The Central Bank of Ireland's Proposed Mortgage Rules

Response to Consultation Paper 87

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Summary

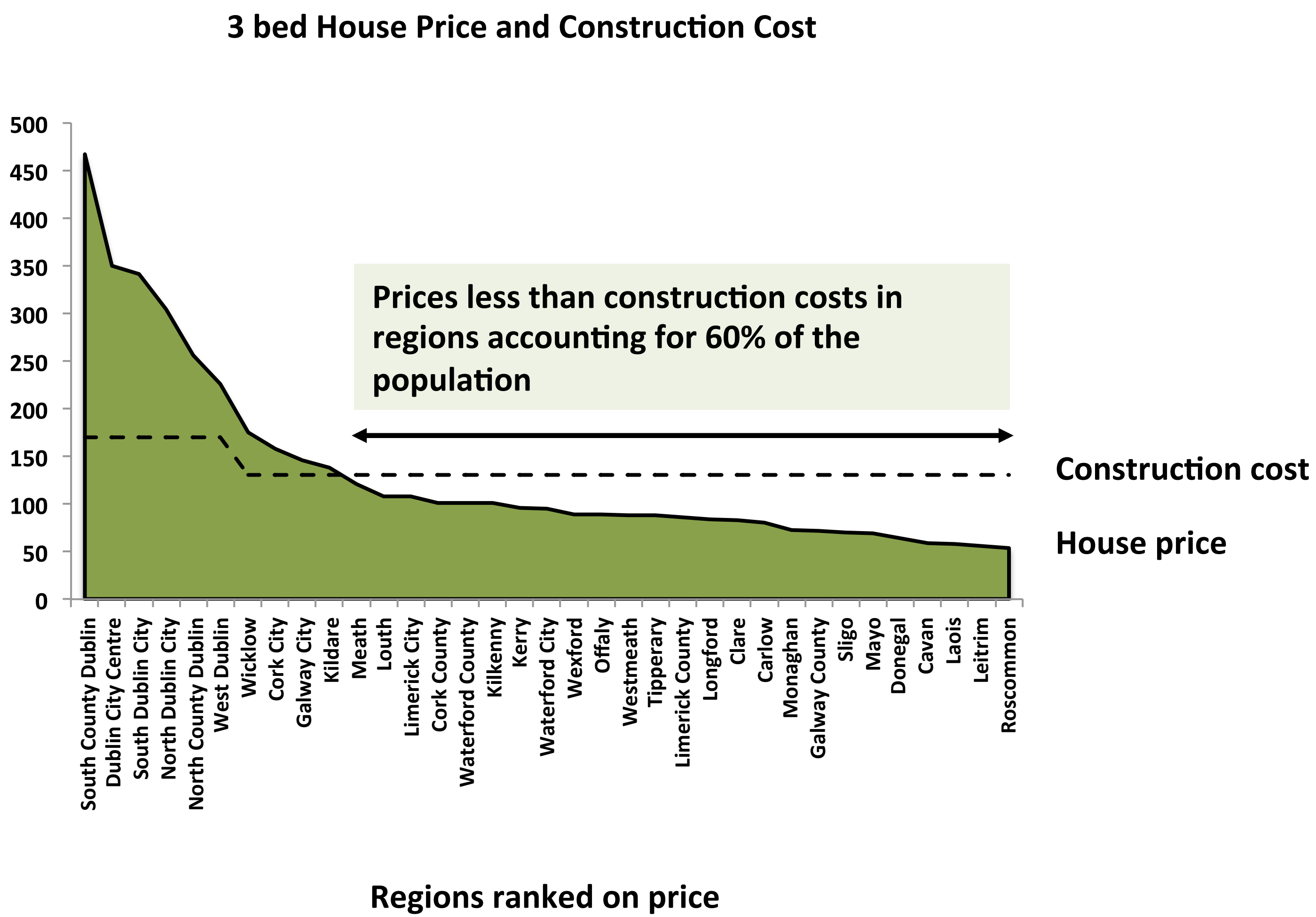
- The introduction of macro-prudential rules to provide "guard rails" for the housing market is to be welcomed
- A LTI cap at 3.5 times is however too low
  - At this loan-to-income ratio, a borrower's interest payments would be 17.5% of income (at today's 10 year fixed rate of 5%)
  - An LTI cap of 5 times – corresponding to interest of 25% of income would be a more reasonable level
- A LTV cap has a one-off effect on house price inflation when it is introduced (or tightened)
  - But there is no evidence that house prices are out of line with fundamentals currently – so there is little merit in introducing an LTV cap at this point in the cycle

