



BANK FOR INTERNATIONAL SETTLEMENTS

Dealing with a balance-sheet recession

by
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Introduction

- Objective:
 - Explore link between private debt, public debt and financial instability in the aftermath of a financial boom gone wrong
- Question
 - How should policy respond to a balance-sheet recession?
- 3 takeaways
 - Balance-sheet recessions are very different from normal recessions
 - Key policy challenge: address head-on debt and capital stock overhangs through balance sheet repair
 - Traditional rules of thumb for prudential, fiscal and monetary policies need reconsideration
- Roadmap
 - Background: what is a balance-sheet recession?
 - Policy response: prudential, fiscal and monetary (PP, FP, MP)
 - Global considerations in context of asynchronous financial cycles



I – Background: financial boom and bust

- Recent recession: major financial cycle bust against backdrop of low inflation
- Very different from typical post-war recession triggered by a MP tightening to constrain rising inflation:
 - Preceding expansion/boom much longer
 - Following debt, asset price and capital stock overhangs much larger
 - Financial sector much more impaired
 - Japan in the early 1990s is closest equivalent
- Historical evidence indicates that these busts
 - Coexist with permanent output losses
 - Are followed by weak recoveries
- Why? Most likely this reflects a mixture of
 - Overestimation of potential output and growth during the boom
 - Misallocation of resources, notably of capital, during that phase
 - Oppressive effect of the subsequent debt and capital stock overhangs
 - Disruptions to financial intermediation



I – Background: limited room for manoeuvre

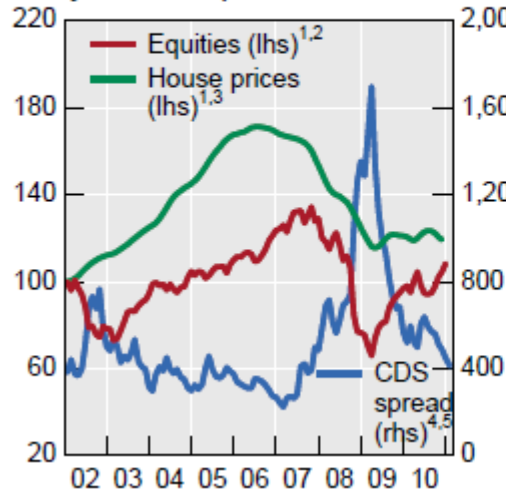
- Policy room for manoeuvre is greatly constrained
 - PP: no capital and liquidity buffers to draw down
 - FP: deficits typically balloon
 - possibly even threatening a sovereign crisis
 - MP: interest rates start from relatively low levels
- This is no coincidence: systematic result of response to financial boom
 - PP: financial boom flatters the financial institutions' accounts
 - “Paradox of financial instability”:
 - Market and accounting indicators of risk look stronger...
 - ...as the unsustainable financial boom proceeds
 - Act as contemporaneous, not leading indicators of financial distress
 - FP: financial boom flatters the fiscal accounts (one-off unsustainable revenues)
 - Overestimation of potential output and growth
 - Structure of revenues
 - Unrecognised build-up of contingent liabilities
 - MP: fails to respond to the build-up of financial imbalances



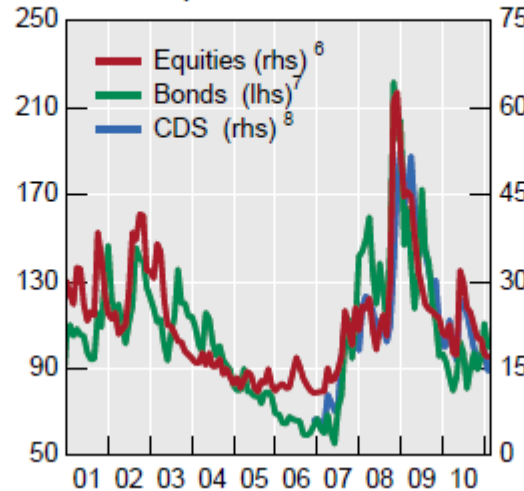
Footprints of the paradox of financial instability

The US example

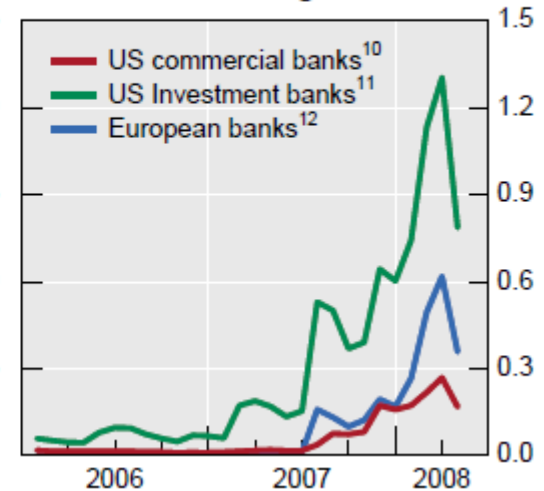
Buoyant asset prices



Subdued implied volatilities⁵



Price of insurance against distress⁹



¹ End-2001 = 100. ² S&P 500. ³ S&P Case Shiller index, 20 cities. ⁴ Five-year on-the-run CDX.NA.HY 100 spread. ⁵ In basis points. ⁶ VIX index (implied volatility on S&P 500). ⁷ MOVE index (implied volatility on treasury options). ⁸ Implied volatility on the 5-year-on-the-run CDX.NA.HY 100 spread. ⁹ In per cent, based on CDS spreads. Risk-neutral expectation of credit losses that equal or exceed 15% of the corresponding segments' combined liabilities in 2006 (per unit of exposure to these liabilities); risk-neutral expectations comprise expectations of actual losses and attitudes towards risk. Taken from Tarashev and Zhu (2008). ¹⁰ Ten banks headquartered in the United States. ¹¹ Eight banks headquartered in the United States. ¹² Sixteen universal banks headquartered in Europe.

