Causes of the global financial crisis, fact and myth: lessons for regulators and bank management

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Copenhagen 31 October

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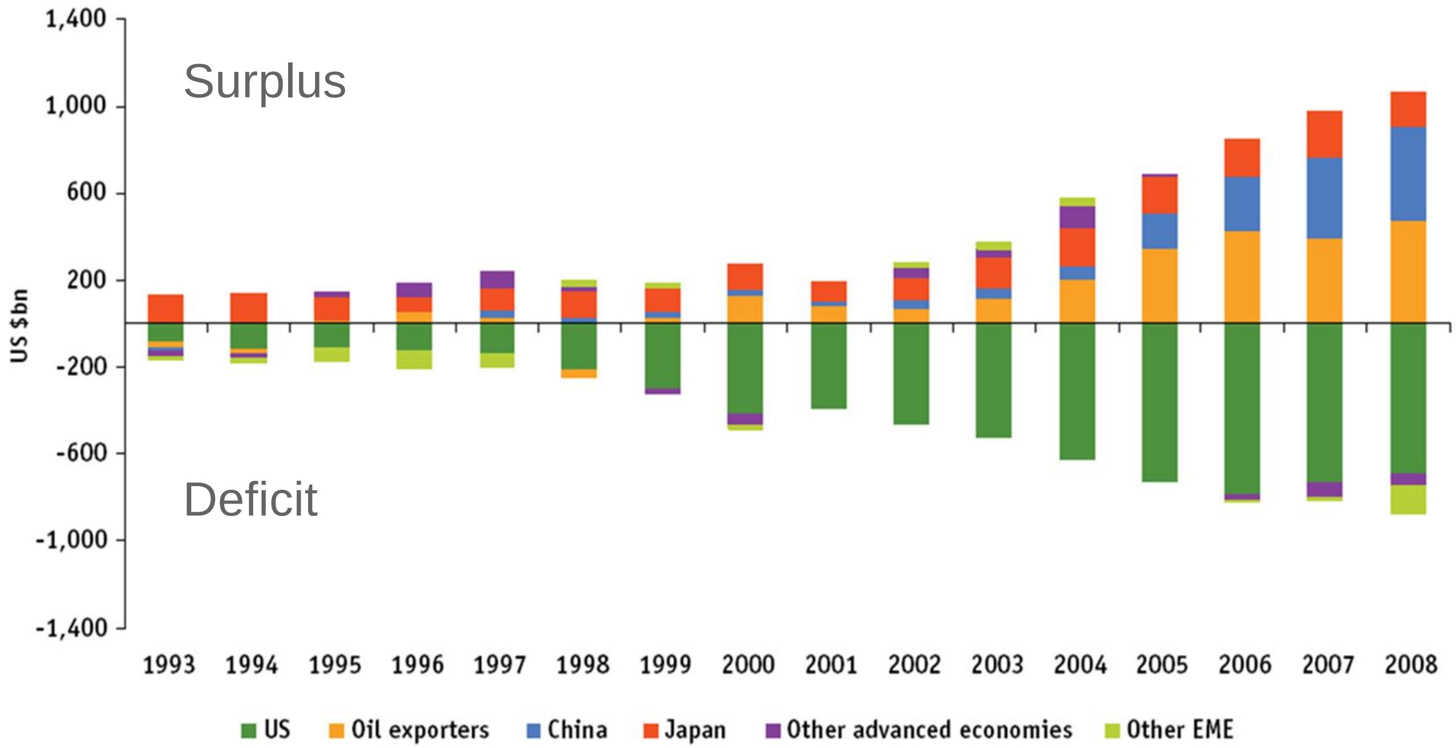
Backdrop to the crisis

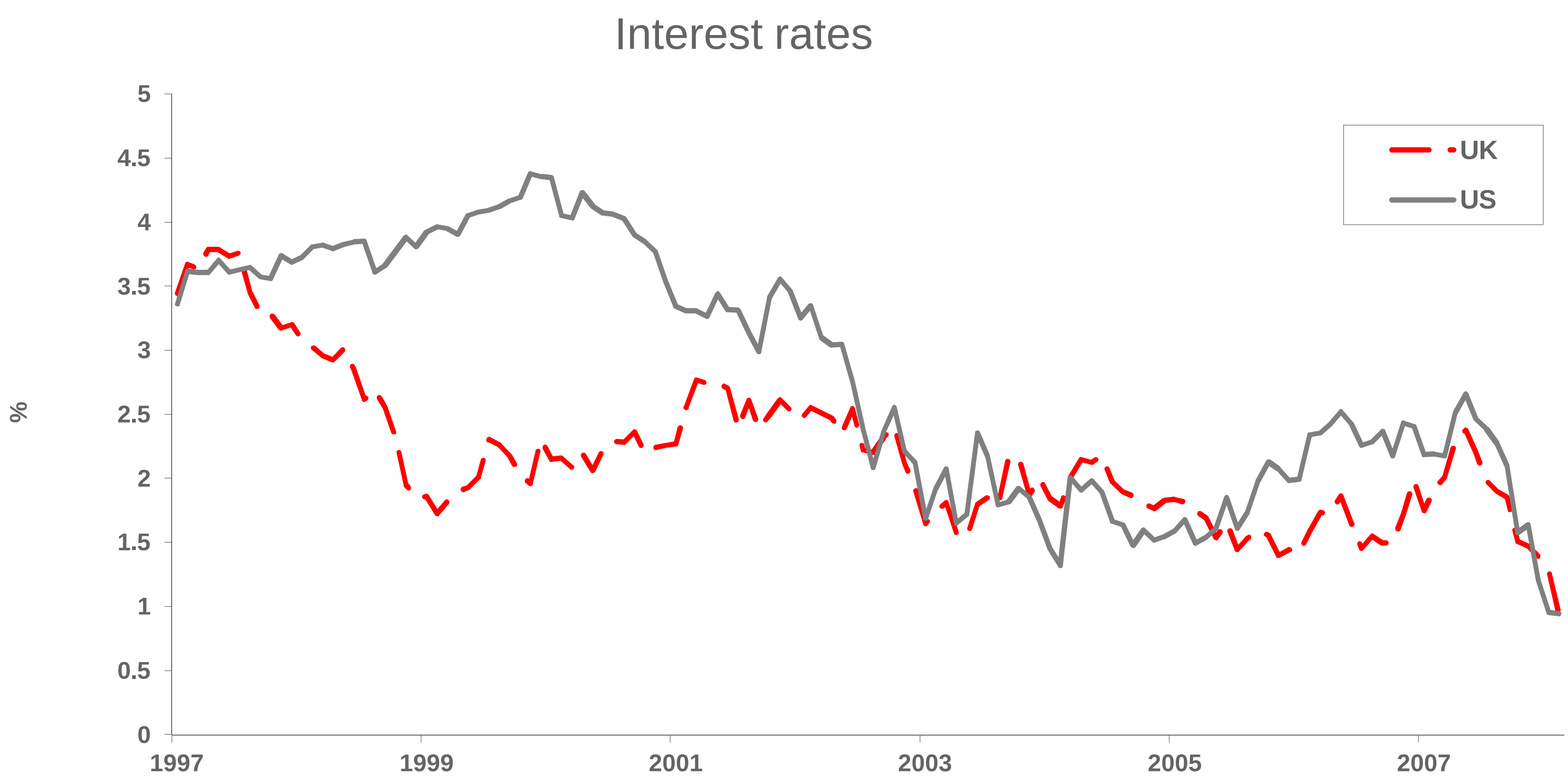
Global imbalances kept US markets liquid.



