The global financial crisis of 2007 - 2009

International chronology of events

Sources: Bank for International Settlements 2009 Annual Report Ch 2

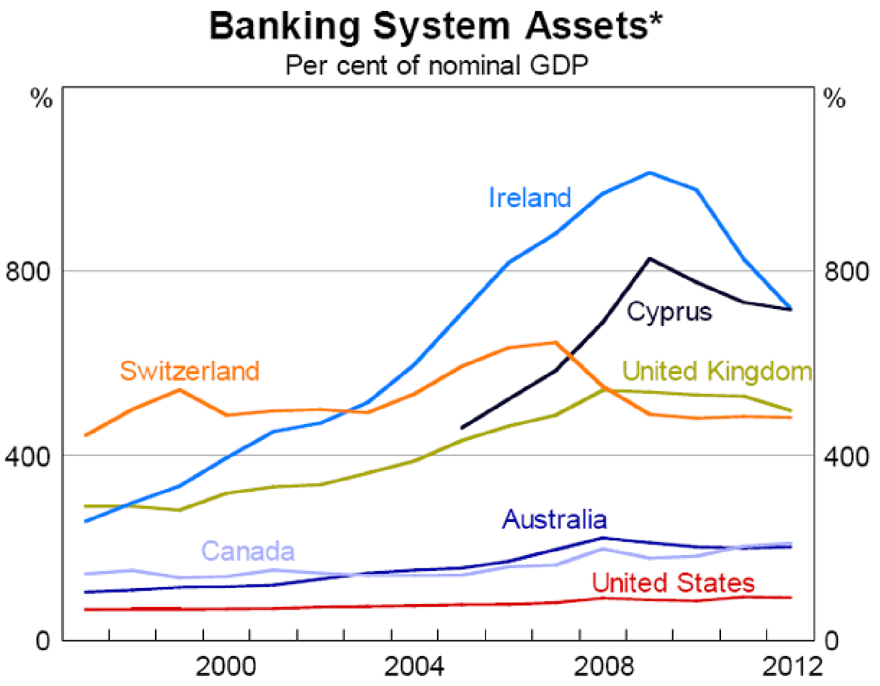
International chronology of the GFC

- RR (part 5) showed:
  - how the GFC originated with vulnerabilities in the US sub-prime sector
  - scale of the crisis as at time of writing
- This section reviews the causes of the crisis and the way it was transmitted through financial markets around the world
- It covers the period around mid 2007–mid 2009
- It does not cover the European sovereign crisis episodes that came afterwards
  - Greece
  - Cyprus
  - ongoing vulnerability of Southern euro member economies

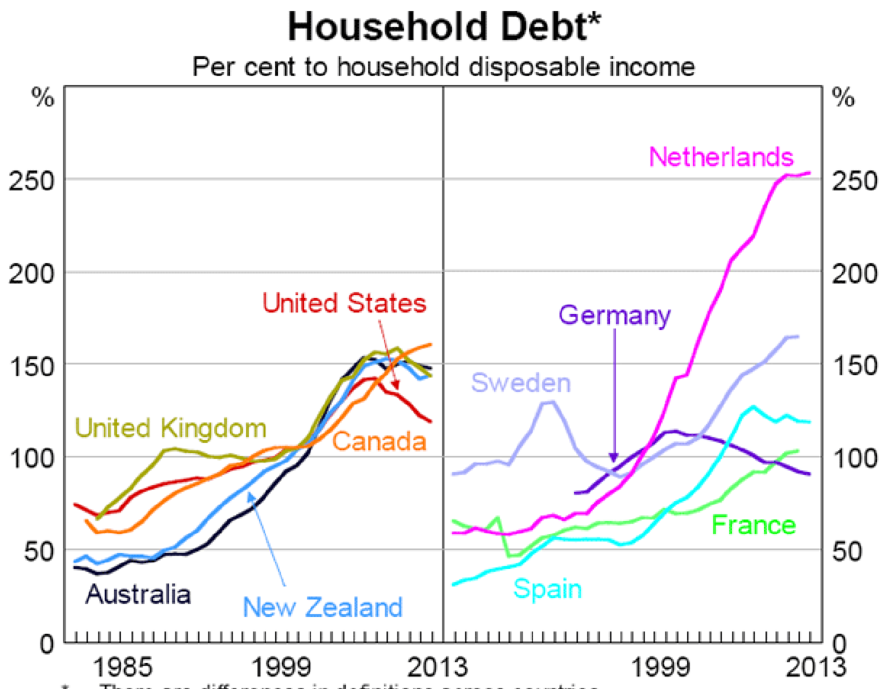
Causes of Economic Crises (Recap)

