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The Credit Crunch and the Housing Market: Implications for Lenders

Plan

- Context: rise and fall of RMBS
- Implications:
  1. The need to deleverage
  2. The paradox of deleveraging
  3. The effect on developers
  4. Risks and problems ahead for lenders:
     - 4.1 BTL
     - 4.2 Vulnerability of the mortgage sector
     - 4.3 Repossessions & Economic Slowdown
     - 4.4 Second round to the Credit Crunch
     - 4.5. Limits to State Intervention
  5. Recommendations

Context: Rise and Fall of RMBS

- RMBS:
  - One key difference between previous credit booms and the expansion of mortgage credit in the most recent credit boom is that it has coincided with a rapid expansion of securitisation.
  - The total outstanding RMBS (Residential Mortgage Backed Securities) and covered bonds rose from £13bn to £257bn between 2000 and 2007 (Crosby 2008, p.5)
    - an increase of nearly two thousand percent in 8 years.
  - In 2007, the UK “accounted for over half of all European RMBS issuance” (*ibid* p. 7).

- RMBS:
  - Allowed lenders package their assets (mortgage debt) and sell to international investors
    - "majority of these investors were from overseas" (Crosby, p.4)
  - Became a key way of raising new funds to lend to UK mortgage borrowers.
    - From being a marginal source of loanable funds, RMBS became "a very important source of funding for UK mortgage lenders. So much so that by 2006 such funding equated to around two thirds of net new mortgage lending in the UK" (*ibid* p. 1).
  - Huge shift away from the traditional source of loanable funds: i.e. savings deposits.
    - Akin to moving from a farm shop model (only sell what you've home-grown) to a supermarket model (purchase wholesale and sell with mark-up – virtually no limit to supply).

- Why did the US Subprime Crisis Impact UK Lenders?
  - Because: UK banks *bought* RMBS products as well as selling them, as a way of managing their overall risk exposure
    - Many of these products contained US subprime mortgages which had grossly underestimated default risk.
    - Certain lenders potentially exposed to huge risks
  - No one knew which lenders were worst affected
  - Lenders stopped lending to each other because they didn't know the true default risk of the bank they were lending to.
  - Banks that had become used to operating on low levels of liquidity became vulnerable to bank runs:
    - E.g. Northern Rock: Savers not able to withdraw deposits because the bank had been operating under

- Collapse of RMBS market
    - Trading in RMBS all but ceased
    - “it will be some considerable time before money market investors from outside the UK have sufficient confidence to return to our market” (Crosby)
- Implications:
    - major contraction of loanable funds:
        - “Such a major source of funding for UK mortgages will not be replaced quickly, certainly not in current market conditions.”
            - » Current climate: economic downturn – a time when savings rates usually fall, reducing further the loanable funds at banks’ disposal.
    - The need to de-leverage

1. The Need to Deleverage

- Why de-leverage?
  - In order to restore confidence of overseas investors in UK banks, lenders need to reduce the average risk on their balance sheets.
  - Any new loans must be:
    - (a) low risk (for lenders, this means low LTV).
    - (b) have adequate risk pricing (spread over LIBOR).
    - (c) financed from savings deposits (rather than RMBS)
- Impact of (a) and (b):
  - Profound implications for both housing demand and housing supply
    - "Paradox of Deleveraging"…

2. Paradox of De-leveraging (McCulley 2008)

- Tightening of loan criteria causes an initial inward shift of the demand for housing, and prices fall.
- But this has 2nd and 3rd round effects:
  - For existing home-owners:
    - ↓V means that the loan-to-value ratio on their mortgage has increased even without them increasing their loan.
      - Cannot move without downsizing;
      - Problems remortgaging, repossession.
      - house purchase and remortgage loans in the wider market decreased by 28% since second half of 2007.
    - Loss aversion: reluctant to sell for less than they paid.
      - But most people cannot buy without selling first, so ↓ demand for properties on the market.
  - For FTBs, even harder to enter the market – need a large deposit.
- Housing demand falls further $\Rightarrow$ ↓V
  - LTVs on existing loans rise further

3. Effect on developers

- Direct effects of credit crunch:
  - Cost of loans increased (spread over LIBOR)
  - LTV requirements make it more difficult to raise finance for projects.
- Indirect effects: falling demand from homeowners:
  - Falling demand among prospective homeowners who cannot afford a mortgage, or who anticipate falling value of property.
  - Falling house prices reduces profit margins, increases difficulty of raising credit.

- Indirect effects: falling demand from landlords:
  - Demand for newbuild high-density houses 2006/2007 has been driven by BTL
  - But, BTL fuelled demand for newbuild fallen significantly because:
  - (i) De-leveraging also affected demand for BTL
    - Landlords need a larger deposit
    - 18% fall in BTL loans
      - 144,600 new buy-to-let loans in the first half of 2008, down from 176,500 in the second half of 2007 and 169,500 in the first half of 2007.
  - (ii) Banks have been alerted by FSA & CML to undisclosed discounts and cash-backs
    - These have previously allowed individuals to purchase off-plan with a BTL loan with little or no deposit.

