



Causes, consequences and solutions to the global financial crisis

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***Conference on “The Big Crunch and the Big Bang:
how to get out of the global financial mess”***

Cambridge, 21 November 2008

Outline

- **Monetary theory: the financial crisis as a non-linear catastrophic event arising out of distrust of money**
- **“Big Crunch”: the implosion of global money supplies September 15 2008**
- **Causes and consequences of the Big Crunch**
- **Conclusion: a seven-point plan to reboot the financial system and decarbonise the world economy**

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Concepts and jargon	Traditional economics	New economics
ethics and society	Utilitarian: social welfare function	Observed: emergent properties
time	Equilibrium: short vs long run, in or out of equilibrium	Arrow of time: history matters & outcomes are emergent
institutions	Simple: representative agents in groups with fixed maximising objectives and transaction/information costs	Diverse: groups with reflexive, negotiable objectives and institutional behaviours
externalities	Monetized: non-market effects valued and traded off for maximum "utility"	Intrinsic: people respond and institutions adapt to their environment

The Big Crunch: new theory

(1) economic activity is based on trust

- Trust underlies our use of money
 - Banks have the role of creating money (we trust banks to create money responsibly, not recklessly)
 - We trust governments to regulate the banks and to guard against “regulatory capture”, i.e. when the private banks subvert regulation to further their self-interest
- Private banks have lost some of our trust
 - The banks do not trust each other (evidence: LIBOR/OIS spread shows that this trust has been eroded since 2007)
 - Different branches within the same bank do not trust each other (evidence: at the run-up to bankruptcy, the head-office of Lehman Brothers in NY appear to have transferred London assets to NY)
- No trust = no banking
 - evidence: UK “Run on the Rock”

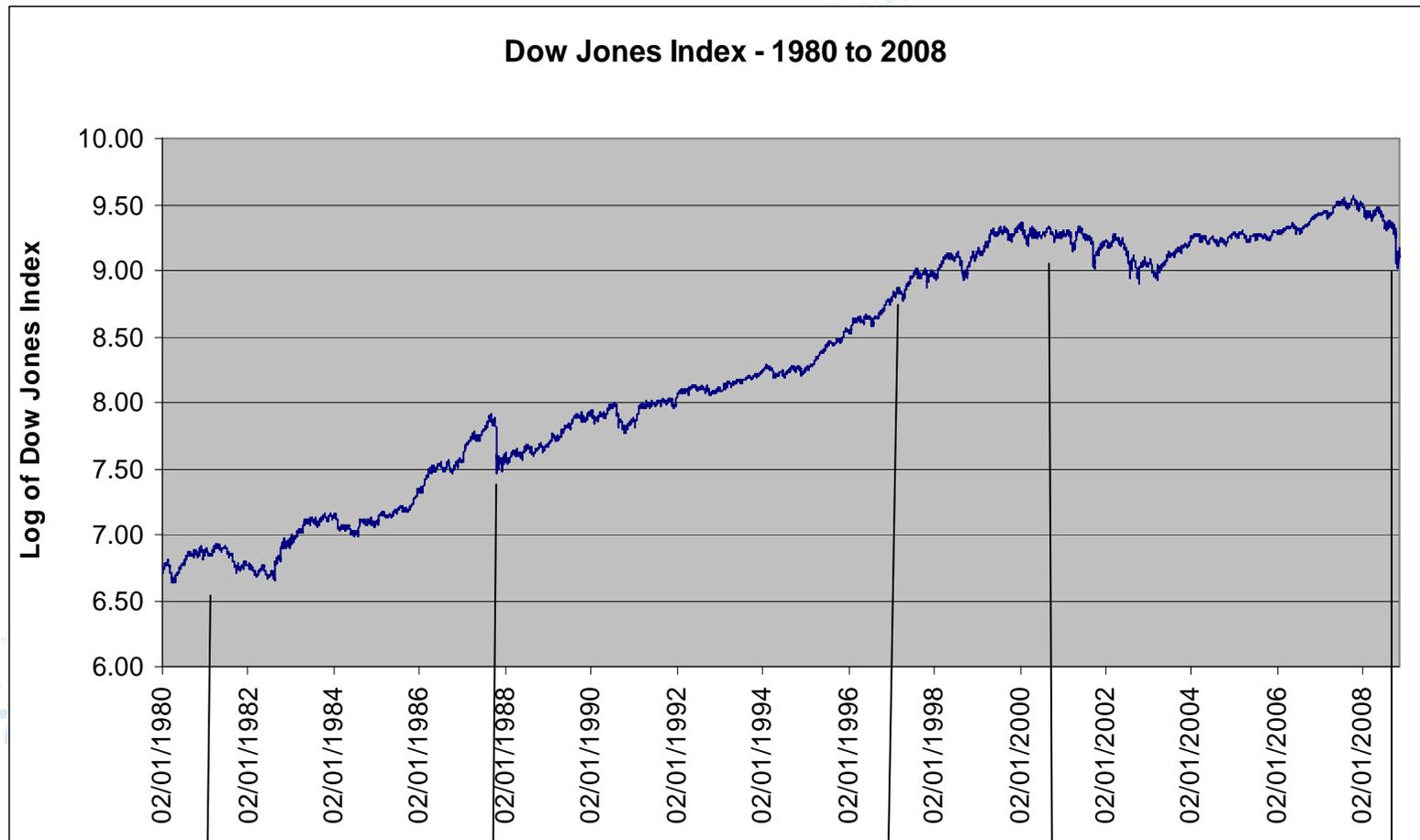
The Big Crunch: new theory (2) banking is intrinsic to advanced capitalist economies

