

# The future of credit

November 2008

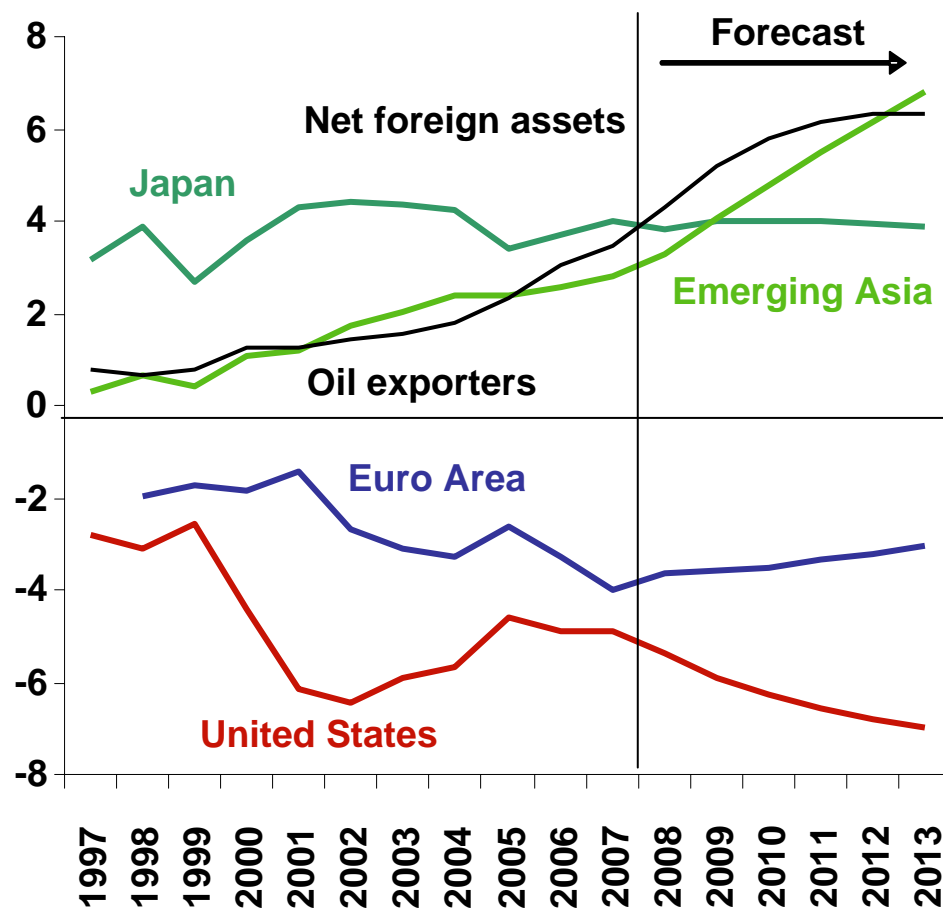
**Trevor Williams, Chief Economist  
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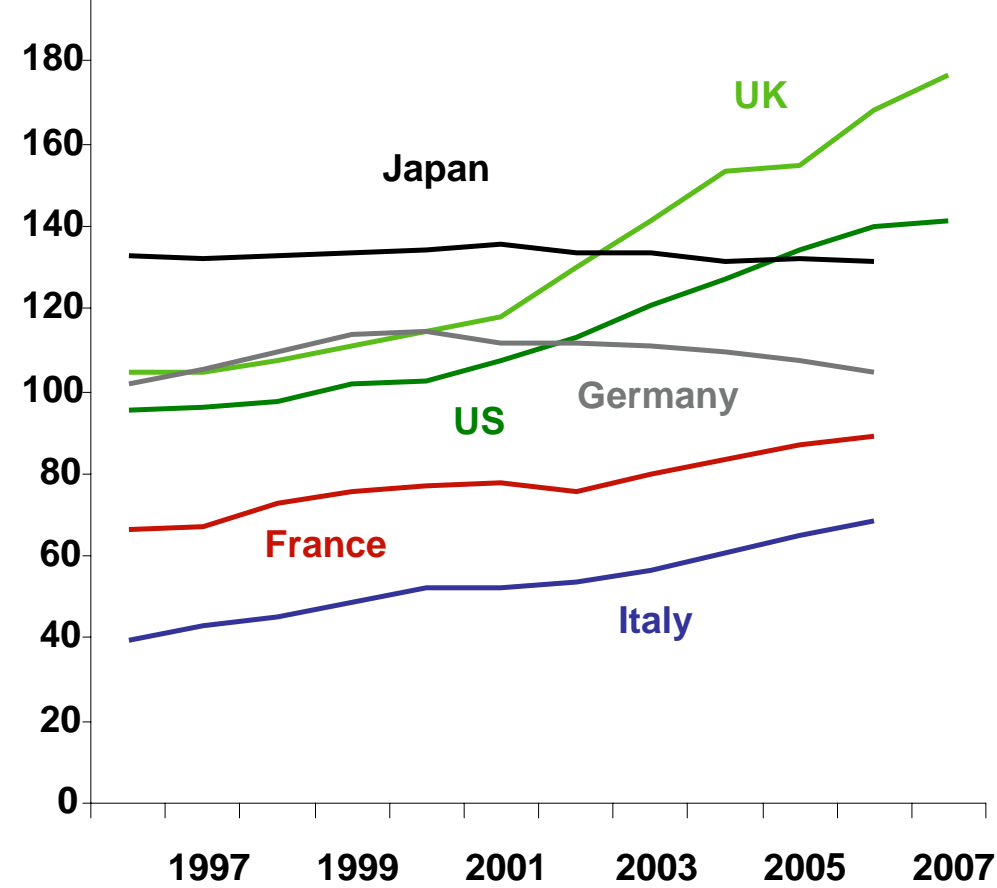
- **Abundant liquidity** - Sustained period of low nominal interest rates, low financial market volatility and robust global growth led to a significant rise in financial market liquidity.
- **Search for yield** - Strong economic growth and record low default rates, encouraged risk taking and saw substantially increased investment in riskier assets and strategies.
- **Complexity** - lower returns on traditional assets led to the creation and demand for more complex vehicles often using derivatives and leverage, earning higher than normal yields for top quality credit ratings. The demand was such that competitive pressures to issue and sell these types of products soared.
- **US sub-prime crisis** - rising US sub-prime mortgage defaults proved the trigger for an inevitable broad based re-pricing of risk by investors. Corporate spreads, CDS and margins have all widened.
- **Deleveraging** - The deleveraging is severe and continuing, leading to concerns about the solvency of banks and effectively closing capital markets. Official interest rates, particularly in the US, were cut sharply and new funding arrangements introduced. However, increased uncertainty has kept interbank interest rates high and credit availability tight, severely denting market confidence for some institutions.

