

Bubbles, Crises, Crashes and Panics

YSS 3264 2nd Semester 2020/21

Introduction

Financial markets are subject to periodic bouts of “irrational exuberance” that lead to bubbles in asset prices, frequently followed by a crash. These afflict particularly stock markets and foreign exchange markets. The banking industry is highly vulnerable. Despite repeated attempts by the authorities to regulate finance, crises recur with remarkable frequency and regularity. In “This Time is Different”, Ken Rogoff and Carmen Reinhart document eight centuries of financial folly. These crises have profound effects on the real economy, leaving a legacy of unemployment and slow growth.

Learning outcomes

Students will have a thorough knowledge of a number of important financial, foreign exchange, and banking crises, stock market bubbles and crashes, in their historical and social contexts; an understanding of the economic analysis of financial markets and their pathologies.

They will have the skill of assembling information and arguments from many sources: historical, and economic; making use of qualitative, and quantitative data. They will be able to write effectively about critical episodes in economic history, bringing together historical data and economic analysis.

Topics to be covered

Will include the following:

Landmark crises: 18th Century Financial bubbles; the Great Crash and Depression, 1929 and the 1930s; South-East Asia, 1997; the 2008/9 global financial crisis

Theories of Financial market efficiency; and theories of bubbles and crashes.

Market psychology. Herd behaviour. Irrational exuberance.

Regulation of financial markets; development of regulatory tools and practices

Cycles of regulation and de-regulation.

Macro-prudential regulation

Too big to fail; too big to save. Moral hazard, bail-outs and bail-ins. “Banking on the state”

Effects of bubbles and crashes on the real economy and society. The economic costs of financial instability and regulation.

Executive compensation schemes, incentives of managers and owners of firms, principal-agent problems in corporate governance. Short-termism in finance. The influence of ratings agencies.

Corruption and crony capitalism.

National regulation of global financial markets

Indicative Reading List

The reading will be drawn from many journal articles, book chapters, newspaper and magazine articles, and official reports. An indicative list of books is as follows:

Viral Acharya and Matthew Richardson, *Restoring Financial Stability*, Wiley, 2009

Franklin Allan and Douglas Gale, *Understanding Financial Crises*, Oxford, 2007

Ben Bernanke, *The Courage to Act*, Norton, 2015

Buchan, James, *John Law: A Scottish Adventurer of the 18th Century*, Maclehose Press, 2018

Dale, R.S. *The First Crash: lessons from the South Sea Bubble*, Princeton University Press, 2004

Dimsdale, Nicholas H. and Anthony Hotson, *British Financial Crises since 1825*, Oxford Univ Press, 2014 (e-book in College library)

Barry Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression 1919-1939*, Oxford, 1992

Milton Friedman and Anna Schwartz, *A Monetary History of the United States*, Princeton, 1971

Goetzmann, William N., *The great mirror of folly: finance, culture, and the crash of 1720*, Yale series in economic and financial history, 2013

Aliber, Robert Z., and Charles P. Kindlebeger, *Manias, Panics and Crashes: A History of Financial Crises*, 7th edition, Palgrave Macmillan, 2015

Charles Mackay, *Extraordinary Popular Delusions and the Madness of Crowds*, 1841, 2nd ed. 1852, re-printed

Malkiel, Burton G., *A Random Walk Down Wall Street*, 10th ed, New York: W. W. Norton and Co., 2012 (and there is a 12th edition, 2015).

Hyman Minsky, *Stabilising an Unstable Economy*, Yale Univ Press, 1986

Quinn, William and John D Turner, *Boom and Bust: A Global History of Financial Crises*, Cambridge University Press, 2020

Raghuram Rajan, *Fault Lines*, Princeton, 2010

Jean-Charles Rochet, *Why are there so many banking crises?* Princeton University Press, 2008

Kenneth Rogoff and Carmen Reinhart, *This time is different: eight centuries of financial folly*, Princeton University Press, 2009.