- No banking means no bank loans for real investment (or consumption)
 - Banks lend less to restore their balance sheets
 - All private banks with substantial exposure to bad money are threatened with bankruptcy
 - Banks' own investment is reduced
- The Big Crunch is a global financial catastrophe
 - Non-linear event with extreme outcomes
 - Unprecedented in economic history in its scale (UK-US private banking linking with all stock exchanges)
 - Unlike the 17C tulip mania or South Sea Bubble, it originates in banks creating money not speculation
 - The crisis is continuing (accelerating?): inertia in expectations slows the rate of “melt-down”

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The Big Crunch: history 1980 to present



**International banking
crisis, 1980 - 1982**

**Black Monday,
19/10/1987**

**SE Asian & Russian
crises, 1997 - 1998**

**Dot Com bubble,
10/3/2000**

**Lehman crash,
15/9/2008**

The Big Crunch

September 15 - 20, 2008

- With the bankruptcy of Lehman Brothers (15/09/08), the global money stock was abruptly reduced
- Many banks with substantial exposure to “toxic debt” may now be insolvent
- The crisis became apparent when banks ceased to trust one another, but has been concealed by creative accounting and failure to value assets at realizable values
- The crisis is international: the banks have been creating new forms of money that have an uncertain worth, “bad money”
- The Fed’s proposal (19/09/08) was to exchange the bad money for good government-backed money, then gradually liquidate the underlying debt
- On 12/11/08 the Fed abandoned plans to buy toxic assets in favour of recapitalisation

