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Real Estate, Interest Rates, and the Mortgage Market Meltdown

Summary

- Mortgage rates are an important factor in explaining house prices and homeownership rates
- House prices have already corrected to levels at or below their long-term trend
- High spreads between Treasury securities and mortgage rates are further pushing down house prices
- Government must act to reduce mortgage spreads to “normal levels” stabilize house prices and spur homeownership

What could possibly have caused real asset prices to boom around the world (at the same time)?

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Low interest rates

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Evidence from user costs

- Variation in the after-tax cost of owning a home can explain an appreciable amount of variation in price-rent ratio
- Excess variation remains, but it is mostly due to US national factors
  - Lending markets
  - Irrational exuberance

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User Cost Regressions With Case and Shiller and OFHEO Price Indexes

Dependent Variable: Log of House Price Index
(t-statistics in parentheses)

	OFHEO Price Index		Case and Shiller/S&P Price Index	
	(1)	(2)	(3)	(4)
Log of User Cost	**-0.85**	**-0.62**	**-0.73**	**-0.75**
	(-12.71)	***(-2.53)***	***(-10.80)***	***(-3.09)***
Log of Rent	**1.34**	**0.81**	**1.42**	**0.93**
	(15.91)	***(10.74)***	***(16.73)***	***(12.44)***
Year Fixed Effects	**No**	**Yes**	**No**	**Yes**