Robert Shiller, *Irrational Exuberance*, Princeton, revised edition, 2015

Andrew Ross Sorkin, *Too Big to Fail*, Viking, 2009

Gillian Tett, *Fool's Gold*, Little Brown, 2009

Tooze, Adam, *Crashed: How a Decade of Financial Crises Changed the World*, Allen Lane, 2018

Anthony Trollope, *The Way We live Now*, Chapman and Hall, 1875

Vogel, Harold L., *Financial Market Bubbles and Crashes*, Cambridge University Press, 2009; 2nd edition, 2018

Assessment

Individual attendance	10%
Individual in-class participation	10%
Individual written assignments (e.g. essays)	40%
Mid-semester exams	15%
Final scheduled exams	25%

Pre-requisites

Either Intermediate Microeconomics (YSS2203) or Intermediate Macroeconomics (YSS2214)

or Principles of Economics (YSS1203) – any one of these.

Reading list

The Tulip Bubble

1. Boissoneault, Lorraine, "There Never Was a Real Tulip Fever", Sept 18th 2017, Smithsonian Magazine, <https://www.smithsonianmag.com/history/there-never-was-real-tulip-fever-180964915/>
2. Garber, Peter M. (1989), "Tulipmania", *Journal of Political Economy*, 97 (3): 535–60, doi:10.1086/261615
3. Garber, Peter M. (1990), "Famous First Bubbles", *The Journal of Economic Perspectives*, Vol. 4, No. 2, 4 (2): 35–54, doi:10.1257/jep.4.2.35, JSTOR 1942889
4. Charles Mackay, *Extraordinary Popular Delusions and the Madness of Crowds*, 1841, 2nd ed. 1852, re-printed (section from)
5. Goldgar, Anna, *Tulipmania: Money, Honor and Knowledge in the Dutch Golden Age*, University of Chicago Press, 2007

The South Sea bubble and the Mississippi Scheme

1. Carlos, Ann M. and Neal, Larry. (2006) "The Micro-Foundations of the Early London Capital Market: Bank of England shareholders during and after the South Sea Bubble, 1720–25" *Economic History Review* 59 (2006), pp. 498–538.
2. Dale, Richard S.; et al. (2005), "Financial markets can go mad: evidence of irrational behaviour during the South Sea Bubble", *Economic History Review*, **58** (2): 233–271, doi:[10.1111/j.1468-0289.2005.00304.x](https://doi.org/10.1111/j.1468-0289.2005.00304.x)
3. Dale, Richard (2004). *The First Crash: Lessons from the South Sea Bubble* (Princeton University Press.)
4. Goetzmann, William N., *The great mirror of folly: finance, culture, and the crash of 1720*, Yale series in economic and financial history, 2013
5. Paul, Helen J. (2011) *The South Sea Bubble: An Economic History of its Origins and Consequences*, Routledge, 2011
6. Shea, Gary S. (2007), "Understanding financial derivatives during the South Sea Bubble: The case of the South Sea subscription shares", *Oxford Economic Papers*, **59** (Supplement 1): i73–i104, doi:[10.1093/oenp/qpm031](https://doi.org/10.1093/oenp/qpm031)
7. Temin, Peter; Voth, Hans-Joachim (2004), "Riding the South Sea Bubble", [American Economic Review](https://doi.org/10.1257/0002828043052268), **94** (5): 1654–1668, doi:[10.1257/0002828043052268](https://doi.org/10.1257/0002828043052268)
8. Levenson, Thomas, *Money for Nothing: The South Sea Bubble and the Invention of Modern Capitalism*, 2020

Market efficiency

1. Fama, Eugene F., "Efficient Capital Markets: A Review of Theory and Empirical Work", *The Journal of Finance*. **25**: 383–417
2. Fama, Eugene F., "The behavior of stock-market prices," *Journal of business* (1965): 34-105

