CLIFFORD CHANCE

MARKET EXUBERANCE AND THE EXPLOITATION OF LEGAL NORMS IN REAL ESTATE FINANCE – CAN HISTORY REPEAT ITSELF?

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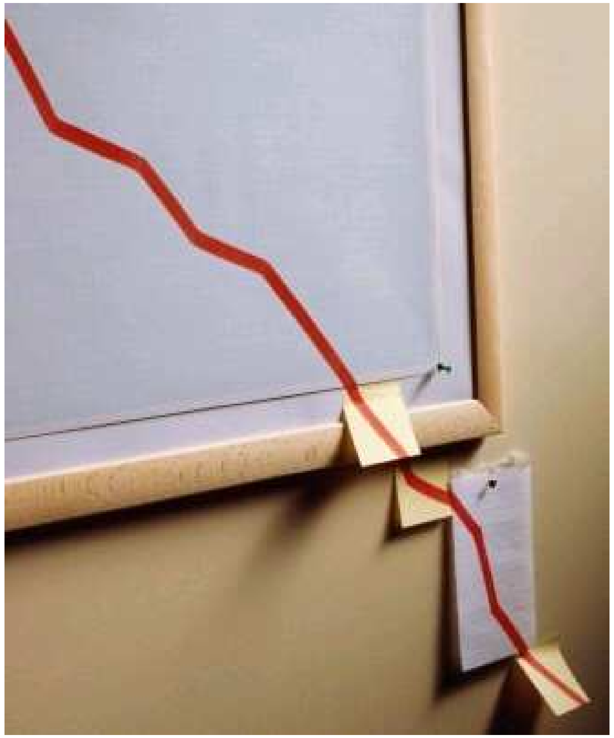
Let me introduce myself

- Lawyer with 30 years experience - acted on many major real estate financings in UK, Europe and in Africa too, many of which when into MBS
  - Many major real estate financings secured on commercial office, hotel and logistics real estate assets in UK, Benelux, France, Germany, Italy, Russia, Scandinavia and Spain
  - Canary Wharf since 1990 incl. financing almost every building on the Canary Wharf estate and acting on the administration and rescue of Canary Wharf in 1992-3
  - Battersea Powerstation in 2012 incl. administration sale and, when rescued, funding of the Northern Line tube extension to Battersea Powerstation
  - Chelsea Barracks since 2009 incl. Islamic financing of the acquisition from MoD and subsequent development financing of phases 1-3
- I have seen a few recessions in my time …
- I've been at the table negotiating rescues when financings have gone spectacularly wrong
- So I would like to think I can speak from a little experience

What is this about?

- Memory Lane – the financial crash and the Great Recession of 2007-9
- What can happen when markets abuse and exploit legal structures
- Financial “weapons of mass destruction” – were they that bad?
- Regulatory over-reaction and adverse economic effects
- Market arbitraging the new regulatory regime to exploit new legal structures
- New threats and challenges
- Market amnesia and history repeating



Those Halcyon days

- In 2005-7 global finance markets were at fever pitch
  - World was “destined” for long term stability, growth and prosperity
  - Politicians queued to claim credit - their astute financial management and “light touch” regulation had ended boom and bust for ever!
- In the US and Europe, loans secured on real estate were originated at record levels and on extraordinarily lax terms
- European banks lent vast sums on real estate backed off the new euro
- Securitisation markets expanded dramatically, selling and repackaging these loans, particularly in the US
  - Access to market in US became deregulated in the 2000s backed off strong investor appetite for long dated investment grade notes
  - Securitisation expanded into Europe, but not to the level in the US
  - Boom in mortgage backed securitisations, including in Europe
  - Massive levels of liquidity in the bond market drove growth

Dramatis personae in 2007-9

- World leaders then … remember them?

Crisis, what crisis?

- It was going so well - what could possibly go wrong?
- The financial crisis started in July 2007 when the market stopped in its tracks -
  - On June 22, 2007, Bear Stearns announced that it was bailing out one of its funds, the Bear Stearns High-Grade Structured Credit Fund, with a $3.2b loan and was negotiating the bailout of another fund, the Bear Stearns High-Grade Structured Credit Enhanced Leveraged Fund
  - In August 2007 BNP-Paribas froze $2.2 billion of funds citing US sub-prime woes
  - Very quickly everything froze – no new transactions or liquidity as defaults started to mount
- Surely the market's "safe as houses" – what's "sub-prime"?
- The crisis unfolded slowly - the reaction of many market participants was similar to World War 1 generals in August 1914: "it will all be over by Christmas" …
- European view was that spiralling property prices and over lending on property was an Anglo-Saxon disease – shouldn't be a European problem and surely this wouldn't affect European banks who have largely kept loans on balance sheet…

