

FINANCIAL CRISES: PAST, PRESENT, FUTURE (22MO0208)

FALL SEMESTER 2024

HANS-JOACHIM VOTH (voth@econ.uzh.ch)

Office Hours

Please contact Anne Sander (anne.sander@econ.uzh.ch) for an appointment. If you have any questions concerning the problem sets or the TA session, please contact Lorenzo Maria Casale (lorenzo.casale@econ.uzh.ch).

Times and Locations

Lectures: Thursdays, 10:15 - 12:00, both in room SOF-G-21 & on Zoom ([Lecture link](#); Meeting ID: 614 0539 4130 & Passcode: 093609), from **03.10** to 19.12.

Professor Voth cannot attend the lectures during the first two weeks of the semester (namely 19.09 & 26.09). A make-up lecture for these two lectures has been scheduled for Tuesday 08.10 from 10:15 to 11.45. The Zoom link is the same as stated above.

TA sessions: Wednesday, 12:15 - 13:45, both in room KO2-F-153 & on Zoom ([TA link](#); Meeting ID: 626 3463 2582, Passcode: 959608), bi-weekly from 25.09 to 11.12. Namely, the lectures will be hosted: 25.09, 09.10, 23.10, 06.11, 20.11 & 11.12.

The first lecture will therefore be the first TA session. You are expected to hand in the first problem set by that date. This problem set can be solved just by using the resource the TA will assign you in due time. The problem set will be graded. Please activate the notifications for the modifications of the Olat course for any updates.

Description

Economic and financial crises are a recurrent feature in modern economies. There is strong reason to believe that they were as common in the 19th century as they are today. Yet why do they occur much more often in developing countries? And how did some countries manage to leave the problem behind? This course presents an overview of different types of crises - asset price bubbles, sovereign debt crises, banking crises, currency crises, and twin crises. It analyses when these types of shocks occur and traces their causes, using the modern tools of macroeconomic theory and the theory of international trade and finance. The empirical parts draw equally on modern and historical evidence, and try to confront the theoretical predictions systematically with the key stylized facts.

Evaluation

Students will be assessed by weekly problem sets (25%), a referee report (15%) and a final exam (60%). The final exam is on Wednesday 16.01.2025, 10:00 - 12:00 and will take place in KO2-F-150. Further details about the exam will be discussed during the course.

Problem sets have to be handed in before the night before the corresponding TA session (first problem set due 24 Sep, by 23.59 in my inbox). Please be brief in your answers. We expect you to answer the problem set in **no more than a page**. Everyone must turn in their own individual work. If possible, please hand in a .pdf format and send them to lorenzo.casale@econ.uzh.ch (no handwritten solutions).

Rules of the Game

This is a small class, offering an opportunity to interact with each other and the professor. Use it! Speak your mind, ask questions. I reserve the right to cold-call students. As we understand that there are abundant reasons for distraction in the online teaching setting, we suggest you to come on-site. Those who do not pay attention will be more likely to be cold-called. We encourage you to take notes during and after class. Please remember, finally that attendance in class is mandatory for this course since it allows for exchange and interaction.

Structure

A. Overview and Introduction

1. Measurement and key facts

B. Asset Price Bubbles

2. Theoretical background
3. Dotcom mania
4. Bubbles and liquidity
5. South Sea bubble
6. Interwar bubbles
7. Experimental evidence

C. Sovereign Debt Crises

8. Key facts
9. Sustainability
10. Reputation vs sanctions
11. Impact, resolution and avoidance

D. Banking Crises

12. Some empirics
13. Theory of bank runs
14. Subprime debt
15. From financial crises to depression

E. Globalization, Exchange Rate Regimes, and Financial Crises

16. Contagion
17. Globalization and financial crises in emerging markets
18. Original sin
19. Argentina and Brazil
20. Liberalization and capital controls

F. Outlook

21. Causes and regulation

Readings

A. Overview and Introduction

1. Measurement and Key Facts

* **Bordo, Michael et al.** (2001): *Financial Crises: Lessons from the last 120 years*, in: *Economic Policy*

Reinhart, Carmen, and Ken Rogoff (2008): *This Time is Different: A Panoramic View of Eight Centuries of Financial Crises*, NBER Working paper No. 13882

Claessens, Stijn and Ayhan M. Kose (2013): *Financial Crises: Explanations, Types, and Implications*, IMF Working Paper

B. Asset Price Bubbles

Jarrow, Robert A. (2015): *Asset Price Bubbles*, in: *Annual Review of Financial Economics* 7: 201-218.

