OF CONDUCT.** Please be on time and show respect for the other students when asking questions or participating in class discussions.

I would prefer that you take notes by hand since the available evidence suggests that it is the most effective way to learn. However, you may take notes on a laptop or tablet if you feel strongly that it would be beneficial for you. Any other use of electronic devices in class—such as checking the news, email, text messages or social media—is not allowed.

All course activities—including class meetings, homework assignments, and exams—are subject to the <u>Academic Integrity</u> portion of the <u>Harvard College Handbook for Students</u>. Academic misconduct of any sort will not be tolerated.

# **CLASS SCHEDULE**

Mon. January 27	Class 1	Course Introduction and Overview
Wed. January 29	Class 2	Antecedents 1: Economic and Financial Environment
Mon. February 3	Class 3	Antecedents 2: The Drive for Homeownership in the United States
Wed. February 5	Class 4	The Mortgage Boom and Bust 1
Mon. February 10	Class 5	The Mortgage Boom and Bust 2
Wed. February 12	Class 6	How the Broader Financial Crisis Unfolded: Part 1
Mon. February 17		NO CLASS: PRESIDENT'S DAY
Wed. February 19	Class 7	How the Broader Financial Crisis Unfolded: Part 2
Wed. Febluary 19	Class I	now the Broader Financial Crisis Officided. Fart 2
Mon. February 24	Class 8	Crisis Policy Response: Pre-Lehman Efforts
Wed. February 26	Class 9	Crisis Policy Response: Lehman and Beyond
M M 10	01 40	
Mon. March 2	Class 10	Crisis Policy Response: Support for Homeowners
Wed. March 4	Class 11	Financial Crisis Wrap-Up: Debate over Where the Blame Lies
Mon. March 9	Class 12	MID-TERM
Wed. March 11	Class 13	Global Economic and Financial Risks
Mon. March 16		NO CLASS: SPRING BREAK
Wed. March 18		NO CLASS: SPRING BREAK
Mon. March 23	Class 14	Lindate on Current Developments & Financial Crises and Decessions
		Update on Current Developments + Financial Crises and Recessions
Wed. March 25	Class 15	The Costs of Recessions and Slow Recoveries
Mon. March 30	Class 16	The Role of the Safety Net and Other Protections
Wed. April 1	Class 17	Crime and Punishment? (GUEST LECTURE BY TIM MASSAD)
Mon. April 6	Class 18	(Traditional) Fiscal Policy Options for Stabilizing the Economy
Wed. April 8	Class 19	Credit Policy as Fiscal Policy
Mon. April 13	Class 20	Monetary Policy Options for Stabilizing the Economy
Wed. April 15	Class 21	The European Crisis
Mon. April 20	Class 22	Policies to Make the Financial System Safer
Wed. April 22	Class 23	Financial Reform: Outstanding Issues
	0.000 20	ataataaaa aatataaa taaaa
Mon. April 27	Class 24	Unfinished Financial Reform + Q and A with ED GOLDING
Wed. April 29	Class 25	Wrapping Up

## **READINGS**

The readings marked with \*\* are required. The other readings contain material that I will draw off for the class lectures and will be useful for students who want to do a deeper dive on these topics.

#### Class 1—Course Introduction and Overview

Hutchins Center on Fiscal and Monetary Policy at Brooking and Yale School of Management Program on Financial Stability. <u>Charting the Financial Crisis: U.S. Strategies and Outcomes</u>. September 2018.

Center on Budget and Policy Priorities. <u>Chart Book: The Legacy of the Great Recession</u>. January 10, 2019.

#### Class 2—Antecedents 1: Economic and Financial Environment

\*\*Greenspan, Alan. Consumer Finance. Speech at the Federal Reserve System's Fourth Annual Community Affairs Research Conference. April 8, 2005.

\*\*Wessel, David. Professor Finds Many Fault Lines in the Crisis. Wall Street Journal. April 22, 2010.

Congressional Budget Office. The Distribution of Household Income. March 19, 2018.