## Global surplus is in the emerging markets But debts in developed economies

% of global GDP



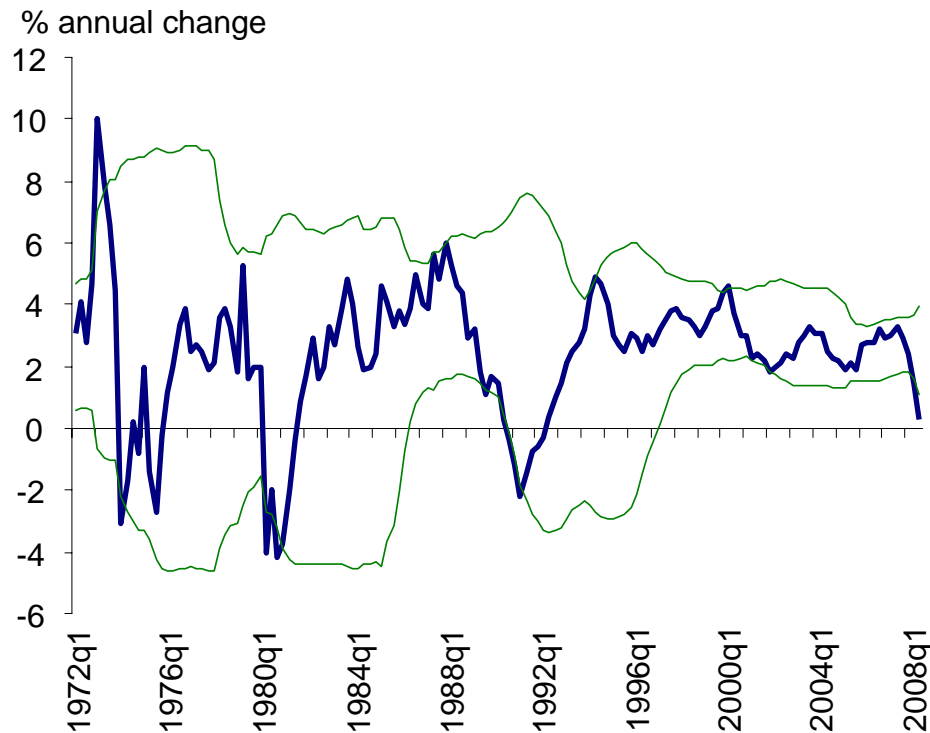
Ratio of household debt to disposable income