- Effect on output:
  - comparing the June quarter of 2008 with the same quarter of the previous year, starts fell by 19 per cent and completions fell by 13 per cent,

    (*Source*: House Building: June Quarter 2008, England, CLG, London)

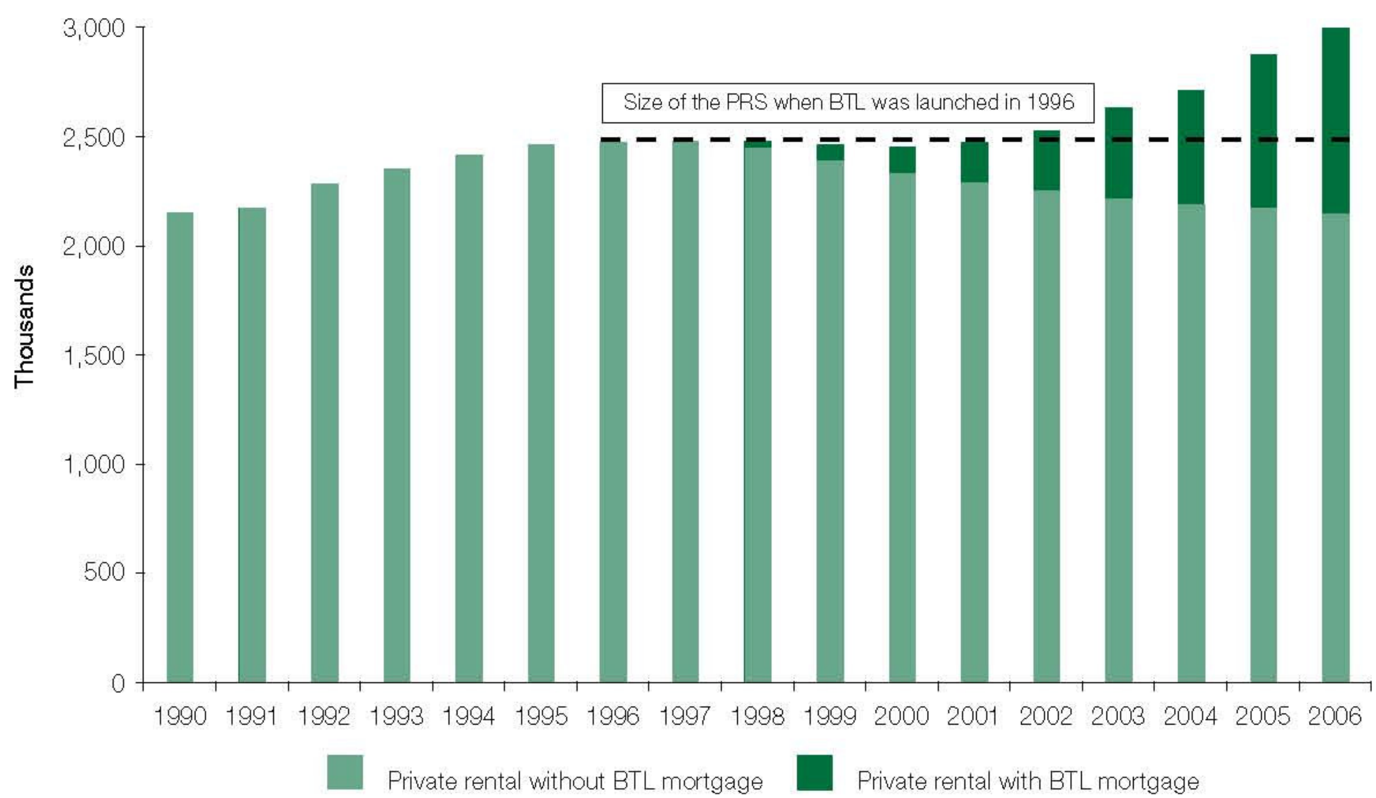
4. Risks & Problems that lie ahead for Lenders

1. BTL
2. Vulnerability of Mortgage Sector
3. Repossessions and Economic slowdown
4. Second round to the credit crunch?
5. Limitations on State Intervention

4.1 The Problem of Buy to Let Mortgages

- BTL has Changed the structure of ownership at the low-end of the market
  - 80% of BTL properties are terraced or flats.
- BTL has Changed the financial structure of PRS
  - BTL properties accounted for 28% of entire PRS stock in 2006, rising from less than 1 per cent in 1996

Figure 5: Private sector rental properties with and without a buy-to-let mortgage, UK (1990 to 2006)