Architects of the meltdown …

- Just so many to choose from – and the nominees include:

Causes of the crisis

- 2000-2007 saw huge growth in institutional demand for investment grade securities - AAA/AA/A/BBB+ bonds
- In US, a key source of supply to meet this demand was securitised bonds secured against prime mortgages –
  - mortgages lent to customers with unblemished credit histories priced well within their means to pay
  - Banks sold prime mortgages in large portfolios to special purpose issuers to issue investment grade bonds through a long established legal structure called mortgage backed securitisation (MBS). Traditionally this was used to re-liquify bank balance sheets
- But there were not enough prime mortgages to meet demand
- So the "alchemy of the market" created investment grade investments secured against sub-prime mortgages –
  - mortgages lent to customers with poor credit histories, no income, no job, no assets, history of late payment delinquencies, poor credit risk

Why sub-prime mortgages?

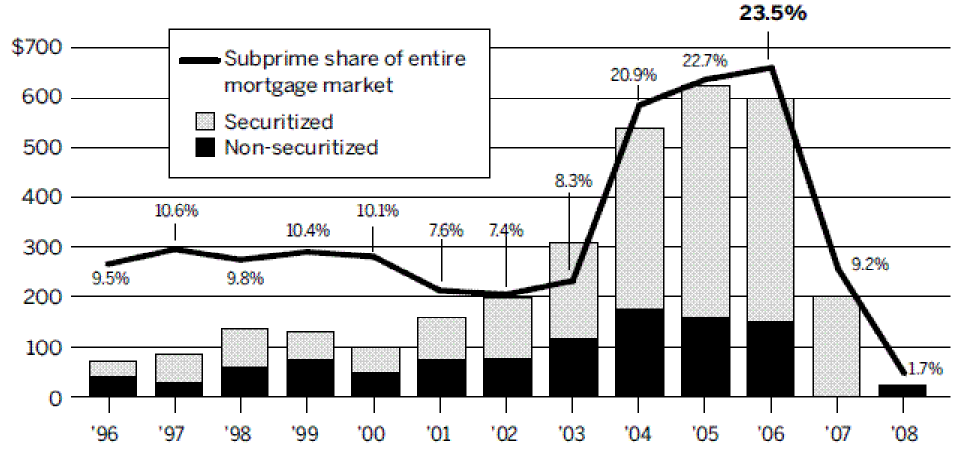
- Rating agencies formulated ratings analyses that permitted sub-prime mortgages to be sold as investment grade MBS –
  - Pooling of 1000s of sub-prime mortgages reduced default risk, out of which were created investment grade tranches for MBS
  - This analysis was flawed - if market experienced a simultaneous shock, as with the financial crisis – the sub-prime mortgages would all fail at once
- Any mortgage would qualify (and mis-selling was rife) –
  - Poor, unemployed people were targeted often fraudulently (Ninja loans)
  - Some mortgagors lied in the absence of credit checks (Liar loans)
  - No or small deposits and introductory low rates which stepped-up sharply later were “selling angles” to induce people to borrow (Tickler loans)
- Mortgage companies/originators profited from the difference between higher mortgage interest rates and bond rates
- Massive expansion in sub-prime led to ever rising US property bubble!

U.S. bubble in sub-prime

Subprime Mortgage Originations

In 2006, $600 billion of subprime loans were originated, most of which were securitized. That year, subprime lending accounted for 23.5% of all mortgage originations.

IN BILLIONS OF DOLLARS



NOTE: Percent securitized is defined as subprime securities issued divided by originations in a given year. In 2007, securities issued exceeded originations.

SOURCE: Inside Mortgage Finance

Ticking time-bomb

- In US a “ticking time-bomb” was created out of -
  - the rapid rise of “private label” MBSs issuing investment grade bonds (AAA/AA/A/BBB+) secured against sub-prime mortgages
  - an explosive mix of excessive borrowing and speculative risk-taking by households put the financial system on a collision course with a property bubble
  - exploitation was rife - sub-prime mortgages were mis-sold in massive amounts
  - Sub-prime mortgages were attractive because they paid a much higher rate of interest
  - Deregulation allowed $1.4tn of sub-prime mortgages to be lent
- This was not all –
  - “butt-ends” of sub-prime mortgage MBSs were then recycled into CDOs and new CDO2s pooling and re-pooling sub-prime risk which were all rated as investment grade!
  - Synthetic CDOs multiplied the depth of losses were rated as investment grade too!
- It seemed that no mortgage was too rotten to be securitised
  - Institutions invested heavily: AAA bonds secured on MBS, CDO and Synthetic CDOs paid significantly higher rates of interest than on AAA corporate and sovereign debt