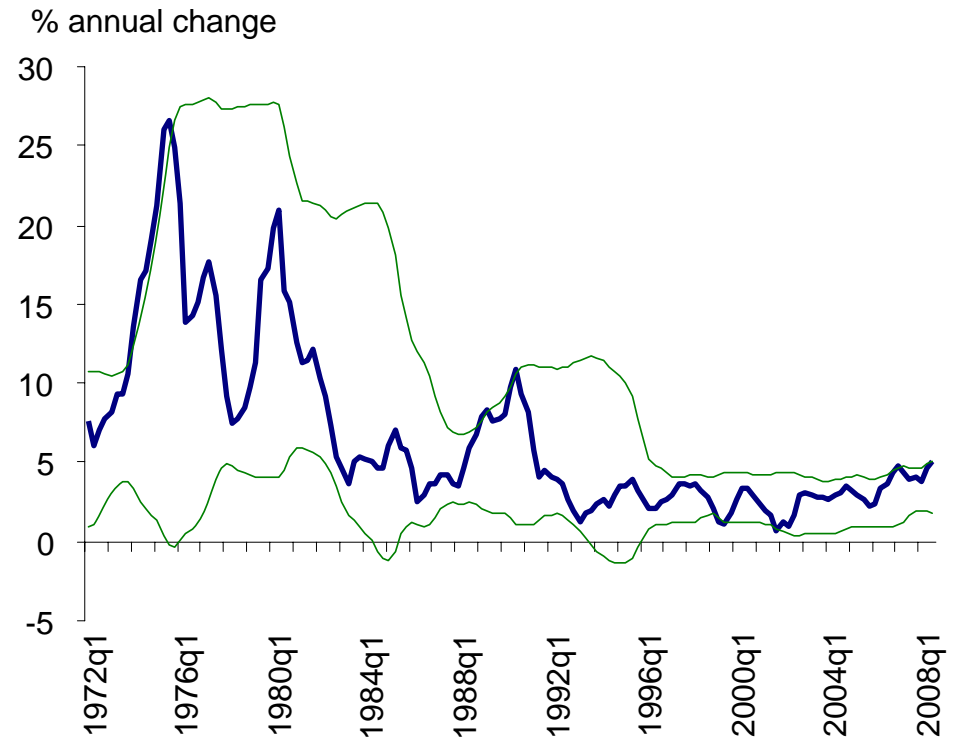
Source: LTSB

# The “Great Moderation” characterised by benign macro-economic conditions...

**Chart 1**  
UK GDP growth

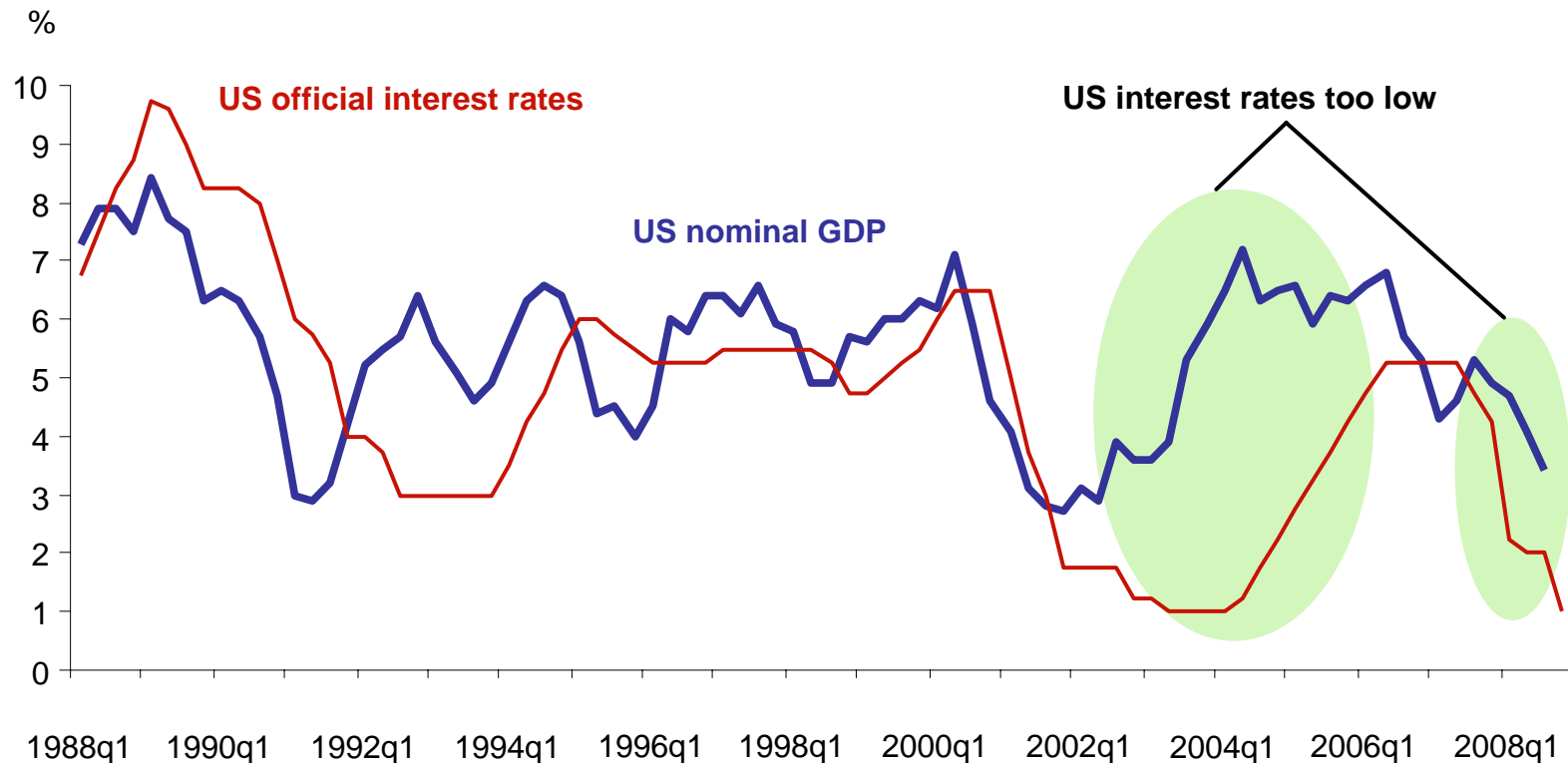


**Chart 2**  
UK RPI inflation



Source: ONS, LTSB Corporate Markets Economic Research