Congressional Budget Office. <u>CBO's Projections of Demographic and Economic Trends</u>. (pages 60-63 on interest rates). June 25, 2019.

Blanchard, Olivier and John Simon. The Long and Large Decline in U.S. Output Volatility. Brookings Papers on Economic Activity. Spring 2001.

Rajan, Raghuram G. The Greenspan Era: Lessons for the Future. August 27, 2005.

#### Class 3—Antecedents 2: The Drive for Homeownership in the United States

\*\*Congressional Budget Office. An Overview of Federal Support for Housing. November 3, 2009.

Frame, W. Scott and Lawrence J. White. <u>Fussing and Fuming over Fannie and Freddie: How Much Smoke, How Much Fire?</u> *Journal of Economic Perspectives* 19(2): 159-184. Spring 2005.

Glaeser, Edward L. Rethinking the Federal Bias Toward Homeownership. Cityscape: A Journal of Policy Development and Research 13(2): 5-37. 2011.

Goodman, Laurie S., and Christopher Mayer. 2018. <u>Homeownership and the American Dream</u>. *Journal of Economic Perspectives*, 32 (1): 31-58. Winter 2018.

# Class 4—The Mortgage Boom and Bust 1

\*\* Minsky's Moment. The Economist. July 30, 2016.

Staff of the Financial Crisis Inquiry Committee. Securitization and the Mortgage Crisis. April 2010.

Staff of the Financial Crisis Inquiry Committee. The Mortgage Crisis. April 2010.

# Class 5—The Mortgage Boom and Bust 2

\*\*Foote, Christopher L., Kristopher S. Gerardi, and Paul Willen. Why Did So Many People Make So Many Ex Post Bad Decisions? The Causes of the Foreclosure Crisis. Federal Reserve Bank of Boston Public Policy Discussion Paper No. 12-2. July 2012 (pp. 1-25).

\*\*Ip, Greg. What the 'Big Short' Movie Gets Right—and Wrong—About the Financial Crisis. Wall Street Journal. December 11, 2015.

Adelino, Manuel, Antoinette Schoar, and Felipe Severino. Loan Originations and Defaults in the Mortgage Crisis: The Role of the Middle Class. The Review of Financial Studies. July 2016.

Bhutta, Neil, Jane Dokko, and Hui Shan. <u>Consumer Ruthlessness and Mortgage Default during the 2007 to 2009 Housing Bust</u>. *Journal of Finance* 72(6): 2433-2466. December 2017.

Foote, Christopher L. and Paul Willen. <u>Mortgage-Default Research and the Recent Foreclosure Crisis</u>. Federal Reserve Bank of Boston Working Paper No. 17-13. October 2017.

#### Class 6—How the Broader Financial Crisis Unfolded 1

\*\* The Day the Market Died. This American Life. October 3, 2008.

Staff of the Financial Crisis Inquiry Commission. The Shadow Banking System. May 2010.

Staff of the Financial Crisis Inquiry Commission. Credit Ratings and the Financial Crisis. June 2010.

#### Class 7—How the Broader Financial Crisis Unfolded 2

- \*\* Out of the Hedges and Into the Woods. This American Life. October 3, 2008.
- \*\* Brunnermeier, Markus K. <u>Deciphering the Liquidity and Credit Crunch 2007-2008</u>. *Journal of Economic Perspectives*, 23 (1): 77-100. Winter 2009.

Cordell, Larry, Yilin Huang, and Meredith Williams. <u>Collateral Damage: Sizing and Assessing the Subprime CDO Crisis</u>. Federal Reserve Bank of Philadelphia Working Paper No. 11-30/R. May 2012.

Financial Crisis Inquiry Commission. <u>The Story of a Mortgage Security: Inside CMLTI 2006-NC2</u>. January 2011.

## Class 8—Crisis Policy Response: Pre-Lehman Efforts

- \*\*Swagel, Phillip. Legal, Political, and Institutional Constraints on the Financial Crisis Policy Response. *Journal of Economic Perspectives*, 29 (2): 107-22. Spring 2015.
- \*\* Bernanke, Ben. Fed Emergency Lending. December 3, 2015.

