Cambridge Centre for Risk Studies

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LEARNING FROM HISTORICAL FINANCIAL CRISES

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Centre for Risk Studies



$$2\cos^2(x) = 1 + \cos(2x)$$
$$\sin(\pi - x) = \sin(x)$$

$$\sin(\pi + x) = \sin(x)$$

$$\sin(\frac{1}{2}\pi/-x) = \cos(x)$$



Definitions

- 'a disturbance to financial markets, associated typically with falling asset prices and insolvency amongst debtors and intermediaries, which ramifies through the financial system, disrupting the market's capacity to allocate capital'
 - Eichengreen and Portes, 1987, p. 10.
- 'the erosion of most or all aggregate banking system capital'
 - Bordo et al., 2001, p. 55.
- 'the price of bank stocks relative to the market'
 - Turner, 2014, p. 55.



Recent Literature

- D. Aikman, A.G. Haldane and B.D. Nelson, 'Curbing the credit cycle', *Economic Journal*, vol. 125 (June, 2014), pp. 1072-1109.
- J.D. Turner, Banking in crisis: the rise and fall of British banking stability, 1800 to the present (Cambridge, 2014).
- Ò. Jordà, M. Schularick and A.M. Taylor, 'Financial crises, credit booms, and external imbalances: 140 years of lessons.' *IMF* Economic Review, vol. 59 (2011).
- R.S. Grossman, Unsettled account: the evolution of banking in the industrialized world since 1800 (Princeton, 2010).
- C.M. Reinhart and K.S. Rogoff, This time is different: eight centuries of financial folly (Princeton, 2009).



Historical Catalogue of Financial Crises

- 1. Crises of the 1720s (South Sea, Mississippi Scheme, Windhoek)
- 2. Country bank crisis of 1825 in UK
- Panic of 1857 in USA
- 4. Collapse of Overend and Gurney, 1866
- 5. Crisis of 1873 (USA)
- 6. Baring Crisis, 1890
- 7. 1907 'Bankers' Panic'
- 8. Financial Crisis of 1914
- 9. 1931-33 and the Great Depression
- 10. Latin American Debt Crisis, early 1980s
- 11. Asia crisis, 1997-99
- 12. Subprime and the Global Financial Crisis



What Causes a Banking Crisis?

'Crises are orphans right up to their inception'

Jordà et al, 2011

- Rapid credit growth over the business cycle
- Asset/collateral price rises produce riskier lending
- Asymmetric information
- Shocks
- 'the contagion of fear', Friedman and Schwartz
- Structural weakness
- Small, undiversified banks (USA)
- No lender of last resort



Case Study no. 1: the 1825 UK Country Bank Crisis

Origins of the crisis

- 'its principal cause was widespread speculation, stimulated partly by a series of good harvests, partly by the low yields on Government securities, but especially by improvident finance on the part of the country banks', W.T.C. King, 1936, p. 35.
- 'any small tradesman, a cheesemonger, a butcher, or a shoemaker may open a country bank', Prime Minister Lord Liverpool
- The crisis
- 60 country banks and 10 London banks fail
- Short, sharp recession
- Consequences of the crisis
- Reshaped British financial system
 - -Bank of England, Discount Houses, Joint Stock Banks



Case Study no. 2: the 1907 US 'Bankers' Panic'

- Origins of the crisis
- 10 years of rapid GDP and credit growth
- Liquidity squeeze following San Francisco earthquake
- The crisis
- State-chartered trusts (quasi-Investment Banks) with just 5% currency reserves damaged by copper speculation
- New York Clearing House loans reduce distressed asset sales
- Consequences of the crisis
- Sharp US recession, GDP contracts c.12%
- 1909 National Monetary Commission recommends 1913 Federal Reserve system



Case Study no. 3: the Global Financial Crisis

- Origins of the crisis
- Sub-prime lending, financial innovation, regulatory capture
- The crisis
- Bear Stearns and BNP funds.
- Lehman and Washington Mutual
- Consequences of the crisis
- Emergency Economic Stabilization Act, 2008
- Exposed flaws in Euro-zone.



Summary Data – Three Case Studies

	1 UK 1825	2 US 1907	3 US 2008
Decline in output	9%	12%	5%
Quarters to regain pre-crisis output	<4	9	12
Peak rise in unemployment	NA	5%	5%
Stock market decline to trough	24%`	49%	57%
Consumer price decline to trough	18%	4%	3%



Conclusions

- 'Credit growth emerges as the single best predictor of financial instability', Jordà et al, 2011.
- Crises usually emerge in less-regulated 'secondary' banks
 - 1825: Country banks
 - 1907: State-chartered trusts
 - 2007-8: Shadow banks, SPVs.
- Financial crises deepen recessions by restricting investment credit.
- Higher cost of credit intermediation
- Falling asset prices weaken bank balance sheets
- Banks restrict credit to rebuild capital
- Banks increase liquid assets in anticipation of depositor withdrawals
- Flight to liquidity restricts lending to new and small businesses



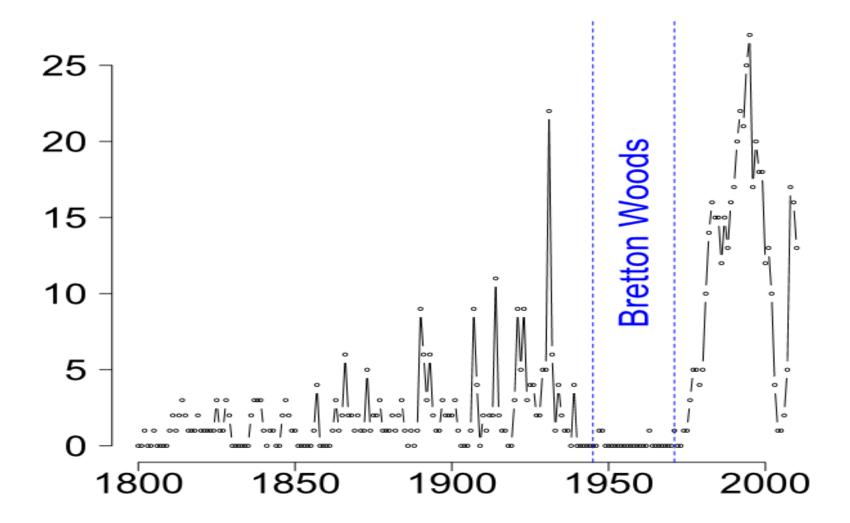
Annual UK Real GDP and Loan Growth (%)

	GDP	Loans
1880-1913	2.01	2.89
1914-45	0.82	1.03
1945-79	2.98	5.07
1980-2008	2.68	7.02

D. Aikman, A.G. Haldane and B.D. Nelson, 'Curbing the credit cycle', *Economic Journal*, vol. 125 (June, 2014), p. 1076.



Banking Crises Through Time





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