Context: no signs of a house price bubble re-inflating

- **It is important to note that there are no signs of a house price bubbles re-inflating at this time**
  - **House prices are low relative to building costs**
  - **Housing market activity levels are very low relative to "natural" benchmarks**

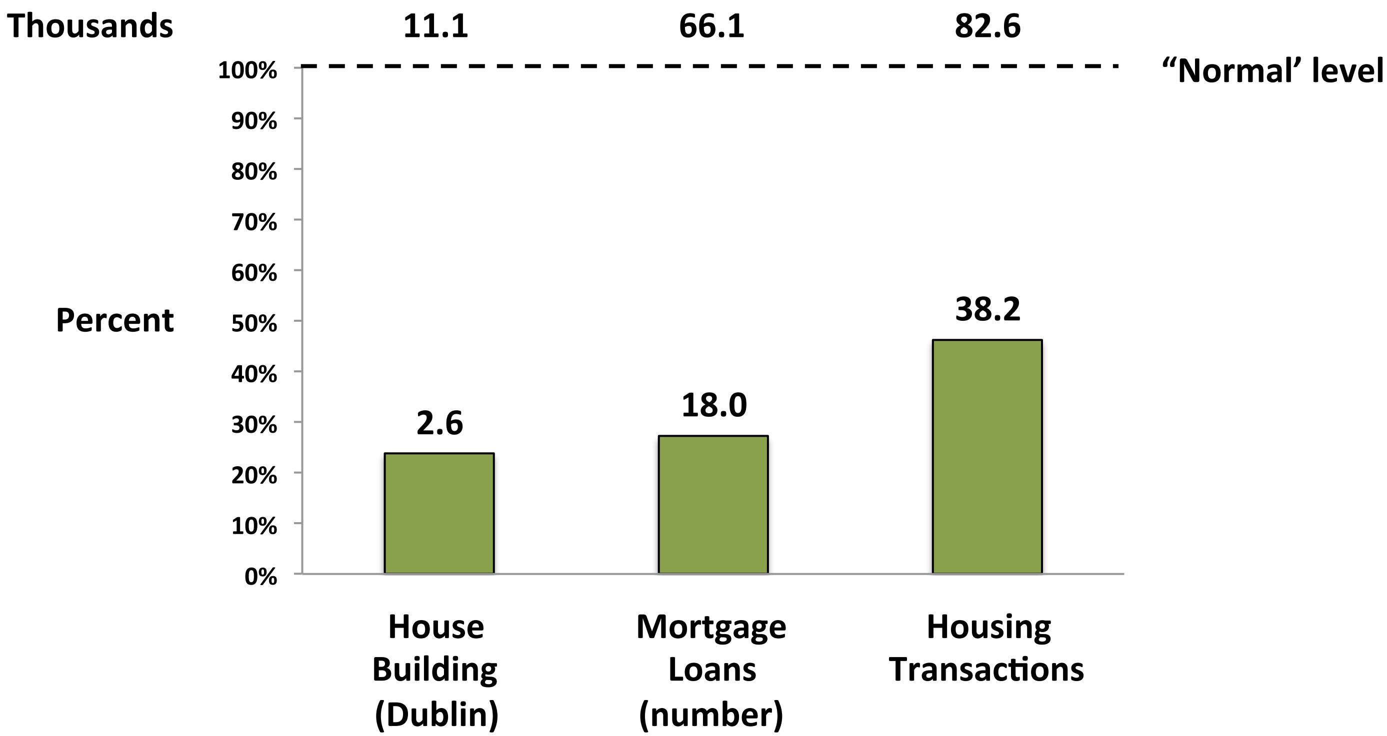
- **While there has been a recent rebound of prices in Dublin, this appears to reflect:**
  - **a deeper crash than in the rest of the country; and**
  - **a stronger recovery in rents**