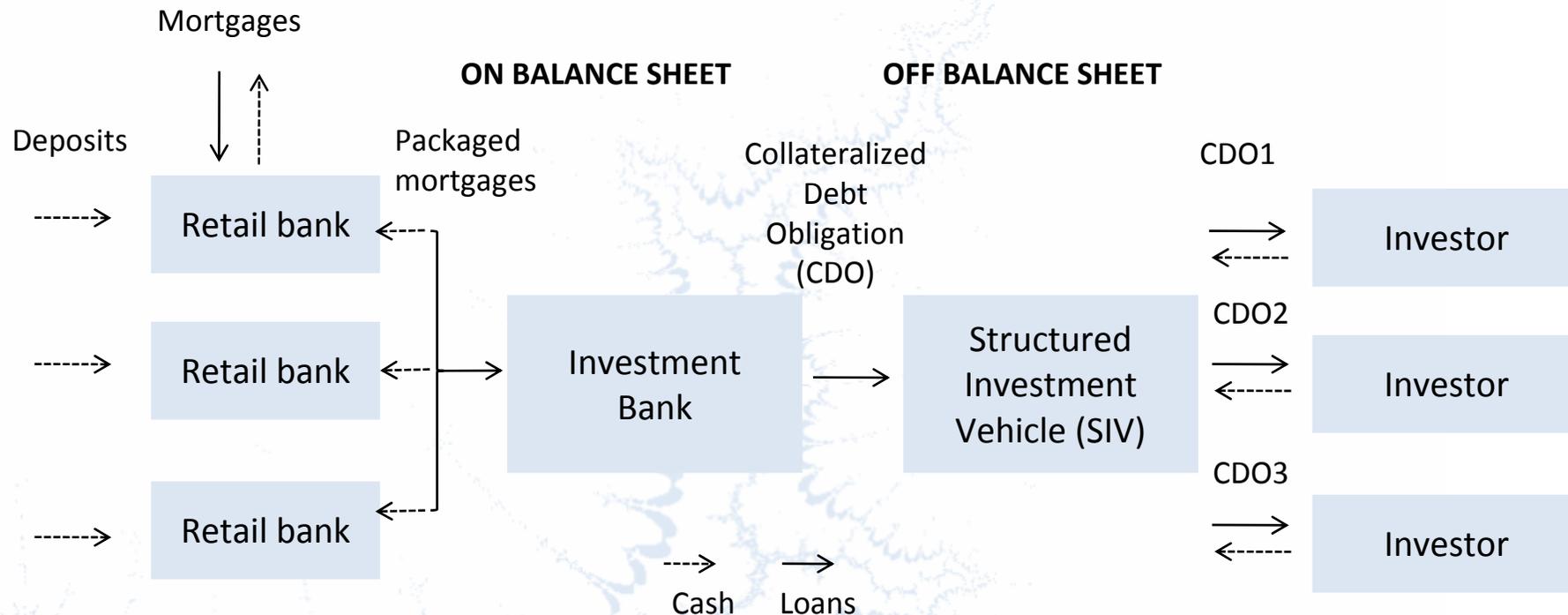
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The Big Crunch: views of causes

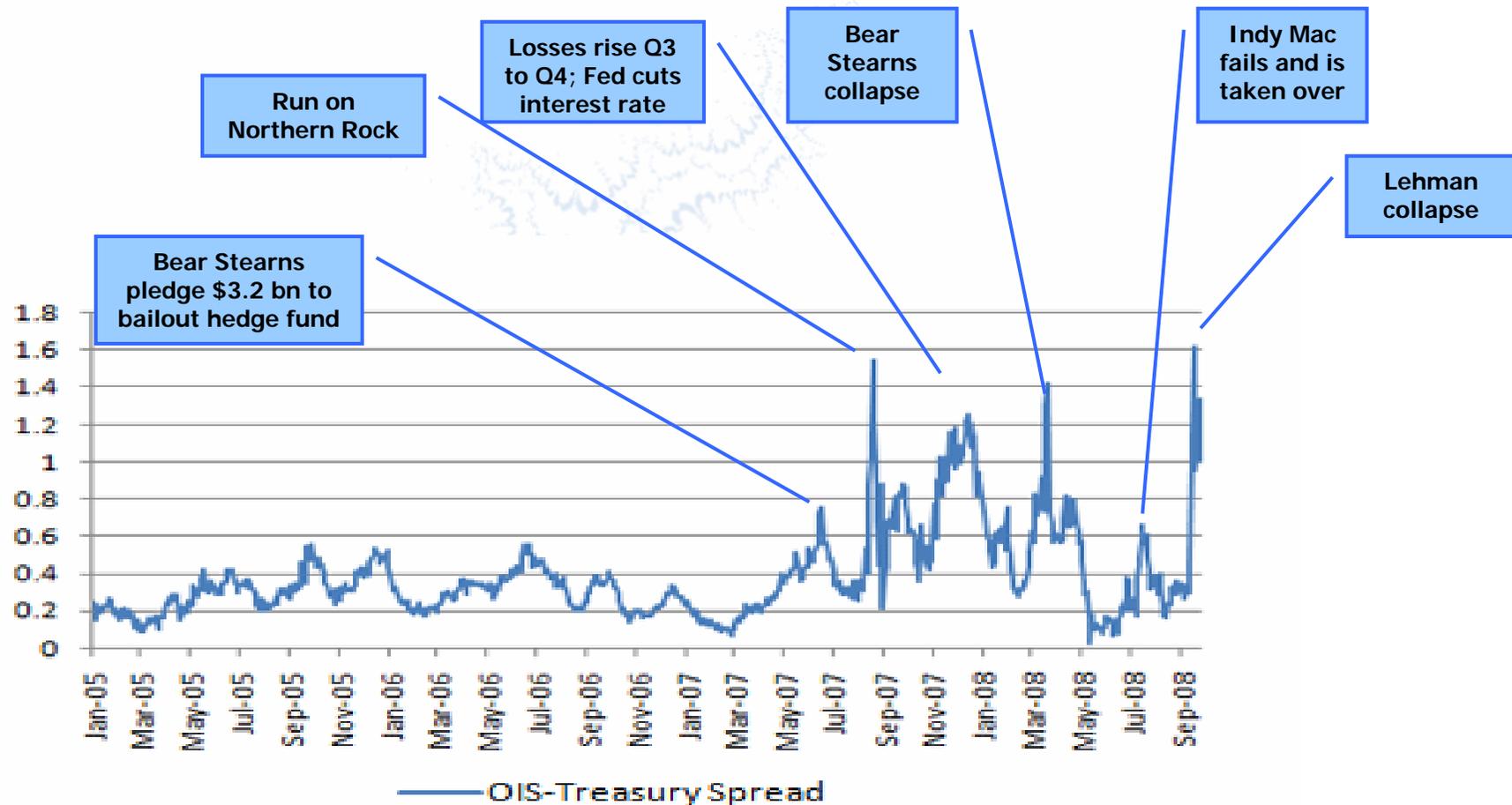
1. Financial Instability: over long periods of growth, capitalist economies tend to move from a financial structure dominated by stable finance to one ruled by speculative finance (unstable). Irregular cycles result from this dynamic (Minsky, 1984)
2. Subprime structure: linking lenders risk to house prices is the main cause. Securitisation spread the problem and added complexity, but is not to blame (Gorton, 2008)
3. Leverage: magnifies gains, but also magnifies losses
 - This is probably the main cause i.e. the creation of bad money