* = compulsory reading

2. Theoretical Background

* Allen, Franklin and D. Gale (2000): *Bubbles and Crises*, in: *Economic Journal* 110: 236-256.

Blanchard, Olivier J., and Mark W. Watson (1982): *Bubbles, Rational Expectations and Financial Markets*, NBER Working Paper No. 945

DeLong, Bradford; Shleifer, Andrei; Summers, Lawrence and Waldmann, Robert (1990): *Noise Trader Risk in Financial Markets*, in: *Journal of Political Economy* 98: 703-738.

Allen, Franklin, Stephen Morris and Hyun S. Shin (2006): *Beauty Contests and Iterated Expectations in Asset Markets*, in: *Review of Financial Studies* 19(3): 719-752.

Abreu, Dilip and Brunnermeier, Markus (2002): *Synchronization Risk and Delayed Arbitrage*, in: *Journal of Financial Economics* 66.

3. Dotcom Mania

* Brunnermeier, Markus and Stefan Nagel (2004): *Hedge Funds and the Technology Bubble*, in: *Journal of Finance* 59

* Eli Ofek and M. Richardson (2003): *Dotcom Mania: The Rise and Fall of Internet Stocks*, in: *Journal of Finance* 58.

Cochrane, John (2002): *Stocks as Money: Convenience Yield and the Tech-Stock Bubble*, NBER Working Paper No. 8987

Pastor, Lubos and Veronesi, Pietro (2006): *Was There a Nasdaq Bubble in the Late 1990s?*, in: *Journal of Financial Economics* 81: 61-100

Lamont, Owen and Richard Thaler (2003): *Can the Market Add and Subtract?*, in: *Journal of Political Economy* 111(2): 227-268

4. Bubbles and Liquidity

* Hong, Harrison, Jose Scheinkman and Wei Xiong (2006): *Asset Float and Speculative Bubbles*, in: *Journal of Finance* 61(3).

Hong, Harrison, Jose Scheinkman and Wei Xiong (2008): *Advisors and Asset Prices: A Model of the Origins of Bubbles*, in: *Journal of Financial Economics* 89(2).

Morris, Stephen and Hyun Shin (2004): *Liquidity Black Holes*, in: *Review of Finance* 8(1)

5. The South Sea Bubble

* Temin, Peter and Hans-Joachim Voth (2004): *Riding the South Sea Bubble*, in: *American Economic Review* 94

Peter M. Garber (1990): *Famous First Bubbles*, in: *Journal of Economic Perspectives* 4(2).

Dale, R.S., Johnson, J.E.V. and L. Tang (2005): *Financial Markets can go mad : Evidence of irrational behaviour during the South Sea Bubble*, in: *Economic History Review* 58(2)

Shea, Gary (2005): *Financial Market Analysis Can Go Mad (in the search for irrational behaviour during the South Sea Bubble*, in: *Economic History Review* 60(4)

6. Interwar Bubbles

* McGrattan, E. and Ed Prescott (2004): *The 1929 Stock Market: Irving Fisher Was Right*, in: *International Economic Review* 45(4): 991-1009

* Romer, Christina (1990): *The Great Crash and the Onset of the Great Depression*, in: *Quarterly Journal of Economics* 105(3)

De Long, B. and Andrei Shleifer (1991): *The Stock Market Bubble of 1929: Evidence from Closed-End Mutual Funds*, in: *Journal of Economic History* 51(3): 675-700

Voth, Hans-Joachim (2003): *With a Bang, Not a Whimper: Pricking Germany's Stock Market Bubble in 1927 and the Slide into Depression*, in: *Journal of Economic History* 62

Xiong, Wei and Jialin Yu (2011): *The Chinese Warrant Bubble*, in: *American Economic Review* 101

Nicholas, Tom (2008): *Does Innovation Cause Stock Market Runups? Evidence from the Great Crash*, in: *American Economic Review* 98(4)

Rappoport, P. and Eugene White (1994): *Was the Crash of 1929 Expected?*, in: *American Economic Review* 84(1)

7. Experimental Evidence

Ackert, Lucy, Narat Charupat, Bryan Church, and Richard Deaves (2006): *Margin, short selling, and lotteries in experimental asset markets*, in: *Southern Economic Journal* 73

Hirota, Shinichi, Shyam Sunder (2007): *Price bubbles sans dividend anchors: Evidence from laboratory stock markets*, in: *Journal of Economic Dynamics and Control* 31(6)

