

Real consequences of financial crises

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Views expressed here are those of the author and do not necessarily reflect those of the BIS.



Outline

- Real consequences of financial crises
 - Short-term: much is perhaps already known
 - Long-term: very little is known about impacts on potential
- How to go about assessing long-term potential?
- What are the policy implications?



Assessing impact on potential output

- Recession impact
- Permanent crisis impact
- Uncertainties stemming from data revision



Why might recessions have permanent effects?

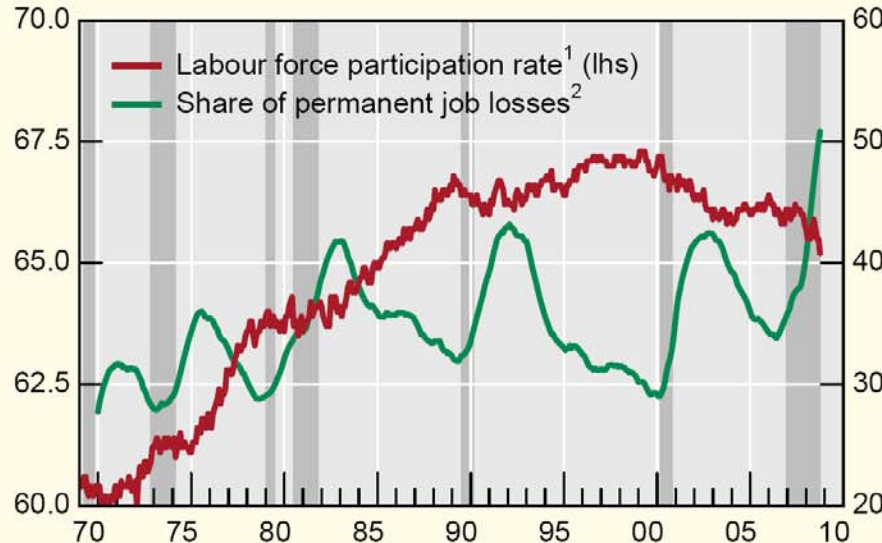
- Certain shocks can shift potential output
 - Technology shocks change total factor productivity
 - Labour market shocks change hours and participation rate
 - Permanent terms of trade shocks (oil prices)
- Shocks can be persistent themselves:
A sequence of large negative shocks
- Increases rigidities



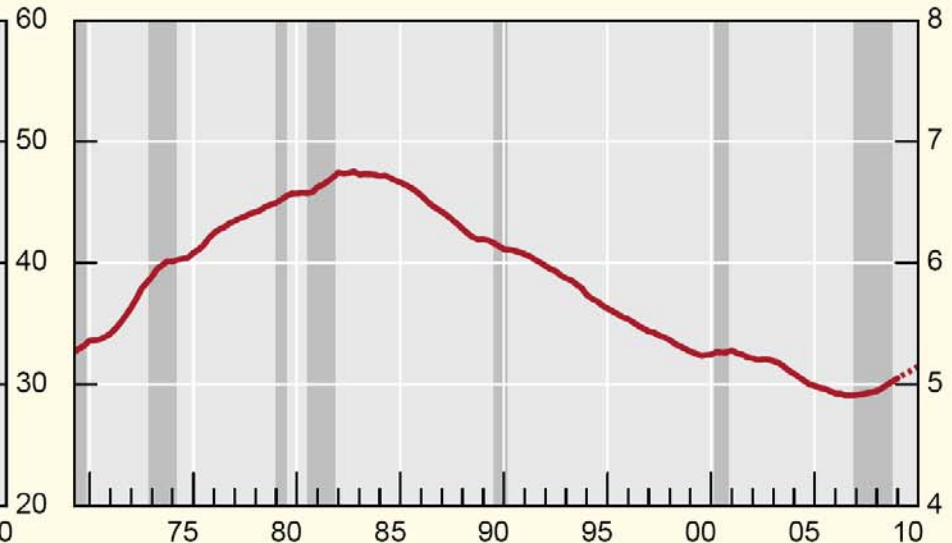
... US recession labour market impact

US employment

Participation rate and job losses



NAIRU



Shaded areas refer to periods of recession dated by the NBER; for the current crisis, it's up to present.

¹ Civilian labour force participation rate, 16 years and over. ² Permanent job losers as a percentage of total unemployed; 12-month moving average.

Sources: Datasream; OECD.



Do shocks have permanent output effects?