Securitisation and leverage



Complexity, spread, and leverage of the structure amplified the risks. E.g. Bear Stearns (BS) was leveraged 35:1 on balance sheet items when it failed. If BS sponsored a SIV leveraged 10:1, total leverage is 350:1 (\$350 backed by \$1 equity) so a 0.3% fall in the value of the mortgage assets wipes out the bank's capital.

The Big Crunch: history of the OIS spread



OIS: Overnight Indexed Swap

Swap spreads reflect expectations of credit risks and of interbank lending risks

Source: to be confirmed.

The Big Crunch: implications for the world economy

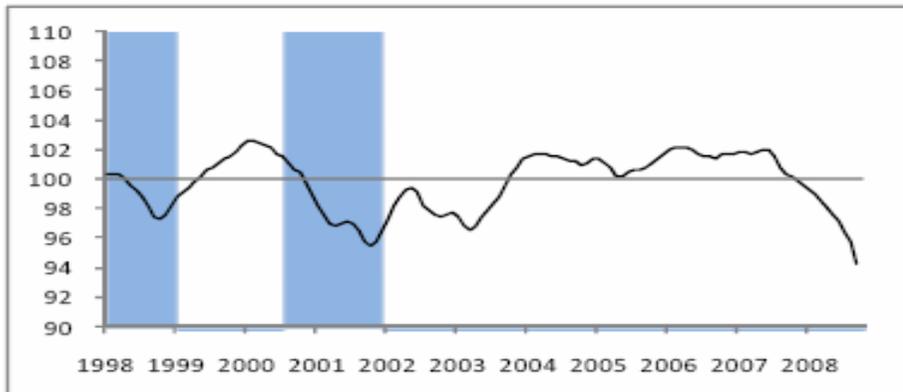
- Global depression seems likely: banks are forced to restore their net credit or go bankrupt, so lending is cut, and investment falls, with the fall re-enforced by expected loss of sales
- US economy is in a very weak position to restore global demand: US foreign and public sectors are both in substantial deficit; personal savings are around zero, and spending is likely to fall
- US \$ faces a potential collapse, with inflationary effects on the US economy (interest rates rise?)
- The “business as usual” resolution
 - Bail out the bad banks
 - Countries with surpluses (China, oil countries) buy up US assets
 - Interest rates fall (but fear of \$ or £ collapse and inflation)
 - Governments invest in social capital
 - Tax cuts (but higher public deficits and fear of inflation)

