Resolution of Banking Crises: An Overview

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Plan of paper

- Benefits and costs of crisis resolution
- Alternative resolution strategies
- Type of crises and resolution options
- Evidence of resolution in major crises

Benefits and costs of banking crisis resolution

Benefits	**Costs**
Avoid systemic crisis	Fiscal costs
- maintain system's liquidity	
- maintain credit in the economy	
Maintain an individual bank's credit and money services	Moral hazard
	- shareholders
	- managers
	- depositors and other creditors

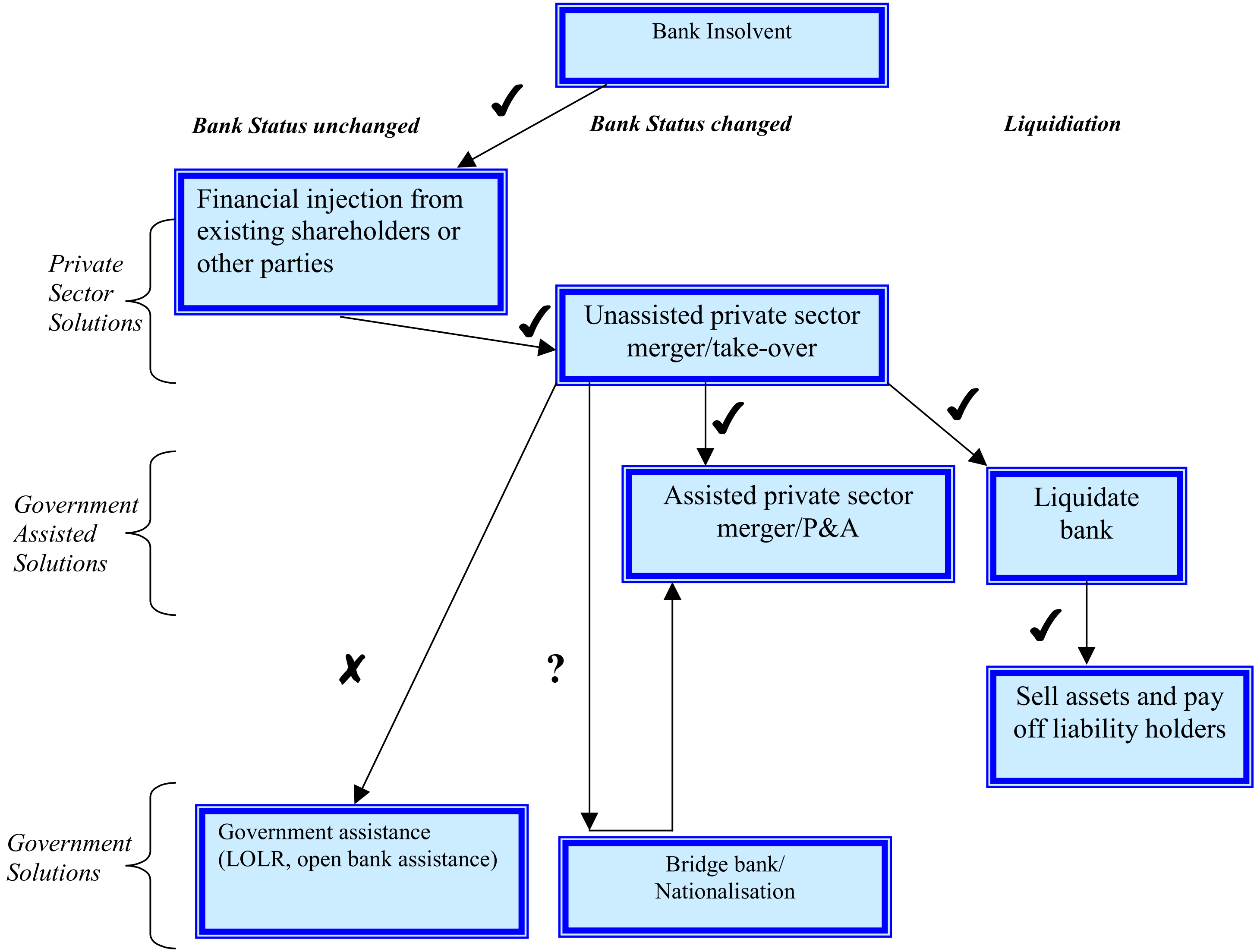
Measures to maximise the <u>net</u> benefits of resolution