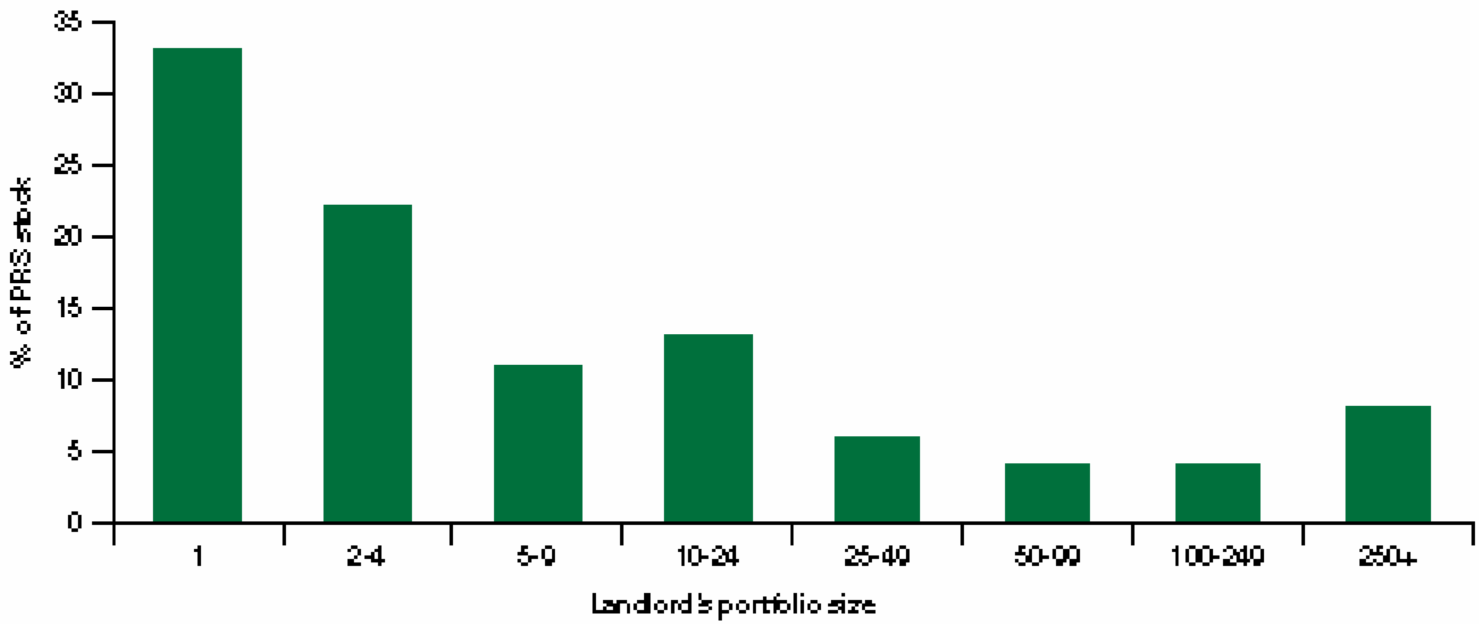
Source: Based on analysis by CML (2007)

Source: NHPAU 2008

BTL is vulnerable:

- Not blue-chip companies:
  - Small landlords (1-2 properties), 68% have another full time job (Scanlon and Whitehead, 2004)
- Multiple loans combine to create very high debt-gearing:
  - Usually also have a mortgage on their own property.
- Anecdotal evidence of widespread overvaluation of newbuild and of mortgage fraud:
  - "off-plan" properties – mortgage based on developer's estimated value rather than price paid. Some BTL borrowers disclosing the former rather than the latter to lenders.
  - Developer's estimated headline value of a property often grossly optimistic
  - Implication: actual LTVs on BTL may be much higher than what's recorded on the lenders books.
- High vacancy rates – motivated by LT capital gain.
  - Many BTL landlords have been willing to hold properties vacant due to conviction that prices will continue to rise.
- Most importantly: Much of BTL mortgage debt issued at the peak of the price cycle…

