The Global Financial Crisis

Dr. Meirion Morgan
Director, MML

www.mmlimited.co.uk

m²L

1. Chronology of the Crisis
2. Causes of the Crisis
3. Resolution of the Crisis.
4. Conclusions
5. Q&A

1.1 The US Subprime Crisis

- Subprime loans are for persons with blemished or limited credit histories (from US Dept of Housing and Urban Development)
- Explosive market growth:
  - 1994 - $40 bn
  - 1999 - $160 bn[1994 x4]
  - 2003 - $332 bn[1999 x2, 1994 x8]
  - 2007 - $1.3 tn[2003 x4, 1994 x30]
- During growth period, lending standards “eased” (fewer loans denied; size of loans larger; automated lending taking place)
- Significant home price growth
- In 2005 Robert Shiller (Nobel prize nominated economist) warns about imminent market crash – and is ignored
- Subprime loans are packaged into “Mortgage Backed Securities” and sold to investors

1.1 The US Subprime Crisis ctd

- 2006
  - House prices fall 3%
  - NourielRoubini warns IMF about imminent housing bust
  - Some banks start reducing their exposure to subprime mortgages
- 2007
  - Subprime market crashes (eg Countrywide Financial)
  - Reports appear about “delinquency” and “foreclosure” in subprime
  - “Credit crunch” begins as banks “discover” they have holdings of subprime securities
  - Federal Reserve lowers interest rates and injects money into the economy ($41 bn)

1.2 The Subprime Crisis comes to Europe

- Industriekreditbank ("IKB")
  - *Mittlestand* lender (German economic backbone – employs 70% of the private sector workforce; generates 50% GDP)
  - "Diversified" its portfolio – bought US Subprime backed securities
  - Required €8 bn bailout in August 2007
  - Now largely owned by a US private equity fund

- Landesbank Sachsen Girozentrale ("Sachsen")
  - Bought US Subprime MBS
  - Emergency line of credit (€17 bn) given by group of regional savings banks in August 2007
  - Subsequently sold to LBBW

1.2 The Subprime Crisis comes to Europe ctd

- BNP Paribas
  - Funds suspended in August 2007 owing to issues in the US Subprime market

- US Subprime Market is largely considered to be "closed"
  - Concerns spread through the banking sector – Eurozone included - as losses mount in the US
  - Concerns spread to other "structured" securities – not just US Subprime
  - "Wholesale" funding costs begin to rise as banks start to ensure the stability of their funding

1.3 The Subprime Crisis comes to the UK

- Northern Rock – from respected building society to nationalised bank
  - In 1997 converted from a "mutual building society" to a "stock form bank"
  - Huge growth in the noughties, assets go from £20bn (1995) to £110bn (2007)
  - Significant dependence on funding via "securitised notes" (MBS) to fuel growth
  - No exposure to US Subprime
  - However, in late 2007 markets become concerned about the dependence of the bank on the securitised notes market
  - Continued to fund via the market but at ever shorter maturities (reflecting issues and cost of longer-term funding)
  - Calls on the BoE for help – and then experiences a bank run

1.4 The Subprime Crisis – it gets worse

- Lehman Brothers, one of the world's largest banks, posts a 2nd quarter loss of $2.8 bn, following issues that include its significant exposure to US Subprime
- Their stock price plummets
- They enter claim for Chapter 11 bankruptcy protection
- The financial crisis enters a new phase:
    - Up until the Lehmans event the markets have been principally concerned about funding in the markets
    - After Lehmans, banks are concerned about whether their bank trading counterparties will be able to honour their payment obligations
    - This pushes funding costs up even further

1.5 Royal Bank of Scotland

- Aggressive expansion in the noughties under Fred Goodwin
- Over-reliance on short-term wholesale funding – very susceptible to changes in market conditions
- Acquisition of ABN Amro increased RBS's exposure to "credit risk" (ABN Amro's portfolio included MBS and other CDOs)
- The acquisition of ABN Amro was largely funded using short-term debt – thus increasing RBS's susceptibility to market conditions
- Following Lehman Brothers' collapse, RBS faces significant liquidity problems
- The BoE / HM Treasury step in

1.6 Global downturn

- US bank issues stem, at source, from a significant increase in house purchases and the rising prices therein – a classic "asset bubble"
- The bubble bursts in 2006-2007 - and many house owners also find themselves unable to pay the increasing mortgage rates, so domestic spending reduces
- Banks across the US, Eurozone and UK experience significant losses as their exposure to the fallout from the US housing market becomes clear
- Banks' funding costs soar as both liquidity and counterparty risks are "priced" in
- Banks cut lending significantly as they attempt to bring their issues under control
- Businesses, reliant on credit support, find themselves squeezed, as do consumers