There were so many guilty parties …

- The contribution of Baby-boomers cannot be underestimated …

- The crisis would not have happened without them - their huge demand for, and faith in speculative value of, real estate drove the bubble …

Crisis unfolds globally

- In 2007 US property market crashed - $1 trillion of MBS bonds and CDOs secured on sub-prime mortgages defaulted and default in huge numbers
- It slowly dawned on participants that no-one had any idea of what each bank's exposure was - leading to market-wide loss of trust and lock-up
- Bond and commercial paper markets dried up depriving banks of readily available liquidity to shore-up positions - banks found that they had massive exposures but could not refinance them or sell them off quickly (or at all)
- Crisis unfolds slowly to mid-2008 – then in August-October 2008 a massive multiplier effect of credit defaults threatened market-wide failure – Lehman collapses - suddenly not only US banks but also European banks teeter on brink
- Size of these banks threatened systemic banking failure in US, UK and Europe
- National governments sought to shore-up banking system by bailing out their banks, in many instances resulting in sovereign default and EU/IMF-led bailout

European euro-zone bank crisis proves to be deeper ...

- How could mis-selling of US sub-prime mortgages cause such systemic damage in Europe and threaten the financial system?
- Newly established euro-markets gave European banks huge scope to raise money a significant part of which was then lent on very poor terms:
  - With the crisis, many of these loans became distressed or non-performing after 2008
  - A stockpile of nearly €780bn of distressed or non-performing loans (NPLs) weighed heavily on the balance sheets of many Eurozone bank balance sheets and much remains to this day
  - Some €250bn of these NPLs were on Italian bank balance sheets
  - This €780bn has fallen significantly over the past 3 years, partly thanks to regulatory pressure*
- Much of this debt was not securitised and continues to burn major holes in bank balance sheets in many euro-zone countries to this day
- European banks were very slow resolving NPLs – many became “zombies” – too many NPLs so unable to lend new loans causing further economic slowdown

* Carlo Svaluto Moreolo “Non-performing Loans: A market in full swing in Europe” September 2018 IPE magazine – and PriceWaterhouseCoopers

Are these structures “financial weapons of mass destruction”?

- As the financial crisis unfolded, over-technical and often bamboozling terminology entered the popular lexicon describing legal structures -
  - Mortgage Backed Securitisations (MBSs)
  - Collateralised Debt Obligations (CDOs)
  - Credit Default Swaps (CDSs) and
  - Synthetic CDOs*
- It was symptomatic of the boom market that these legal structures were (mis)used in increasingly complex financial structures with layer on layer of bonds and financial instruments with increasingly impenetrable names
- Legal structures were developed to exploit new markets and arbitrage credit spreads and positions – no-one wanted to confess to not knowing what all the new terminology meant!*

* Michael Lewis, *The Big Short*: *Inside the Doomsday Machine*, 2010 W. W. Norton & Company

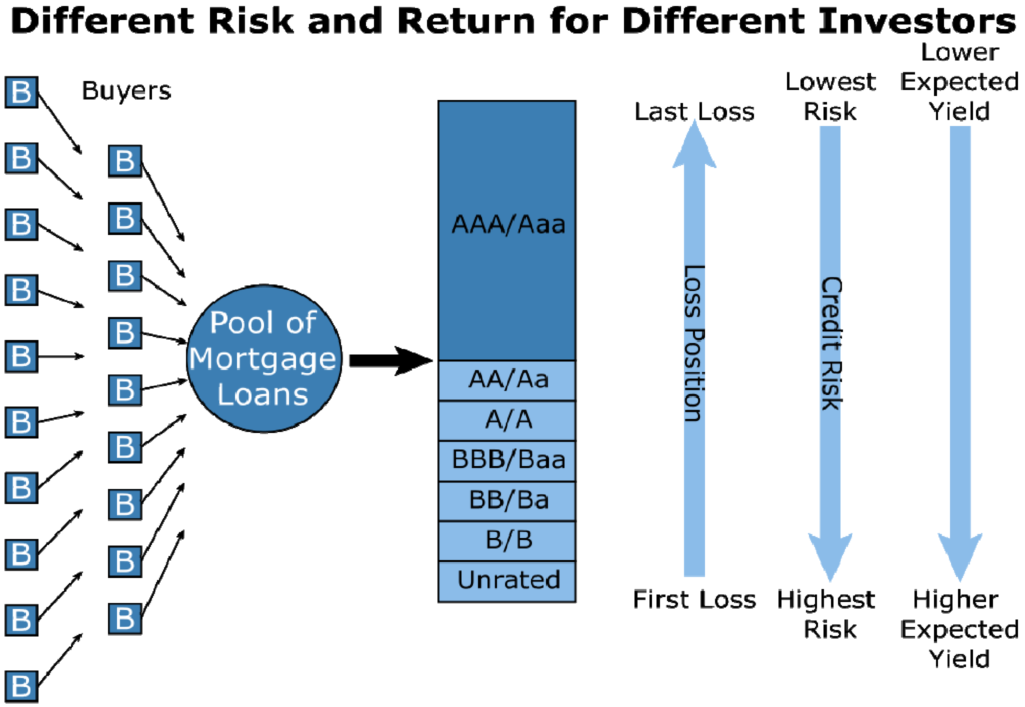
** Bird and Fortune “Sub-Prime Crisis” YouTube - October 2007 https://www.youtube.com/watch?v=mzJmTCYmo9g