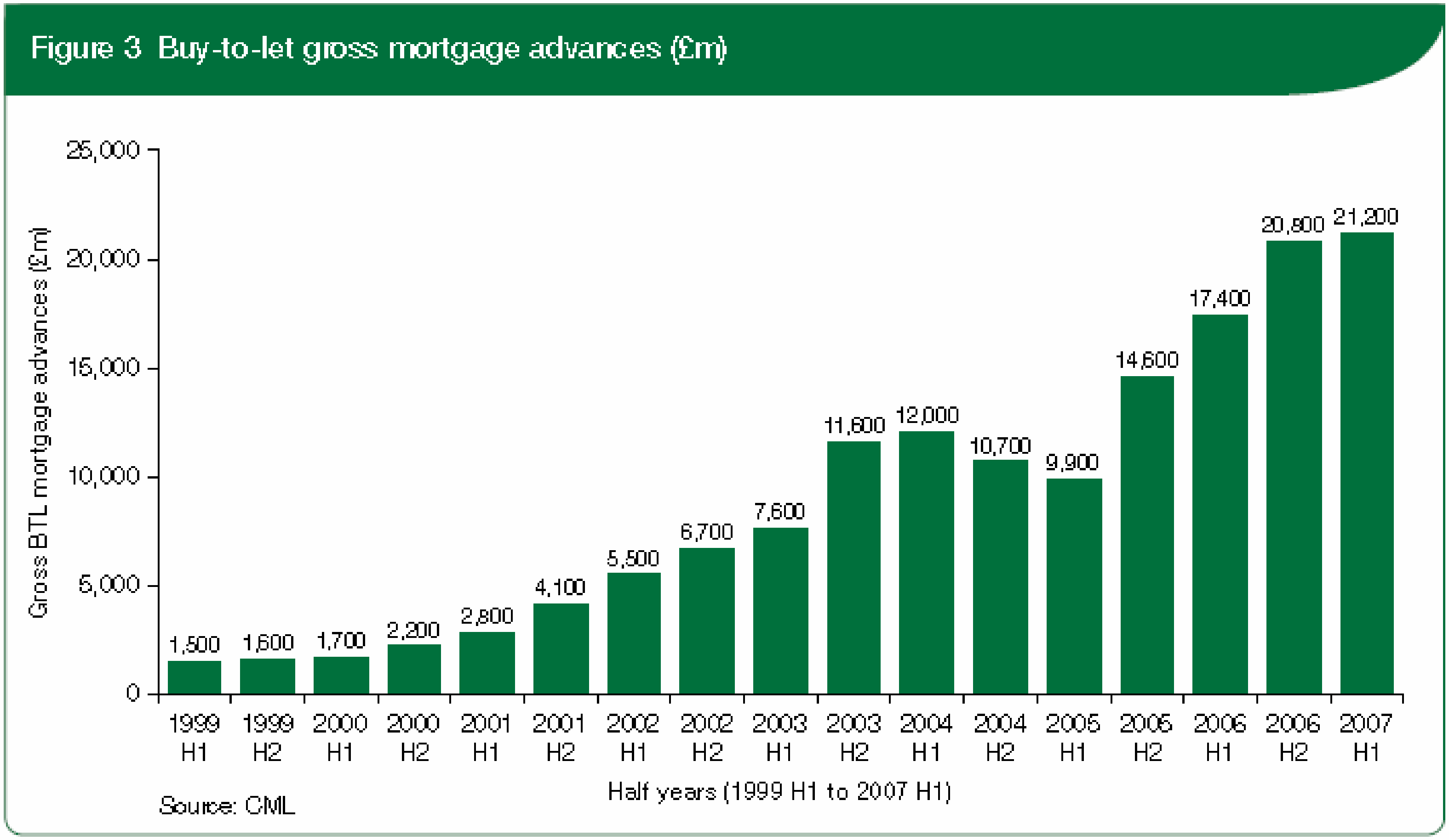
Figure 2.2 Distribution of private rented stock by size of landlord's portfolio



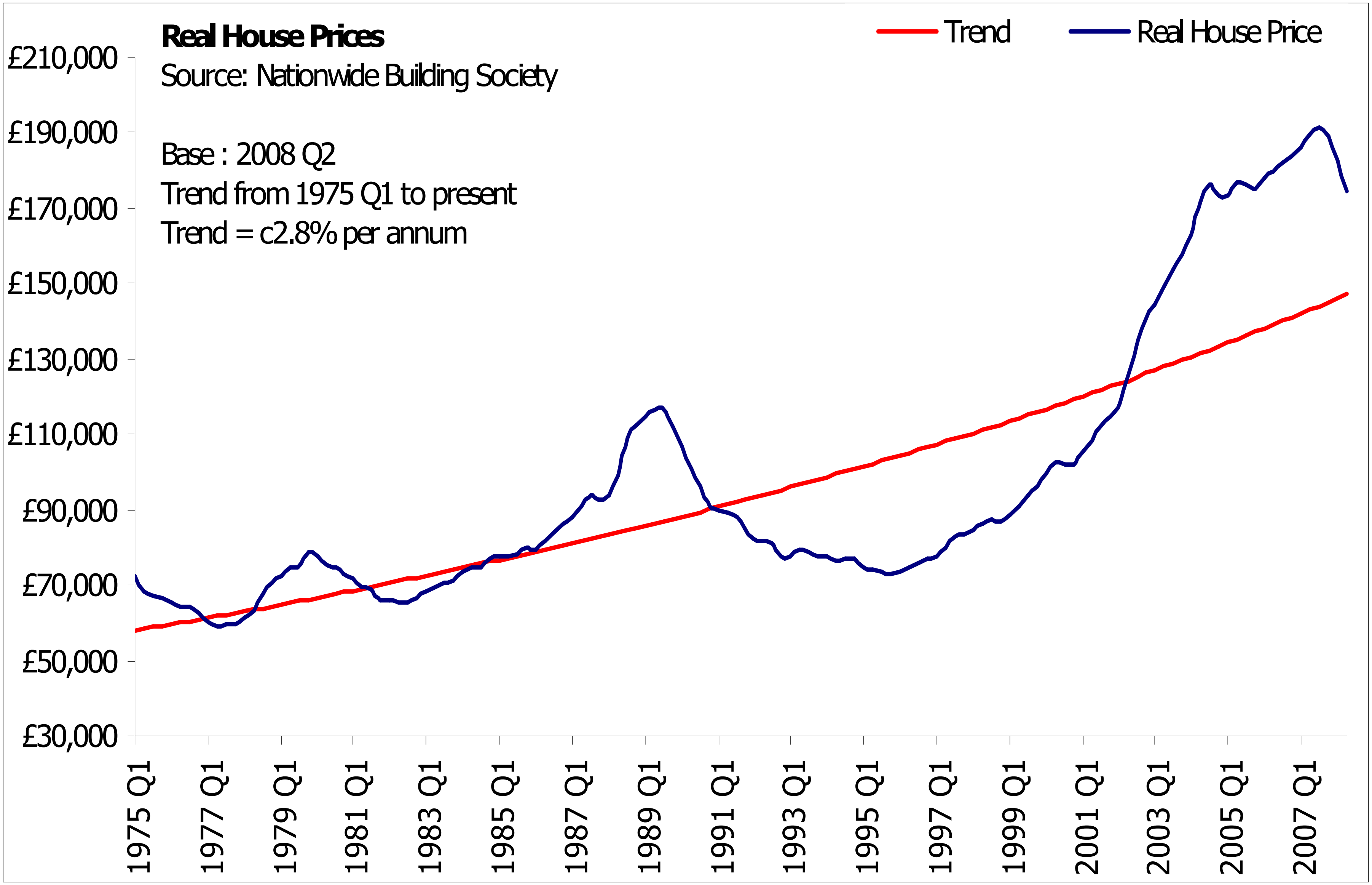
Source: CLG(2008)