Source: IMF, FSA calculations

Low interest rates led to search for yield and high indebtedness

Low cost imports into western economies from the far east kept inflation low and central banks maintained an accommodating monetary policy for too long.



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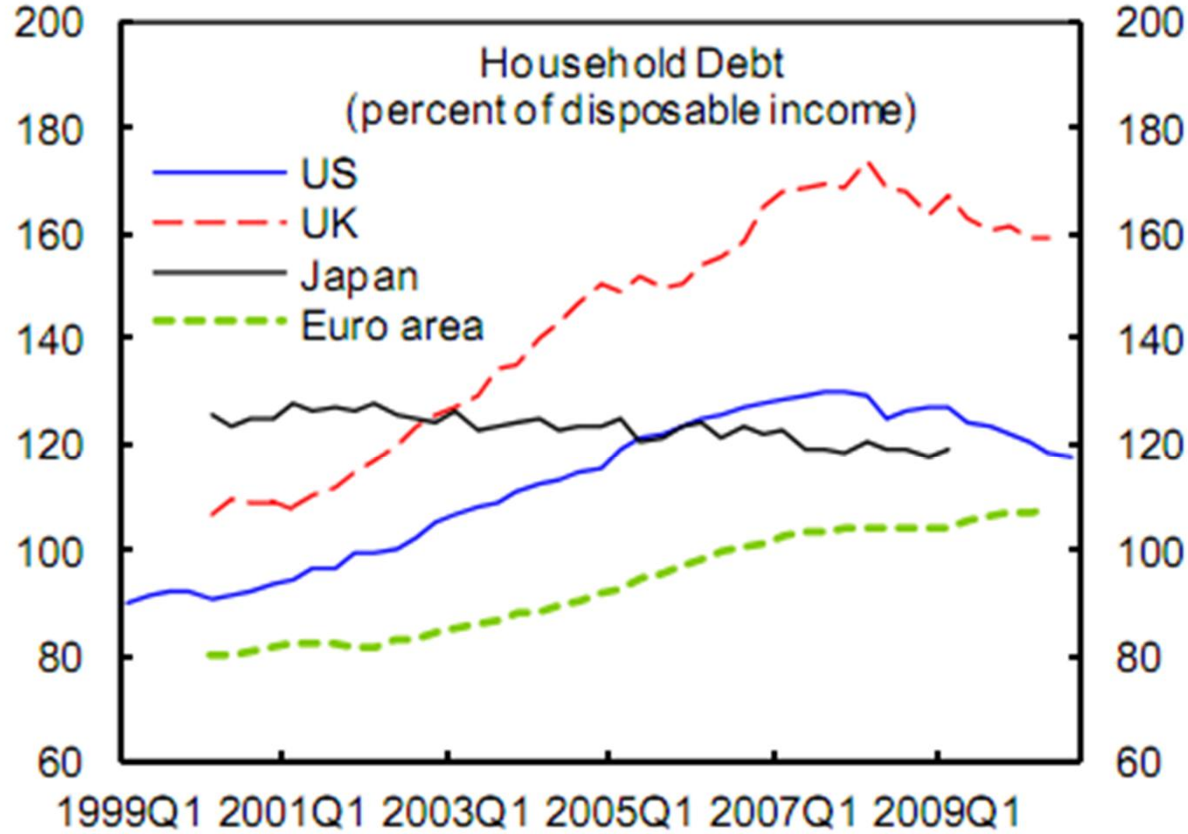
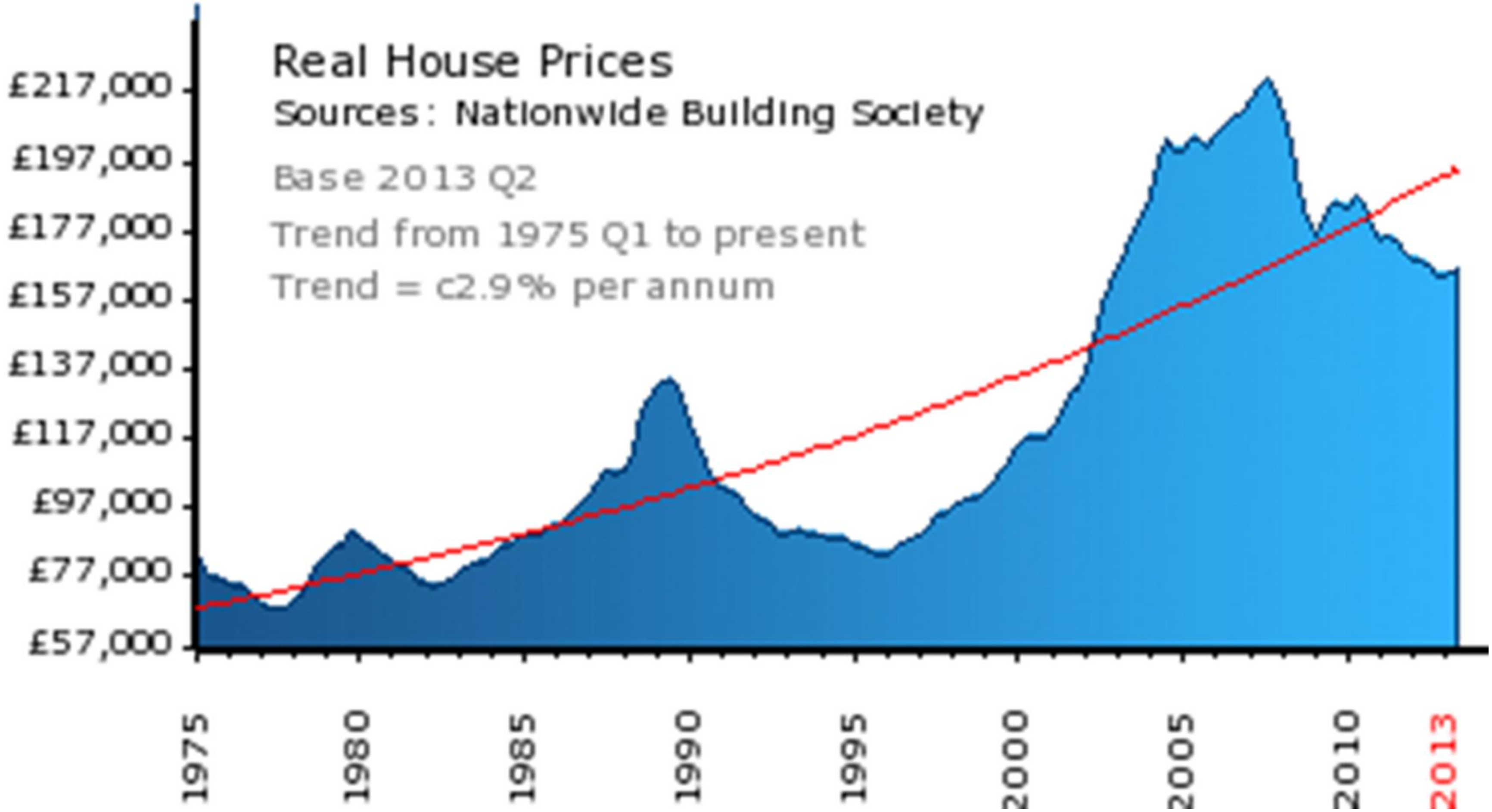
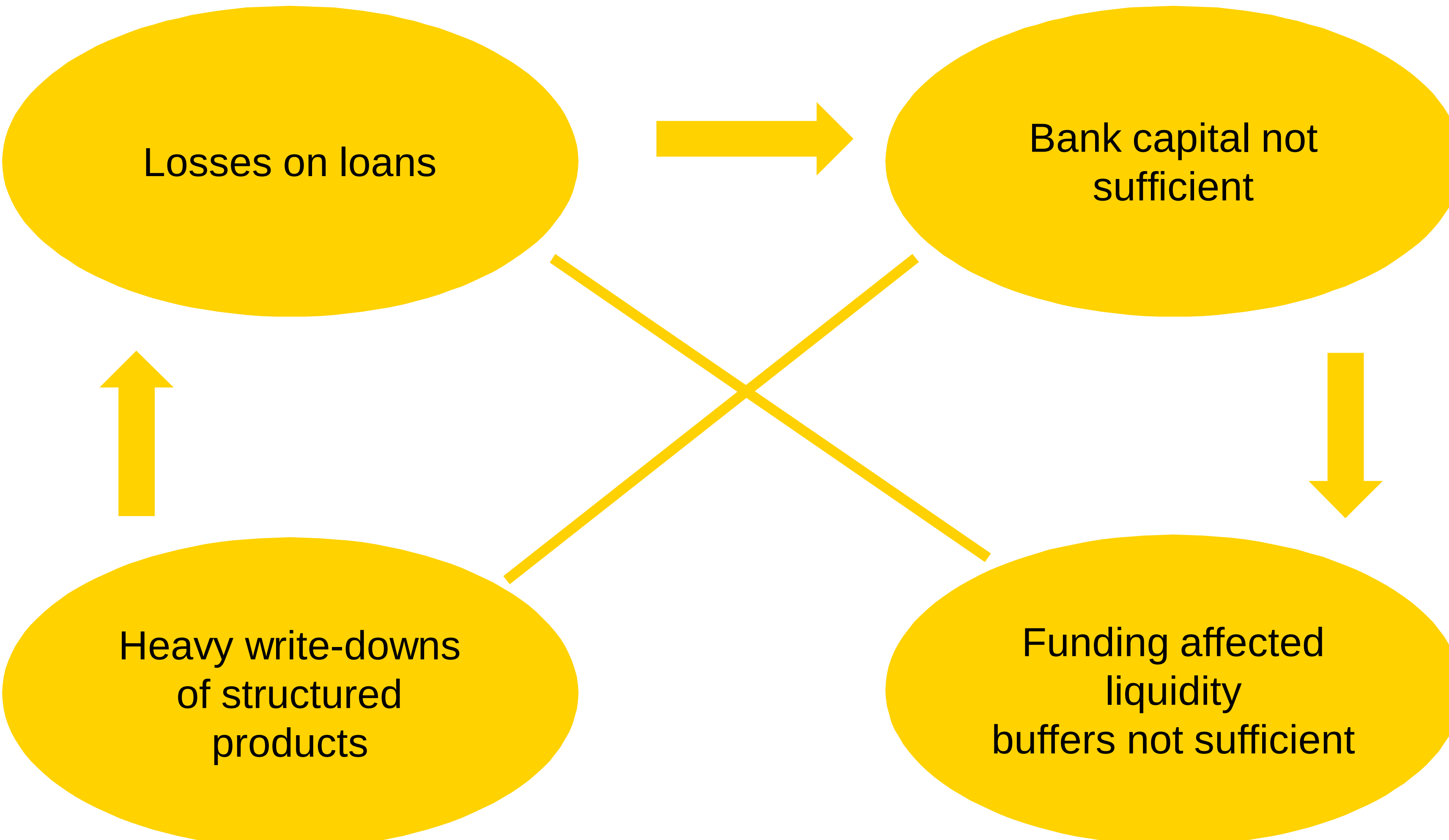


Sources: OECD; WEO; and IMF staff calculations.

Bubbles in housing markets (UK example)