1.7 Eurozone Sovereign Crisis

- Banking crisis – principally concerns about debt levels – led to concern over sovereign debt levels in the Eurozone
- The introduction of the Euro led to a lower cost of borrowing for many countries (one author has termed this the "implicit Germany guarantee")
- Trade imbalances of these increasingly indebted countries amplified the issues
- Net result – a crisis of confidence in the markets
- Downgrades of sovereign debt ratings by the credit rating agencies made it increasingly difficult and costly for the countries to refinance
- Greece cannot refinance via the bond markets and is bailed out with loans from the other Eurozone members and the IMF
- Spain subsequently required bailout
- Countries enter period of austerity with significant impacts for their economies

2.1 The US Housing Bubble

- A typical asset bubble, and global in nature: not only had the US seen significant growth, but UK, Australia, etc seen the same
- The US boom started later than eg Australia but the effect was profound
- From 2001-2005, consumer spending and residential construction accounted for 90% of the growth in the US GDP
- There was also, in the US, significant housing equity withdrawal – so US consumers were, in part, funding their lifestyles on the "capital gain" associated with their houses
- When the housing bubble burst, the obvious reduction in consumer spending occurred

2.2 US Monetary Policy & Bank Expansion

- Low interest rates – the Fed Funds rate was < 2% for most of 2001-2005
- Low interest rates fuelled a borrowing boom, as credit was deemed to be cheap
- The “feel good” factor meant an easing of conditions under which consumers could obtain credit
- This ease, plus low interest rates, resulted in a significant increase the level of private debt
- Banks, regulated under the Basel II regime, are only required to hold limited equity capital
- The banks are therefore able to expand operations using the wholesale funding markets
- Banks therefore become “over leveraged” - their capacity to absorb losses is limited

2.3 Limited, or no, regulation

- Unregulated derivative markets see explosive growth in complex credit derivatives – such as "Collaterlized Debt Obligations"
- Investors in CDOs may well not have understood the risk of such products
- Such lack of understanding may have, in part, stemmed from the "credit ratings" assigned to the products, which created a false sense of security
- The repeal of the Glass-Steagal Act (introduced after the Great Depression to regulate banking activities) in the US allowed a banking free-for-all
- There was active opposition to the introduction of regulation in the US
- In the UK, the "light touch" regulatory regime was, in part, blamed for RBS's failure

3.1 Basel III (Global)

- A global regulatory standard agreed upon by members of the Basel Committee on Banking Supervision
- Scheduled for introduction from 2013 – 2018 (ie phased in)
- Principal changes over Basel II :
  - increased common equity
  - additional capital buffers
  - introduction of liquidity ratios
  - counterparty credit risk now includes a “credit valuation adjustment”

3.2 Basel III - Criticisms

- Andy Haldane (BoE)
  - "Modern finance is complex, perhaps too complex ... Because complexity generates uncertainty, not risk, it requires a regulatory response grounded in simplicity. Less may be more"
  - Basel I – c. 30 pages; Basel III – c. 600 pages

- Kenneth Rogoff (Economics Prof at Harvard)
  - Banks require more equity, less debt finance
  - Legislative complexity now huge (eg Dodd-Frank vs Glass-Steagall)

3.3 Financial Services Bill (UK)

- Yet to receive Royal Assent
- Results, in part, from criticism of the Financial Services Authority
- Establishes the *Financial Policy Committee* within the BoE to monitor and respond to systemic risk
- Clarifies crisis management arrangements between the Treasury and the BoE
- Transfers responsibility for significant regulation to the newly established *Prudential Regulation Authority*, a subsidiary of the BoE

3.4 Funding for Lending Scheme (UK)

- Launched on 13 July 2012
- Intended to incentivize banks to lend (to non-financial companies) by providing funding at sub-market rates
- Price & quantity of funding linked to performance in lending

- *Criticism*: now that the banks can get money more cheaply from the BoE, savings rates are dropping considerably

3.5 "Business Bank" (UK)

- Introduced by Vince Cable
- Intended to lend to small and medium sized cash-strapped businesses
- Size £1bn

- *Criticism*: not nearly enough money. IPPR suggest that around £40 bn is required.

4. Conclusions

- Financial crisis has illustrated points of failures in many aspects of the global financial system
- The issues cascaded such that the final symptoms of the crisis bear no resemblance to the original cause – although one could argue that all the issues result from significant credit expansion
- Many economists would argue that the net result – a global downturn – is the inevitable consequence of an asset bubble
- The effects of the crisis still play large at a national level, over 5 years after the first ripples occurred
- The methods of resolution – increased regulation, state supported lending – have their critics and have yet to show that the financial system is more robust or point to a path out of the crisis