- GDP series contain a unit root
Shocks have permanent effects on level
- Potential GDP series contain two unit roots
Shocks have permanent effects on growth

	Australia	Japan	Finland	Norway	Sweden	UK	US
GDP	<i>Level</i>	<i>Level</i>	<i>Level</i>	<i>Level</i>	<i>Level</i>	<i>Level</i>	<i>Level</i>
Potential GDP	<i>Level</i>	<i>Growth</i>	<i>Level</i>	<i>Growth</i>	<i>Growth</i>	<i>Growth</i>	<i>Level</i>



Why might financial crises have permanent effects?

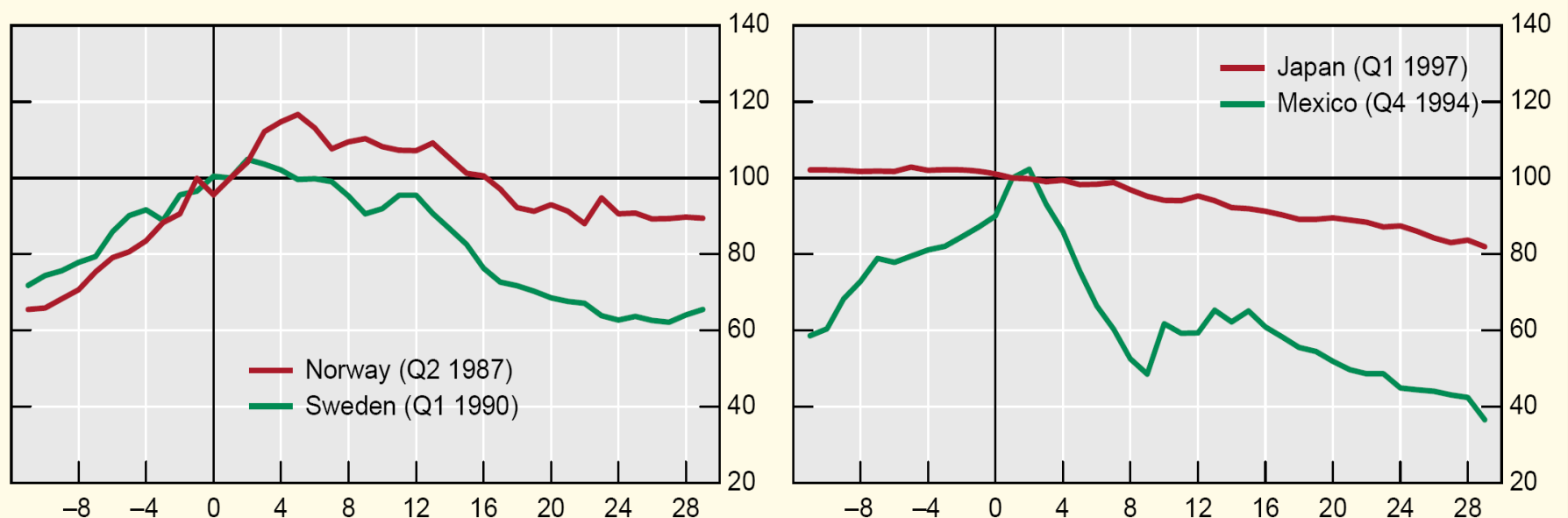
- By reducing credit and investment
 - But credit could be endogenously driven by output
- By reducing total factor productivity (impairing ability of financial system to allocate capital)
 - But it could also eliminate inefficient financial firms



Prolonged decline in credit to GDP ratio in previous financial crises

Private credit¹ from selected business cycles²

As a percentage of GDP



¹ Domestic credit to the private sector as a percentage of GDP, rebased on the peak of the business cycle. ² Period zero and dates in the panel legends refer to the peak of the output cycle.

Sources: IMF; national data.



Evidence is mixed

- Credit to GDP ratio tends to fall following financial crises
- Impact on trend GDP is ambiguous
 - Negative impacts in Japan and Finland
 - But positive effects in Mexico and Norway