Structured products played a large role in losses



Causes of crisis and strengthening the system going forward

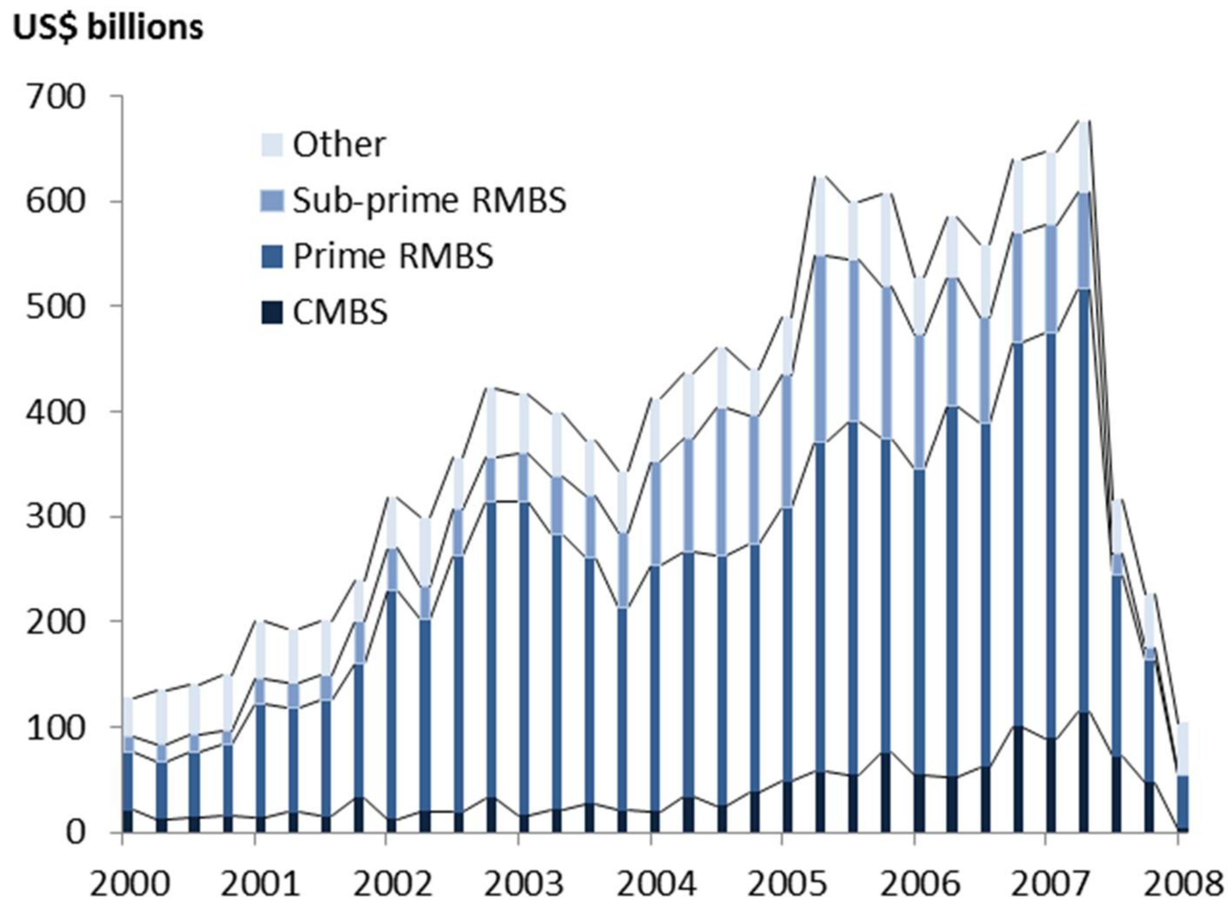
Intend to focus on –

1. market failures – wider lessons from the structured products market
2. The lessons for bank regulation
3. The lessons for bank management and regulators from the concentrated risk positions

What are the lessons from the problems in the securitisation market

First factor – Two different markets 2004 and 2006/7

- The market deteriorated as volumes grew
- Market outgrew available prime loans to fuel it
- Proportion of sub prime increased.



Second factor – Fall in lending standards

As growth increased due diligence and lending standards deteriorated.

Dell Arica et al – as proportion of sub prime loans in pools grew denial rates for new loans fell sharply.

Fitch (2007) found –

- Poor lending decisions
- Evidence of fraud misrepresentation

DELL'ARICCIA, G., IGAN, D. and LAEVEN, L. (2008), Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market, IMF Working Paper.

FITCH RATINGS (2007), The Impact of Poor Underwriting Practices and Fraud in Subprime RMBS Performance.