History: 1929 to present

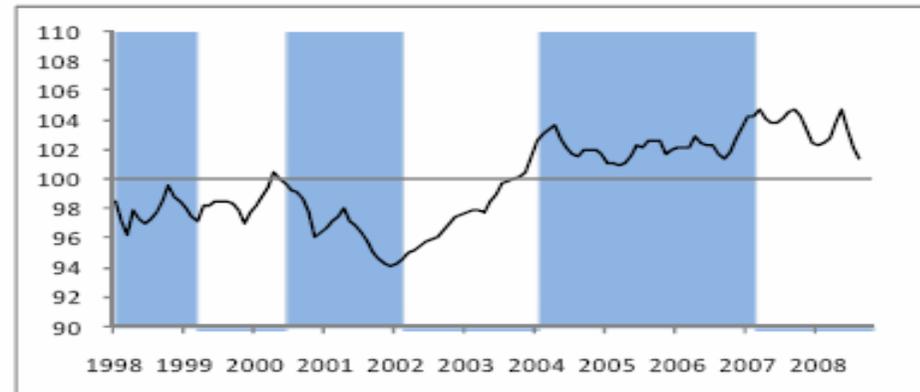
Period	Duration	Reason	Features
The Great Depression	1929 – 1939	Bad policy	<ul style="list-style-type: none"> •Supply of gold backing currencies fell •Failure to prevent spread of panic and drop in money supply when bubble burst
The Golden Years	1939 – 1971	Good policy	<ul style="list-style-type: none"> •Tight international monetary policy •Fixed exchange rates (US\$ gold standard) and restricted international capital flows
Globalisation and liberalisation	1972 on	Old policy	<ul style="list-style-type: none"> •Gold supply limited liquidity, US\$ overvalued and lost trust •B-W System needed adjustment
Crisis	Duration	Reason	Features
International Banking Crisis	1980 – 1982	Bad policy	US tight money supply and high spending increased interest rates, Mexico defaulted.
Black Monday	1987	Speculation	Financial innovations e.g. program trading, index futures and portfolio insurance
Swedish Banking Crisis	1991 – 1993	Easy credit	Restructured tax and economic slowdown burst housing/finance bubble
Japan's Lost Decade	1992 – 2002	Easy credit	Government increased interest rates, housing/finance bubble burst
South East Asian Crisis	1997	Easy credit / Speculation	High interest rates attracted FDI and a large inflow caused a run-up in prices
Russian Crisis / LTCM	1998	Speculation	Low price of oil reduced revenue: Russia defaulted on govt bonds, LTCM collapsed
Dot Com Boom	2000	Speculation	Speculation on technology stocks