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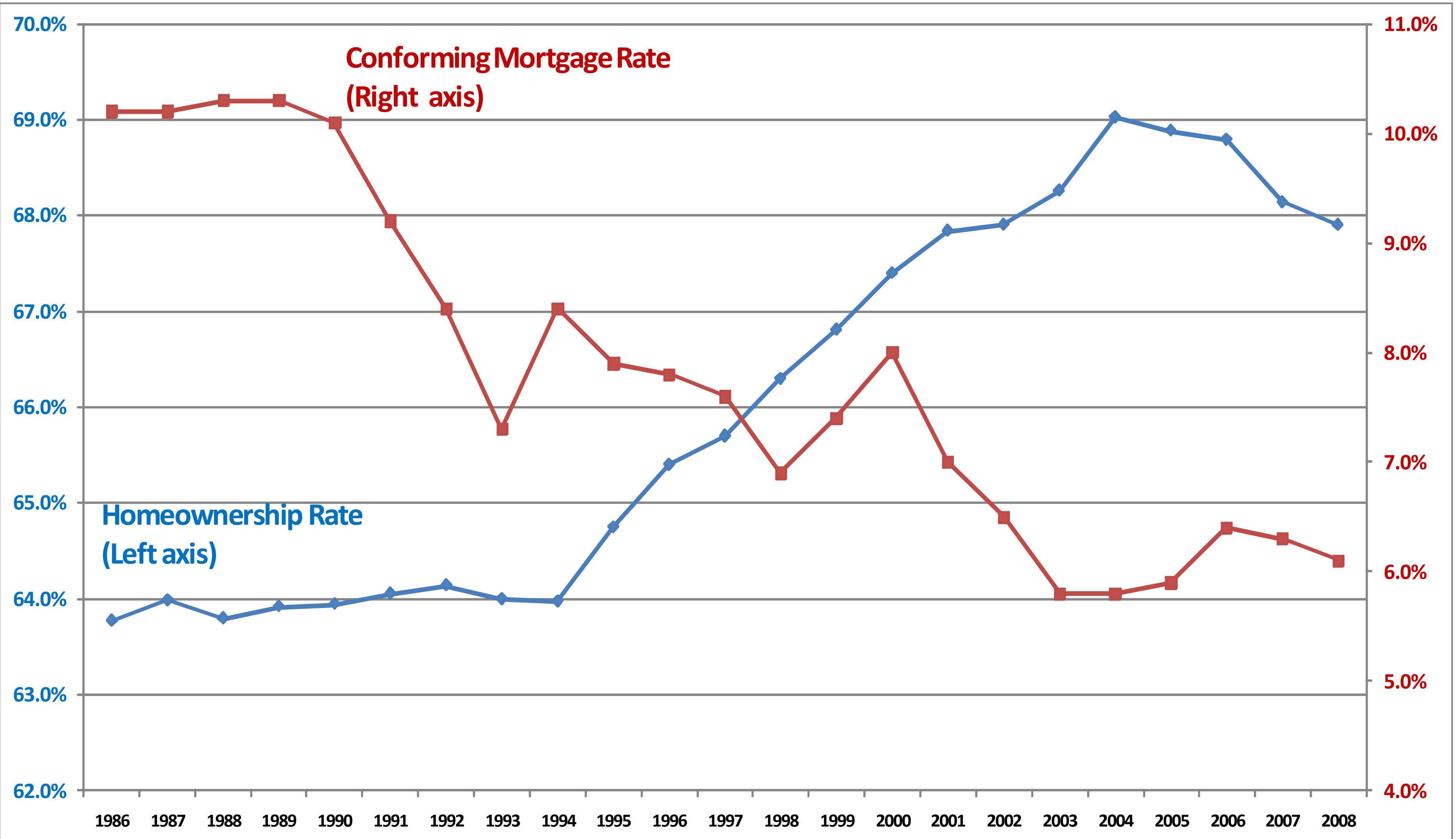
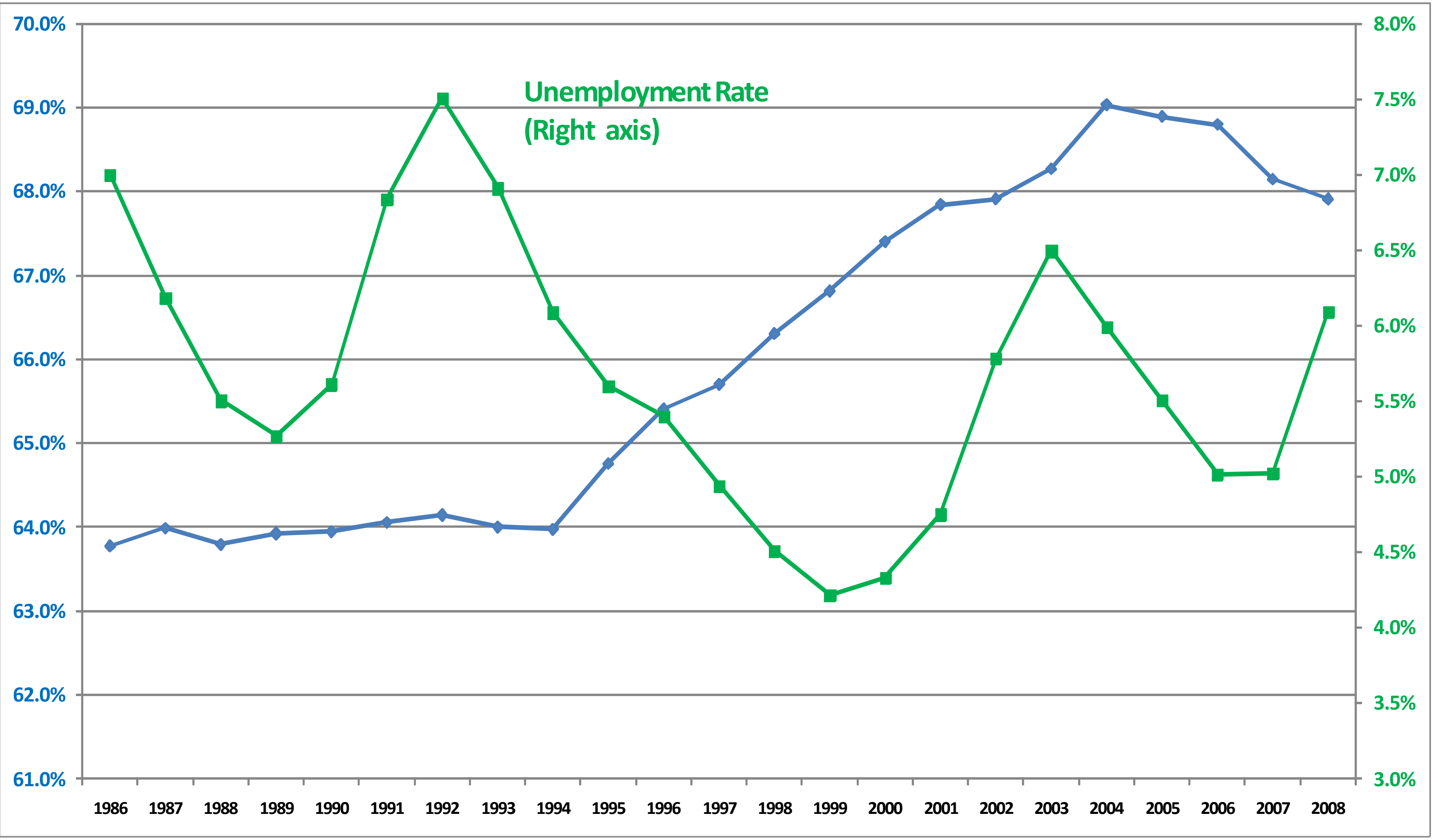
Homeownership rate appear strongly linked to mortgage rate