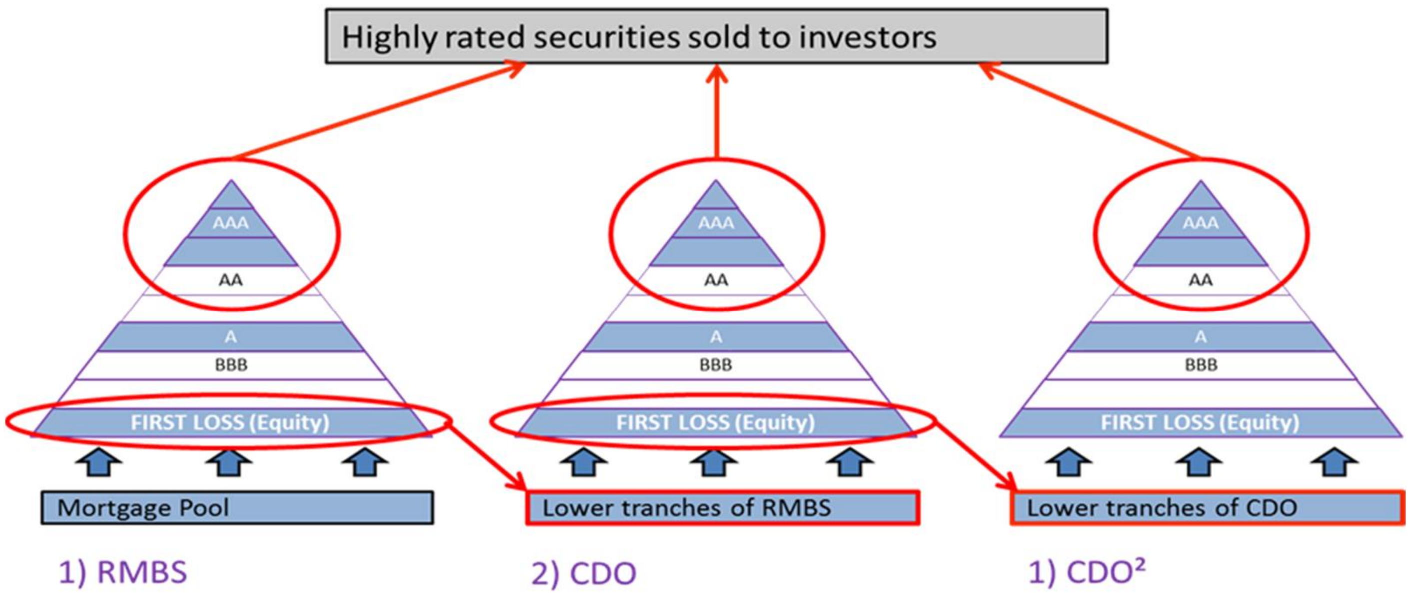
Third factor - opacity

As quality of loans in the pools reduced so –

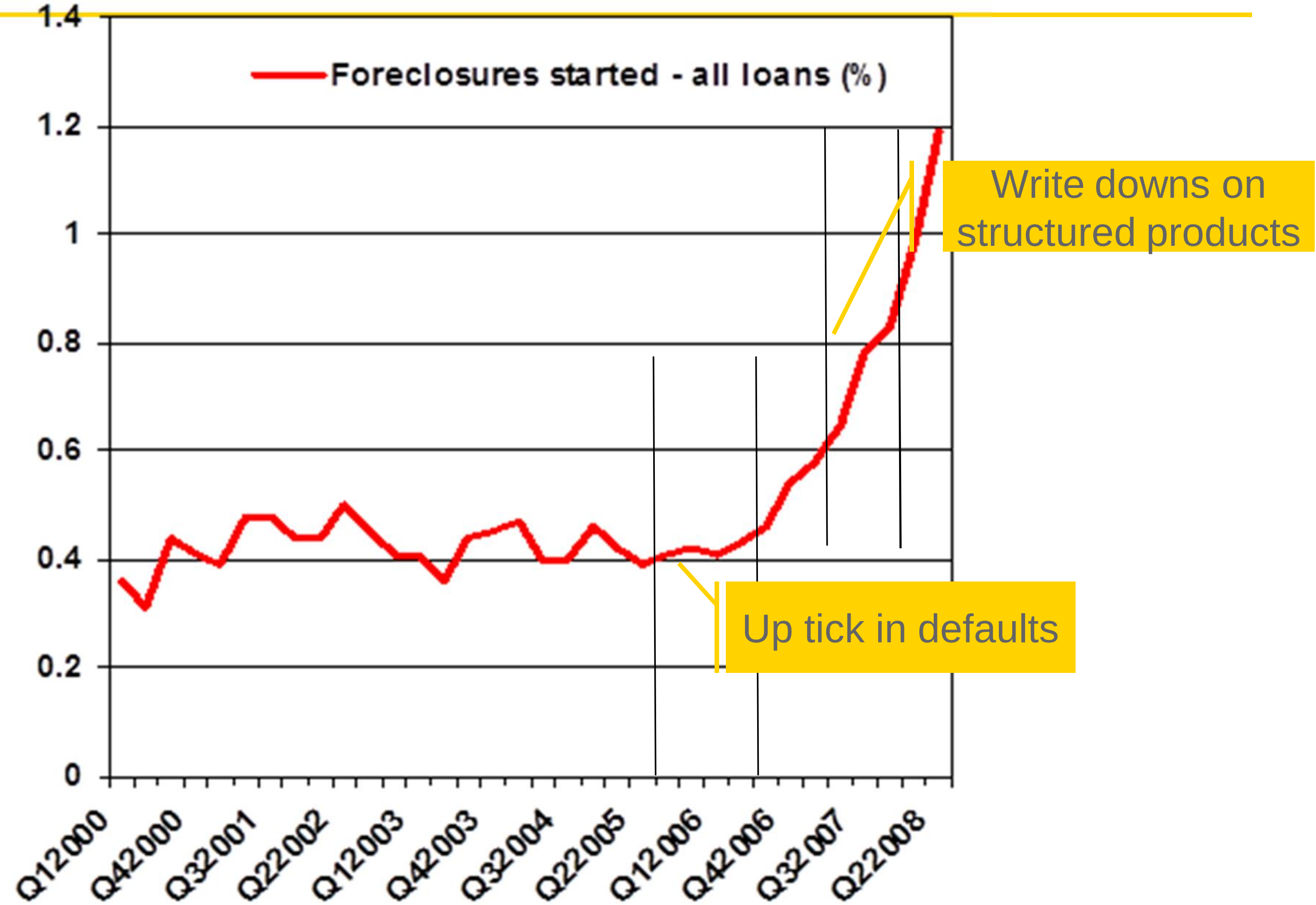
- Tranching increased
- Use of other credit enhancements increased.

Prospectuses were long and material difficult to find

A range of new instruments proliferated- CDO, CDO squared



Opacity of defaults across market meant that the prices reacted too slowly to changing default rates



It is not clear that regulatory changes have dealt with core problems in securitisation

Trading on exchange to encourage more liquidity /transparency

Standardization of prospectuses, contracts and structures.

Standards and an oversight mechanism for models used to rate securities.

Mechanism to pool default rates across structures underpinned by similar assets

Allowance into liquidity pools of banks could be used to enforce standards around loan quality in pools, low level tranching and high due diligence.

Important - the same problems could occur in the same or different global markets going forward.

- Assets being generated in shadow banking markets

Ratings cannot be removed from the system

Final Report of the IIF Committee on Market Best Practices: Principles of conduct and best practice recommendations – July 2008

Produced extensive recommendations for the restructuring of the securitisation market.

Most of which have <u>not</u> become part of official agenda, including those regarding ratings agencies-

- Independent validation and oversight of ratings agency models
- Adequate data and systems
- Ratings covering qualitative issues such as lending standards and sampling of borrower documentation
- Industry standards for ratings agencies' internal processes and external review of processes.

Regulation of banks

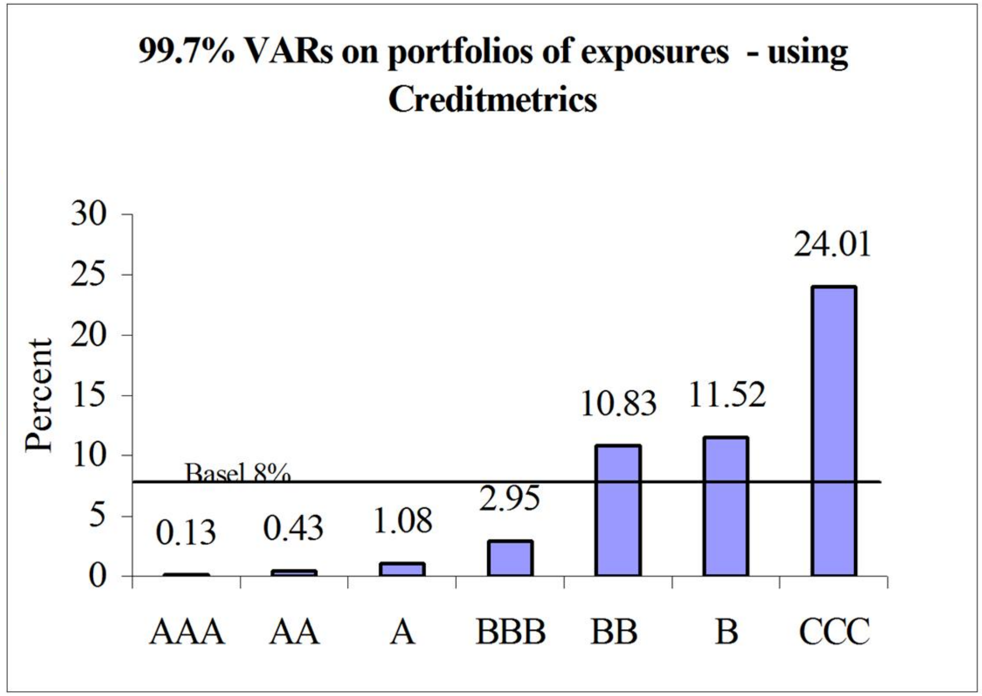
Focus on Basel II and complexity is misleading

Basel II introduced after crisis started – 2008 for advanced banks - and has not been introduced in the US

Distortions which led to growth of securitisation came from Basel I – a leverage ratio –like requirement.