Source: NHPAU 2008

£21bn BTL mortgage debt issued at 2007 house price peak



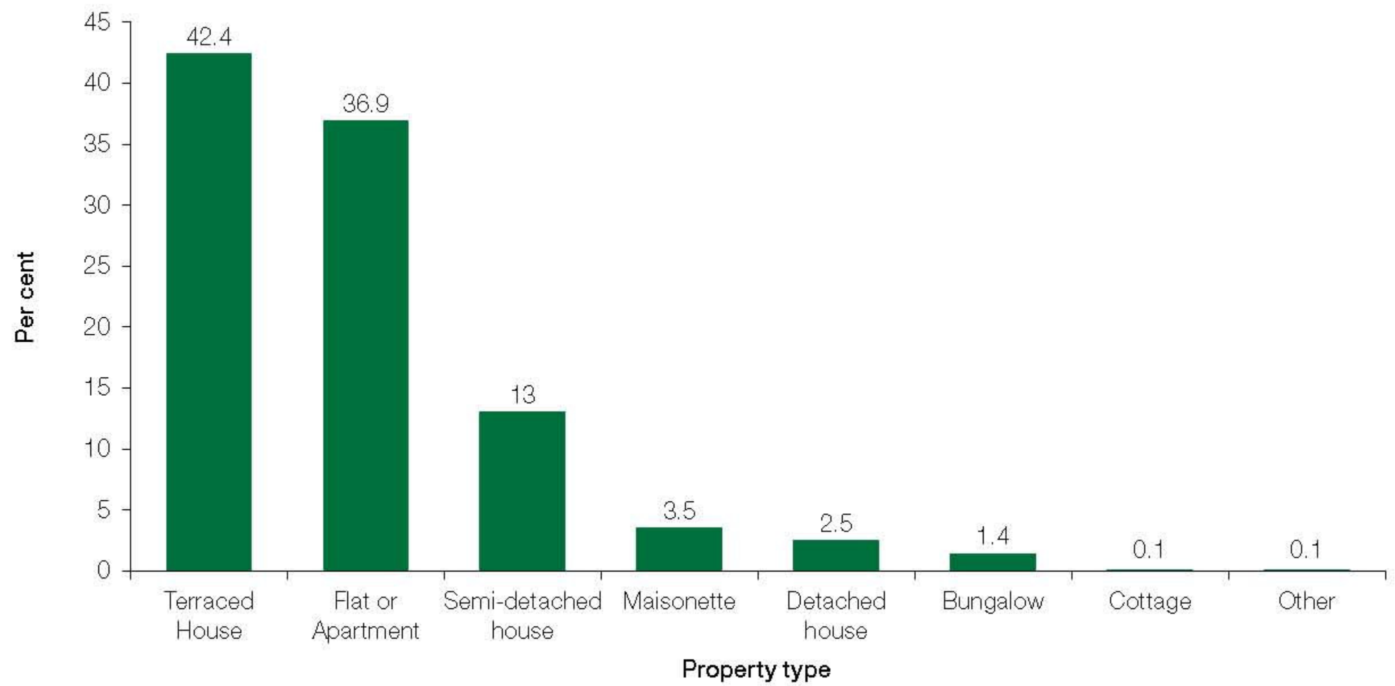
Source: NHPAU 2008


Real House Prices
Source: Nationwide Building Society
Base : 2008 Q2
Trend from 1975 Q1 to present
Trend = c2.8% per annum
Trend
Real House Price
£210,000
£190,000
£170,000
£150,000
£130,000
£110,000
£90,000
£70,000
£50,000
£30,000
1975 Q1
1977 Q1
1979 Q1
1981 Q1
1983 Q1
1985 Q1
1987 Q1
1989 Q1
1991 Q1
1993 Q1
1995 Q1
1997 Q1
1999 Q1
2001 Q1
2003 Q1
2005 Q1
2007 Q1

- almost 90% of total BTL advances since 1999 have been taken out during periods of above-trend house prices, and £74bn of BTL mortgages – more than half of total BTL advances since 1999 – were issued at the very peak of the housing boom (when house prices were more than 30% above trend).
  - for a significant proportion of BTL loans there is a very real risk that the value of collateral will fall below outstanding mortgage debt.
  - No emotional attachment to the property
- Already signs that all is not well:
  - Repossessions on BTL properties as a % of all BTL mortgages almost doubled in the space of eighteen months from the second half of 2005 to the first half of 2007,
  - and this was before the first round of gloomy house price results were released in late 2007!