Source: Borio (2011), based on Bankscope; Bloomberg; Datastream; JPMorgan, Markit; Tarashev and Zhu (2008); author's calculations.



II – Addressing the bust: two phases

- Distinguish two phases
 - Crisis management (CM) and crisis resolution (CR)
- Priorities
 - CM: prevent the implosion of the financial system and economy
 - Use room for manoeuvre for aggressive responses
 - CR: balance-sheet repair to lay basis for a self-sustained recovery
 - Adjust policies accordingly
- Good example: Nordic countries
 - Despite limited room for expansionary MP and FP (external crisis)
 - Promoted quick and self-sustained recovery after recession
- Bad example: Japan
 - Had much more room to expand but experienced lost decade
 - Postponed balance-sheet repair



II – What did the Nordics do?

- CM phase: prompt and short
 - Stabilised financial system (liquidity support; guarantees)
- CR phase: addressed balance-sheet problems head on
 - Enforced comprehensive loss recognition (write-downs)
 - Recapitalised institutions (subject to tough tests)
 - Sorted institutions based on viability
 - Dealt with bad assets (including disposal)
 - Reduced excess capacity in the financial system
 - Promoted operational efficiencies
- Implications
 - Need for public money
 - Need for forceful approach (address conflicts of interest)
 - Degree of public control is inevitable



II – Pitfalls of prudential policy

- Pitfall: focus exclusively on recapitalising banks with private sector money without enforcing full loss recognition
 - To prevent a credit crunch/deleveraging
- Why?
 - Fails to reduce cost of equity (and funding more generally)
 - Can generate wrong incentives
 - To avoid recognition of losses
 - To misallocate credit
 - Keep afloat bad borrowers (ever-greening)
 - Charge higher rates to healthy borrowers
 - Bet for resurrection
- In CR phase, when reduction in overall debt and asset prices is inevitable
 - Issue is not so much overall amount of credit...
 - ...but its quality (allocation)
 - Form of “hysteresis”



II – Pitfalls of fiscal policy

- Pitfall: risk of weakening further fiscal positions
 - Not using available (scarce) ammunition efficiently
- Better to use available fiscal capacity to address balance sheets head-on...
 - To absorb losses/inject strength in private sector balance sheets
 - Calls for substitution of public for private sector debt (eg, debt relief)
 - Buck for buck much better use of public money
 - eg, (purely illustrative) 20% GDP debt overhang = .5-1% deficit max (2.5-5% interest rate)
- ...than pump-priming: one-off effect without doing much for balance sheets
 - Fails to unblock private demand
- Broad-ranging policy action needed
 - eg, to address household debt overhang



II – Pitfalls of monetary policy

- Pitfall: aggressive and protracted easing – interest rate and balance-sheet policy (large-scale asset purchases, liquidity support) – buys time but can delay adjustment
- Mechanisms: it can...
 - Mask underlying balance-sheet weaknesses
 - Delay recognition of losses/repayment of debt (if no refinancing option)
 - Numb incentives to reduce excess supply in financial sector and encourage betting behaviour
 - Encourage risk-taking in trading/specific sectors (eg, commodities? currencies?)
 - Undermine earnings capacity of financial sector
 - Compress interest margins (low short-term rates, flat yield curve)
 - Create strains in insurance/pension fund sectors (low long-term rates)
 - Atrophy financial markets as central bank takes over intermediation
 - eg, masking/delaying market signals
- ... while having limited traction on output
 - No wish to borrow



II – Basic logic and some preliminary evidence

- Basic reason for limitations
 - MP typically operates by encouraging borrowing, boosting asset prices and risk-taking
 - But initial conditions already include too much debt, too high asset prices (property) and too much risk taking
 - Inevitable tension: how policy works and direction economy needs to go
- Recent preliminary empirical evidence
 - Balance-sheet recessions are indeed different
- Approach
 - 24 countries since mid-1960s; 65 recessions; 28 financial crises
 - Distinguish recessions (downturns) without and with financial crises
 - Control for various factors (severity downturn, etc)
- Findings: traditional macroeconomic policies are less effective
 - In normal recessions, the more accommodative MP in the downturn, the stronger the subsequent recovery
 - but this relationship is no longer apparent if a financial crisis occurs
 - Similar result for fiscal policy
 - The faster the deleveraging in the downturn with a financial crisis, the stronger the subsequent recovery



III – The exchange rate and global dimension

- MP: any induced exchange rate depreciation can be quite effective
 - Boosts income and output
 - Helps repair balance sheets
- Export-driven credit-less recoveries: typical way out of financial crises
- But
 - Option is less effective for large, more closed economies
 - Can be seen as having a beggar-thy-neighbour character
 - May result in unwelcome capital flows and exchange rate pressures
 - If economic and financial cycles are not synchronised
- Are we seeing this again globally?
 - Several EMEs are seeing serious symptoms of build-up of financial imbalances
 - Real interest rates unusually low globally



Conclusion

- Balance-sheet recessions are different
 - Need to deal with debt and capital stock overhangs directly (balance-sheet repair)
- Traditional rules of thumb for policy are less effective
 - May be adequate for CM but less well suited for CR
 - Buy time but can make it easier to waste it
 - Can delay the necessary balance-sheet adjustment
 - Can make eventual exit harder
 - Can promote imbalances elsewhere in the global economy
- New form of time inconsistency?
 - Responses that seem compelling in the short-run generate costs that build over time
 - Short horizons are key:
 - Risk of making similar mistakes to those that contributed to the crisis in the first place?



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