

DISCUSSION OF “CREDIT SUPPLY AND THE  
HOUSING BOOM” BY ALEJANDRO JUSTINIANO,  
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## THE PAPER

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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.*

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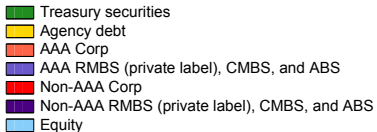
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Many different institutions have emerged to tranche risk in this way: banks, hedge funds, and securitizations with credit enhancement to create low-risk instruments (AAA-rated tranches) for some clienteles, and high-risk instruments (equity tranches)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

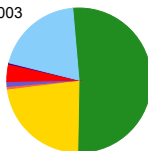


# RISK-AVOIDING PORTFOLIO, FROM BERNANKE'S GLOBAL-SAVING-GLUT PAPER, 2011

## Held by global saving glut countries

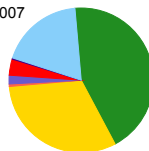


2003



Share AAA: 76.2%

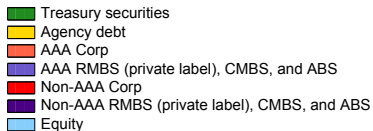
2007



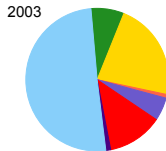
Share AAA: 77.5%

# RISK-LOVING PORTFOLIO

## Held by U.S. residents

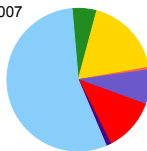


2003



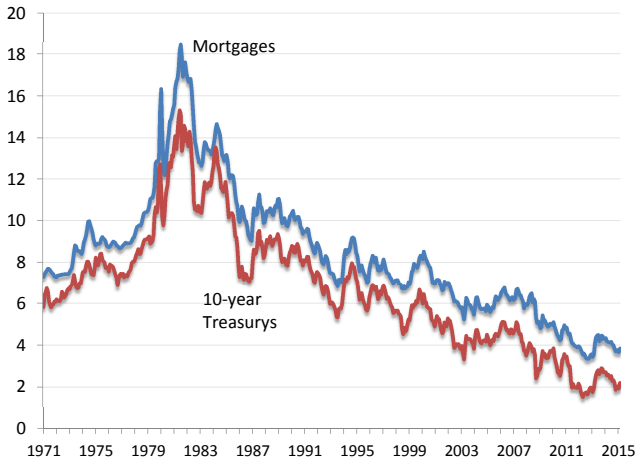
Share AAA: 35.8%

2007



Share AAA: 32.0%

## 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  $p$

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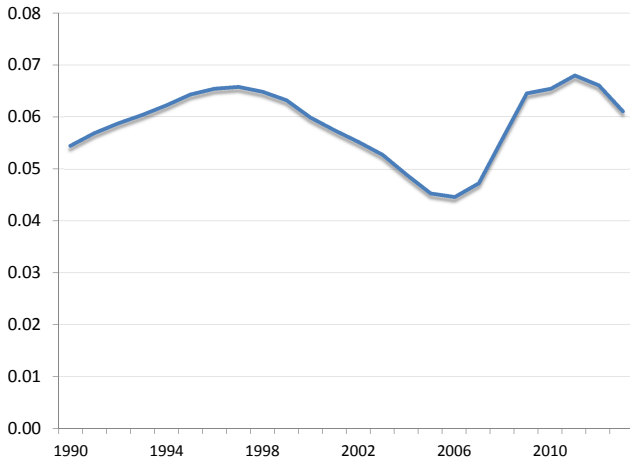
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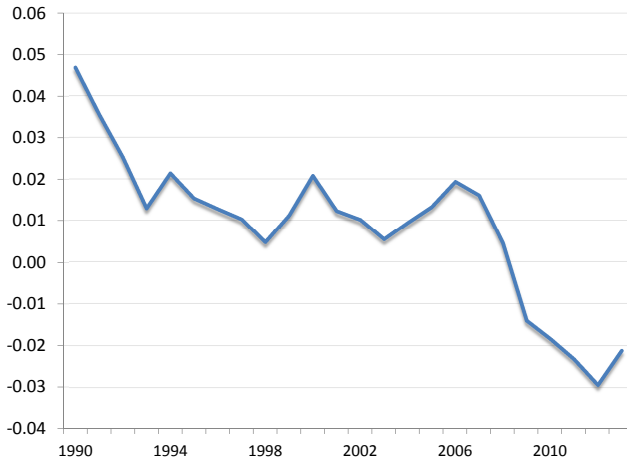
$$g = r - \frac{f}{p}$$

