

# Banking crises

## Econ 4335 Extra Lecture

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22 March 2010

# Plan for the lecture

- ▶ Typology, prevalence
- ▶ An example: The Kristiania Crash 1899
- ▶ Why so many banking crises?
- ▶ The aftermath of banking crises
- ▶ Some aspects of the recent crisis

# Typology

- ▶ Individual banks
- ▶ Systemic crisis
- ▶ Liquidity crisis
- ▶ Solvency crisis
- ▶ One leads to the other

## Prevalence of systemic crises

- ▶ 114 "national" banking crises since 1945
- ▶ 10 "global" banking crises since 1890, 6 since 1945
- ▶ Developed and emerging economies equally affected
- ▶ Argentina and UK 4 since 1945
- ▶ Norway in banking crisis 16 per cent ! of time since independence (1905?), US 13 per cent since 1800
- ▶ Norway, 1 since 1945, 5(?) before
  - 1899, **1921-28**, 1931-32, **1987-93**

Reinhart and Rogoff: *This time is different. Eight centuries of financial folly*. Princeton Univ Press 2009

# The Kristiania crash 1899

- ▶ 7 banks closed
- ▶ several others received support
- ▶ huge losses on mortgages, loans to property developers and investors in shares
- ▶ Norges Bank lender of last resort, huge losses

Hanisch: *Om valget av det gode samfunn* Hyskoleforlaget (1996), kap 2 (Hanisch og Ryggvik)

# The Kristiania crash, the run-up 1894 - 99

- ▶ Speculation in apartment buildings
- ▶ House prices up 72 per cent (or 150 H & R)
- ▶ Construction boom
- ▶ Tripling in new apartments
- ▶ Infrastructure investments
- ▶ Immigration, construction workers
- ▶ Initial real forces

- ▶ Six new banks established
- ▶ Rapid credit expansion
- ▶ Interbank lending provided liquidity
- ▶ Banks borrowed heavily abroad
- ▶ Rapid increase in share prices
- ▶ Share purchases financed by borrowing, also bank shares
- ▶ Interest rates low for too long?

# The Kristiania Crash, the turning point

- ▶ The discount rate was increased in 1898 (and reduced in early 1899)
- ▶ Bankruptcy in a big export firm in June 1899 brought down the first bank and created "panic"
- ▶ Foreign banks started to withdraw their credits
- ▶ Credit contraction
- ▶ Demand for new housing depended on steady inflow of new construction workers, which again depended on *increasing* construction activity



# The Kristiania Crash, the aftermath

- ▶ House prices down 27 per cent 1900, 59 per cent to 1904
- ▶ Twelve per cent of apartments empty 1904
- ▶ Net emigration 25 000 to 1905
- ▶ Drain on gold reserves

# The two main examples on the curriculum

- ▶ The Norwegian Crisis 1987-1993
  - ▶ Vale (2004)
  - ▶ Steigum (2004)
- ▶ The International Financial Crisis 2007-2009
  - ▶ Brunnermeier (2009)
  - ▶ Diamond and Rajan (2009)

# Why so many banking crises?

- ▶ Low equity
- ▶ Borrowing short, lending long, runs
- ▶ Moral hazard? Lack of market discipline
- ▶ Contagion
- ▶ "This time is different"

## Some known risk factors

- ▶ Rapid increases in asset prices,
  - commercial property, land, housing, shares, ....
- ▶ Rapid credit growth
- ▶ Deregulation, financial innovation, increased competition
  - the Nordic crisis ca 1990 (Norway, Sweden, Finland)
- ▶ High international capital mobility
  - twin crises, Asia / Emerging market crisis 1997-99
- ▶ Large current account deficits
- ▶ Falling price levels, rapid disinflations

Allen and Gale (1999)

# Bubbles, euphoria and irrational exuberance?

- ▶ Definition of bubble
  - ▶ Something that bursts?
  - ▶ Driven by irrational expectations?
  - ▶ Driven by shortsightedness?
- ▶ Different kinds of rationality
- ▶ Mimicking successful behavior

## Or is it real news?

- ▶ Large movements in asset prices may happen for perfectly rational reasons
- ▶ Did asset prices reach unsustainable levels, or was it news that burst the "bubble"
- ▶ Real shocks may be the primary cause of credit losses and crisis
- ▶ Oil price shocks, transition from sail to steam
- ▶ Contagion or parallel development?
- ▶ Real shocks may also trigger the turning point in a development that would in no case be sustainable

## Keynes on asset prices

*A conventional valuation which is established as the outcome of the mass psychology of a large number of ignorant individuals is liable to change violently as the result of a sudden fluctuation of opinion due to factors which do not really make much difference ...the market will be subject to waves of optimistic and pessimistic sentiment, which are unreasoning and yet in a sense legitimate where no solid basis exists for a reasonable calculation.*

*It might have been supposed that competition between expert professionals,..., would correct the vagaries of the ignorant individual left to himself. ...however..most of these persons are,in fact, largely concerned not with making superior long-term forecasts of the probable yield of an investment over its whole life, but in foreseeing changes in the conventional basis of valuation a short time ahead of the general public."*

Keynes: *The General Theory of Employment, Interest and Money*, p. 154

# Risk control

Risk factors occur frequently, banking crises more rarely.

- ▶ Good banking practices
- ▶ Bank capital requirements
- ▶ Accounting rules
- ▶ Supervision
- ▶ Deposit insurance
- ▶ Central Bank liquidity supply when system stressed (Gerdrup)
- ▶ Orderly and quick procedures for closing banks
- ▶ General macroeconomic policies



# The aftermath of severe banking crises

- ▶ Longer and more severe recessions
  - output down 9 per cent
  - unemployment up 7 per cent
- ▶ Fall in real house prices
  - 35 per cent over 6 years
- ▶ Fall in real equity prices
  - 55 per cent over 3.5 years
- ▶ Increased government debt
  - 86 per cent

Reihart and Rogoff (2009, article

# Mechanisms behind real effects

- ▶ Increased lending margins
- ▶ Credit rationing
- ▶ Higher costs of capital for banks
- ▶ Risk perceptions and precautionary behavior outside of banks
  
- ▶ Cause or effect?
- ▶ Direct effects when bubbles burst
- ▶ Direct effects of news

# The aftermath of severe banking crises

- ▶ New regulation

# The latest crisis

- ▶ Subprime crisis, banking crisis or financial crisis?
- ▶ Breakdown of bond markets and interbank markets
- ▶ The deep global impact
- ▶ Contagion and parallel developments
- ▶ Country differences
- ▶ Loan losses on mortgages to homeowners

# The markets for bonds issued by private institutions

- ▶ Securitization, risks remained with banks (and turned up in surprising places)
- ▶ Rating bureaus, outsourcing of evaluation of credit risk
- ▶ Liquidity for the individual bank, but not for the banking system
- ▶ Market organized by a small number of investment banks with conflicting interests, low transparency
- ▶ Failures of investment banks
- ▶ Bond markets froze
- ▶ Only fire-sale transactions in many markets