- Impose losses on stakeholders to limit moral hazard:
  - shareholders
  - managers if failure their fault
  - possibly uninsured creditors and partially on depositors
- But maintain system liquidity in systemic situations:
  - pay creditors what they are due promptly
  - possibly <u>temporary</u> broad deposit guarantees in systemic crises

Resolution options

- Seek private sector solutions first:
  - minimises fiscal costs and moral hazard;
  - is this more or less likely with very large complex banks? May be some banks TBTF for private sector but may take time to find a buyer;
- If private solutions not immediately possible:
  - liquidate medium and smaller banks but;
  - possibly temporary government intervention and creation of ‘bridge bank’ in systemic situations, but if so (i) very temporary while seek private sector solution; (ii) impose losses on shareholders, managers and, if possible, creditors.

Alternative resolution strategies: decision tree in crisis resolution



Types of shocks to the banking system

TRANSMISSION OF SHOCK	SHOCK: Idiosyncratic	SHOCK: Common
No widespread contagion	**Small-medium bank** **A** **Barings** **BCCI**	**B** **Sectoral or regional banks** **S&L (US)** **Small banks (UK)**
Potential widespread contagion	**First Pennsylvania Bank** **C** **LTCM** **Isolated LCFI failure**	**D** **Nordic Countries (early 90s)** **Japan (90s)** **East Asia (late 90s)**

- A - bank can be liquidated, its customers can switch banks, spillover effects limited
- C - if no immediate private sector solution issue of whether an LCFI temporarily taken over by government rather than liquidated. Easier to liquidate if shock is purely bank specific (eg fraud).
- D - scenario resolution more problematic, often occur in recessions/asset price boom and bust
  - domestic bank merger less likely implies foreign takeover or if not temporary government intervention
  - difficult to evaluate banks' impaired assets and thus costs to shareholders
  - imposing losses on creditors may cause a wider liquidity crisis so may need temporary broad guarantees

- Most cost measures of banking crises are of fiscal costs.

- Fiscal costs of crisis resolution may not be a good measure of the economy wide costs. They represent a transfer of income from taxpayers to bank stakeholders buy may not necessarily represent a cost to the economy as a whole.

- In fact, higher (lower) fiscal costs may imply lower (higher) broader costs.

- Therefore produce own estimates of output losses - proxy for economy wide losses - in 33 developed and emerging-market systemic crises. Output or (output growth) losses are measured as the cumulative deviation in output during the crisis period from its pre-crisis trend.