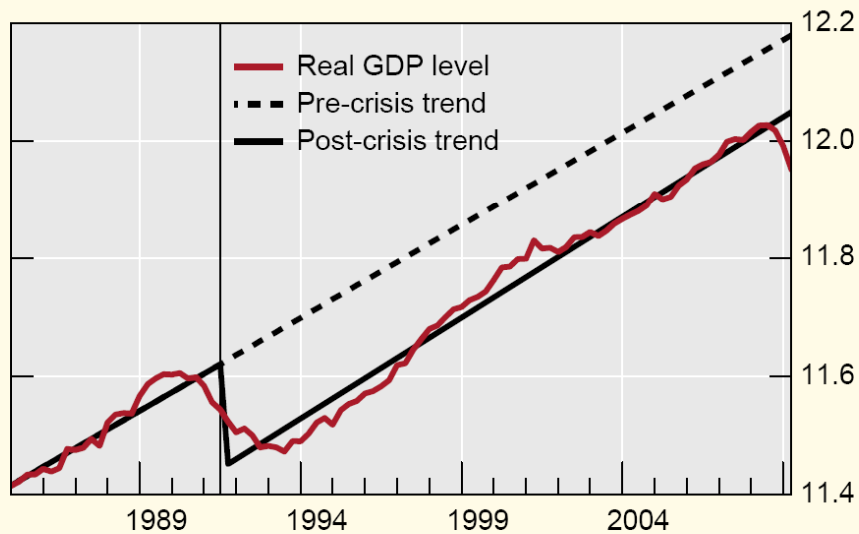


Negative Impact

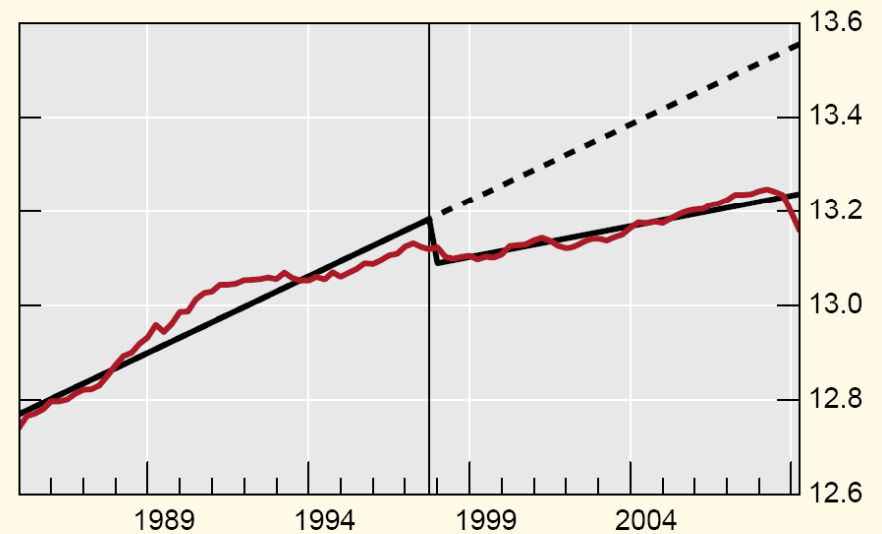
Output from selected crises

In logarithm

Finland



Japan



Source: BIS calculations

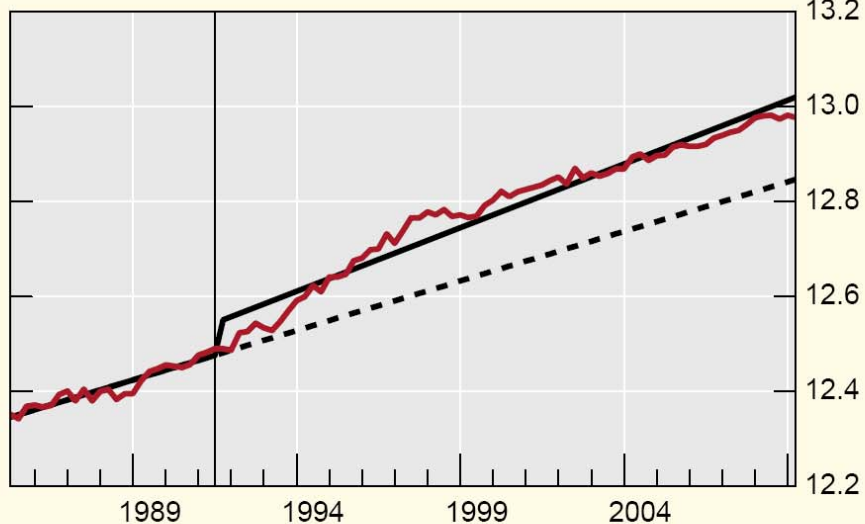


Positive impact

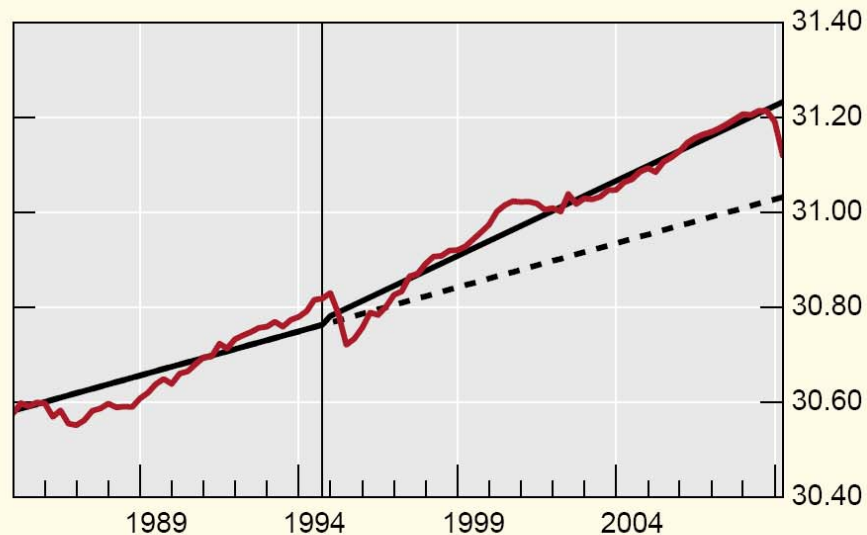
Output from selected crises

In logarithm

Norway



Mexico



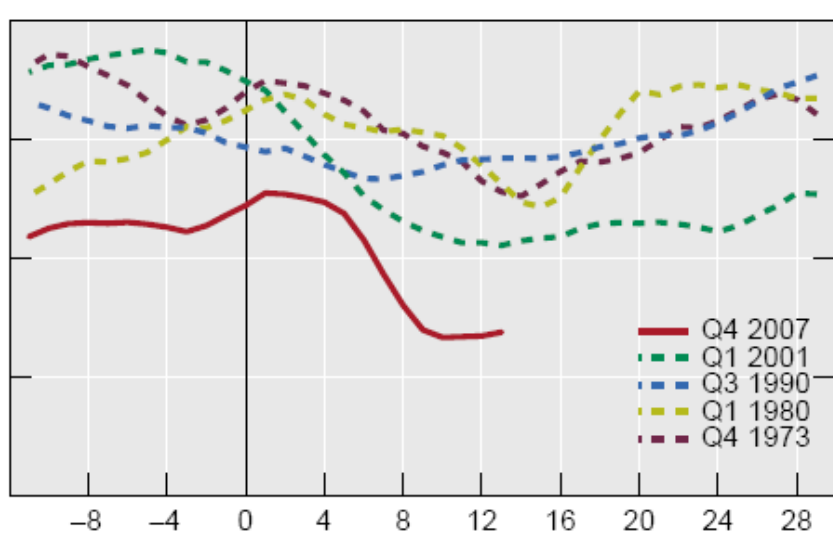
Source: BIS calculations