House prices are below construction costs in 60 percent of the country



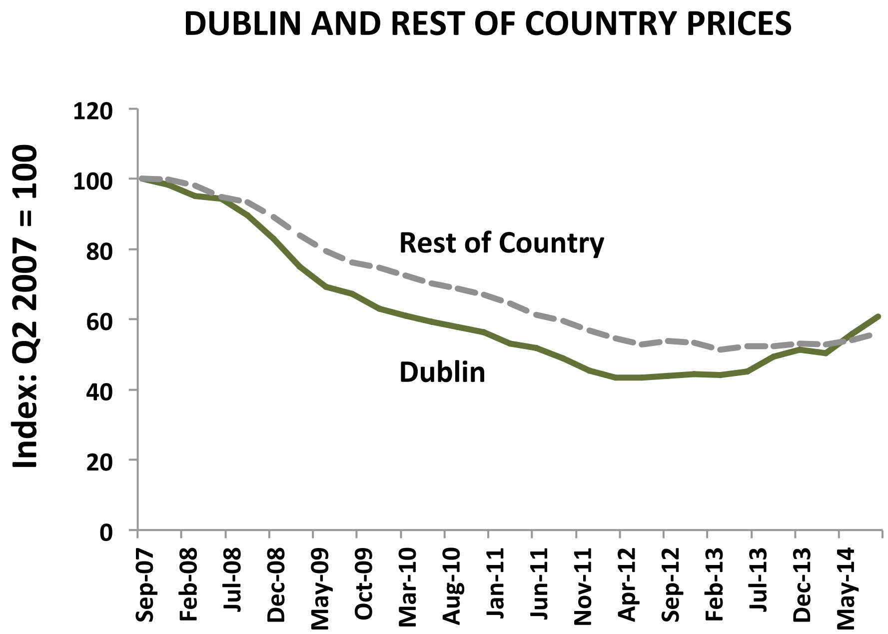
Source: Daft Report Q3 2014, SCSI 2014

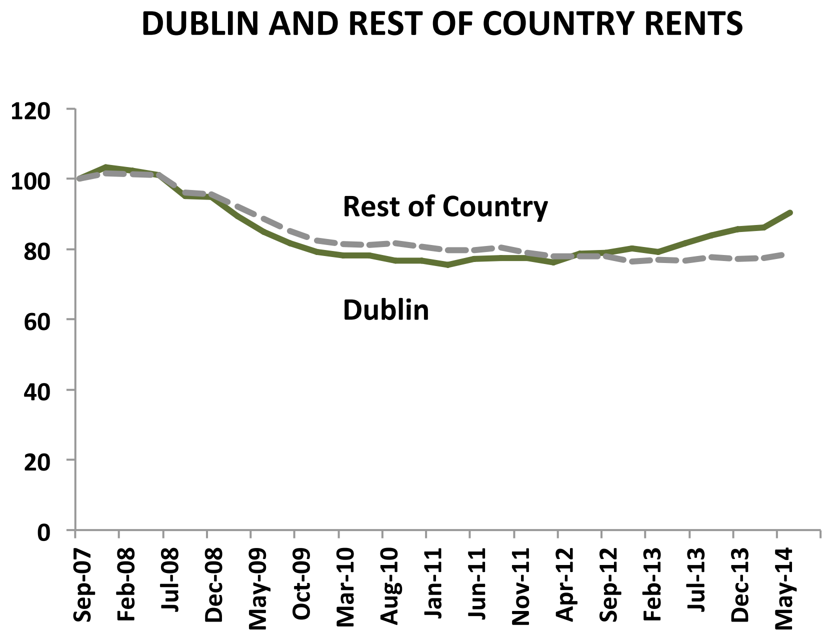
Housing activity is at very low levels



Normal levels: House building (greater Dublin area) – Morgenroth, Edgar "Projected Population Change and Housing Demand: A County Level Analysis", ESRI (2014); mortgage lending – 80 percent of transaction volume; transaction volume – UK average 2006–2013 scaled to Ireland on population
Sources: ESRI, UK National Statistics, Property Price Register