“Weapon” 1 - Mortgage backed securitisation (MBS)

- Publicly issued investment grade bonds secured over a portfolio of mortgages on residential (RMBS) or commercial property (CMBS)
- Developed in the US from the 1960s as an effective means for US banks to re-liquefy their balance sheets by selling mortgages (often via a government agency or investment bank) that securitized and re-packaged the loans together into investment grade securities
- Diversifies risk split into strata of investment grades AAA/AA/A/BBB+
- 1990s/2000s - RMBS/CMBS introduced into UK and then Europe
- With deregulation, system was massively abused when securities rated as investment grade backed by sub-prime mortgages were issued
- Legal structure was badly abused and became tainted by the crisis
- 2012 – prime MBS market has recovered in the US and continues to grow
- Slow recovery in UK and Europe with strong regulatory resistance to the re-emergence of MBS

John J McConnell and Stephen A Buser, The Origins and Evolution of the Market for Mortgage-Backed Securities, Annual Revue of Financial Economics 2011, 3:173-92

MBS – structure with tranched risk



“Weapon” 2 - Collateralized Debt Obligations (CDOs)

- Originally developed in US to permit banks and institutions to sell and repackage corporate loans as publicly issued investment grade bonds
- After 2002 CDO market was flooded with bundled up non-investment grade “butt-end” tranches of MBS secured over sub-prime mortgages
- This further powered the mortgage supply chain for sub-prime mortgages
- Incredibly, rating agencies rated repackaging of non-investment grade butt-end of MBSs secured on non-prime mortgages as investment grade
- This pooling performed the “market alchemy” of transforming BBB, BB or even worse tranches into 80% AAA, AA or A investment grade notes
- It got worse - the dross end of CDOs which didn’t make the cut as investment grade CDOs were again repackaged into CDO2 and then again into a CDO4 pooling and re-pooling!
- This huge edifice of investment grade notes built on pooling and re-pooling of butt-end F-rated (irony intended) securities saw no apparent limit and had disastrous consequences when the market crashed

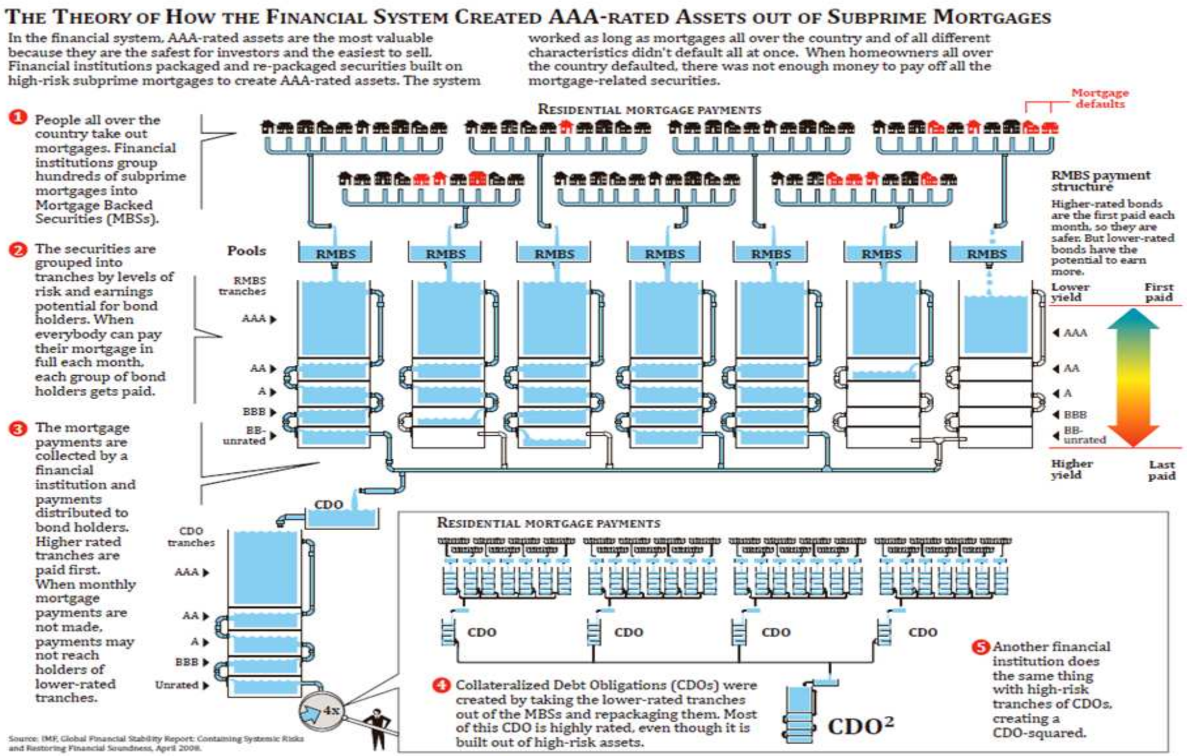
McLean, Bethany and Joe Nocera, All the Devils Are Here, the Hidden History of the Financial Crisis, Penguin, 2010