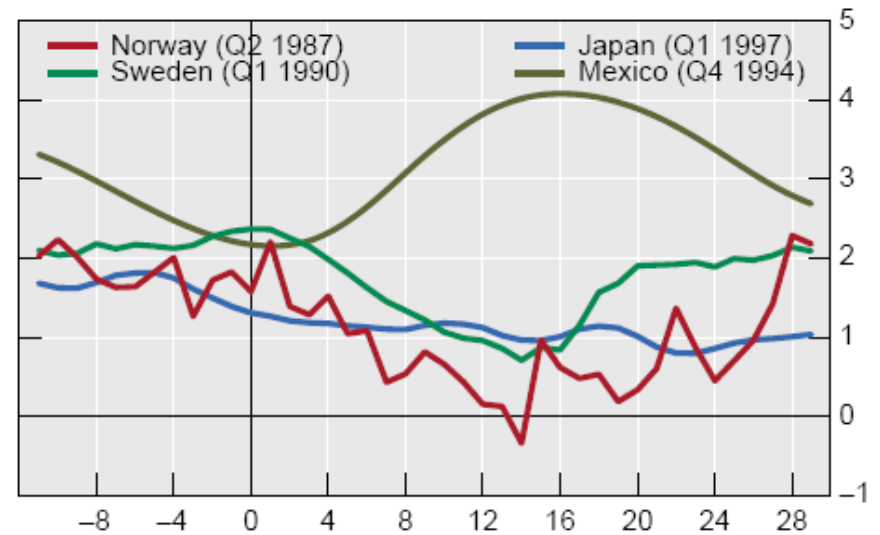
Potential output before & after crises

Potential output over selected business cycles¹

United States



Norway, Sweden, Japan and Mexico



Quarters

¹ Annual changes, in per cent; period zero and dates in the panel legends refer to the peak of the output cycle; for the United States, peak dates are from the National Bureau of Economic Research (NBER).

