Discussion of "Credit Supply and the Housing Boom" by Alejandro Justiniano, Giorgio E. Primiceri, and Andrea Tambalotti

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The paper

argues that an expansion in mortgage funding accounted for the runup in housing prices, not so much reductions in the collateral constraint on borrowers

This is not such a novel view—it is close to a consensus among housing experts

The long essay by Levitin and Wachter, cited in the paper, says the following in its abstract:

> *[Our paper] demonstrates that the bubble was a supply-side phenomenon attributable to an excess of mispriced mortgage finance: mortgage-finance spreads declined and volume increased, even as risk increased—a confluence attributable only to an oversupply of mortgage finance.*

The role of the interest rate in allocating risk

The paper also mentions the role of the declining world interest rate

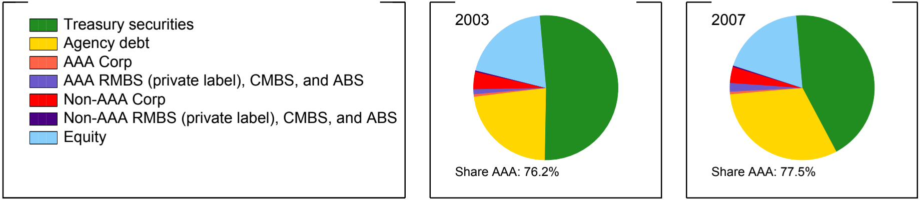
The interest rate governs the terms of trade between risk lovers and risk avoiders

The risk lovers borrow from the risk avoiders and hold the riskier investments

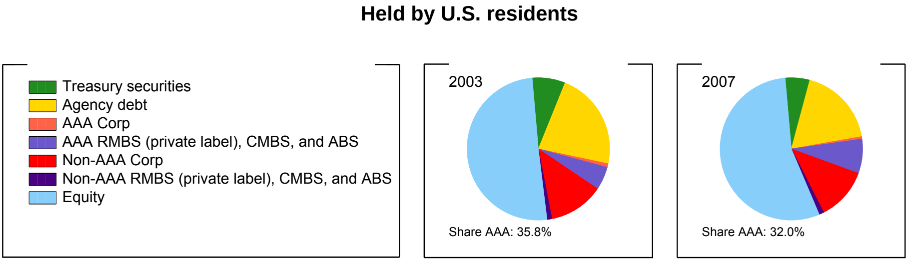
Many different institutions have emerged to tranche risk in this way: banks, hedge funds, and securtizations with credit enhancement to create low-risk instruments (AAA-rated tranches) for some clienteles, and high-risk instruments (equity tranches) for others

Risk-avoiding portfolio, from Bernanke's global-saving-glut paper, 2011

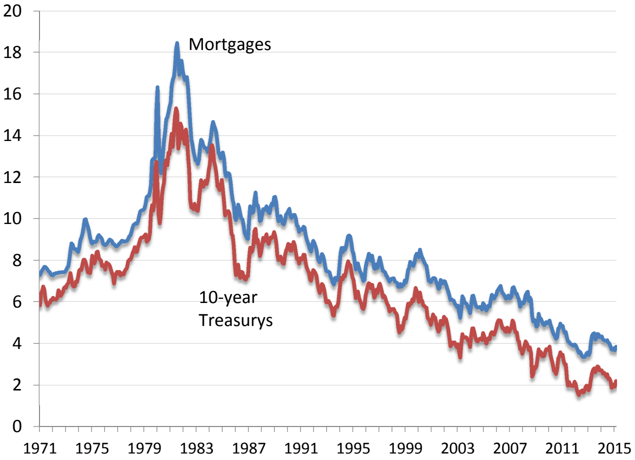
Held by global saving glut countries



Risk-loving portfolio



30-YEAR FIXED-RATE MORTGAGE INTEREST RATE AND 10-YEAR TREASURY BOND RATE



Mortgages v. Treasurys during the expansion, crisis, and recovery

How strong is the effect of the lower interest rate?

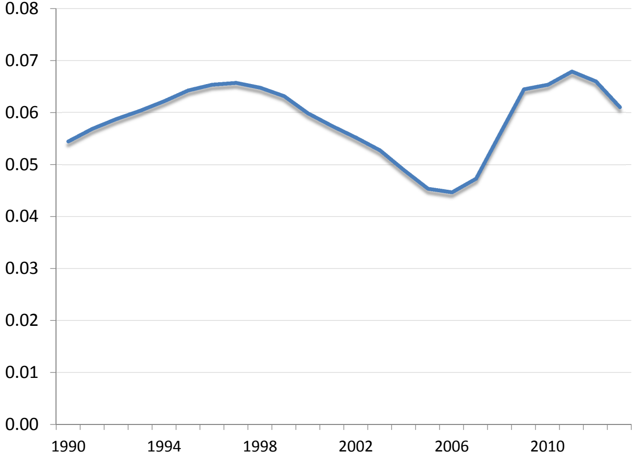
The Gordon dividend-growth model applied to housing may help on this:

$$p = \frac{f}{r - g}$$

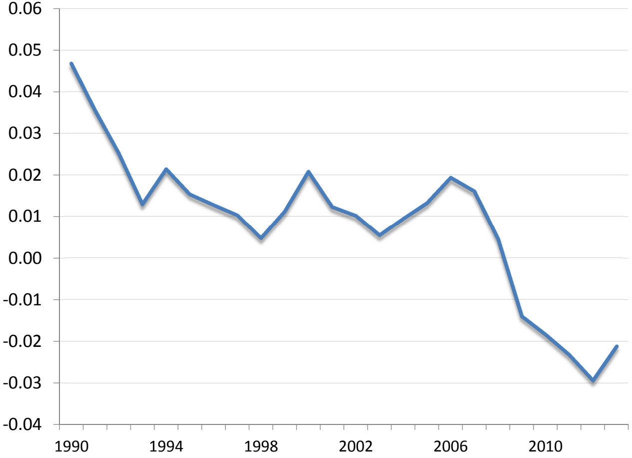
a lower interest rate r or a higher flow-value growth rate g raises the price of housing p

$$g = r - \frac{f}{p}$$

Ratio of flow value of owner-occupied real estate to market value



Implied nominal expected growth rates of flow value



Conclusions about the role of the interest rate

Over the period from 1993 through 2006, the implied expected growth rate was close to constant, meaning that all of the rise in housing stock prices relative to flow prices came from the falling interest rate

But the collapse of prices starting in 2007 was not at all the result of rising interest rates, but rather of a large decline in the expected growth of the flow value of housing

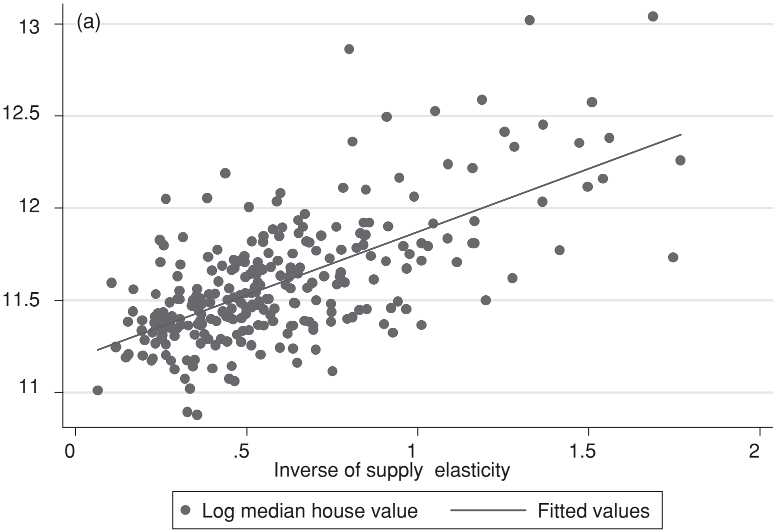
Supply of housing

The model assumes a fixed supply of houses—an increase in demand raises house prices, and does not stimulate new construction and the shift of land into housing and out of other uses

In reality, many markets have elastic supply of new houses and house price did not rise very much during the bubble

A paper by Albert Saiz has demonstrated this point, and provides strong evidence of the heterogeneity of housing markets along this dimension

Albert Saiz, *QJE*



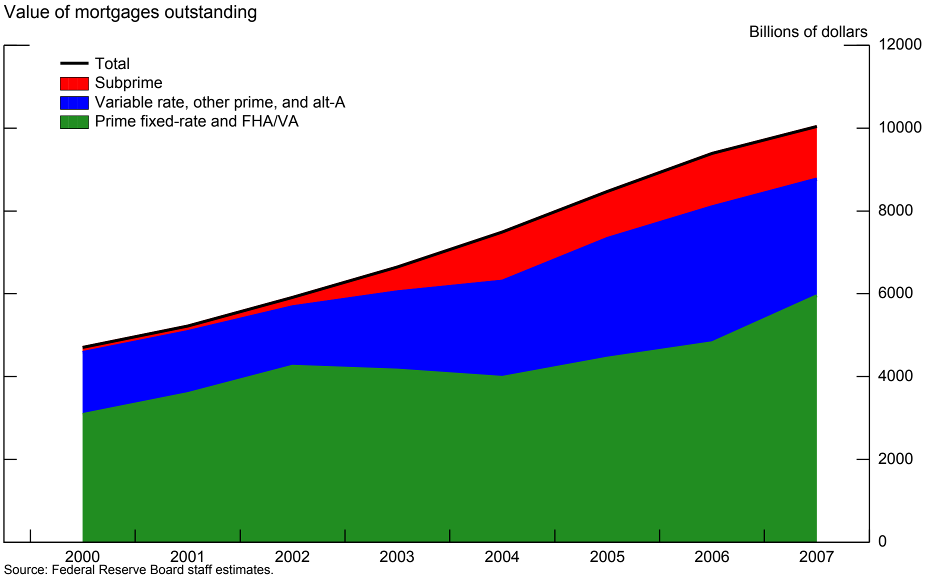
Modeling the opening of the mortgage market

The paper's model takes the opening to be a simple upward shift in an exogenous constraint on all mortgage finance

This assumption contradicts the evidence that the traditional 30-year fixed mortgage is tightly linked to other debt markets

More subtle modeling would recognize the specific importance of new types of mortgages, which extended mortgage financing to borrowers previously excluded

Expansion of non-traditional mortgages



Source: Federal Reserve Board staff estimates.

The fax machine removed a key mortgage bottleneck

The fax was the first practical way to distribute the terms of mortgages in the wholesale market to independent brokers, who proved to be adept at helping previously excluded classes of borrowers obtain loans

Concluding remarks

The paper is on the right track in emphasizing the supply of finance to housing

Rough calculations suggest that all of the price increase resulted from declining interest rates; innovation in mortgage forms and extension of eligibility to less credit-worthy borrowers is secondary

So the paper's characterization of the rise in supply might better be the connection to the world interest rate, rather than a shift of a fixed constraint.