BTL concentrated in high-density housing where price falls could be most severe due to surplus of new city centre flats

Figure 7 BTL properties by type, UK (2004 to 2006)



Source: NHPAU 2008

4.2 Vulnerability of Mortgage Sector

- **UK has:**
  - high mort/GDP
  - high % OO
  - high initial LTV
  - v.low % FRMs
  - Growth of subprime and $2^{nd}/3^{rd}/4^{th}$ charge mortgages
  - Massive accumulation of unsecured debt
  - An economy & mortgage sector inextricably linked with US
- **Implication?**
  - mortgage market vulnerable to fluctuations in macro economy
  - Mortgage market has high impact on macro economy

Treasury Housing Finance Review, March 2008

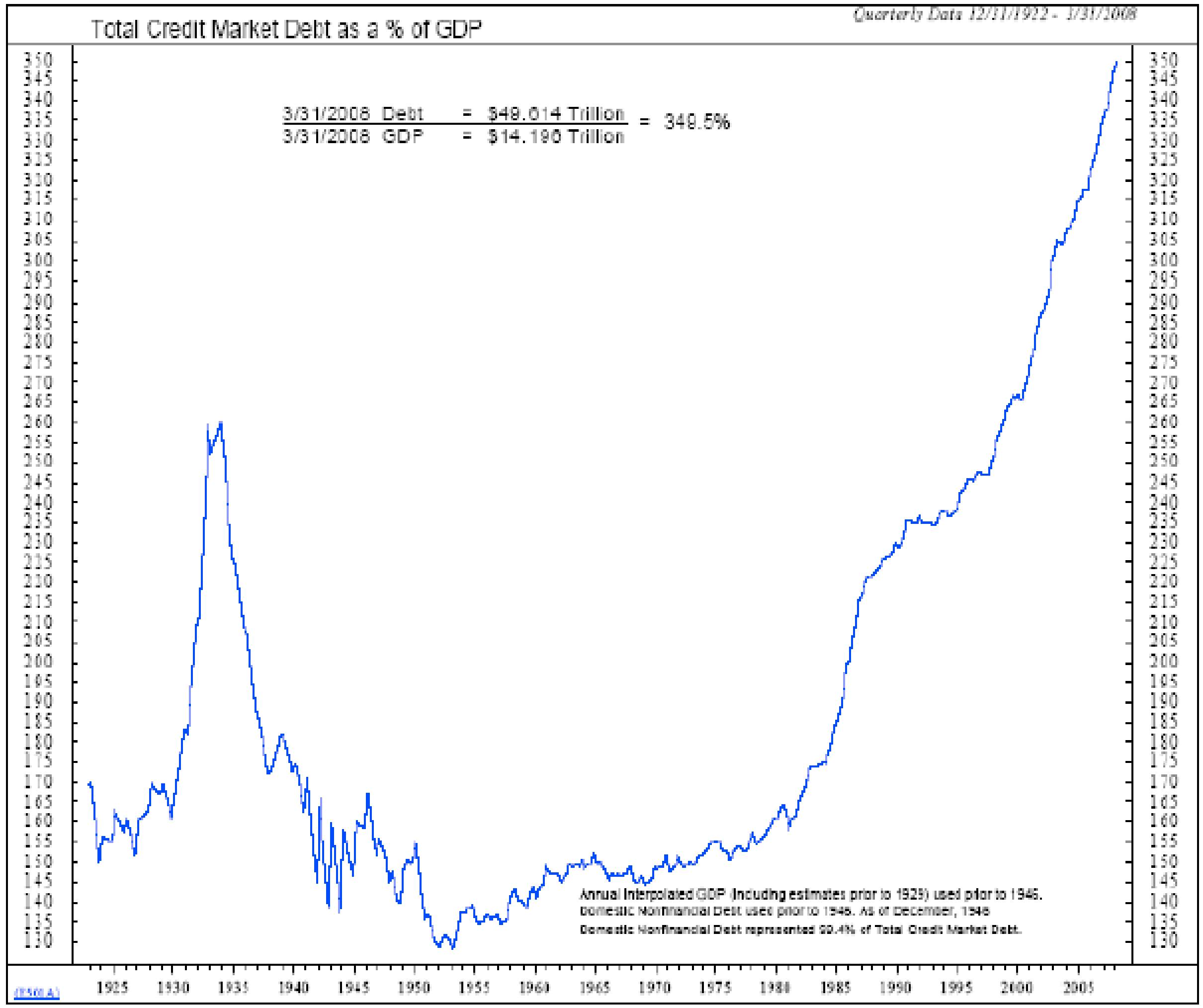
Table A.2: Comparison of international mortgage markets

	Mortgage debt to GDP (%)	Owner occupation (%)	Typical initial LTV (%)	Specialist mortgage products	New fixed-rate mortgages (% >10 years)	Explicit Pre-payment charges	Funding model
Denmark	101	55	60-80	Yes	50	No	Callable covered bond
US	84	68	80	Yes	52	No	Agency
UK	83	70	80	Yes	1	Yes	Deposit
Spain	59	86	70	Some	1	Yes	Deposit
Germany	51	43	70	Some	28	Yes	Non-callable covered bonds
Canada	42	66	65	Some	2	Yes	Deposit
France	32	57	67	Some	46	Yes	Non-callable covered bonds
Japan	32	63	70-80	Some	17	No	Agency
Italy	19	80	55	Yes	7	Yes	Deposit

Sources: European Mortgage Federation, HM Treasury, IMF, Mercer Oliver Wyman, Merrill Lynch, Statistics Canada, US Census Bureau.