The Dublin "rebound" reflects a deeper decline and is underpinned by growth in rents





Sources: CSO House Price Index, PRTB/ESRI Rent Index

In order to decide the appropriate level of a LTI cap, one should have a sense of what house price-to-income ratio is justified by fundamentals

- **In equilibrium, the price of a house should be equal to the present value of the rental cashflows it produces (either directly for a landlord or implicitly for an owner occupier)**
  - **Rents should be net of depreciation and maintenance costs**
  - **The discount rate should be the cost of financing house purchase which we will take as the mortgage interest rate. This should be the long rate i.e. reflective of expectations of variable rates throughout the life of the mortgage**

- **We can express this algebraically using the formula for a growing perpetuity (sometimes called the Gordon Growth Model):**

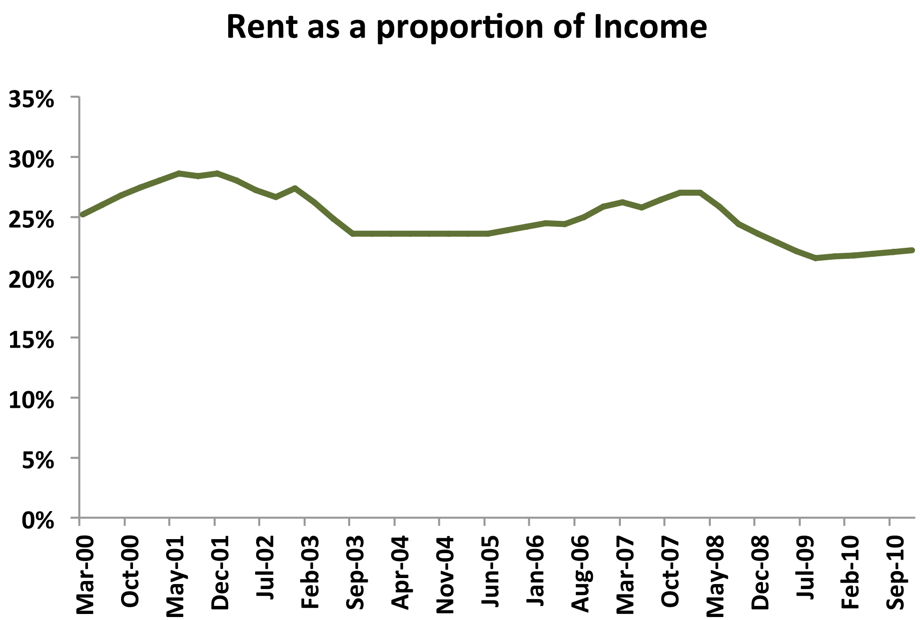
Price = Rent / (Long mortgage interest rate + Costs – Growth rate of rents)

- **We can simplify further by noting that costs (expressed here as a proportion of house price) and real rental growth are both small (at around 0.5%) and opposite in sign so we can assume they cancel each other out. Dividing through by Income we obtain the formula for the equilibrium Price / Income ratio:**

Price / Income = (Rent / Income) / (Long real mortgage interest rate)

- **We can estimate these parameters**

Rents have been a fairly consistent proportion (about 25%) of incomes over the last decade



Source: CSO

The long real mortgage interest rate is about 3.5%

Variable	Estimate	Basis
Long nominal mortgage interest rate	5.0%	Bank of Ireland 10 year fixed rate as at 8/12/2014
Expected inflation	1.5%	10 year market expectation (breakeven inflation on French indexed bonds)
Long real mortgage interest rate	3.5%	[calculated from the above]