English, Bill and Trish Mosser. The Use and Effectiveness of Conventional Liquidity Tools Early in the Financial Crisis. September 2018.

Geithner, Tim and Andrew Metrick. <u>Ten Years after the Financial Crisis: A Conversation with Timothy Geithner</u>. October 2018.

Jester, Dan, Matthew Kabaker, Jeremiah Norton, Lee Sachs. Rescuing the Mortgage Giants. September 2018.

Logan, Lorie, William Nelson, and Patrick Parkinson. <u>Novel Lender of Last Resort Programs</u>. September 2018.

#### Class 9—Crisis Policy Response: Lehman and Beyond

- \*\* Bernanke, Ben S. <u>Reflections on a Year of Crisis</u>, Speech at the Federal Reserve Bank of Kansas City's Annual Economic Symposium, Jackson Hole, Wyoming. August 21, 2009.
- \*\* Liang, Nellie, Margaret M. McConnell, and Phillip Swagel. <u>Evidence on Outcomes</u>. November 2018 (pp. 11-15).

Jester, Dan, David Nason, and Jeremiah Norton. Recapitalizing the Banking System. September 2018.

Clark, Tim, Matt Kabaker, and Lee Sachs. The Banks: Reviving the System. September 2018.

# Class 10—Crisis Policy Response: Support for Homeowners

- \*\* Dokko, Jane and Karen Dynan. <u>Ten Years Since the Financial Crisis: Some Lessons for Reducing Risks to Households</u>. November 2018.
- \*\* Liang, Nellie, Margaret M. McConnell, and Phillip Swagel. <u>Evidence on Outcomes</u>. November 2018 (pp. 15-16).

Abel, Joshua and Andreas Fuster. <u>How Do Mortgage Refinances Affect Debt, Default, and Spending? Evidence from HARP</u>. Federal Reserve Bank of New York Staff Report No. 841. February 2018.

Agarwal, Sumit, Gene Amromin, Itzhak Ben-David, Souphala Chomsisengphet, Tomasz Piskorski and Amit Seru. Policy Intervention in Debt Renegotiation: Evidence from the Home Affordable Modification Program. Journal of Political Economy, Vol. 125, 3. June 2017.

Piskorski, Tomasz and Seru, Amit. <u>Debt Relief and Slow Recovery: A Decade after Lehman</u>. December 1, 2018.

## Class 11—Financial Crisis Wrap-Up: Debate over Where the Blame Lies

- \*\*Financial Crisis Inquiry Commission. <u>Conclusions of the Financial Crisis Inquiry Commission</u>. January 2011.
- \*\*Financial Crisis Inquiry Commission. <u>Dissenting Views by Keith Hennessey</u>, <u>Douglas Holtz-Eakin</u>, <u>and Bill Thomas</u>. January 2011.

Swap Cops. This American Life. October 3, 2008.

Canner, Glenn and Neil Bhutta. Did the CRA Cause the Mortgage Market Meltdown? March 2009.

Mankiw, N. Gregory. Learning the Right Lessons from the Financial Crisis. New York Times. July 27, 2018.

Samuelson, Robert J. <u>Lehman Brothers Collapsed 10 Years Ago. Whose Fault was It?</u> Washington Post. August 26, 2018.

Stiglitz, Joseph E. Capitalist Fools. Vanity Fair. January 2009.

## Class 12—MIDTERM

#### Class 13—Global Economic and Financial Risks

[No readings—the campus was up-ended with students packing to depart and turn-out was understandably light; we had an informal conversation about risks to economy and the financial system from the virus]

# Class 14—Update on Current Developments + Channels through which a Financial Crisis Can Affect the Economy

\*\* Bernanke, Ben. S. Financial Panic and Credit Disruptions in the 2007-09 Crisis. Brookings Blog. September 13, 2018.

Bernanke, Ben. S. The Real Effects of the Financial Crisis. Brookings Papers on Economic Activity. Fall 2018.