- Lenders have thrown caution to the wind during boom
  - Rise in second, third and fourth charge mortgages
    - Not regulated by FSA: data?
    - High risk because second charges are taken out when the first charge lender would not advance further funds.
  - Also high levels of unsecured debt
    - credit card debt has risen by more than 100% in ten years,
    - and by a thousand per cent since the last pre-slump period 20 years ago
      - (in 1987, total outstanding credit card debt stood at £5bn; it has since risen to £55bn).

- Fragility of wider financial system:
  - Both our economy and mortgage sector inextricably connected to the US economy & mortgage sector
  - Worrying given the major structural problems in the US economy (see graph below)
  - When the US catches a cold, we get pneumonia…

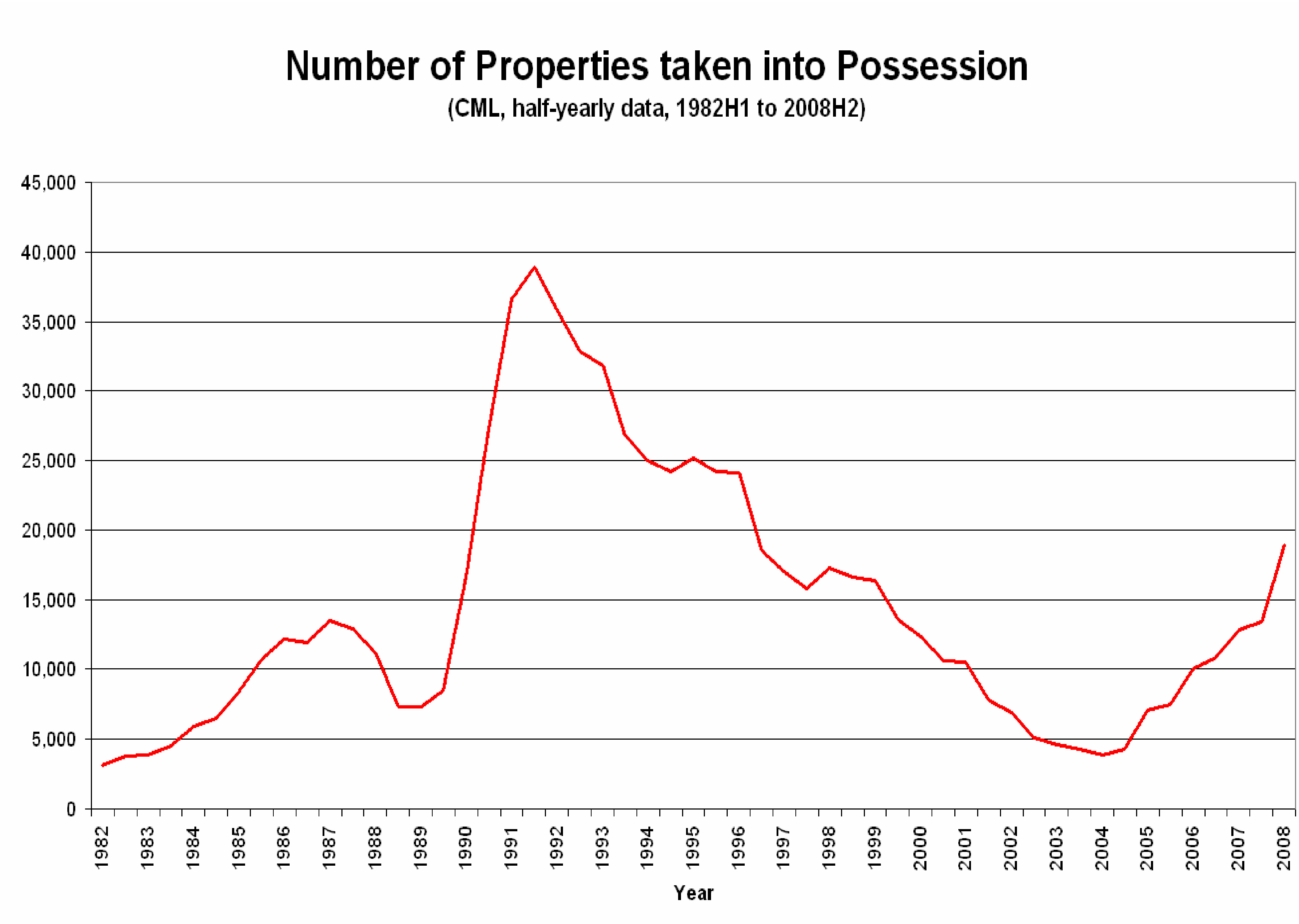


4.3 Repossessions

- During the downswing: immense financial pressures on lenders to speed foreclosure
  - Why?
    - **need to resell collateral on bad debt before it declines further in value.**
    - Also:
      - **MIGs**
        - compared to the early 1990s crisis, lenders are more exposed to losses on repossessions because of the restructuring and lower take up of Mortgage Indemnity Guarantee cover.
      - **foreclosure requirements of securitised debt**
- ISMI restructuring of 1995 & low take-up of MPPI.
- Effect? Repossessions already rising rapidly even though unemployment increases are modest…