“Weapon” 3 - Synthetic CDOs – the atomic option

- A swap is a legitimate means to underwrite or off-set risk on set cash flows or amounts over a set period – e.g. interest rates (fixed vs floating)
- Credit default swaps (CDS) underwrite debtor default risk under a “reference” loan or bond issue (performance vs default)
- CDSs were misused to create “synthetic” CDOs which cloned economics of a “real” CDO to obtain investment outcome parallel to a CDO – a “bet” on ”real” mortgage products, rather than a real mortgage security itself
- Synthetic CDOs created huge bets on CDOs with sub-prime mortgages -became a dominant form of CDO in U.S., valued at $5 trillion in 2006
- Synthetics thrived in the boom because they were cheaper and easier to create than real CDOs, whose raw material, mortgages, were drying up
- Synthetics are controversial because they created massive bets on CDOs - vastly amplifying the losses suffered, causing ballooning risk of systemic failure and ultimately becoming the vehicle that spread the sub-prime risk from the mortgage market to the global financial system

* Warren Buffett - “In our view, however, [credit default and synthetic CDO] derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal,” Buffett, Berkshire Hathaway 2002 annual letter (BRK-A, BRK-B)

MBS and CDO alchemy – repackaging non-investment grade into investment grade in the boom up to 2007



Are these structures really that toxic?

- No, not MBSs and CDOs, not if used appropriately for a genuine commercial purpose –
  - Indeed these structures are needed more in Europe now to assist banks to re-liquify their loan balance sheets and to dispose of NPLs
  - MBSs and CDOs were long standing and established well before the bubble
  - They are a recognised structure for banks and other originators to re-liquify prime mortgages and prime loans in large portfolios by issuing investment grade securities to invertors
  - CDSs used wisely and not as a speculative tool can be a valuable form of credit insurance to enhance the credit of debtors or portfolios of debts
- During the boom, the decline in underwriting standards with sub-prime mortgages and increasingly complex financial structures made these structures appear toxic, and regulators focused in on this and blamed these structures for the mess
- That said, structuring CDSs to create synthetic CDOs based off real CDOs of sub-prime mortgages was incredibly toxic and multiplied the risk!