- Asset bubbles and collapse
  - especially if associated with excessive leverage (eg Japan in the 1980s)
- Bank failures, including depositor panics
- Foreign currency debt
  - eg Mexico crisis 1994-95
  - Asian financial crisis 1997-98
- Poor lending and risk management practices
- Various combinations of the above
- Feedback mechanisms that amplify an initial shock

Excessive debt and overexpansion of financial activity a source of vulnerability



* Banking system assets are subject to definitional differences
Sources: RBA; Thomson Reuters; national sources

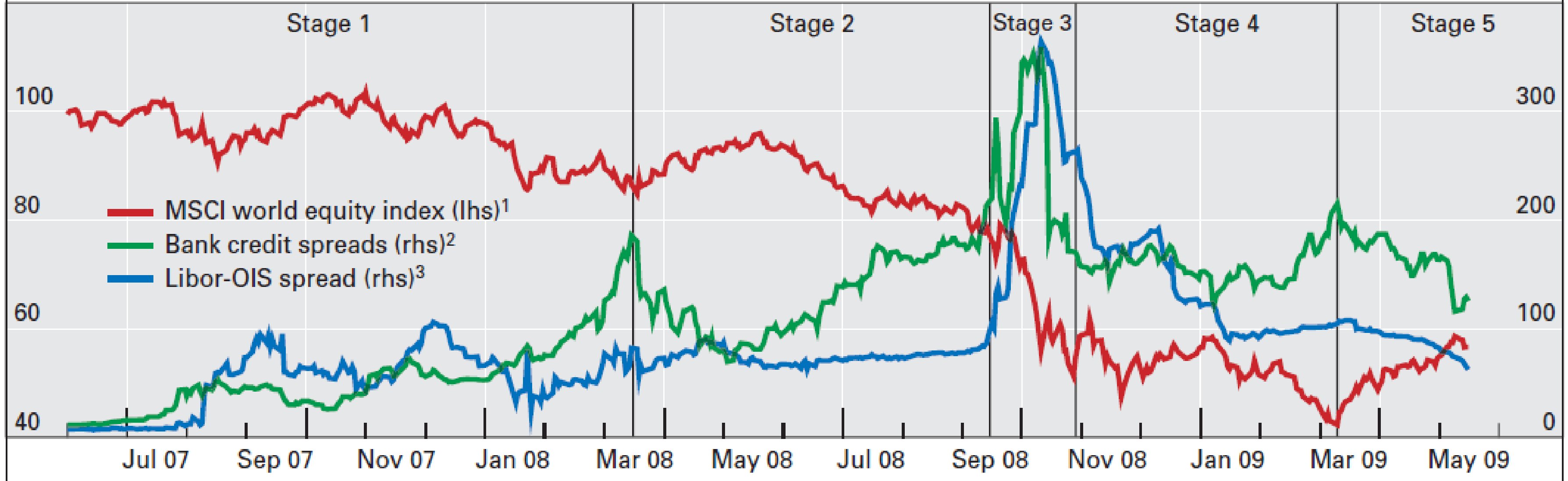


* There are differences in definitions across countries
Source: national sources

BIS: Five stages of the crisis

1. (period to Mar 2008): Subprime losses in the US weaken the financial system
2. (Mar – Sep 2008): Events leading to Lehman collapse
3. (Sep/Oct 2008): Global loss of confidence triggered by Lehman collapse
4. (Oct 2008 – Mar 2009) Spillover to global economy reinforces impact on markets
5. (Mar 2009 -): First signs of stabilisation