Repossessions and LFS Unemployment Rate

Source: CML & LFS 2008


Number of Properties taken into Possession
(CML, half-yearly data, 1982H1 to 2008H2)
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Year

4.4 Second round to the credit crunch?

- Current credit crunch has been driven by defaults on US subprime mortgage debt.
- But what happens if UK mortgage default rates rise significantly?
  - UK mortgages also entered RMBS market,
  - What would happen if lenders and investors find they are holding “toxic” UK mortgage debt?
- Risk may be low but will continue to rise if:
  - the UK economy continues to slow, house prices continue to fall, and repossessions continue to rise,
- Confidence in UK banking sector could take a long time to recover, and hence credit crunch may continue for some time.

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4.5 Constraints on State Intervention

- Government debt:
  - Rising government debt, and falling tax revenues as the economy slows, limits the government's capacity to:
    - Bolster ISMI
    - Stamp duty
  - Anyway, such measures may do little to temper the slowdown.
- Spectre of Inflation:
  - Rising import costs
  - Lowering interest rates to boost housing sector could exacerbate inflationary pressures.
    - Would reduce demand for UK currency, which is already falling in value
    - Falling value of the pound $\Rightarrow$ $\uparrow$price of imports $\Rightarrow$ $\uparrow$inflation

- Questionable whether the state should attempt to prop-up the housing market:
  - Low interest rates & promotion of homeownership in the US & UK are what got us into this mess in the first place
    - Fundamental incompatibility of long-term mortgage finance & short-term employment contracts of low income HHs
    - High-debt gearing & speculative demand for housing ⇒ volatility
    - Bubble had to burst at some point. Don't want to re-create it!

- Part of a bigger picture of re-adjustment:
  - Low r $\Rightarrow$ credit fuelled boom in demand in West
    - Sucked in imports from China etc
      - » But high savings rates in China – became source of cheap loanable funds to feed the West's credit boom.
  - Not sustainable:
    - Rising wage & raw materials costs in China
    - Falling exchange rate: imports becoming more expensive in UK
    - Rising default rates in UK, prolonged credit credit crunch
    - Over dependence on international credit markets has put entire Western banking system at risk (cf Northern Rock, Fannie Mae…).
  - Deleveraging should be seen as a return to prudent lending
    - Reducing interest rates would presumably further reduce loanable funds
      - » If the RMBS sector were alive and kicking, this would not be such a problem since banks could obtain funds via the wholesale market.
      - » By restricting new lending to being financed from savings deposits, a reduction in interest rates could further reduce deposits (saving would become even less attractive, particularly with rising inflation) and hence new lending.

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5. Recommendations

- We need to help vulnerable HHs worst affected by a bubble created by policy of promoting OO,
    - but not re-inflate the housing market
- We need tenure neutrality in the taxation system.
- We need to redesign the regulatory & monitoring framework for banks:
    - Is the split accountability between BoE, HMT& the FSA a good way to regulate & monitor the sector?
    - How can we encourage greater transparency in the RMBS market?
        - » Is it too complex for its own good?
    - propensity to lend cheap mortgage credit at the peak of the housing cycle
        - » Do risk-based capital adequacy requirements exacerbate the credit cycle?

- Governments should be cautious about bailing out the banking sector:
  - Mortgage gaurantees provided by Fannie Mae and Freddie Mac are, arguably, what encouraged banks to lend to recklessly in the first place.
  - Extension of the Special Liquidity scheme would insulate lenders from the consequences of bad decisions, sowing the seeds for future moral hazards
    - Lenders need to know that governments won't bail them out, otherwise they will base futuer strategies on the assumption that while governments talk tough, they capitulate when the chips are down (problem of time inconsistency).
- E.g. Forest fires:
  - Forrest management that puts out even small fires leads to much bigger forest fires in the long run.
  - Unmanaged forests have regular small fires that burn up the dead foliage that accumulates on the forest floor, which makes major forest fires unlikely.
  - So good forrest management should allow small fires
  - Similarly, governments that intervene to prevent small recessions may be increasing the risk of a major depression in future.
    - The question is whether we are on the brink of a minor recession (worthy of a light touch approach from central government) or a major recession (worthy of significant intervention).
    - Trouble is, we may not know until we get there…

- Can we encourage the development of financial vehicles to:
    - » allow low income HHs to buy into housing assets without becoming mortgagors?
    - » encourage investment diversification across housing sectors to avoid the potentially disproportionate effects of speculation on entry level housing?
  - – How can we encourage LT FRMs?
- Cynics might say that the only thing we learn from credit cycles is that banks (and governments!) never learn from credit cycles. Let’s hope they’re wrong.