The Big Crunch: implications for the world economy

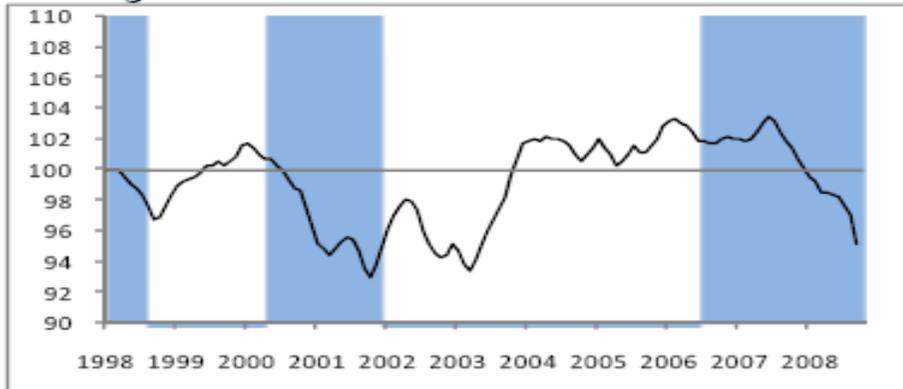
Strong slowdown in the OECD area



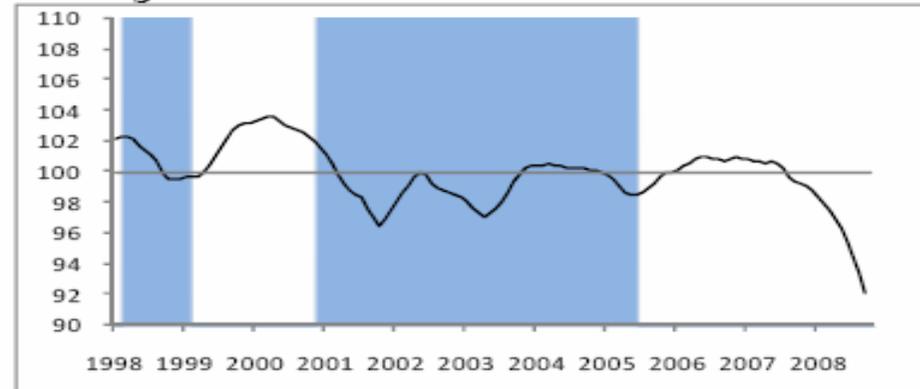
Downturn in China



Strong slowdown in the United States



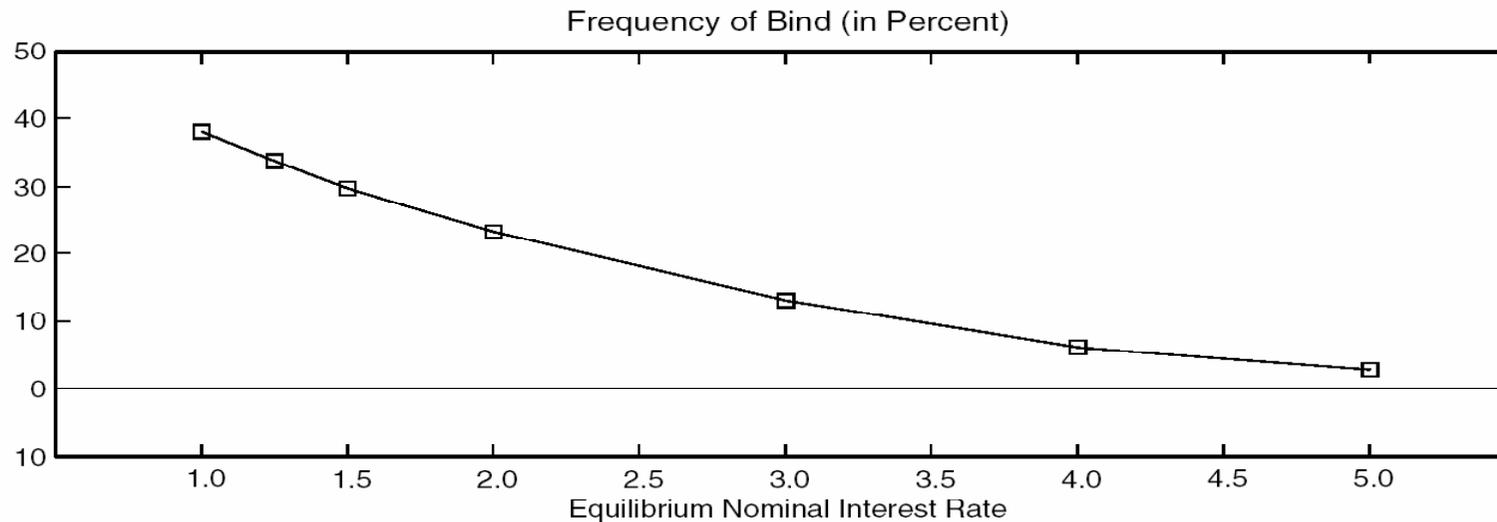
Strong slowdown in the Euro area



OECD Composite Leading Indicators News Release, 7 November 2008

ECB Analysis of risks of a liquidity trap

FIGURE 3.4: FREQUENCY OF BIND OF THE ZERO LOWER BOUND ON NOMINAL INTEREST RATES



Source: Gunter Coenen and Volker Wieland (2003) 'The zero-interest-rate bound and the role of the exchange rate for monetary policy in Japan', Working Paper No. 218 European Central Bank, March.

