House Prices and Credit Constraints

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Variations across countries

	Mortgage/GDP	Loan-to-value
Denmark	98	80
Finland	31	70-85
France	29	66
Germany	43	70
Iceland	102	80-90
Ireland	59	91-95
Italy	15	80
Netherlands	73	112
Norway	55	60-80
Spain	50	83
Sweden	37	90
UK	78	80

Source: Miles and Pillonca, tables 1 and 2, Oxford Review of Economic Policy 2008.

Why do LTV ratios vary?

- Technology of credit evaluation
- Legal system
- Cost of foreclosure
- Risk-sharing between lender and borrower
  - Lender recourse to borrower assets

Borrowing constraints and housing demand

- Constrained household
  - Assets available for downpayment => housing expenditure
  - Housepricedemand = Assets/(1-LTV*)
    - Elasticity wrt downpayment ratio = -1
- LTV* increased from 85% (US 1990) to 93% (US 2005)
  - Translates into a demand increase for credit constrained households of 114%.
  - With 10% of all households credit constrained the aggregate impact is 11%.

Sensitivity to fundamentals

- dHousepricedemand/dAssets = 1/(1-LTV*)
  - For an owner
    - Assets ≈ value of current house minus debt.
    - The higher is LTV* the more sensitive is housepricedemand to asset prices (= house prices).
    - Multiplier effect on house prices.
      - For a given supply of housing, the higher is LTV* the more sensitive are house prices to fundamentals and the more volatile are house prices (Lamont and Stein).
    - Income and user cost coefficients in housing price equations should be functions of LTV.

What drives LTV?

- Technology of credit evaluation.
- Income prospects of first-time buyers
- House price expectations
- Price of risk
- Sentiment.

- Is a high LTV problematic?
  - Demand (and hence price) more volatile.
  - Default option closer to being in the money.

Impact on rent

- The two approaches should be seen as complements.
  - Aggregate demand for owner-occupied housing depends on user cost, borrowing constraints and rent.
  - Lowering LTV* increases demand from owner-occupiers, induces some renters to switch to owner-occupancy. This would lower rent and induce some owners to switch to renting.
  - Add income to the price-to-rent models.

Minor quibbles

- Expectations formation
  - Backward looking
  - Optimal forecasts
- Log transformation of user cost
  - Constant elasticity = high sensitivity at low user cost = high sensitivity to measurement errors.
  - Measure of expected capital gains is arbitrary.
  - Constant elasticity is just a pedagogical device.
- Time dummies
- Gradual adjustment does not necessarily reflect ”inefficiency”.