The five stages of the crisis to date



[1] Morgan Stanley Capital International index, in US dollar terms; 1 June 2007 = 100. [2] Equally weighted average of CDS spreads (in basis points) for 18 major international banks; includes Lehman Brothers until 15 September 2008 and Merrill Lynch until 31 December 2008. [3] Three-month US dollar Libor minus overnight index swap (OIS) rates, in basis points.

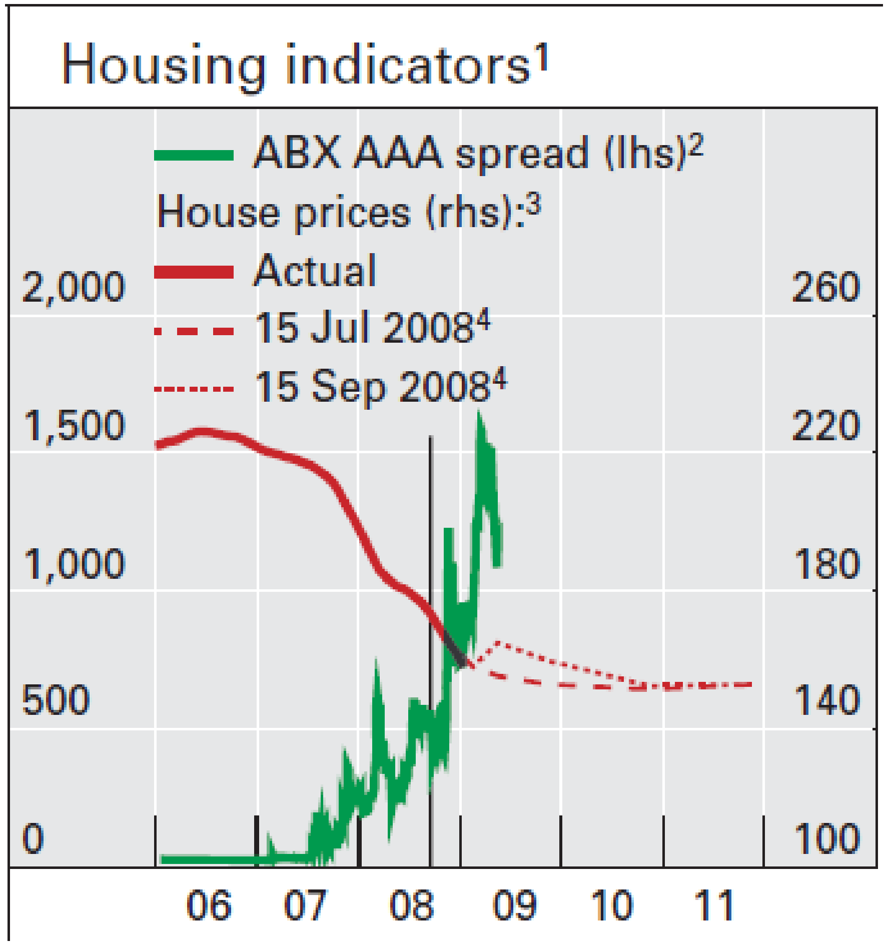
Sources: Bloomberg; Markit; BIS calculations. Graph II.1

Stage 1: Subprime losses in the US

- Possible bubble in house prices
- Asset-backed securities underpriced risk (the “originate-to-distribute” model)
- Role of the rating agencies: conflict of interest
- Holders of asset-backed securities, including major investment banks, incurred losses
- This culminated in emergency takeover of investment bank Bear Stearns in Mar 2008
- Meanwhile, falls in property prices around the world undermines confidence in banks
- Sep 2007: Northern Rock fails in UK