Mian, Atif R. and Amir Sufi. Finance and Business Cycles: The Credit-Driven Household Demand Channel. National Bureau of Economic Research Working Paper No. 24322. February 2018.

## Class 15—Why Recessions and Slow Recoveries are Costly

- \*\* Congressional Budget Office. <u>Understanding and Responding to Persistently High Unemployment</u>. February 16, 2012.
- \*\* Murray, Sara. The Curse of the Class of 2009. Wall Street Journal. May 9, 2009.

Davis, Steven J. and Till Von Wachter. Recessions and the Costs of Job Loss. Brookings Papers on Economic Activity. Fall 2011.

Hoynes, Hilary W., Douglas L. Miller, and Jessamyn Schaller. Who Suffers During Recessions? National Bureau of Economic Research Working Paper No. 17951. March 2012.

Kahn, Lisa B. The Long-term Labor Market Consequences of Graduating from College in a Bad Economy. Labour Economics. 17(2): 303-16. April 2010.

Parker, Jonathan A. and Annette Vissing-Jorgensen. <u>The Increase in Income Cyclicality of High-Income Households and Its Relation to the Rise in Top Income Shares</u> *Brookings Papers on Economic Activity*. Fall 2010.

Yagan, Danny. <u>Employment Hysteresis from the Great Recession</u>. Journal of Political Economy. September 2019.

## Class 16—The Role of the Safety Net and Other Protections (in Mitigating the Human Costs)

\*\* Bitler, Marianne and Hilary Hoynes. The More Things Change, the More They Stay the Same? The Safety and Poverty in the Great Recession. *Journal of Labor Economics*. January 2016.

Auclert, Adrien, Will Dobbie, and Paul Goldsmith-Pinkham. <u>Macroeconomic Effects of Debt Relief:</u> Consumer Bankruptcy Protections in the Great Recession. March 2019.

Ganong, Peter and Pascal Noel. <u>Consumer Spending during Unemployment: Positive and Normative Implications</u>. *American Economic Review*. July 2019.

Johnston, Andrew, and Alexandre Mas. <u>Potential Unemployment Insurance Duration and Labor Supply: The Individual and Market-Level Response to a Benefit Cut</u>. *Journal of Political Economy*. October 2018.

Maestas, Nicole, Kathleen J. Mullen, and Alexander Strand. <u>The Effect of Economic Conditions on the Disability Insurance Program: Evidence from the Great Recession</u>. December 2018.

# Class 17—Crime and Punishment? Accountability for Corporate Wrongdoing (GUEST LECTURE BY TIM MASSAD)

Readings can be found on the Ec 1746 Canvas page.

Rakoff, Jed S. The Financial Crisis: Why Have No High-Level Executives Been Prosecuted? *The New York Review of Books*. January 2014.

Buell, Samuel W. Capital Offenses: Business Crime and Punishment in America's Corporate Age. 2016.

## Class 18—(Traditional) Fiscal Policy Options for Stabilizing the Economy

\*\* Furman, Jason. The Fiscal Response to the Great Recession: Steps Taken, Paths Rejected, and Lessons from Last Time. September 2018.

Congressional Budget Office. <u>Policies for Increasing Economic Growth and Employment in 2010 and 2011</u>. January 2010.

Berger, David, Nicholas Turner, and Eric Zwick. <u>Stimulating Housing Markets</u>. National Bureau of Economic Research Working Paper No. 22903. December 2016.

Green, Daniel, Brian T. Melzer, Jonathan A. Parker, and Arcenis Rojas. <u>Accelerator or Brake? Cash for Clunkers, Household Liquidity, and Aggregate Demand</u>. National Bureau of Economic Research Working Paper No. 22878. May 2018.

#### Classes 19—Credit Policy as Fiscal Policy

- \*\* Timiraos, Nick. <u>How Federal Lending Programs Served as a Big Shadow Stimulus</u>. *Wall Street Journal*. March 10, 2016.
- \*\* Wessel, David. The Facts Behind the Student Debt 'Crisis.' Fall 2015.