Smith, Vernon, Gerry Suchanek and Arlington Williams (1988): *Bubbles, Crashes, and Endogenous Expectations in Experimental Spot Asset Markets*, in: *Econometrica* 56

Becker, Ralf, Urs Fischbacher and Thorsten Hens (2002): *Soft Landing of a Stock Market Bubble: An Experimental Study*, Zurich IEER Working Paper No. 90

C. Sovereign Debt Crises

8. Key Facts

* Eichengreen, Barry and Richard Portes (1986): *Debt and Default in the 1930s: Causes and Consequences*, in: *European Economic Review* 30(3)

* Mauro, P., Nathan Sussman and Yishay Yafeh (2002): *Emerging Market Spreads: Then and Now*, in: *Quarterly Journal of Economics* 117(2)

Eichengreen, B. and P. Lindert (1992): *The International Debt Crisis in Historical Perspective*. Boston: MIT Press.

Jorda, Oscar, Moritz Schularick and Alan M. Taylor (2016): *Sovereigns versus Banks:*

Credit, Crises, and Consequences, in: *Journal of the European Economic Association* 14(1): 45-79

Panizza, U., F. Sturzenegger, and J. Zettelmeyer (2009): The Economics and Law of Sovereign Debt and Default, in: *Journal of Economic Literature* 47(3)

Sturzenegger, F. and J. Zettelmeyer (2008): Haircuts: Estimating investor losses in sovereign debt restructurings, 1998-2005, in: *Journal of International Money and Finance* 27(5)

Tomz, M. and M. Wright (2007): Do Countries Default in Bad Times?, in: *Journal of the European Economic Association* 5

9. Sustainability of Sovereign Debt

* Bohn, H. (1998): The Behavior of US Public Debt and Deficits, in: *Quarterly Journal of Economics* 113(3)

Aizenman, J. and B. Pinto (2005): Managing Economic Volatility and Crises: A Practitioner's Guide (technical appendix), Cambridge and London: Cambridge University Press.

Besley, T. and T. Persson (2009): The Origins of State Capacity: Property Rights, Taxation, and Politics, in: *American Economic Review* 99(4)

Blanchard, O. (2004): Fiscal Dominance and Inflation Targeting: Lessons from Brazil, NBER Working Paper 10389

Celasun, O., X. Debrun, and J. Ostry (2006): Primary Surplus Behavior and Risks to Fiscal Sustainability in Emerging Market Countries: A Fan-Chart Approach, IMF Working Paper No 06/67

Cole, J. and P. Kehoe (1996): A Self-Fulfilling Model of Mexico's 1994-1995 Debt Crisis, in: *Journal of International Economics*

Drelichman, Mauricio and Hans-Joachim Voth (2008): Debt Sustainability in Historical Perspective: The Role of Fiscal Repression, in: *Journal of the European Economic Association* 6

10. Reputation versus Sanctions

* Kletzer, K. and B. Wright (2000): Sovereign Debt as Intertemporal Barter, in: *American Economic Review* 90(3)

Bulow, J., and K. Rogoff (1989): Sovereign Debt: Is to Forgive to Forget?, in: *American Economic Review* 79(1)

Drelichman, M. and H.-J. Voth (2011): Lending to the Borrower from Hell: Debt and Default in the Age of Philip II, 1556-1596, in: *Economic Journal* 121

Grossman, R. and J. Van Huyck (1988): Sovereign Debt as a Contingent Claim: Excusable Default, Repudiation, and Reputation, in: *American Economic Review* 78(5)

Mitchener, K. and M. Weidenmier (2010): Supersanctions and Sovereign Debt Repayment, in: *Journal of International Money and Finance* 29(1)

Rui Esteves (2013): The Bondholder, the Sovereign, and the Banker: Sovereign Debt and Bondholders' Protection before 1914, in: *European Review of Economic History* 17(4)

- Bulow, Jeremy and Kenneth Rogoff** (1991): **Sovereign Debt Repurchases: No Cure for Overhang**, in: *Quarterly Journal of Economics* 106
- Rose, A.** (2005): **One Reason Countries Pay their Debts: Renegotiation and International Trade**, in: *Journal of Development Economics* 77(1)
- Sachs, Jeffrey** (1986): **Managing the LDC Financial Crises**, in: *Brookings Papers on Economic Activity* 1986(2)