Theories of Bubbles

1. Brunnermeier, Markus, "Bubbles," New Palgrave Dictionary of Economics, 2nd Edition, Lawrence Blume and Steven Durlauf (eds.) 2009 may be downloaded from <https://scholar.princeton.edu/markus/publications/bubbles-entry-new-palgrave-dictionary-economics>
2. Stephen G Cecchetti, Hans Genberg, John Lipsky and Sushil Wadhwani, *Asset Prices and Central Bank Policy*, Geneva Report on the World Economy, no 2, 2000, International Centre for Monetary and Banking Studies and CEPR
3. Wikipedia article on "Economic Bubbles"
https://en.wikipedia.org/wiki/Economic_bubble
4. Vogel, Harold L., *Financial Market Bubbles and Crashes*, Cambridge University Press, 2nd Edition, 2018 (e-book in college library)
5. Froot, Kenneth A.; Obstfeld, Maurice (1991). "Intrinsic Bubbles: The Case of Stock Prices". *American Economic Review*. **81**: 1189–1214.
6. Shiller, Robert J., "Speculative Asset Prices", *American Economic Review*, vol. 104 no 6, June 2014, pp. 1486-1517

Hyperinflation

1. Philip Cagan, "The Monetary Dynamics of Hyperinflation" in Milton Friedman (ed.), *Studies in the Quantity Theory of Money*, Chicago University Press, 1956
2. Robert P. Flood and Peter Garber, "Market Fundamentals vs Price-Level Bubbles: The First Tests," *Journal of Political Economy*, 1980, vol. 88 no 4, 745-770
3. Carl E. Walsh, *Monetary Theory and Policy*, MIT Press, 3rd edition, 2010, chapter 4, Money and Public Finance
4. Sargent, Thomas J., "The end of four big inflations", from *Inflation: Causes and Effects*, Robert J. Hall (ed), U of Chicago Press, 1982; downloaded from www.nber.org/chapters/c11452.pdf. In Sargent, Thomas J., *Rational Expectations and Inflation*, Princeton University Press, 3rd edition, 2013
5. Keynes, John Maynard, *The Economic Consequences of the Peace*, 1920. Vol 2 of The Collected Writings of John Maynard Keynes, Cambridge University Press. E-book online in college library. <https://doi-org.libproxy1.nus.edu.sg/10.1017/UPO9781139524292>
6. Adam Tooze, "The German National Economy in an Era of Crisis and War, 1917–1945," chapter 18, *The Oxford Handbook of Modern German History*, Helmut Walser Smith (ed.), 2011
7. Thomas Mergel, "Dictatorship and Democracy, 1918–1939," chapter 19, *The Oxford Handbook of Modern German History*, Helmut Walser Smith (ed.), 2011

The Wall Street Crash and the Great Depression

1. Ben S. Bernanke, "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *The American Economic Review* 73, No. 3 (June 1983): 257–76, available from the St. Louis Federal Reserve Bank collection at [Stlouisfed.org](http://stlouisfed.org)
2. Eichengreen, Barry, *Golden Fetters: The Gold Standard and the Great Depression 1919-1939*, Oxford, 1992
3. Fisher, Irving, 1933, Debt-Deflation Theory of Great Depressions, *Econometrica*, vol. 1, no 4, pp.337-357
4. Milton Friedman and Anna Schwartz, *A Monetary History of the United States*, Princeton, 1971
5. Galbraith, John Kenneth, *The Great Crash 1929*, 1954 (many later editions)
6. J M Keynes, The Economic Consequences of Mr Churchill, in *Essays in Persuasion*, Collected Writings of John Maynard Keynes, vol 9, <https://doi-org.libproxy1.nus.edu.sg/10.1017/UPO9781139524162>
(Full text e-book in the college library)

Surveys of Recent Financial Crises

1. Allen, Franklin, and Douglas Gale, 2007, *Understanding Financial Crises*, Oxford University Press, chapter 1, "History and Institutions", pp. 1-26
2. Kindleberger, Charles P., *Manias, Panics, and Crashes: A History of Financial Crises*, Basic Books, 1978; and more recent editions
3. Reinhart, Carmen M., and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press, 2009, chapters 1-3, pp. 1-47
4. Schularik, M. and A.M. Taylor (2009), "Credit Booms Gone Bust: Monetary Policy: Leverage Cycles and Financial Crises, 1870-2008", Working Paper Series, No 15512, National Bureau of Economic Research.