The run on Northern Rock, Sep 2007
"Orderly panic"

US house prices and asset backed securities



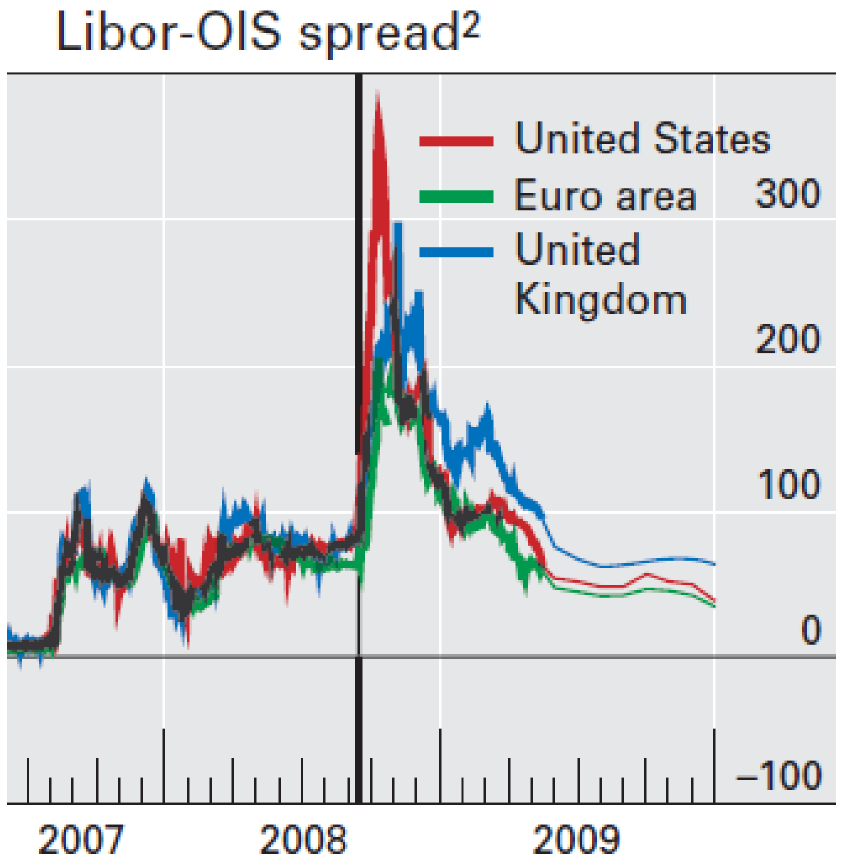
Stage 2: From Bear to Lehman

- Continued losses in securities markets, including falls in equity prices
- Continued falls in property prices
- Heightened uncertainty about asset quality adds to dysfunction in interbank credit markets
- Lehman collapse (15 Sep 2008) leads to escalating panic in markets
- This type of panic has a self-reinforcing quality

Stage 3: Immediate impact of Lehman collapse

- Accelerating declines in equity prices around the world
- A ceasing-up of interbank funding markets
- Further falls in property prices
- A series of failures or emergency rescues of significant financial institutions in the US, euro area and UK:
  - eg Washington Mutual, Wachovia, Dexia, UK and Irish banks, TARP package in the US