... led to abundant liquidity, the search for yield and demand for riskier/more complex products – but also exacerbated by excessively low interest rates, especially in the US



Source: Bloomberg, LTSB Corporate Markets Economic Research

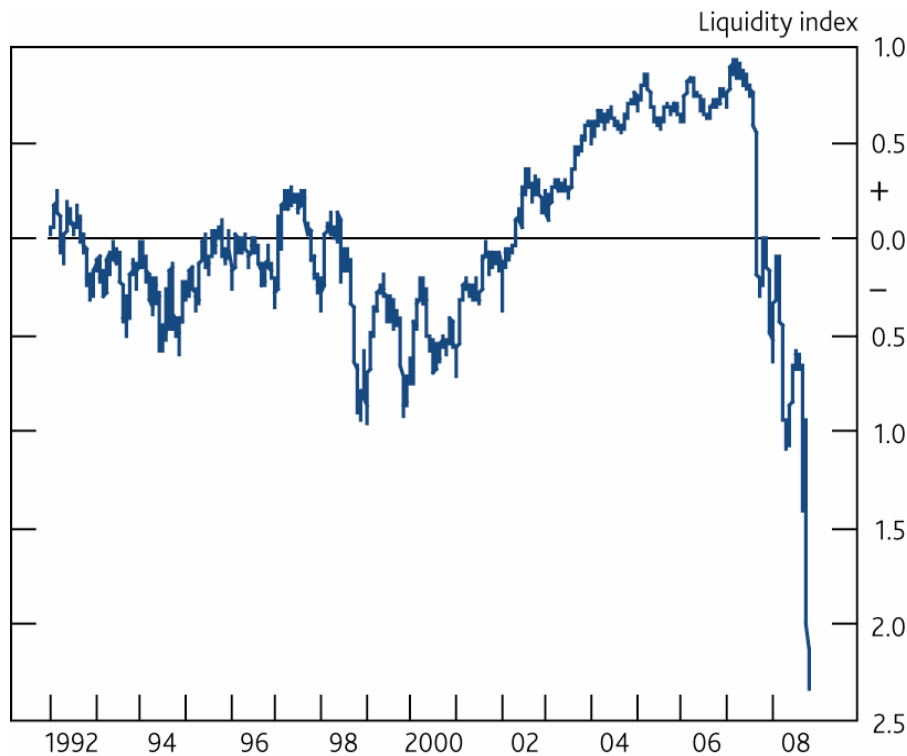
## Rising US subprime mortgage arrears were a catalyst for the broader repricing of risk