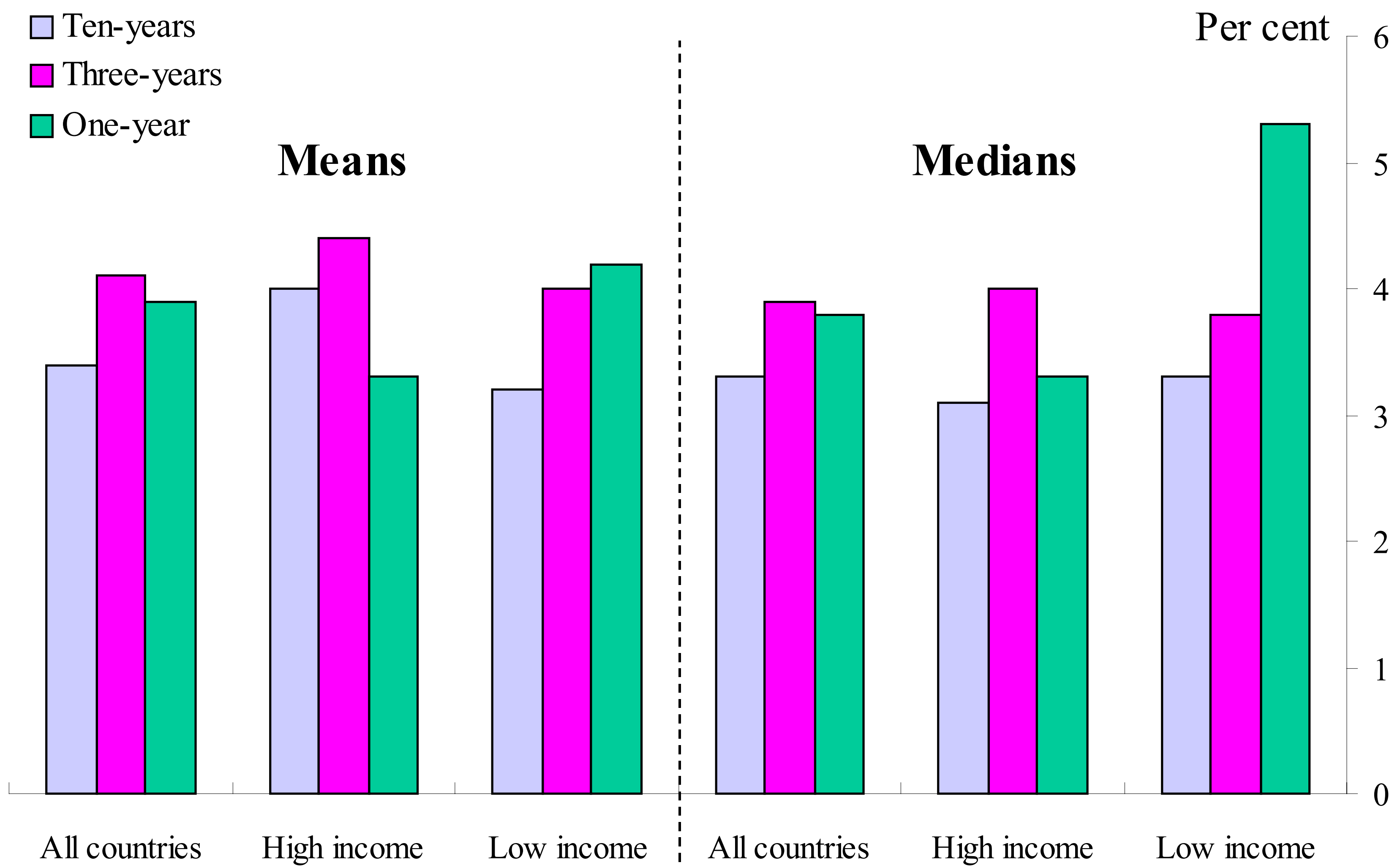
- 3 measurement issues.

1. How To Define The Banking Crisis Period?

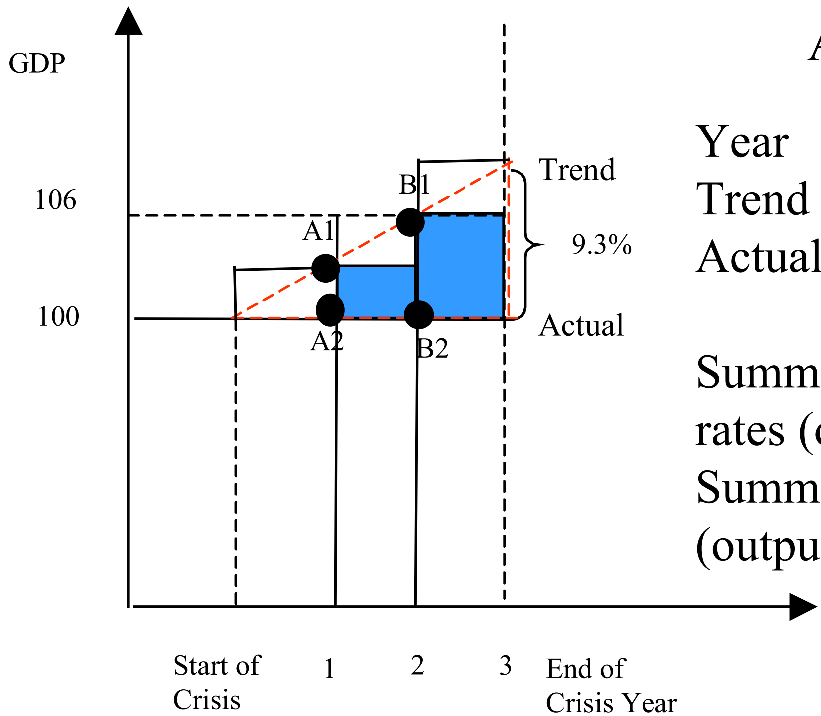
- Beginning
  - quantitative — deposit withdrawals; increase in non-performing loans; decline in bank share prices
  - qualitative — judgements of financial experts (Caprio and Klingebiel, (1999), Barth et al (2000)) ✓
    (one or more significant event eg forced closure, merger or government takeover). Results not sensitive to precise start date
- End
  - qualitative — judgement of financial experts (Caprio & Klingebiel (1999), Barth et al (2000)). ✓
  - quantitative — GDP growth back to trend (IMF) ✓
    GDP <u>level</u> back to trend