Exchange rate crises under fixed and floating exchange rates

The gold standard

Bretton Woods

The European Monetary System

1. Bernanke, Ben, and Harold James, "The Gold Standard, Deflation, and Financial Crisis in the Great Depression: An International Comparison," in *Financial Markets and Financial Crises*, R. Glenn Hubbard (ed), University of Chicago Press for the NBER, 1991. Retrieved from <https://www.nber.org/chapters/c11482> 8th March 2020.
2. Bordo, Michael D., "The operation and demise of the Bretton Woods system: 1958 to 1971," VoxEU, 23 April 2017, <https://voxeu.org/article/operation-and-demise-bretton-woods-system>

3. Bordo, Michael D., 2017, "The operation and demise of the Bretton Woods system: 1958 to 1971", NBER, Working Paper No 23189
4. Roberts, Richard, "Sterling and the end of Bretton Woods"
www.helsinki.fi/iehc2006/papers1/Roberts.pdf
5. Eichengreen, Barry, and Charles Wyplosz, "The Unstable EMS," *Brookings Papers on Economic Activity*, 1993, no 1, pp. 51-143
6. Garber, Peter M., "The Collapse of the Bretton Woods Fixed Exchange Rate System," in Michael D. Bordo and Barry Eichengreen (eds.) *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*, University of Chicago Press, 1993 www.nber.org/chapters/c6876.pdf
7. Giavazzi, Francesco and Alberto Giovannini, *Limiting Exchange Rate Flexibility: The European Monetary System*, 1989, MIT Press
8. Catherine R. Schenk, "The Retirement of Sterling as a Reserve Currency after 1945: Lessons for the US Dollar?"
9. Schenk, C.R. (2013) The Sterling area and economic disintegration," *Geschichte und Gesellschaft*, 39 (2). pp. 177-196
10. Friedman, Milton, The Case for flexible exchange rates, in *Essays in Positive Economics*, Chicago: University of Chicago Press, 1953
11. Ronald I McKinnon, "Rules of the Game: International Money in Historical Perspective," *Journal of Economic Literature*, vol. XXXI, March 1993, pp.1-44

Argentina – a pegged exchange rate and a currency board

1. IMF, *Lessons from the crisis in Argentina*, Washington DC: IMF
<https://www.imf.org/external/np/pdr/lessons/100803.htm>

Theory of Exchange rate bubbles and crises

1. Krugman, Paul, (1979) "A model of balance of payments crises", *Journal of Money, Credit, and Banking* 11: 311-325
2. Flood, R. and Garber, P. (1984) "Collapsing exchange rate regimes: some linear examples", *Journal of International Economics* 17:1-13
3. Morris, Stephen, and Hyun Song Shin, "Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks," *American Economic Review*, Vol. 88, No. 3 (Jun., 1998), pp. 587-597
4. Corsetti, Giancarlo, [Stephen Morris Hyun Song Shin](#), "Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders," *The Review of Economic Studies*, Volume 71, Issue 1, 1 January 2004, Pages 87–113
5. Obstfeld, Maurice. "[Rational and Self-Fulfilling Balance-of-Payments Crises](#) ." *American Economic Review*, Vol. 76, No. 1, (March 1986), pp. 72-81.