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Solution: phases and criteria

Three Phases of Crisis Management

1. Short-term: Immediate Damage Containment
2. Medium-term: Restructuring Insolvent Banks
3. Long-term: Systemic Restructuring

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Three Phases of Crisis Management

1. Short-term: Immediate Damage Containment
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Traits of good strategies (Ergungor, 2007)

1. Transparent, early recognition preserves trust
2. Politically and financially independent agencies
3. Maintain market discipline (e.g. Enron)
4. Repair the real economy esp. creditworthiness

Solution: a seven-point plan

1. Allow markets to work and bankrupt bad banks, whilst maintaining their institutional knowledge
2. Co-ordinate an global interest-rate cut to zero
3. Temporarily fix exchange rates (implement capital controls) and fix key international prices (e.g. carbon, coal, oil, gas)
4. Consolidate the bad debt into regional banks
5. Reflate via an agreed global investment plan, supported by the good banks and scaled to maintain effective demand
6. Reduce the risks of regulatory capture by a global regulatory authority having the power to “name and shame”
7. Reform international company law and standards to reduce costs of decarbonising the global economy

(1) Allow markets to work

1. Let bad banks go bankrupt so bad money is flushed out of the system
2. If actual bankruptcy is too unpalatable, try a “shadow” version, mimicking the legal process
3. Government bail-outs (on non-commercial terms) transfer capital from taxpayers to bad banks
4. Keep small depositor and shareholder protection in place
5. A blanket guarantee may stop panic in short-term, but it is costly and may lengthen duration of crisis

(2) Coordinated interest rate cut to near zero

- This jump-starts markets and allows central banks to regain control and raise interest rates appropriate to local conditions
- Near-zero rates allow good banks to build up assets or take over assets of failed banks and governments to finance debt easily
- It may avoid the global economy falling into a liquidity trap
- If there is to be a co-ordinated bankruptcy, close markets briefly after cutting the interest rates

(3) Fix exchange rates and other global prices

- These would make the existing behind-the-scenes fixes explicit e.g. China and Japan are supporting the US\$
- While recovery is taking place, controls could reduce foreign exchange speculation
- Modest \$ and £ devaluations could help to restore balance
- Simultaneously establish global price signals for carbon and fossil fuels to support decarbonisation (and other primary commodities?)

(4) Consolidate the bad debt

Swedish model separated assets into good and bad: good assets remained in banks, bad assets in separate companies

1. Transparent, full recognition of bad debt and clear rescue plan communicated to markets
2. Politically and financially independent agencies, bad debt cleared out efficiently and slowly
3. Maintenance of market discipline to some extent
4. Repair of the real economy via management and equity injections

(5) Reflate via a global investment plan

- Investment should be justified by cost-benefit analysis, allowing for all risks
- The programme should be co-ordinated on a global, macro scale but tailored by governments to regional needs and conditions
- Investment backed by good banks may restore banks and the “real” economy

(6) and (7) Reform international regulations and law

- Reform global regulatory standards and institute a global Regulatory Standards Authority (RSA) to “name and shame” e.g. to deter regulatory capture
- RSA would support global financial regulation and consolidate proposed and existing standards
- Global company law should require all companies to take into account social externalities, as a strong signal that unethical behaviour is unacceptable
- Ratings agencies should explicitly include environmental performance in rating companies

Conclusions for global policy

- The Big Crunch is a catastrophic financial disaster that may lead to a 21^C Greater Depression under current policies as promoted by the bankers
 - continuation of these policies seems likely to deepen and prolong the recession/depression
- A co-ordinated and well-timed global portfolio of policies may re-boot the system into an improved state, but nothing is guaranteed
- A consensus set of temporarily fixed key global exchange rates prices will promote investment e.g. a real carbon price rising to about \$100/tCO₂-eq (2000 prices) by 2020 (and rising thereafter) via a trading scheme
 - a portfolio of supporting policies (regulation, ecotax reform, information) will reduce costs and accelerate change
- An urgent and strong global fiscal reflation based on investment justified by social values will take up resources unemployed by the credit crunch, and kick-start the much delayed shift towards decarbonising the global economy
 - costs critically depend on international co-ordination