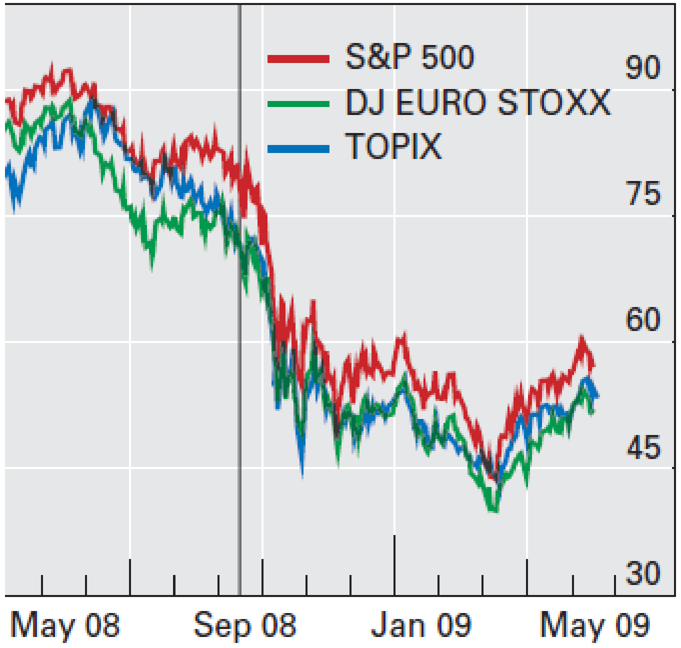
Interbank borrowing rates



Declining equity prices

Equity market indicators[1]

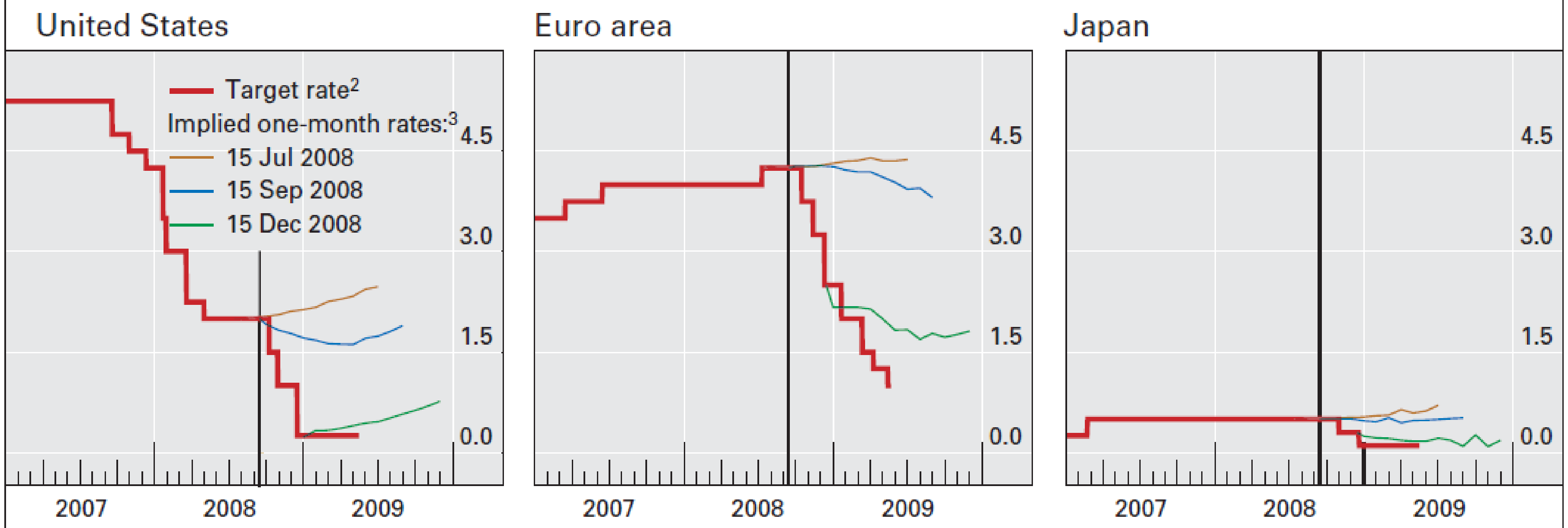
Major indices[2]



Cuts in central bank policy rates

Policy rates and implied expectations[1]