C-K and IMF methods often give similar end year.

2. Which Pre-crises Trend Output Growth Rate Should Be Used?



3. Summing the Deviation in the Growth or Level of Output from Trend?



Assume trend growth 3% per annum

Year	0	1	2	3
Trend	100	103(3%)	106.1(3%)	109.3(3%)
Actual	100	100(0%)	100.0(0%)	100.0(0%)

Summing growth rates (output losses 1)	3.0%	+ 3.0%	+ 3.0%	= 9.0%
Summing levels (output losses 2)	1.5%	+ 4.5%	+ 8.0%	= 14.0%

Output losses 1 is the cumulative differences in the <u>growth</u> rates from its pre-crisis 10 year trend.

Output losses 2 is the cumulative differences in the <u>level</u> of output from its pre-crises 10 year trend.

Liquidity support (LOLR) and the fiscal costs and output losses of bank resolution in 33 systemic crises 1977-2001

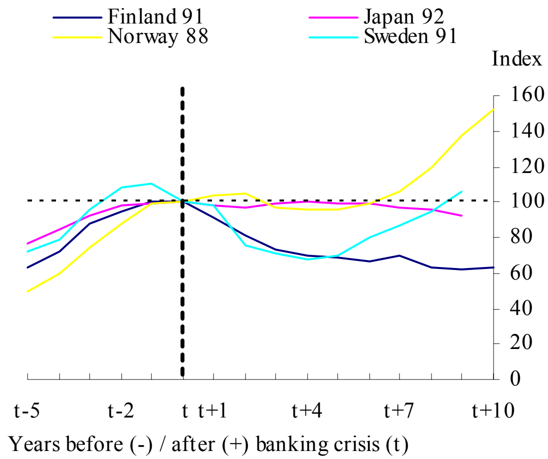
	Number of crises	Average length of crisis (years)	Bank credit/ annual GDP (%)	Cumulative fiscal costs of banking resolution (per cent of GDP)	Output losses1 (per cent of GDP), median	Output losses2 (per cent of GDP), median
All countries	33	3.8	43.0	15.6	11.5	19.0
– Banking crisis alone	10	4.5	43.5	9.0	2.6	5.8
– Banking and currency crisis	23	3.5	42.8	18.4	16.4	23.0
– High income	6	5.2	76.6	10.7	19.3	36.0
– Low/medium income	27	3.5	35.5	16.7	8.5	14.3
– Open ended LOLR	21	4.3	45.4	18.1	15.0	27.6
– No LOLR	12	2.9	38.8	11.2	4.0	3.8

Finland (91-93), Japan (92-), Korea (97-98), Norway (88-92), Spain (77-85), Sweden (91), Argentina (80-82), Argentina (95), Brazil (94-96), Chile (81-83), Colombia (82-87), Ghana (82-89), Indonesia (97-98), Mexico (94-95), Phillipines (81-87), Sri Lanka (89-93), Thailand (83-87), Thailand (97-98),Uruguay (81-84), Venezuela (94-95), Turkey (82-85), Turkey (01-), Ecuador (96-), Phillipines (98-99), Malaysia (97-98), Paraguay (95-98), Senegal (88-91), Bulgaria (96-97), Czech Republic (89-91), Hungary (91-95), Poland (92-95), Slovenia (92-94), Cote d'Ivoire (88-91).