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# 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

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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

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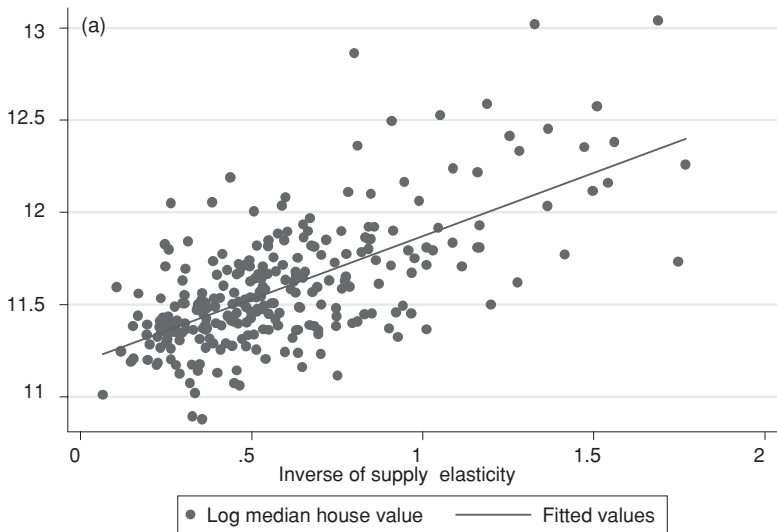
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In reality, many markets have elastic supply of new houses and house price did not rise very much during the bubble

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

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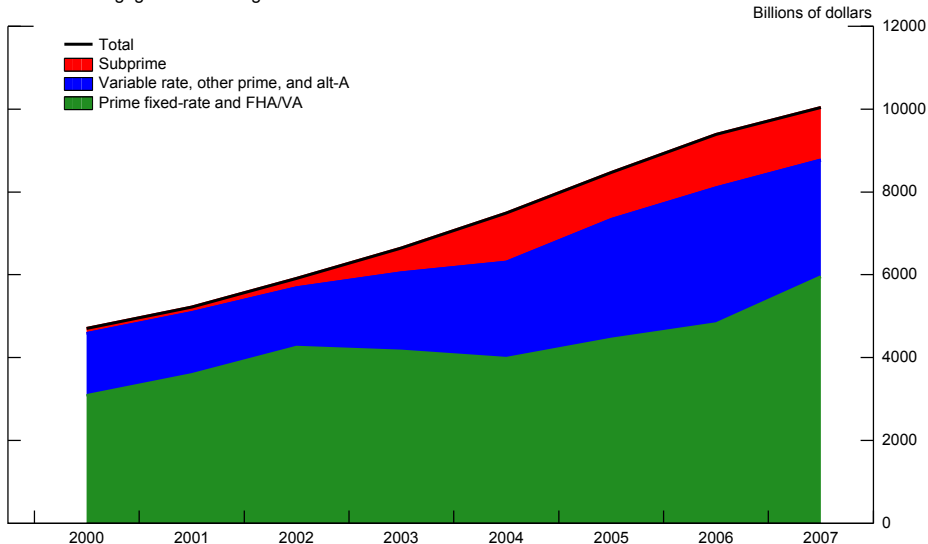
This assumption contradicts the evidence that the traditional 30-year fixed mortgage is tightly linked to other debt markets

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

Value of mortgages outstanding



# THE FAX MACHINE REMOVED A KEY MORTGAGE BOTTLENECK



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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

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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.

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