Most private sector exposures – flat 8% capital charge

Basel I encouraged banks to offload high quality assets.



JACKSON, P., FURFINE, C., GROENEVELD, H., HANCOCK, D., JONES D., PERRAUDIN, W., RADECKI, L.,YONEYAMA, M. (1999). Capital Requirements and Bank Behaviour: The Impact of the Basle Accord, No. 1 - April. Basle Committee on Banking Supervision Working Papers.

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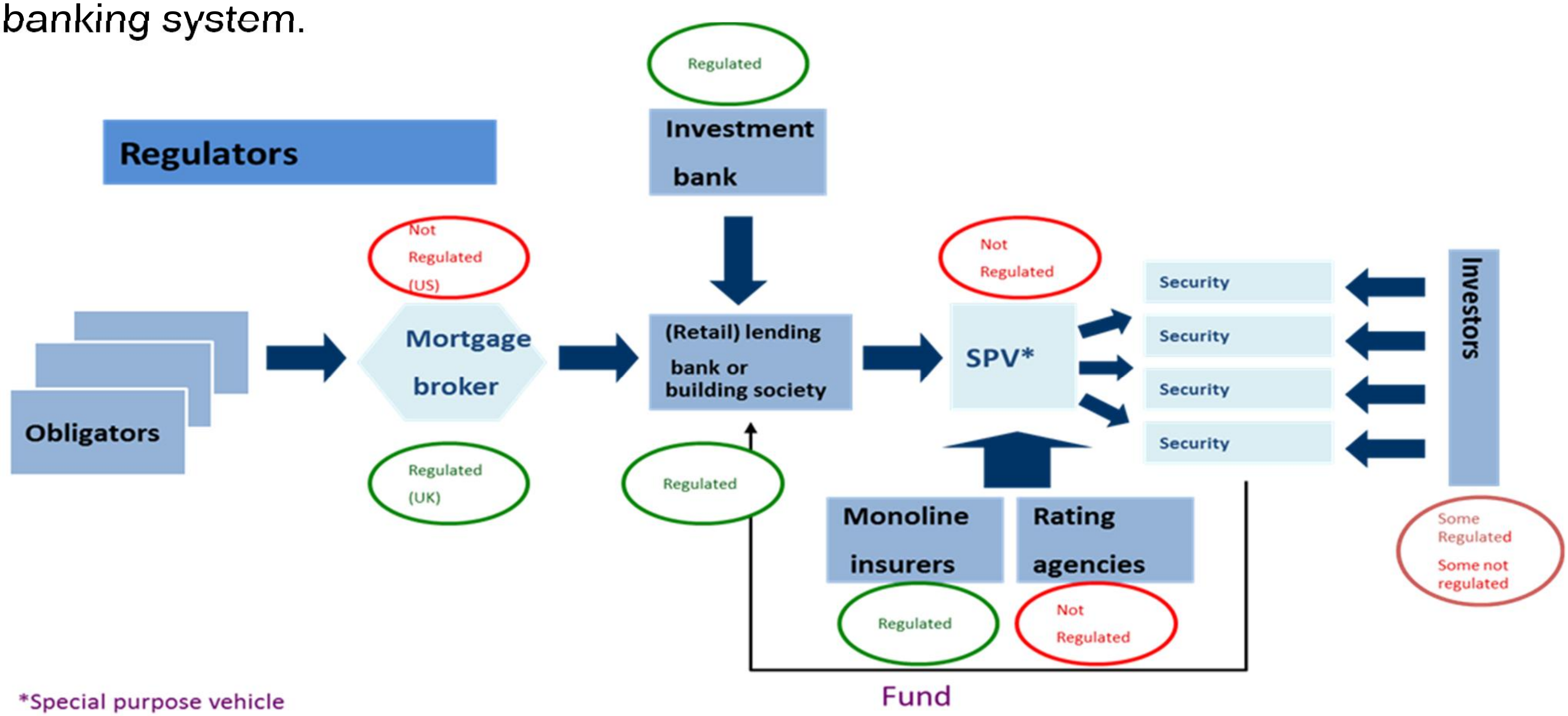
Basel I also encouraged use of mortgage brokers to originate sub prime

Lower capital charge if the bank itself had not originated sub prime loans for pool – Lesson beware incentives which push loan origination out of the banking system.



Shadow banking momentum is growing

And is again leading to different types of structure but is less reliant on underlying credit assessment.

Banks	Structured products	Institutional investors	Peer to peer
Credit assessment/ internal external data	Credit enhancements	Security	Diversification of lenders
Diversification of lending	Diversification of pools	Credit enhancement	Credit assessments. Internal/external data
		Credit assessment	

Security is important for some exposures e.g. mortgages and commercial projects and SME but it does not override the credit assessment

Security was important for RMBS/CMBS but credit enhancement was the key factor

Source: Jackson, 2014 This paper is forthcoming as chapter 11, *Shadow banking and new lending channels - past and future,* in Morten Balling and Ernest Gnan (Eds.), *50 years of money and finance: Lessons and challenges*, Vienna, Larcier for SUERF - the European Money and Finance Forum (www.suerf.org)"

Bank capital was too low

Basel I 8% allowed subordinated debt to count in Tier 2.

The addition of hybrid capital reduced equity and reserves requirement to 2% out of 8%.

Capital was unusable as a buffer

Basel III has dealt with these issues

Trading books v Banking books – has not been dealt with

- One reason capital charges very low – illiquid positions included in trading books
- Trading book requirements assume resale or hedging possible within 24hours.
- But leverage loans, securitisations, loans being warehoused for securitisations were in trading books
- No liquidity test has been applied.
- Simply increasing capital requirements for trading books increases distortions.
- Fundamental trading book review is on-going but it is not clear if it will deal with the issues.