A rough-and-ready approximation suggests an equilibrium price to income ratio of 7x

Variable	Estimate
Rent / Income	25%
Long real mortgage interest rate	3.5%
Equilibrium Price / Income ratio	7.1x

It is important to note that high inflation creates a credit constraint on mortgage borrowers

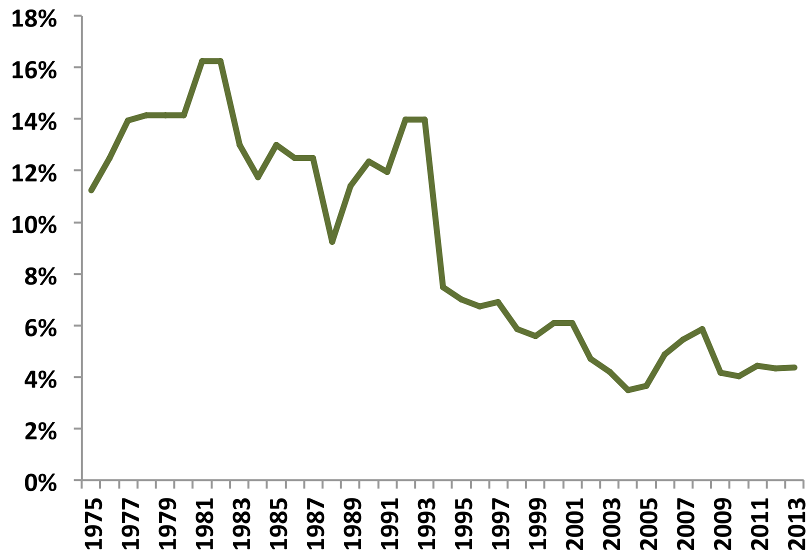
ILLUSTRATION

Inflation	11.5%	1.5%	0%
Real mortgage interest rate	3.5%	3.5%	3.5%
Nominal mortgage interest rate	15%	5.0%	3.5%
Max Interest / income	25%	25%	25%
Max Loan / income	1.7x	5.0x	7.1x
Equilibrium house price / income	7.1x	7.1x	7.1x

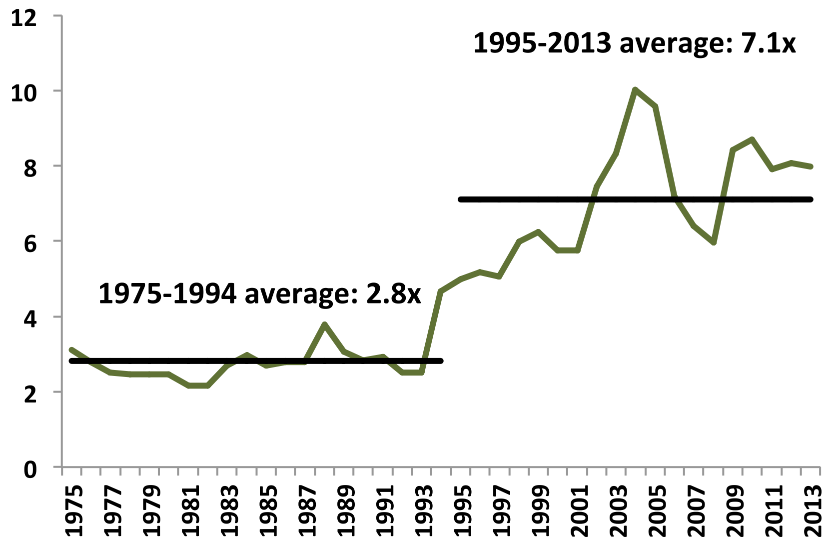
- **Imagine mortgage lenders will only approve loans where the interest payment is no more than 25% of income**
- **When inflation is high, so too are nominal interest rates. So loans have to be smaller relative to incomes to meet the 25% cap**
- **Real variables – including the equilibrium house price-to-income ratio - are unchanged**