And there’s (some) life in them yet …

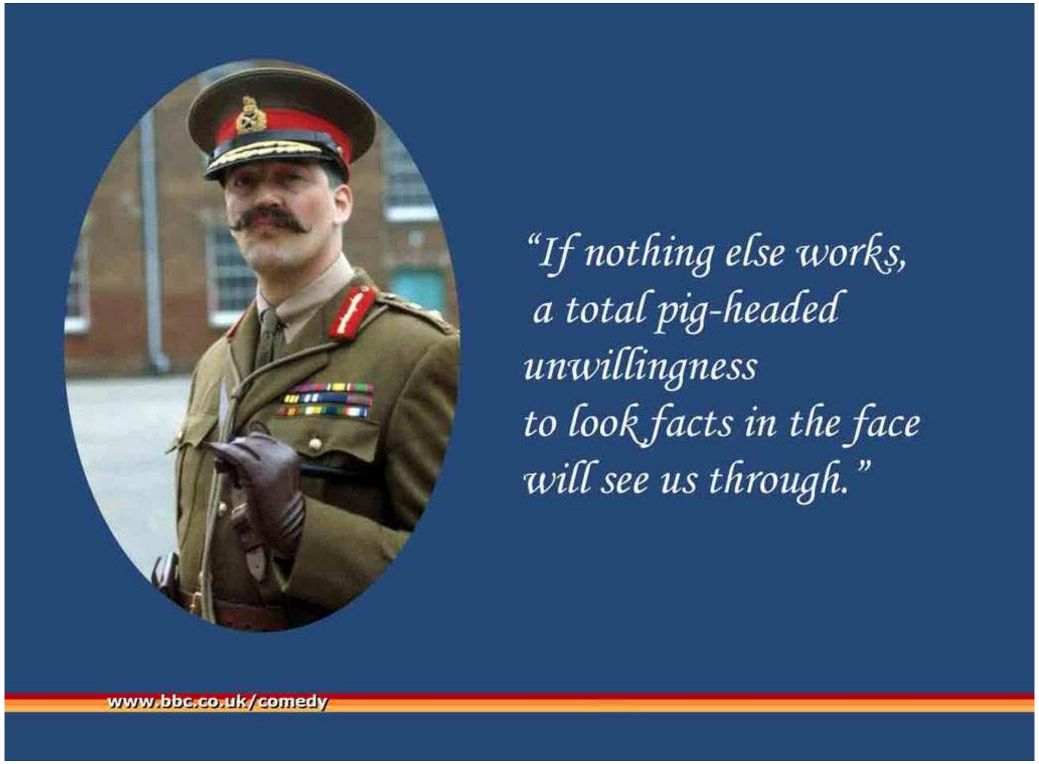
Old alphabet soup, new taste

ABS	*(asset-backed security)*	Most generic form of securitisation, includes credit-card debt, car loans, or any packaged income stream. Making steady comeback
MBS	*(mortgage-backed security)*	Backed either by commercial (CMBS) or residential (RMBS) mortgages. The most problematic in the downturn, fuelled subprime crisis
CDO	*(collateralised debt obligation)*	Pre-crisis these were often invested in “tranches” of ABSs and MBSs or in other CDOs. Not popular with regulators
CLO	*(collateralised loan obligation)*	Frequently filled with sliced and diced loans extended to poor-credit firms, such as those taken over by private-equity. Making a comeback

Sources: Dealogic; *The Economist*

*Excluding residential mortgages

What did you do in the Great Recession?



Austerity and the "Lost Decade" – 2008-2018

- Crash produced a chain-reaction and multiplier effect with shock waves across global markets bringing banks and insurers to their knees
- Bailout of Europe's banks saved the banking system, but massively increased public debt, shifting the cost of austerity onto ordinary people - those who could least afford it and were not to blame for the crisis but who suffered through economic austerity
- Governments became heavily indebted and some failed and needed to be bailed out – Portugal, Ireland, Greece, Spain and others limped on
- Austerity policies focused on reducing deficits and indebtedness but failed to restore market confidence to re-float economic activity
- Stagnation in economic growth and declining living standards produced yawning inequality - many parts of Europe have experienced zero or, worse still, negative economic growth in real terms for over a decade
- This "lost decade" combine with the euro-crisis focused discontent on the effects of globalisation - Brexit and rise of populist political parties – wider voter backlash
- Long-term effects of Great Recession - fall out continues to this day

Joseph Stiglitz, *Globalization and Its Discontents*, Penguin 2013

Political will to stop this happening again

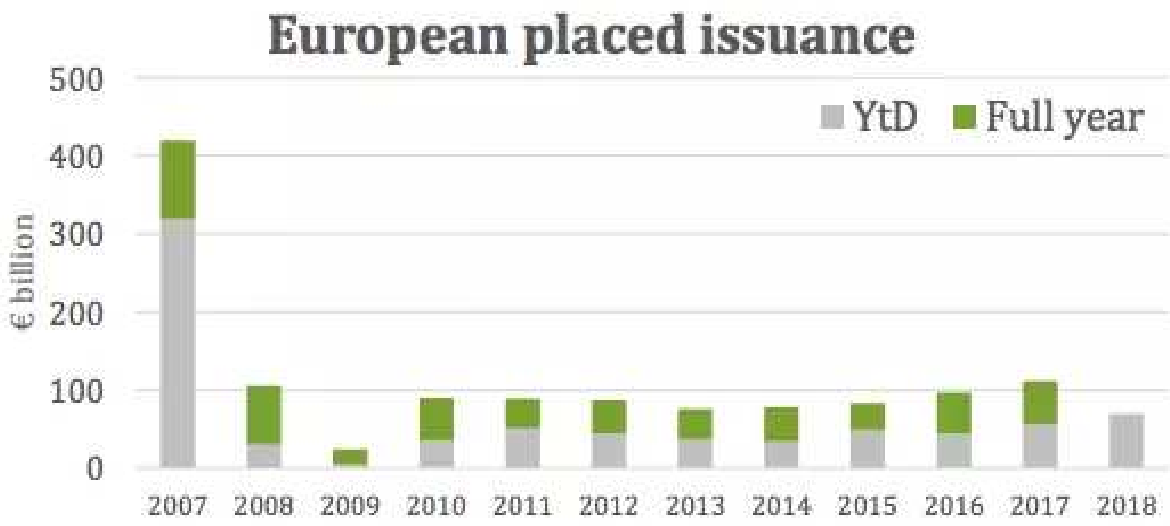
- Although the source of crisis was American, European regulatory reaction has been more stringent than in the US
- The infamy of MBS contributed to new regulatory constraints
  - Capital Requirements Regulation, part of Basel III, a pivotal piece of post-crisis legislation, requiring issuers to retain 5 per cent “skin in the game”
  - Risk-weighting, also part of Basel III, determines the capital a bank must carry against certain types of assets - securitisation carries risk weightings more punitive than for the underlying loans themselves
  - Certain securitisations would not count as high quality liquid assets, which go towards meeting the liquidity coverage ratio
- And this was against a background European securitisations in 2000 to 2012 (apart from some CMBSs) having negligible losses, whereas U.S. sub-prime securitisations had losses of 12% and CDOs around 50%
- If European MBS was so successful with negligible losses, why constrain it?