(sources: US Census Bureau and Freddie Mac)

Homeownership rate appear weakly linked to unemployment rate



(sources: US Census Bureau and Freddie Mac)

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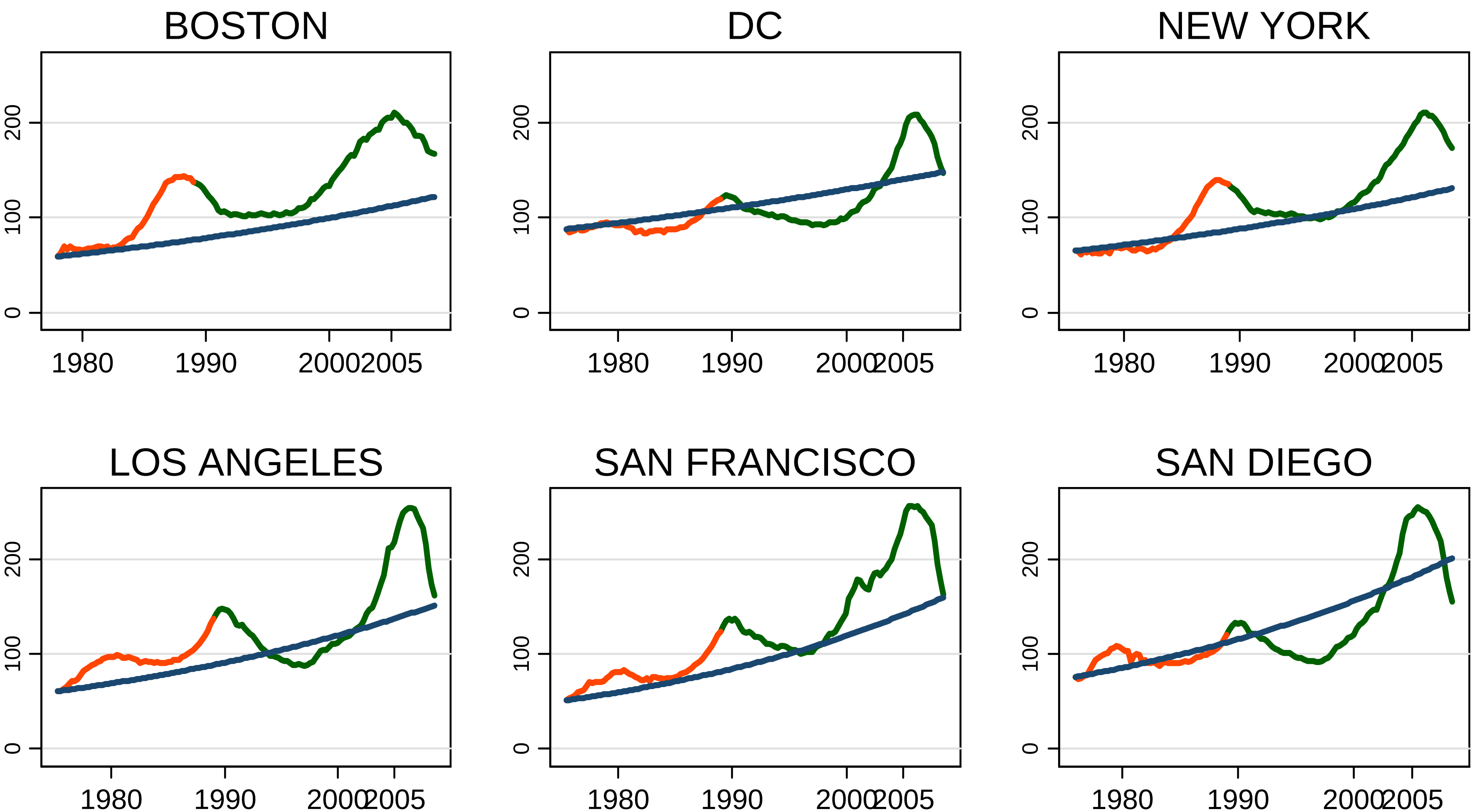
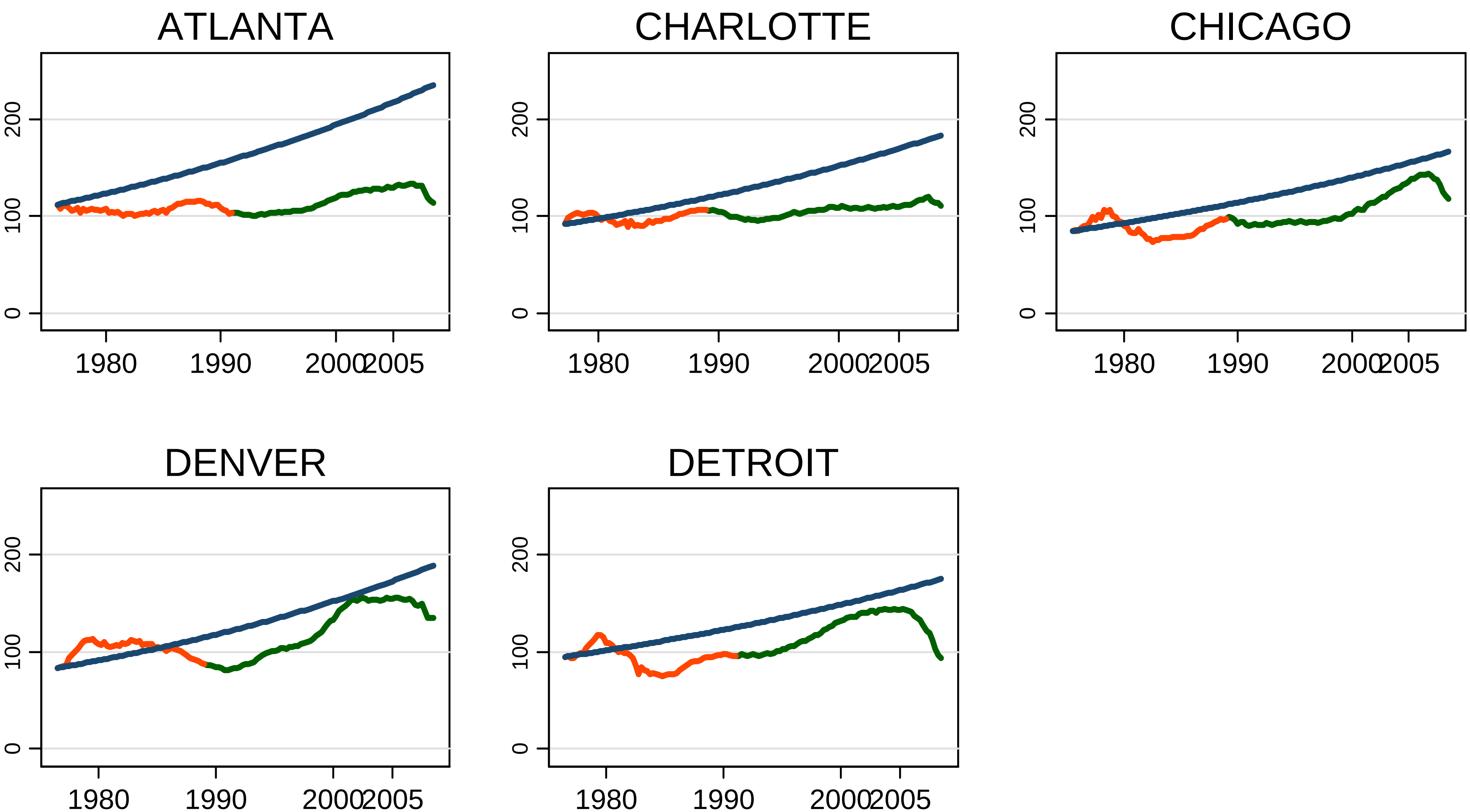
House prices in most markets have fallen close to their real value prior to the boom