Sources: OECD; national data; BIS calculations.



Challenges from real time data revision

- Frequent and large revisions of actual GDP
- Data revisions can reverse direction of growth
- Most revisions occur within three to four years

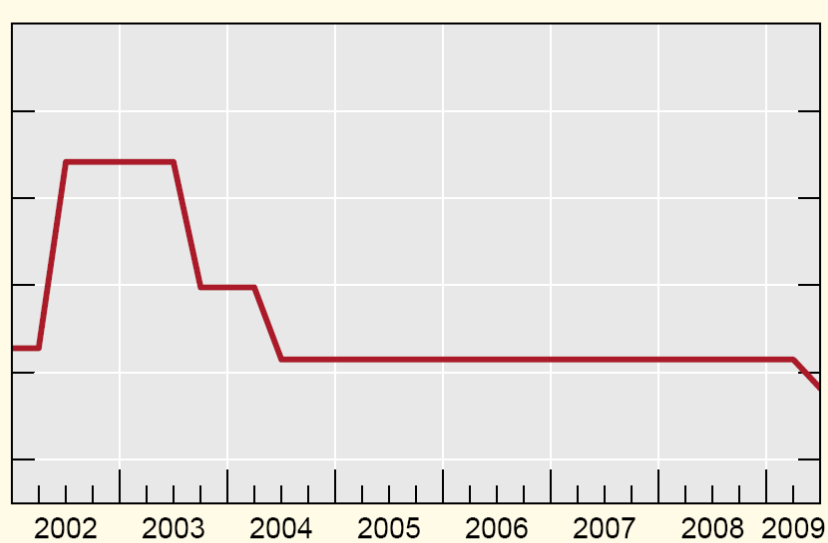


Examples of GDP revision

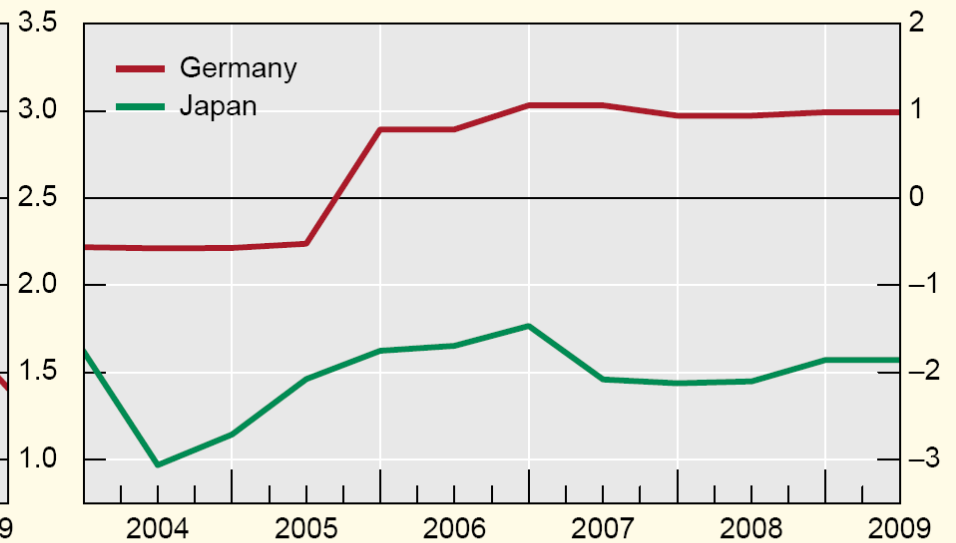
GDP data revisions for 2001 Q4

Annualised change, in percent

United States



Germany and Japan¹



¹ Quarterly OECD vintage data started in Dec 2003.

Sources: Federal Reserve Bank of St. Louis; OECD.



Policy Implications

- Monetary Policy
 - Greater difficulties in assessing output gaps
 - Consequently natural rate of interest
- Fiscal policy
 - Uncertainty about structural budget deficits



Conclusions

- Difficult to differentiate financial crises effects from normal recession effects
- Impacts on long term supply is ambiguous
- Future evolution of potential output depends on policy actions