Source: Bank of England

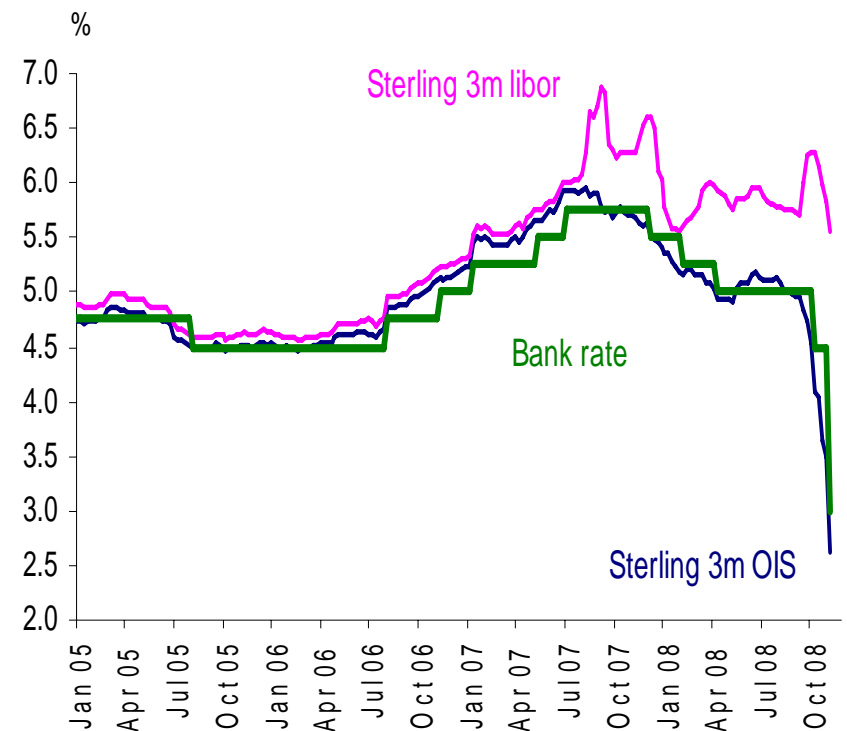
# What impact is the credit crisis having?

**Chart 1**  
Financial market liquidity has dried up



Sources: Bank of England

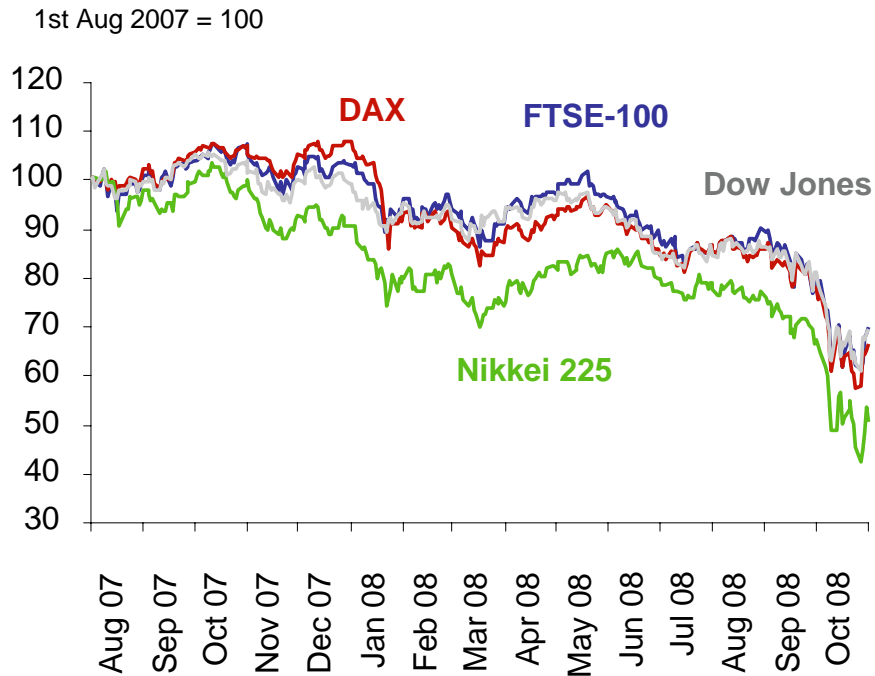
**Chart 2**  
Money market tensions have risen