- Obstfeld, Maurice, Jay C. Shambaugh and Alan M. Taylor, "The Trilemma in History: Tradeoffs among Exchange Rates, Monetary Policies, and Capital Mobility," 2004, NBER working paper, www.nber.org/papers/w10396

Sovereign Debt Crises of the 1980s

- Cohen, Daniel, "The Debt Crisis: A post-mortem", NBER Macroeconomics Annual 1992, pp. 64-114 <https://www.journals.uchicago.edu/toc/ma/1992/>
- Dooley, Michael P. "A Retrospective on the Debt Crisis," NBER working paper no 4963, December 1994
- Reinhart, Carmen M., and Kenneth S. Rogoff, *This Time is Different*, Princeton University Press, 2009, parts I to III, pages 1-138

Banking Crises

- Diamond, Douglas and Philip H. Dybvig, 1983, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy*, vol. 91 no 3, pp 401-419
- Allen, Franklin, and Douglas Gale, *Understanding Financial Crises*, Oxford: Oxford University Press, 2007, chapter 3
- Jean-Charles Rochet, *Why are there so many banking crises?* Princeton University Press, 2008

East Asian Financial Crisis

- Pierre-Richard Agénor, Marcus Miller, David Vines and Axel Weber (eds), 1999, *The Asian Financial Crisis: Causes, Contagion and Consequences*. Cambridge: Cambridge University Press.
- Radelet, Steven, and Jeffrey Sachs, "The Onset of the East Asian Financial Crisis", NBER Working paper 6680, August 1998
- Corsetti, Giancarlo, Paolo Pesenti and Nouriel Roubini, "What Caused the Asian Financial Crisis?" *Temi di Discussione* no. 343, Banca D'Italia, December 1998.
 - (alternative references: Corsetti, Giancarlo, Paolo Pesenti, and Nouriel Roubini, "What Caused the Asian Currency and Financial Crisis? Part I: A Macroeconomic Overview," NBER Working Paper 6833, National Bureau of Economic Research, Cambridge, MA, 1998.
 - Corsetti, Giancarlo, Paolo Pesenti, and Nouriel Roubini, "What Caused the Asian Currency and Financial Crisis? Part II: The Policy Debate," NBER Working Paper 6834, National Bureau of Economic Research, Cambridge, MA, 1998.
- Steven Radelet, Jeffrey D. Sachs, Richard N. Cooper and Barry P. Bosworth, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects" *Brookings Papers on Economic Activity*, Vol. 1998, No. 1 (1998), pp. 1-90
<http://www.jstor.org/stable/2534670>
- Martin Feldstein, "Refocusing the IMF", *Foreign Affairs*, 1st March 1998
<https://www.foreignaffairs.com/articles/asia/1998-03-01/refocusing-imf>
- Stanley Fischer, "The IMF and the Asian Crisis", speech, 20th March 1998
<https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp032098>

7. Chari, Anusha, and Peter Blair Henry, "Two Tales of Adjustment: East Asian Lessons for European Growth," *IMF Economic Review*, vol. 63 no 1, 2015, pp. 164-196
8. Boorman, Jack, Timothy Lane, etc etc, "Managing Financial Crises: the experience in East Asia," *Carnegie-Rochester Conference Series on Public Policy*, vol. 53 (2000), pp. 1-67
9. Kaminsky, Graciela L., and Carmen M. Reinhart, "The Twin Crises: The Causes of Banking and Balance of Payments Problems," *American Economic Review*, vol 89 no 3, June 1999, pp 473-500

Crises and Contagion

1. Pierre-Richard Agenor, Marcus Miller, David Vines and Axel Weber (eds), 1999, *The Asian Financial Crisis: Causes, Contagion and Consequences*. Cambridge: Cambridge University Press.
2. Claessens, Stijn and Kristin Forbes, eds, *International Financial Contagion*, Springer, 2001