11. Impact, Resolution and Avoidance

- * **Kovrijnykh, N. and B. Szentes** (2007): **Equilibrium Default Cycles**, in: *Journal of Political Economy* 115
- Benjamin, D. and M. Wright** (2013): **Recovery before Redemption: A Theory of Delays in Sovereign Debt Renegotiations**, in: *Econometrica*
- Borensztein, E. and P. Mauro** (2004): **The Case for GDP-Indexed Bonds**, in: *Economic Policy* 19
- Panetta, F. et al.** (2011): **The Impact of Sovereign Credit Risk on Bank Funding Conditions**, MPRA Paper 32581
- De Grauwe, P.** (2013): **The Governance of a Fragile Eurozone**, in: *Australian Economic Review* 45(3)
- Pitchford, R. and M. Wright** (2007): **Restructuring the Sovereign Debt Restructuring Mechanism**, UCLA Working Paper
- Von Hagen, J., and B. Eichengreen** (1996): **Federalism, Fiscal Restraints, and European Monetary Union**, in: *American Economic Review* 86(2)

D. Banking and Credit Crisis

12. Some Empirics

- * **O Grada, C. and Eugene N. White** (2002): **Who Panics During Panics? Evidence from a Nineteenth Century Savings Bank**, NBER Working Paper 8856
- Calomiris, C. W. and Joseph R. Mason** (2003): **Fundamentals, Panics, and Bank Distress During the Depression**, in: *American Economic Review* 93
- Grossman, R.** (1994): **The Shoe that didn't drop: Explaining Banking Stability During the Great Depression**, in: *Journal of Economic History* 54
- Gorton, G. and Lixin Huang** (2002): **Banking Panics and the Origin of Central Banking**, NBER Working Paper 9137

13. Theory of Bank Runs

- * **Diamond, D. and Philip Dybvig** (1983): **Bank Runs, Deposit Insurance, and Liquidity**, in: *Journal of Political Economy* 91
- * **Zhiguo He and Wei Xiong** (2012): **Dynamic Debt Runs**, in: *Review of Financial Studies*

25(6)

- Allen, F. and Douglas Gale (1998): **Optimal Financial Crises**, in: *Journal of Finance* 53(4)
- Lorenzoni, G. (2008): **Inefficient Credit Booms**, in: *Review of Economic Studies* 75(3)
- Postlewaite, A. and Xavier Vives (1987): **Bank Runs as an Equilibrium Phenomenon**, in: *Journal of Political Economy*
- Matsuyama, K. (2007): , in: *American Economic Review* 97(1)

14. Subprime Debt

- * Greenlaw, M. et al. (2008): **Leveraged Losses: Lessons from the Mortgage Market Meltdown**, in: *Proceedings of the U.S. Monetary Policy Forum* 2008
- * Mian, Atif R. and Sufrin, Amir (2009): **The Consequences of Mortgage Credit Expansion: Evidence from the 2007 Mortgage Default Crisis**, in: *Quarterly Journal of Economics*
- Dell'Ariccia, G. et al. (2012): **Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market**, in: *Journal of Money, Credit and Banking* 44
- Reinhart, Carmen M. and Rogoff, Kenneth S. (2008): **Is the 2007 U.S. Sub-Prime Financial Crisis so Different? An International Historical Comparison**, NBER Working Paper 13761
- Keys, B. et al. (2010): **Did Securitization Lead to lax Screening? Evidence from Subprime Loans**, in: *Quarterly Journal of Economics* 125(1)

15. From Financial Crisis to Depression

- * Bernanke, B. (1983): **Non-Monetary Effects of the Financial Crisis in Propagation of the Great Depression**, in: *American Economic Review* 73
- * Schnabel, I. and Hyun Shin (2004): **Liquidity and Contagion: The Crisis of 1763**, in: *Journal of the European Economic Association* 2
- Bernanke, B. and Mark Gertler (1989): **Agency Costs, Net Worth, and Business Cycle Fluctuation**, in: *American Economic Review* 79
- Mishkin, F. (1978): **The Household Balance and the Great Depression**, in: *Journal of Economic History* 38
- Cole, H. and Lee Ohanian (2000): **Re-Examining the Contributions of Money and Banking Shocks to the US Depression**, in: *NBER Macroeconomics Annual 2000* Vol. 15
- Kiyotaki, N. and John Moore (2002): **Balance-Sheet Contagion**, in: *American Economic Review* 92

E. Globalization, Exchange Rate Regimes, and Financial Crises

16. Contagion

- * Mauro, P., Nathan Sussman and Yishay Yafeh (2002): **Emerging Market Spreads: Then and Now**, in: *Quarterly Journal of Economics* 117(2)