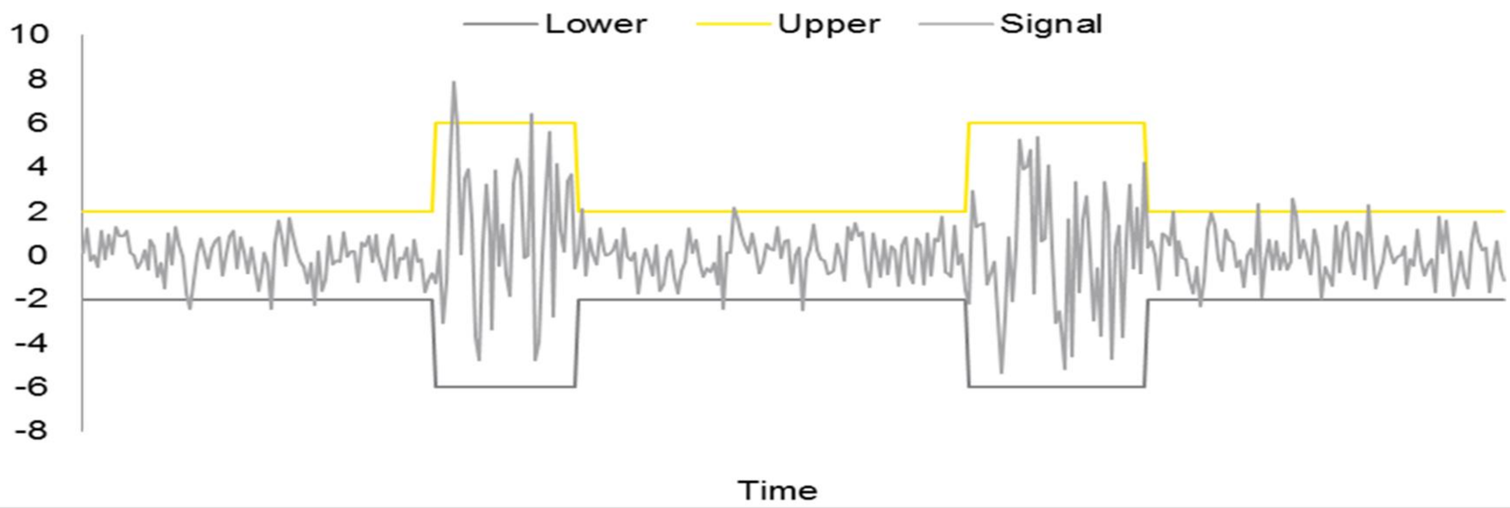
Point in time modelling

VaR models for trading books under-read risk because a one year data history was allowed.

VaR measures compress in low volatile periods and expand too late when volatility increases.

This has been dealt with using stress VaR

A general principle of through the cycle not point in time metrics has not been adopted.



The same issue is true of banking books

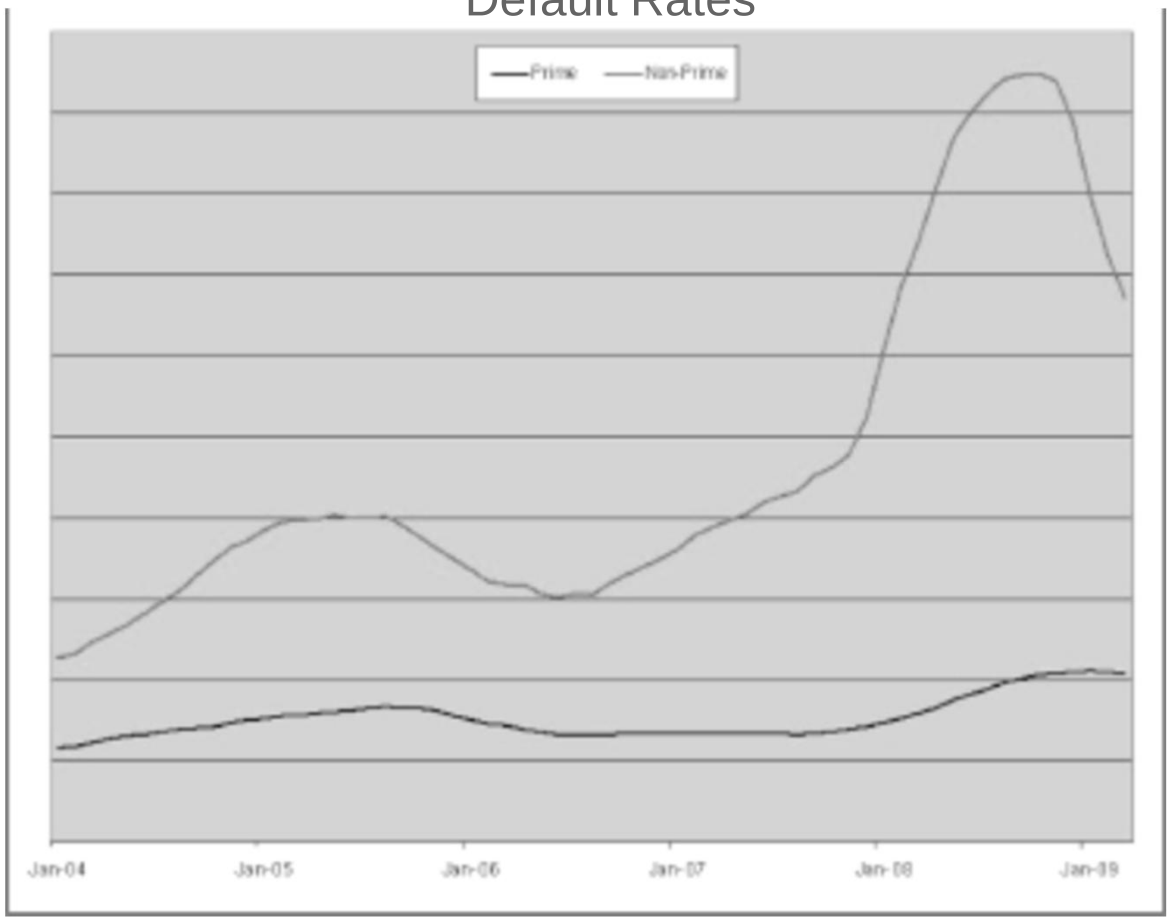
Some authorities encouraged point in time modelling of PDs

- ‘More accurate’
- ‘Better risk signals’

