Real consequences of financial crises

Stephen Cecchetti
Economic Adviser and Head
Monetary and Economic Department
Bank for International Settlements

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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

- Labour force participation rate\(^1\) (lhs)
- Share of permanent job losses\(^2\)

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

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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 credit\(^1\) from selected business cycles\(^2\)

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
- Real GDP level
- Pre-crisis trend
- Post-crisis trend

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 cycles

United States

Norway, Sweden, Japan and Mexico

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 Japan\(^1\)

\(^1\) 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