- * **Acemoglu, D., Asuman Ozdaglar and Alireza Tahbaz-Salehi** (2015): *Systemic Risk and Stability in Financial Networks*, in: *American Economic Review* 105(2): 564-608
- Forbes, K. and Roberto Rigobon** (2002): *No Contagion, Only Interdependence: Measuring Stock Market Co-Movements*, in: *Journal of Finance* 57
- Bordo, M. and Antu Panini Murshid** (2000): *Are Financial Crises Becoming Increasingly More Contagious? What is the Historical Evidence on Contagion*, NBER Working Paper 7900

17. Globalization and Financial Crises in Emerging Markets

- * **Kaminsky, G. and C. Reinhart** (1999): *The Twin Crises: The Causes of Banking and Balance-of-Payments Problems*, in: *American Economic Review* 89
- * **Krugman, P.** (1999): *Analytical Afterthoughts on the Asian Crisis*, mimeo
- Calvo, G. and Carmen Reinhart** (2002): *Fear of Floating*, in: *Quarterly Journal of Economics* 117(2)
- Dornbusch, R.** (2001): *A Primer on Emerging Market Crises*, NBER Working Paper 8326
- Mishkin, F.** (1999): *Global Financial Instability: Framework, Events, Issues*, in: *Journal of Economic Perspectives* 13(4)
- Heinemann, Frank, Rosemarie Nagel and Peter Ockenfels** (2004): *The Theory of Global Games on Test: Experimental Analysis of Coordination Games with Public and Private Information*, in: *Econometrica* 72

18. Original Sin

- * **Flandreau, M. and Nathan Sussman** (2004): *Old Sins, Exchange Clauses and European Foreign Lending in the Nineteenth Century*, mimeo
- Bordo, M., Christopher Meissner and Angela Redish** (2003): *How Original Sin was Overcome: The evolution of external debt denominated in domestic currencies in the United States and the British Dominions 1800-2000*, NBER Working Paper 9841
- Eichengreen, B., Ricardo Hausmann, and Hugo Panizza** (2003): *The Pain of Original Sin*, in: *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economics*. Chicago: University of Chicago Press.

19. Argentina and Brazil - The crisis that happened and the one that didn't

- * **Mussa, M.** (2002): *What went wrong with Argentina?*, in: *Argentina and the Fund: From Triumph to Tragedy*, 2002.
- * **Roubini, N.** (1998): *The Case Against Currency Boards: Debunking 10 Myths about the Benefits of Currency Boards*, mimeo.
- Mardi, D.** (2003): *Characterizing Global Investors' Risk Appetite for Emerging Market Debt During Financial Crises*, IMF Working Paper 03/251
- Razin, A. and E. Sadka** (2003): *A Brazilian-Type Debt Crisis: Simple Analytics*, NBER Working Paper 9606

Blanchard, O. (2004): *Fiscal Dominance and Inflation Targeting*, NBER Working Paper 10389

Della Paolera, G. and Alan M. Taylor (2001): *Introduction to "Straining at the Anchor: The Argentine Currency Board and the Search for Macroeconomic Stability, 1880-1935"*, Chapter 9 in NBER book *Straining at the Anchor: The Argentine Currency Board and the Search for Macroeconomic Stability, 1880-1935* (2001)

20. Liberalization and Capital Controls

* Kaplan, S. and Dani Rodrik (2001): *Did the Malaysian Capital Controls Work?*, NBER Working Paper 8142

* Johnson, S. and Todd Mitton (2003): *Cronyism and Capital Controls: Evidence From Malaysia*, in: *Journal of Financial Economics* 67

Edwards, S. (1999): *How Effective Are Capital Controls?*, in: *Journal of Economic Perspectives* 13

Leblang, D. and Barry Eichengreen (2003): *Capital account liberalization and growth: was Mr Mahathir right?*, in: *International Journal of Finance & Economics*, Special Issue: Symposium on Capital Controls, Volume 8

Leblang, D. and Barry Eichengreen (2008): *Democracy and Globalization*, in: *Economics and Politics* 20(3)

Rodrik, D. (1998): *Who needs capital account convertibility?*, in: *Should the IMF Pursue Capital-Account Convertibility?* p. 55 ff, *Essays in international finance* 207

F. Summary and Outlook

21. Causes and regulation

Reinhart, C. and K. Rogoff (2010): *Growth in a Time of Debt*, in: *American Economic Review* 100(2)