2007-8 Financial Crisis

1. Charles Ferguson (director), *Inside Job*, 2010, <http://documentarylovers.com/film/inside-job/>
2. Michael Lewis, 2010, *The Big Short*. Film of the same name, 2015
3. Rajan Raghuram, *Fault Lines*
4. Tett, Gillian, *Fools' Gold*
5. Tooze, Adam, *Crashed: How a Decade of Financial Crises Changed the World*, Allen Lane, 2018
6. IMF, World Economic Outlook, April 2009
7. Wikipedia article on the crisis.
https://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932008
8. Minsky, Hyman, Stabilising an Unstable Economy
9. Federal Reserve Bank of St Louis, resources on the financial crisis of 2007—2008, <https://www.stlouisfed.org/financial-crisis> including a timeline and many articles in the academic journals, mainstream media, and official reports
10. The Economist, "Origins of the Financial Crisis", 7 Sept 2013, Schools Brief
<https://www.economist.com/news/schoolsbrief/21584534-effects-financial-crisis-are-still-being-felt-five-years-article>
11. Brunnermeier, Markus K., "Deciphering the Liquidity and Credit Crunch," *Journal of Economic Perspectives*, 2009, vol. 23 no 1, pp. 77-100 [liquidity credit crunch.pdf](#)
12. Gorton, Gary, "The Panic of 2007" NBER Working paper no 14358
www.nber.org/papers/w14358
13. Paul Mizen, "The Credit Crunch of 2007-2008: A Discussion of the Background, Market Reactions, and Policy Responses," *Federal Reserve Bank of St Louis Review*, September/October 2008
14. Stewart, James B., "Eight Days: The Battle to Save the American Financial system," *The New Yorker*, 12 September 2009
15. Adrian, Tobias, and Hyun Song Shin, "Liquidity and leverage," *Journal of Financial Intermediation*, 2010, Volume 19, Issue 3 (online in the college library)

European sovereign debt and banking crisis

Ireland
Greece
Spain, Portugal, Italy
Cyprus
Banking Union

1. Baldwin, Richard, and Francesco Giavazzi, *The Eurozone Crisis: A Consensus View of the Causes and a Few Possible Solutions*, VoxEU, September 2015
<https://voxeu.org/content/eurozone-crisis-consensus-view-causes-and-few-possible-solutions>
2. Brunnermeier, Markus and Ricardo Reis, "A Crash Course on the Euro Crisis," NBER Working paper 26229, September 2019, downloadable from
<https://scholar.princeton.edu/sites/default/files/markus/files/19-crashcourse.pdf>
3. Reuters, 21 August 2015 What has happened to more than 30 bailed-out European Banks? <https://uk.reuters.com/article/europe-banks-bailouts/factbox-what-has-happened-to-more-than-30-bailed-out-european-banks-idUKL5N10W0XJ20150821>
4. Hyman P. Minsky, "The Financial Instability Hypothesis," Working Paper No. 74, The Jerome Levy Economics Institute of Bard College, May 1992
5. Lane, Philip R., "The European Sovereign Debt Crisis," *Journal of Economic Perspectives*, vol 26, no 3, Summer 2012, pp. 49–68
6. Minsky, Hyman P., "The Financial-Instability Hypothesis: Capitalist Processes and the Behavior of the Economy" (1982). *Hyman P. Minsky Archive*. 282.
https://digitalcommons.bard.edu/hm_archive/282
7. Bertola, Giuseppe, John Driffill, Harold James, Hans-Werner Sinn, Jan-Egbert Sturm and Ákos Valentinyi, "Chapter 4: Banking Union: Who Should Take Charge?", EEAG Report on the European Economy 2014, 2014, 91–108 | Details | PDF Download
8. Thorsten Beck, "European Banking Union at three: a toddler with tantrums", Voxeu, 4th July 2017 <https://voxeu.org/article/european-banking-union-three>
9. Wikipedia article on the European Debt Crisis
https://en.wikipedia.org/wiki/European_debt_crisis
10. Martin Wolf, *The Shifts and the Shocks*, 2014, Allen Lane
11. Andrew Haldane and Piergiorgio Alessandri, "Banking on the State", 2009, <https://www.bis.org/review/r091111e.pdf>

12. Financial Services Authority, March 2009, The Turner Review: A Regulatory Response to the Global Banking Crisis, www.fsa.gov.uk/pubs/other/turner_review.pdf
13. Driffill, John, 2016, "Unconventional Monetary Policy in the Euro Zone" *Open Economies Review*, vol. 27, pp 387-404, DOI 10.1007/s11079-016-9393-0 (online in the college library)