Was not a cause of crisis but carries same danger as point in time VaR

UK subprime mortgages against prime mortgages

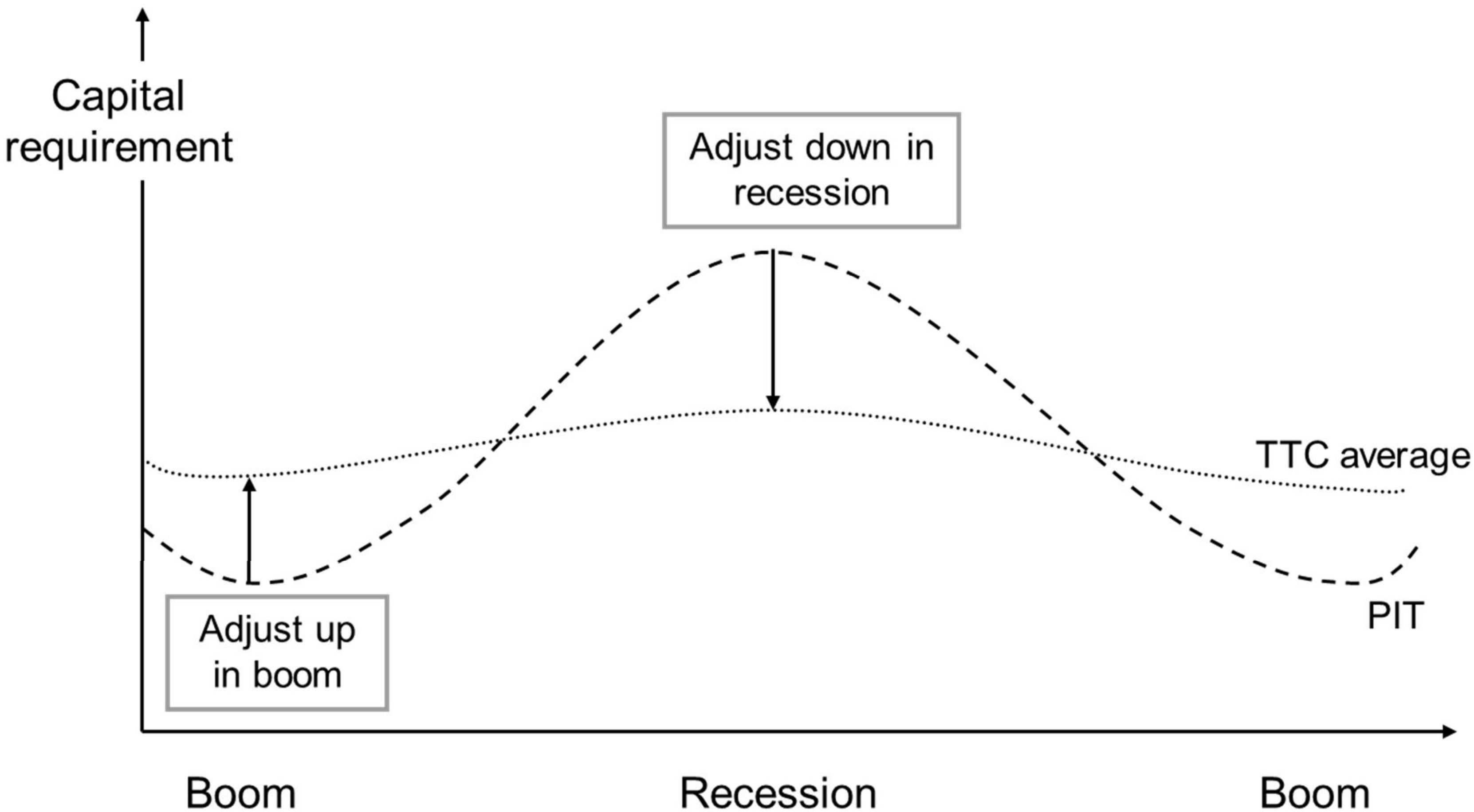
Default Rates



Actual bank data

Can it be dealt with?

Point in time PD estimates can be scaled into through the cycle



Risk insensitive metrics

Risk insensitive metrics is not a solution

Taking the mortgage example –

Would encourage regulatory arbitrage, leading to exposure to higher risk borrowers

Bank concentrations and risk governance

Risk concentrations at the heart of crisis

Mix of ‘disaster myopia 'and ‘false sense of security’

Asset backed exposures cause more crises than any other risk type.

Banks take larger exposures because of the security.

But value of the security is itself volatile.

Better ways of looking at risk concentrations needed

May be across a variety of instruments

Regulators must focus on concentrated exposures to underlying risk factors.

An overhaul of risk governance has been needed

Frameworks have been changed

- Role of CRO
- Seniority of CRO
- Involvement of board

But other areas need more work

- Embedding risk appetite
- Risk transparency
  - Better data
  - Better metrics
  - Stress testing as a management tool
    - Risk sensitive
    - But faster

Conclusions

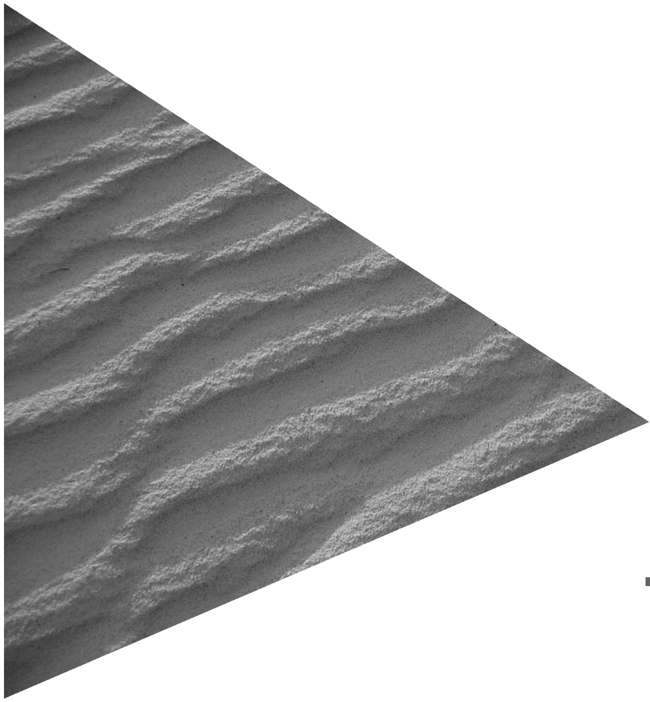
Important that the authorities carry out a stock take of the causes of the crisis and whether the changes to date have covered the weaknesses in the global system and will help to prevent a crisis going forward.

Certain areas which have received far too little attention

- Structure of the securitisation market
- Use of trading book capital treatments for illiquid assets
- Point in time modelling of risks for banks' books

Misunderstanding of the drivers of the crisis create the potential for the wrong solutions gaining ground.

Basel II and complexity rather than Basel I and its simplicity



Thank you

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