This dynamic means that the end of the inflationary era has eased credit constraints and allowed LTI multiples which represent not an easing of credit standards but a better alignment of lending to fundamentals

Nominal Mortgage Interest Rate



Loan-to-Income ratio at which interest is 25% of income



Source: CSO

The LTI cap should be increased

- The Central Bank has proposed a LTI cap of 3.5x
- While this is reflective of historical underwriting standards, those standards were the product of the inflationary era and out of line with fundamentals
- At today's (ten year, fixed) mortgage interest rate of 5%, that would make interest payments just 17.5% of income. Rents, by comparison, are typically 25% of income
- In the context of house prices which are already low relative to construction costs, there are negative consequences for setting a LTI cap too low
  - House prices are set artificially low relative to fundamentals
  - Construction activity is also suppressed, prolonging an already deep and long construction recession
  - Because there is too little construction, rents tend to rise
- The Central Bank should better align the LTI cap with fundamentals. If the LTI limit were to allow interest payments of up to 25% of income, then it should be set at 5x

An LTV cap is a less effective macro-prudential tool which might be used as a "brake" on an overheating market

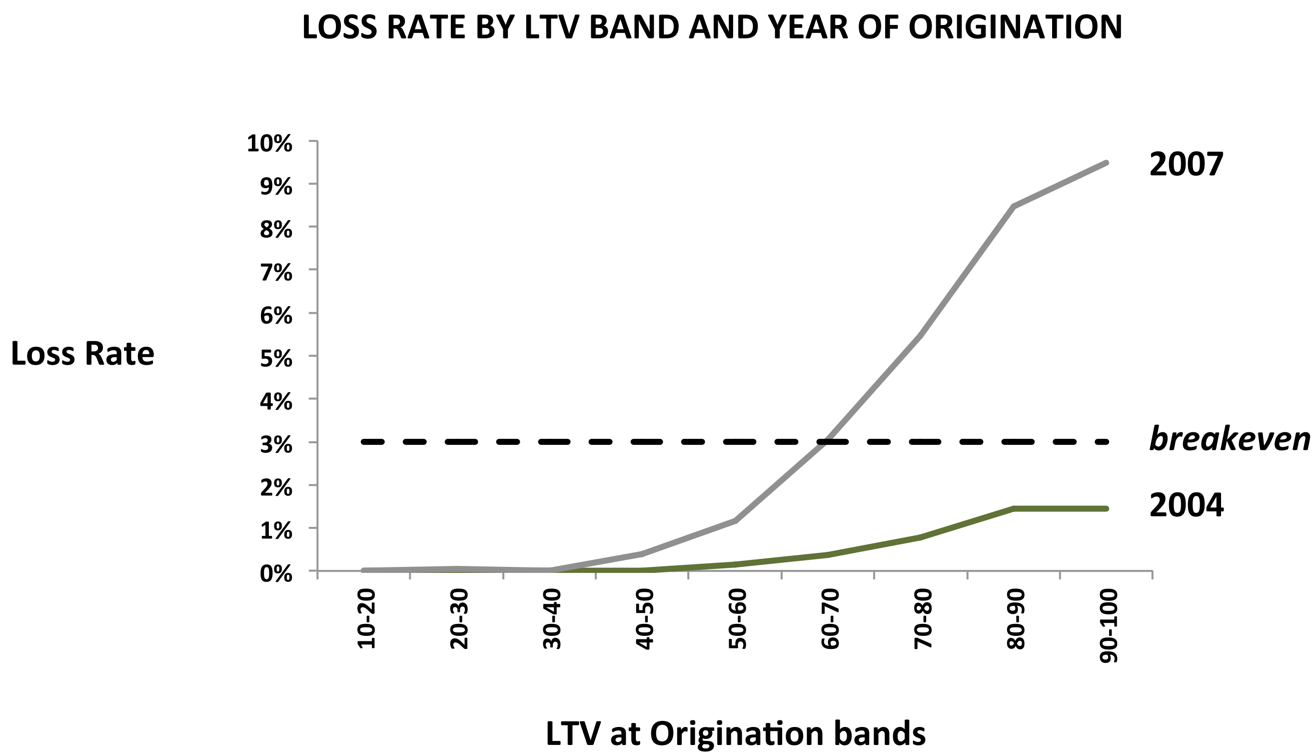
- **A LTV cap does less good a job of acting against high house prices. High loan-to-value lending is only problematic when house prices are "too high", but the tool does not assess the appropriateness of current prices**