Over-penalising securitisation

- European regulation penalised an industry on the basis of American problems and despite European MBS resilience
- And this was in context of European bank balance sheets being loaded with distressed and non-performing loans:
  - Too much bad debt to risk realising the loss on balance sheet – so bad loans are "nursed" along – 'kicking the can down the road'
  - Local insolvency and corporate laws are often "debtor friendly" so loan realisation and enforcement is often slow or non-existent
  - Portfolios of distressed and non-performing loans were sold off – but local law rules and taxes can constrain sales – EU has published consultation document to enhance loan sales
- Last 10 years saw a regulatory over-reaction against European securitisation, followed by a more recent reversal of that position, to one that is much more supportive today

European MBS issuance since crisis

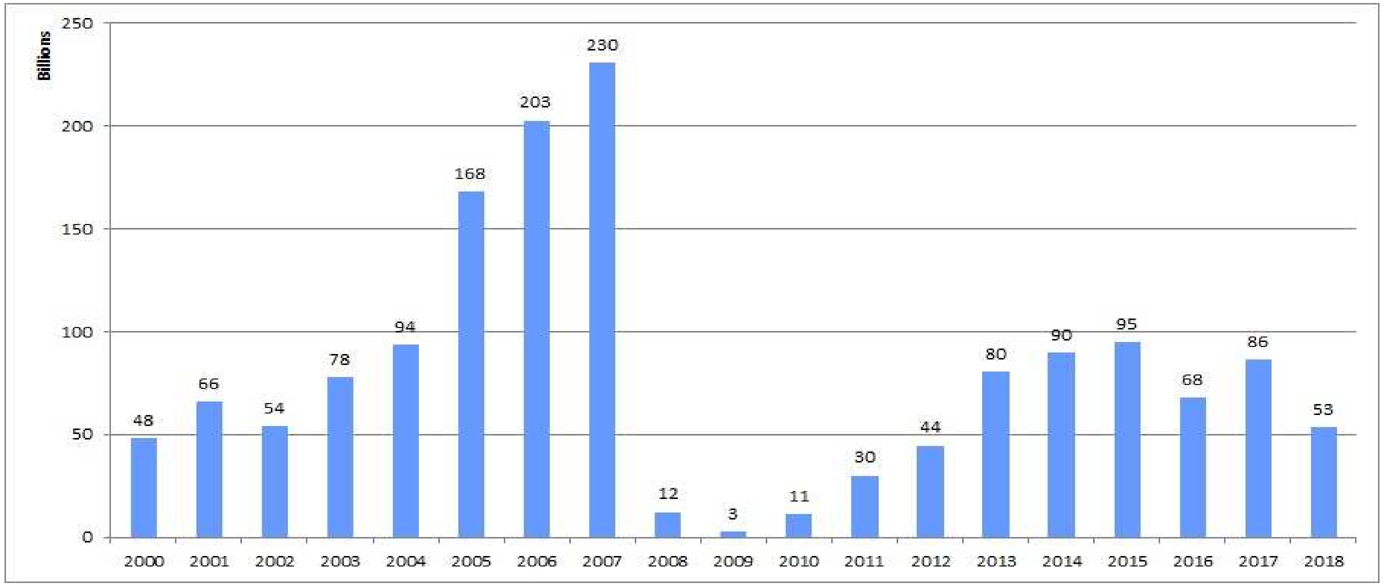
- RMBS and CMBS issuance in Europe has been substantially reduced



Source: FT

U.S. CMBS issuance since crisis

- The US saw a significant recovery in MBS since the crisis – for example CMBS issuance in US has substantially recovered