Sources: Bloomberg, LTSB Corporate Markets Economic Research

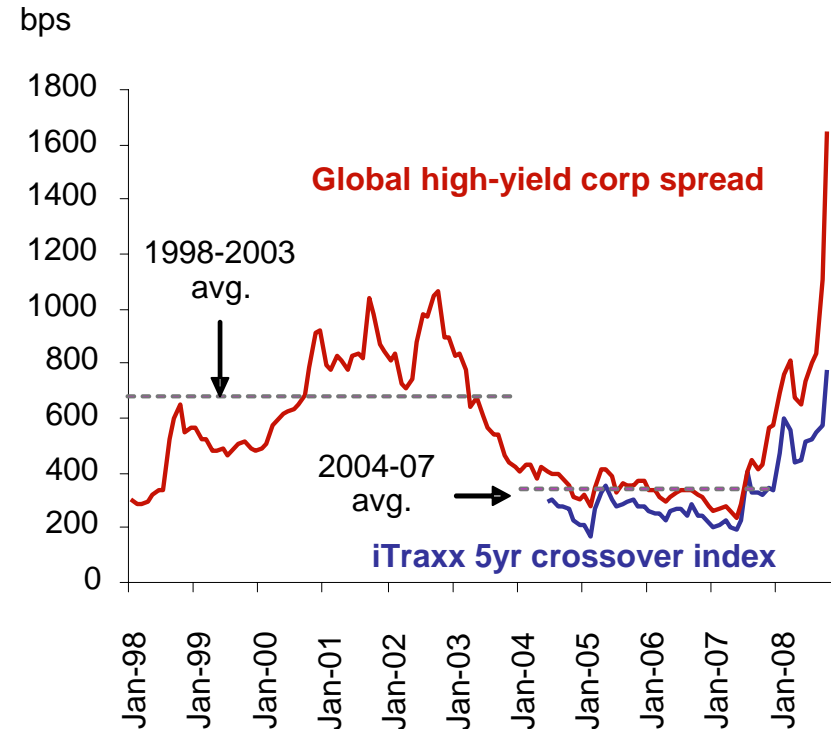
# What impact is the credit crisis having?