Evidence of resolution in recent systemic crises (summarised in Table 4)

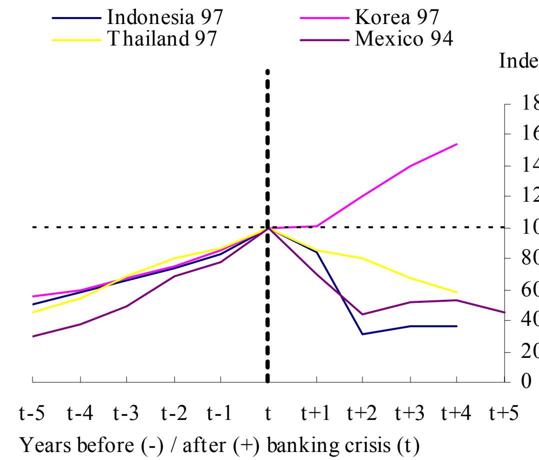
- Central banks made losses on ‘liquidity’ support but open-ended support seemed to prolong crises and increase rather than reduce the output losses and fiscal costs of crisis
- Broad deposit guarantees and liquidity support given in all cases. Widespread bank runs avoided other than in Indonesia where guarantees delayed
- Resolution usually a combination of private sector merger and government support - both open bank assistance and temporary nationalisation. Liquidation limited to small banks
- Losses imposed on shareholders and senior managers but not creditors
- Resolutions more successful in restoring bank capital (financial restructuring) than bank credit growth and profits (operating restructuring). Suggests although crisis management techniques important crisis prevention policies crucial too.

Developed Countries: Early 1990s
Real bank credit (t=100)



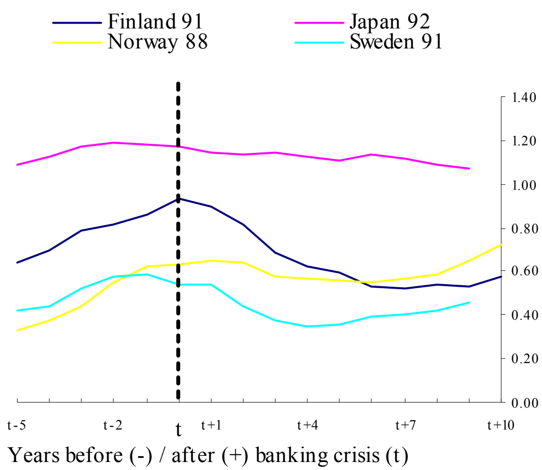
Sources: IFS and Datstream.

Emerging-Markets: Recent
Real bank credit (t=100)



Sources: IFS and Datstream.

Developed Countries: Early 1990s
Bank credit/GDP ratio



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Emerging-Markets: Recent
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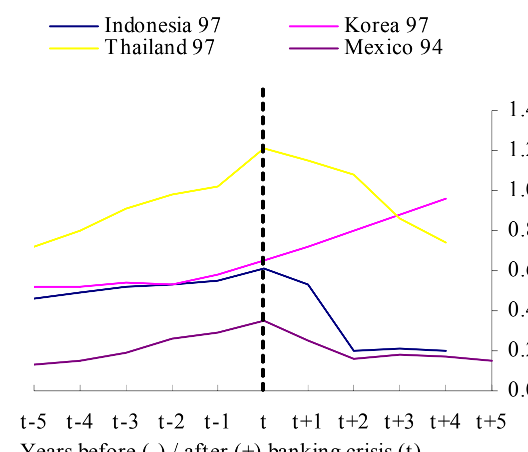

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