- **It might make sense to think of a cap on "Loan to Fundamental Value" but this in fact translates to the LTI cap. If house prices of 7x income can be justified on fundamentals then an LTI limit of 5x effectively generates an LTV cap of 70% of fundamental value**

- **It seems that an LTV cap in the presence of an LTI cap actually acts pro-cyclically i.e. restrains lending more when prices are low than when they are high. This clearly is not a desirable property**

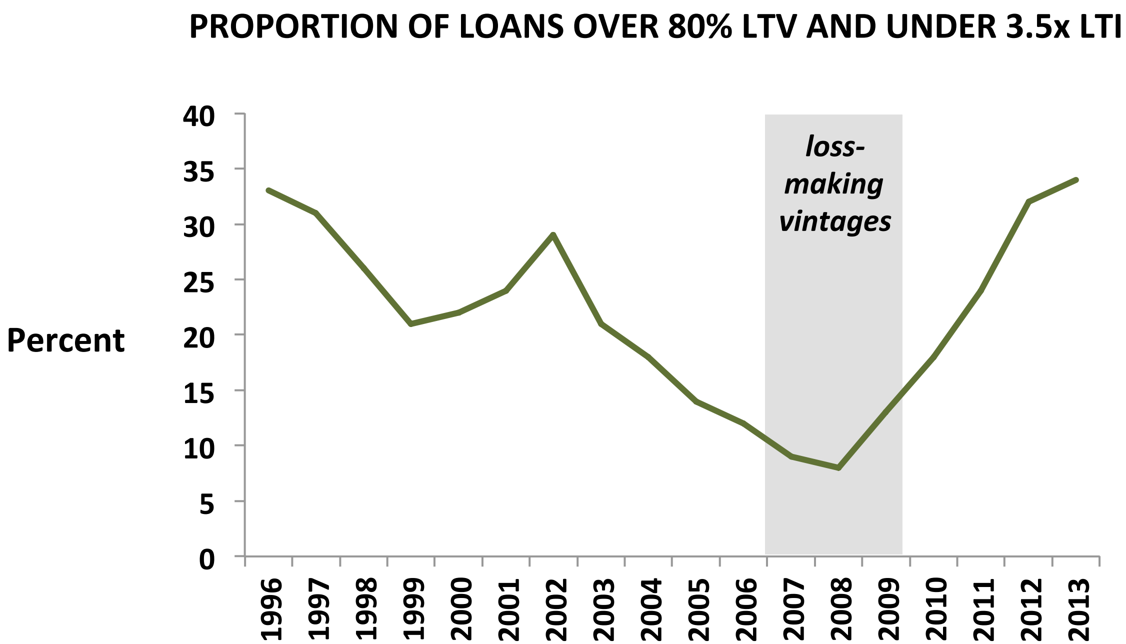
- **An LTV cap might have a useful role to play in reining in an overheating market**
  - **The cap essentially works as a temporary brake on demand. While some potential purchasers are pushed out of the market, they do re-enter the market once they have saved large enough a deposit**
  - **But now is not the right time to apply the brakes. House building, housing transaction volumes and mortgage lending are all at low levels**

High LTV lending is only high risk if it precedes a recession and house price crash



Source: Central Bank of Ireland. Loss rate calculated as 90+ default rate times loss given default. Breakeven loss rate assumes 10 year average life and 30 bps margin before losses i.e. breakeven at 300 bps lifetime loss rate

The incremental impact of an LTV cap in the presence of LTI cap appears to be pro-cyclical



Source: Central Bank of Ireland