In per cent

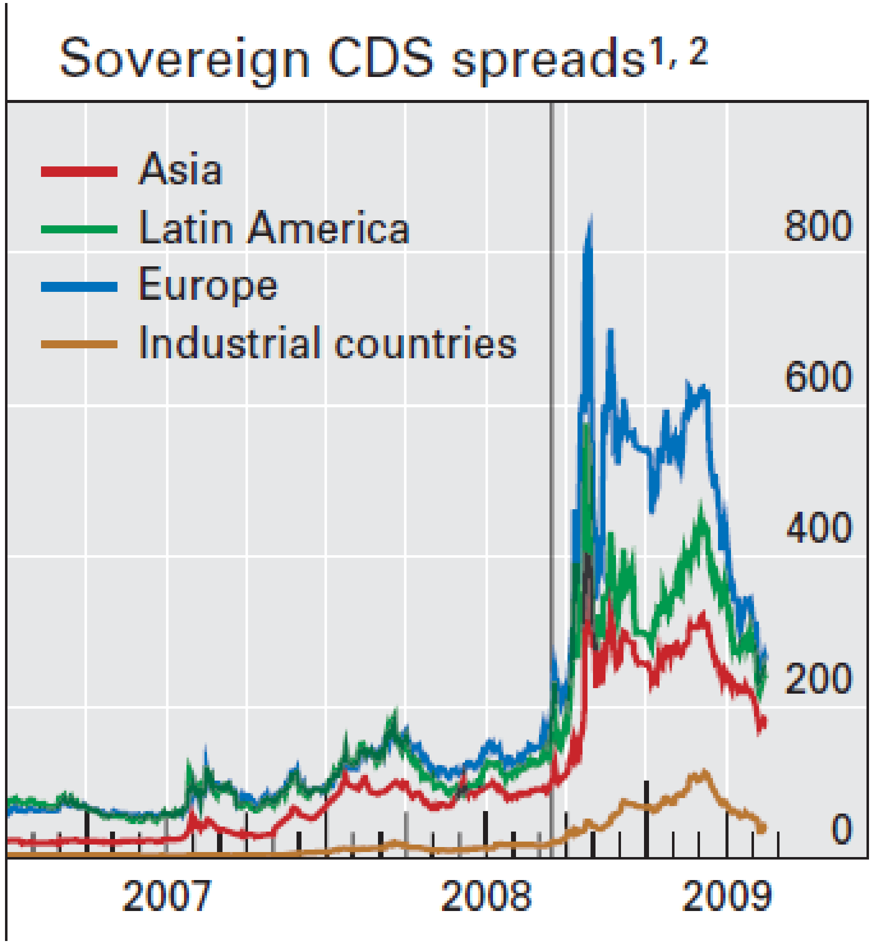


[1] The vertical line marks 15 September 2008, the date on which Lehman Brothers filed for Chapter 11 bankruptcy protection. [2] Central bank policy rate; for the United States, target federal funds rate; for the euro area, interest rate on the main refinancing operations; for Japan, target for the uncollateralised overnight call rate. [3] Observations are positioned on the last business day of the month indicated in the legend; for the United States, federal funds futures; for the euro area, EONIA swap; for Japan, yen OIS.

Sources: Bloomberg; BIS calculations.

Graph II.9

Contagion to emerging market economies



Stage 4: Adverse feedback from the real economy

- Loss of confidence in the financial system triggers real economic responses (covered in more detail in next part)
- Rapid declines in international trade, industrial production, spending and employment
- These developments reinforce negative sentiment in financial markets and hamper recovery efforts

Stage 5: Early signs of stabilisation (Mar 2009 -)

- Policy measures in major economies begin to turn things around
- US Treasury actions to ‘stress-test’ and recapitalise banks using TARP money
- Asset purchase programs by most major central banks
- Most financial and economic indicators begin to improve, though only gradually
- GFC exposes structural weakness of the euro area, and is followed by recurring (but smaller) crises in Europe

Summary: four key elements in the GFC

- Vulnerability: excessive leverage and risk-taking around the world
  - property markets, securities markets, currency markets
  - possibly caused by earlier low interest rates (?)
- Trigger: US subprime crisis
- Contagion: interbank exposures, interconnectedness of markets, loss of confidence and panic
- Feedback: financial stress weakens the real economy, which in turn amplifies the financial stress