Lucas, Deborah. <u>Credit Policy as Fiscal Policy</u>. *Brookings Papers on Economic Activity*. Spring 2016.

Passmore, S. Wayne and Shane M. Sherlund. The FHA and the GSEs as Countercyclical Tools in the Mortgage Markets. *Economic Policy Review*. December 2018.

Dynan, Karen. What's Wrong with Student Loans (and How to Fix It). October 2019.

Looney, Adam. Reauthorizing the Higher Education Act: Strengthening Accountability to Protect Students and Taxpayers. Testimony Submitted to the U.S. Senate Committee on Health, Education, Labor and Pensions. April 2019.

# Class 20—Monetary Policy Options for Stabilizing the Economy

\*\* Bernanke, Ben. The New Tools of Monetary Policy. January 2020.

\*\* Kuttner, Ken. <u>How Low Can We Go? Prospects for Negative Interest Rates</u>. *EconoFact*. September 2019.

Kuttner, Kenneth N. <u>Outside the Box: Unconventional Monetary Policy in the Great Recession and Beyond.</u> *Journal of Economic Perspectives* 32(4). Fall 2018.

Bernanke, Ben. S. <u>The Taylor Rule: A Benchmark for Monetary Policy</u>. Brookings Blog. April 28, 2015.

Bernanke, Ben S. <u>How Big a Problem is the Zero Lower Bond on Interest Rates?</u> Brookings Blog. April 12, 2017.

Bernanke, Ben S. <u>The Zero Lower Bound on Interest Rates: How Should the Fed Respond?</u> Brookings Blog. April 12, 2017.

Forbes, Kristin. <u>Policy Implications of a Low Interest Rate Environment: The UK Experience</u>. presentation at the 62nd Annual Federal Reserve Bank of Boston Economic Conference. September 2018.

Gagnon, Joseph E. and Brian Sack. QE: A User's Guide. Peterson Institute for International Economics Policy Brief 18-19. October 2018.

#### Class 21—The European Crisis

\*\* Zettelmeyer, Jeromin. Why Has the Euro Crisis Management Been So Hard? June 2018.

Shambaugh, Jay. The Euro's Three Crises. Brookings Papers on Economic Activity. Spring 2012.

## Class 22—Policies to Make the Financial System Safer

\*\* Yellen, Janet L. Financial Stability a Decade after the Onset of the Crisis. Speech, August 25, 2017.

Aikman, David, Jonathan Bridges, Anil Kashyap, and Caspar Siegert. <u>Would Macroprudential Regulation Have Prevented the Last Crisis?</u> Mimeo, July 2018.

Elliott, Douglas J., Greg Feldberg, and Andreas Lehnert. <u>The History of Cyclical Macroprudential Policy in the United States</u>. Office of Financial Research Working Paper #0008. May 2013.

Tarullo, Dan. Stress Testing after Five Years. June 2014.

Tarullo, Dan. Financial Regulation Since the Crisis. December 2016.

## Class 23—Financial Reform: Outstanding Issues

\*\* Bernanke, Ben. S. Ending "Too Big to Fail: What's the Right Approach? Brookings Blog. May 13, 2016.

Haldane, Andrew G. <u>The Dog and the Frisbee</u>. Speech at the Federal Reserve Bank of Kansas City's Annual Economic Policy Symposium. August 2012.

Sarin, Natasha and Lawrence H. Summers. <u>Understanding Bank Risk through Market Measures</u>. *Brookings Papers on Economic Activity*. Fall 2016.

Sharfstein, David and Phillip Swagel. <u>Legislative Approaches to Housing Finance Reform</u>. Milken Institute Viewpoints. October 2016.

# Class 24—Unfinished Financial Reform + Q and A with Ed Golding

Tarullo, Daniel K. <u>Financial Regulation: Still Unsettled a Decade after the Crisis</u>. *Journal of Economic Perspectives*. Winter 2019.

# Class 25—Wrapping Up