Source: CREFC

New spring for securitisation

- Sections of the industry blamed regulators for post-crisis struggle in Europe - regulatory impact on securitisation was seen by many as over-bearing and counter-productive
- Banks constrained in re-liquifying loan books limiting banks' ability to rebuild balance sheets to provide new lending
- European Central Bank sees securitisation as more the cure and not the disease -
  - Central banks starting accepting securitisation investments as collateral
  - Recognised as vital tool to help expand bank lending to SMEs to re-float economic activity and assist banks in disposing of non-performing loans
- In 2016 EU Commission placed securitisation at centre of Capital Markets Union designed to introduce "simple, transparent and standardised" (STS) investment grade securities – but not until 2019 – 11 years after the crisis

Meanwhile – new risks are emerging

- As regulators solve the last crisis, new risks are emerging
- The market is always changing, developing and adapting
- New regulatory regimes encourages new legal structures which serve legitimate purposes in "normal" times but which, as before, run the risk of being over exploited and becoming a “ticking debt time-bomb” in the future
- New regulation constrains some of the excesses but a decade of ultra-low interest rates has produced higher and higher levels of over-indebtedness at low rates
- Sponsors are in charge (again) – there is huge competition amongst lenders for new lending mandates producing downward spiral in lending terms and standards

Christopher Whittall and Mike Bird “*In a Blast From a Financial Crisis Past, Synthetic CDOs Are Back*” Wall Street Journal 28 Aug 2017

Is the sub-prime time-bomb back?

- This time over-indebted companies may be lighting the fuse – $1.3tn of corporate loans lent as leveraged “cov-lite” loans (light on loan covenants and controls)
- A decade on, instead of making risky sub-prime mortgages, banks are lending cov-lite loans to indebted companies in increasingly large amounts
- In October 2018, Bank of England raised the spectre of 2007-08 credit crunch –
  - “Global leveraged loan market [is] larger than, and … growing as quickly as, the US sub-prime mortgage market had been in 2006”.
- As with the last crisis, underwriting standards have slipped – risky corporate debt is now too easy to obtain in the view of many participants -
  - Many cov-lite loans are repackaged as collateralised loan obligations (similar to CDOs)
  - There are fewer incentives to impose strict terms if banks believe they can sell them to investors quickly as investment grade CLOs – so long as market continues and the music keeps playing
- A key question is whether this bubble could trigger a market panic?

“The sub-prime timebomb is back – this time companies are lighting the fuse” The Guardian, 13 January 2019

But will this lead to another crash with systemic failure?

- Investors in leveraged loans and CLOs may face huge losses like investors during the 2008 crisis due to lower lending standards with covenant-lite loans and higher levels of corporate indebtedness than 10 years ago
- While trends in CLO market are similar, there is not the same multiplier with re-layering of non-investment grade debt through CDOs and Synthetic CDOs
- Systemic risk may not be so worrying now, but, if global economy worsens sharply, this could lead to losses for many investors and lead to a similar drying-up in liquidity just like during the 2008 crisis
- Reports suggest the market for CLOs may be cooling, as uncertainty affects financial markets - fewer investors mean banks are postponing sales of leveraged loans as CLOs with the result that banks have had to keep these cov-lite loans longer on their balance sheets exposing them to greater risk
- This particular debt market will be one to watch in 2019-20

https://www.theguardian.com/business/2019/jan/12/subprime-timebomb-back-companies-lighting-the-fuse?CMP=share_btn_link

New world – new risks in real estate lending

- Commercial real estate lending is increasingly dominated by non-banking sector with more aggressive lending terms
  - High leveraged senior and mezzanine finance secured on riskier assets
  - “Warehouse” loan facilities – vulnerable loan on loan lending structures
  - Rise of Debt Funds as lenders - unknown systemic risk if they fail
- New, riskier asset classes –
  - Development of residential property with large exposure to top-end apartment developments for foreign buyers
  - Private Rental Sector and Buy to Rent – new sector exposed to renting apartments to private tenants – who will rent?
  - Care homes - reliance on public sector funding which is squeezed
  - Office property let to short-term WeWork or Regis-type tenants – co-working space vulnerable to economic downturn
  - Retail property - exposed to retail downturn and on-line competition
  - Student accommodation - reliance on foreign students post-Brexit

History repeating … and new crises

- Recession is just around the corner according to IMF
- No two recessions are alike –watch for the next one coming our way soon!
- Market euphoria and market amnesia – what happens when market players are too young to remember anything bad that happened last time and are making so much money they feel invincible!
- Governments forget and loosen regulations and restrictions
- Marco Polo economic risks – China has driven growth in world economy – will a melt down in China lead to the next global recession?
- Hard Brexit – un-scoped fallout risk for UK, Ireland and EU
- And many western governments, already heavily indebted from the bailouts last time, are least well equipped to rescue their economies if there is another meltdown …

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