**Chart 3**  
Falling bank stocks put equity markets under pressure



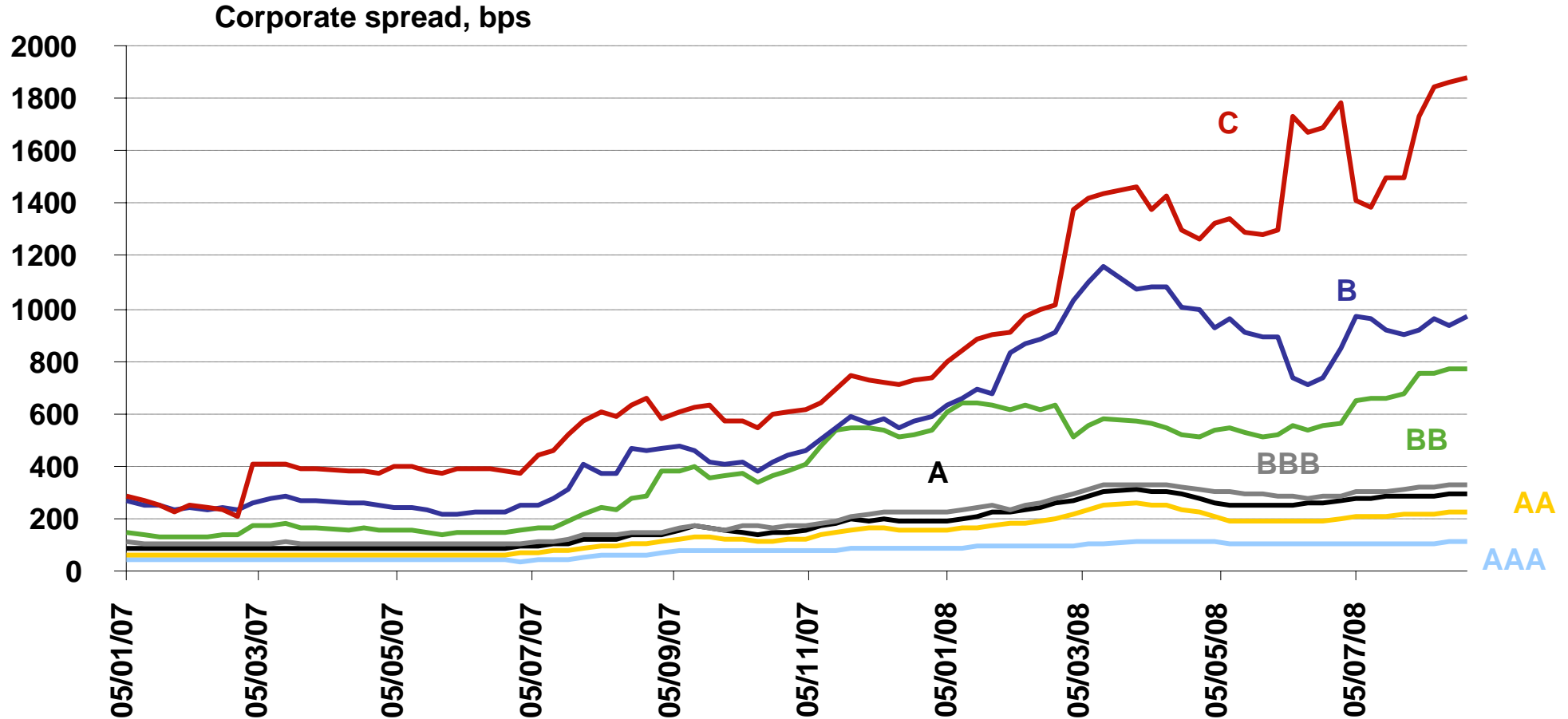
Sources: Bloomberg

**Chart 4**  
Corporate credit costs have spiralled



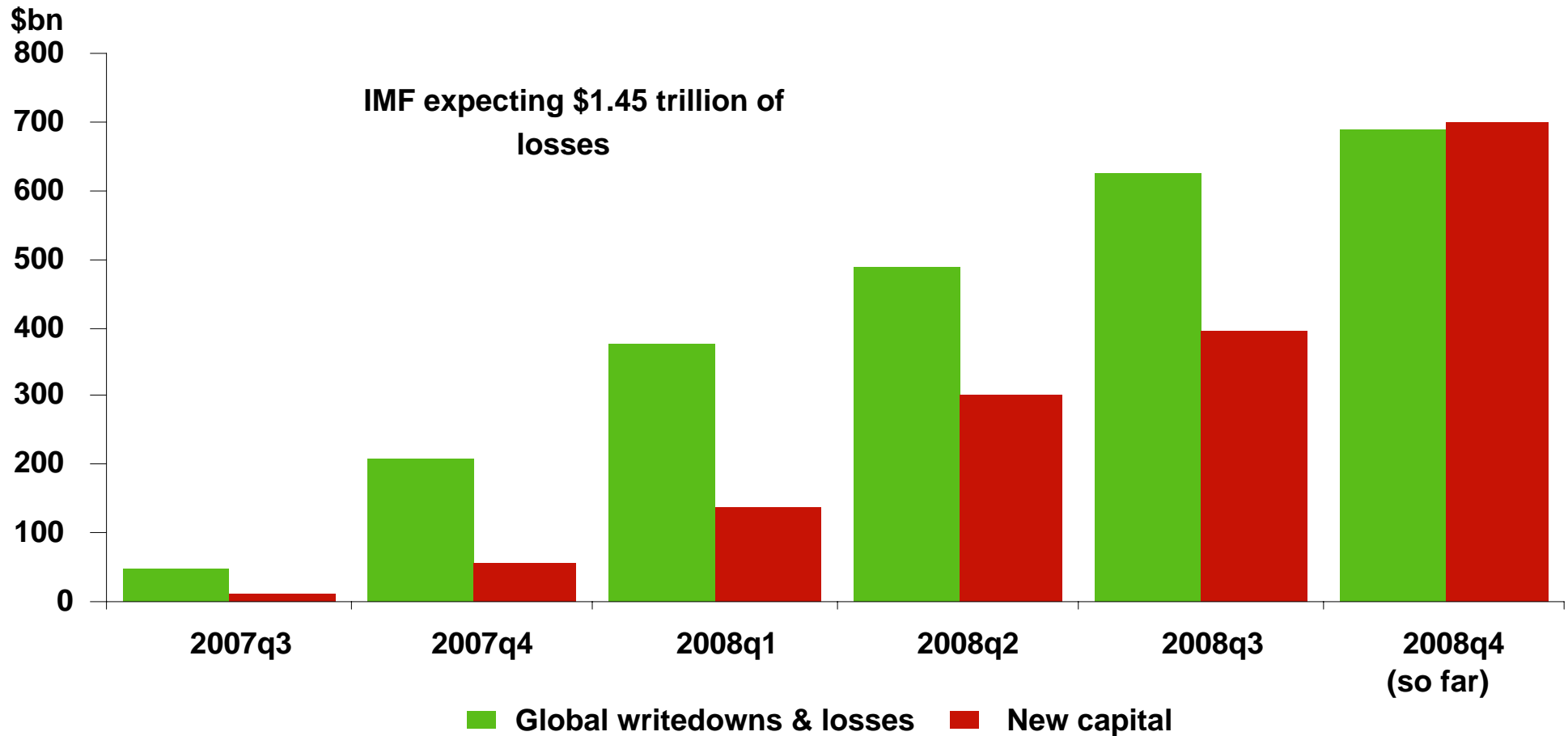
Sources: Merrill Lynch indices

## Spreads have widened and FX exchange rates are volatile...



Source: Bank of England

## Global losses and write downs are at \$688.8bn, new capital raised is \$696.4bn cumulatively in Q4 so far



Source:

# Lessons from the recent financial turmoil

Area of weakness	Specific issues raised
<b>Liquidity management</b>	<ul style="list-style-type: none"> <li>• Underinsurance against closures of key funding markets.</li> <li>• Inadequate recognition of contingent liquidity obligations to off balance sheet entities.</li> <li>• Scenarios used in the stress testing of funding insufficiently severe.</li> </ul>
<b>Valuation of complex structured products</b>	<ul style="list-style-type: none"> <li>• High dependency on models in valuation.</li> <li>• Extent of investors' reliance on a narrow ratings metric.</li> <li>• Insufficient clarity in the composition and construction of instruments.</li> </ul>
<b>Opacity of structured credit exposures</b>	<ul style="list-style-type: none"> <li>• Inadequate disclosure of exposures and losses.</li> <li>• Lack of transparency in off balance sheet exposures.</li> </ul>
<b>Crisis management arrangements</b>	<ul style="list-style-type: none"> <li>• Insolvency arrangements for banks.</li> <li>• Deposit insurance regime.</li> <li>• Improvements in tripartite arrangements.</li> <li>• Underdeveloped practical arrangements for managing stress at international institution level.</li> </ul>

## What can we expect to see in the future?

- Change in legislation as regulators try and catch up with the markets
- Greater transparency, for issuers, insurers, ratings, credit scoring methodologies, disclosure of who has debt, implications for balance sheets of exposure (confidential to regulator).
- Understanding and reporting of *total leverage* and so exposure of whole of firm risk is required in future, not just on balance sheet, but all products. Only then can proper analysis be taken of risk of defaults.
- Models have only be taking account of risk on balance sheet (i.e. regulated capital), totally missing overall risk. This is gross failure on an epic scale.
- Scenarios / stress testing must be more varied and ‘blue sky’.

## What are the implications for financial firms?

- Tougher for those more reliant on wholesale markets
- Deposit taking institutions will gain relative to wholesale borrowers. That may make retail banks more competitive versus investment banks
- Increased consolidation
- Higher rated will gain relative to lower rated companies
- Private equity may do well – funds flow in for better returns
- Sovereign wealth funds to remain a key feature of the future financial landscape
- Developing markets gain at expense of the developed markets, as crisis was in developed markets and made their assets cheaper
- Firms with global presence in emerging markets to gain relative to others

# What has happened so far?

**Table 3.A** Major central bank operational announcements since April 2008<sup>(a)</sup>

	Bank of England	Federal Reserve	European Central Bank	Co-ordinated central bank announcements <sup>(b)</sup>
May	Announced that expanded three-month long-term repos would be maintained in June and July.	Expanded size of Term Auction Facility (TAF). Extended collateral of Term Securities Lending Facility (TSLF).		Expansion of agreements between Federal Reserve and European Central Bank.
July		Introduced 84-day TAF. Primary Dealer Credit Facility (PDCF) and TSLF extended to January 2009. Authorised the auction of options for primary dealers to borrow Treasury securities from the TSLF.	Announced that it would conduct operations under the 84-day TAF to provide US dollars to European Central Bank counterparties. Announced that supplementary three-month longer-term refinancing operations (LTROs) would be renewed in August and September.	
September	Announced that expanded three-month long-term repos would be maintained in September and October. Announced long-term repo operations to be held weekly. Extended drawdown period for Special Liquidity Scheme (SLS).	Expanded collateral of PDCF. Expanded size and collateral of TSLF. Announced provision of loans to banks to finance purchase of high quality asset-backed commercial paper from money market mutual funds.	Announced six-month LTROs would be renewed in October, and three-month LTROs would be renewed in November and December. Conducted Special Term Refinancing Operation.	Expansion of agreements between Federal Reserve and European Central Bank. Establishment of swap agreements between Federal Reserve and Bank of England, subsequently expanded. Bank of England and European Central Bank, in conjunction with Federal Reserve, announced operation to lend US dollars for one week over quarter end, subsequently extended to scheduled weekly operations.
October	Extended collateral for one-week US dollar repos and for three-month long-term repos. Extended collateral of all extended-collateral sterling long-term repo operations, US dollar repo operations, and the SLS to include bank-guaranteed debt under HM Government's bank debt guarantee scheme. Announced Operational Standing Facilities and a Discount Window Facility, which together replace existing Standing Facilities.	Announced payment of interest on required and excess reserve balances. Increased size of TAFs. Announced creation of the Commercial Paper Funding Facility.	Increased size of six-month supplementary LTROs. Announced reduction in corridor of standing facilities from 200 basis points to 100 basis points around the interest rate on the main refinancing operation. Introduced swap agreements with Swiss National Bank.	Announced schedules for TAFs and Forward TAFs for auctions of US dollar liquidity during the fourth quarter. European Central Bank and Bank of England announced tenders of US dollar funding at 7-day, 28-day, 84-day maturities at fixed interest rates for full allotment. Swap agreements increased to accommodate required level of funding.

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