House prices relative to 50-year trend



Source: OFHEO, Case-Shiller Index and BLS
OFHEO Index Current as of Quarter 3 2008
Case-Shiller Index Current as of September 2008
Real Home Price Index

House prices relative to 50-year trend



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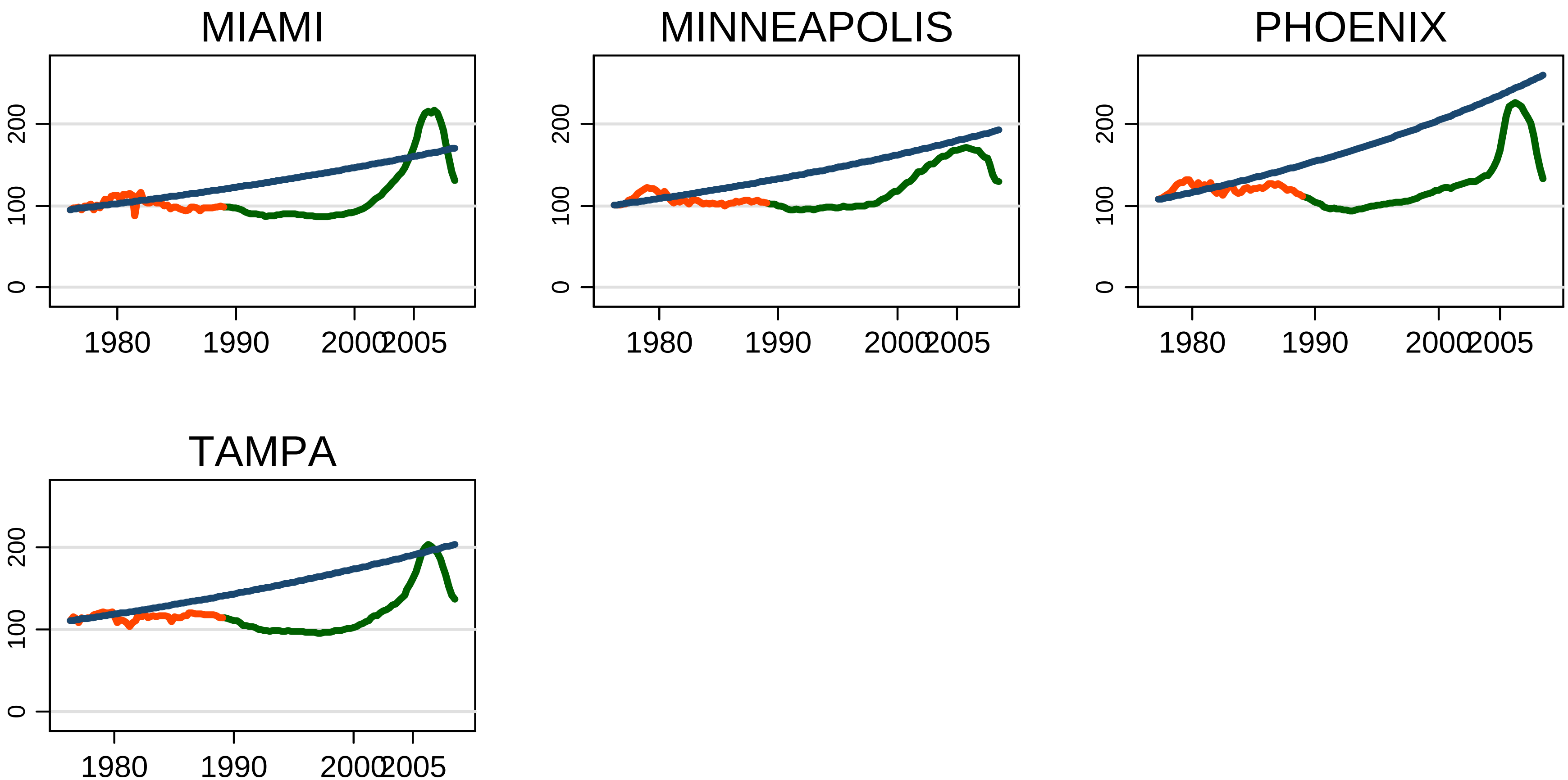

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- Fast Forward to September, 2008
- The Government takes conservatorship of GSEs…
- And mortgage rates go up!

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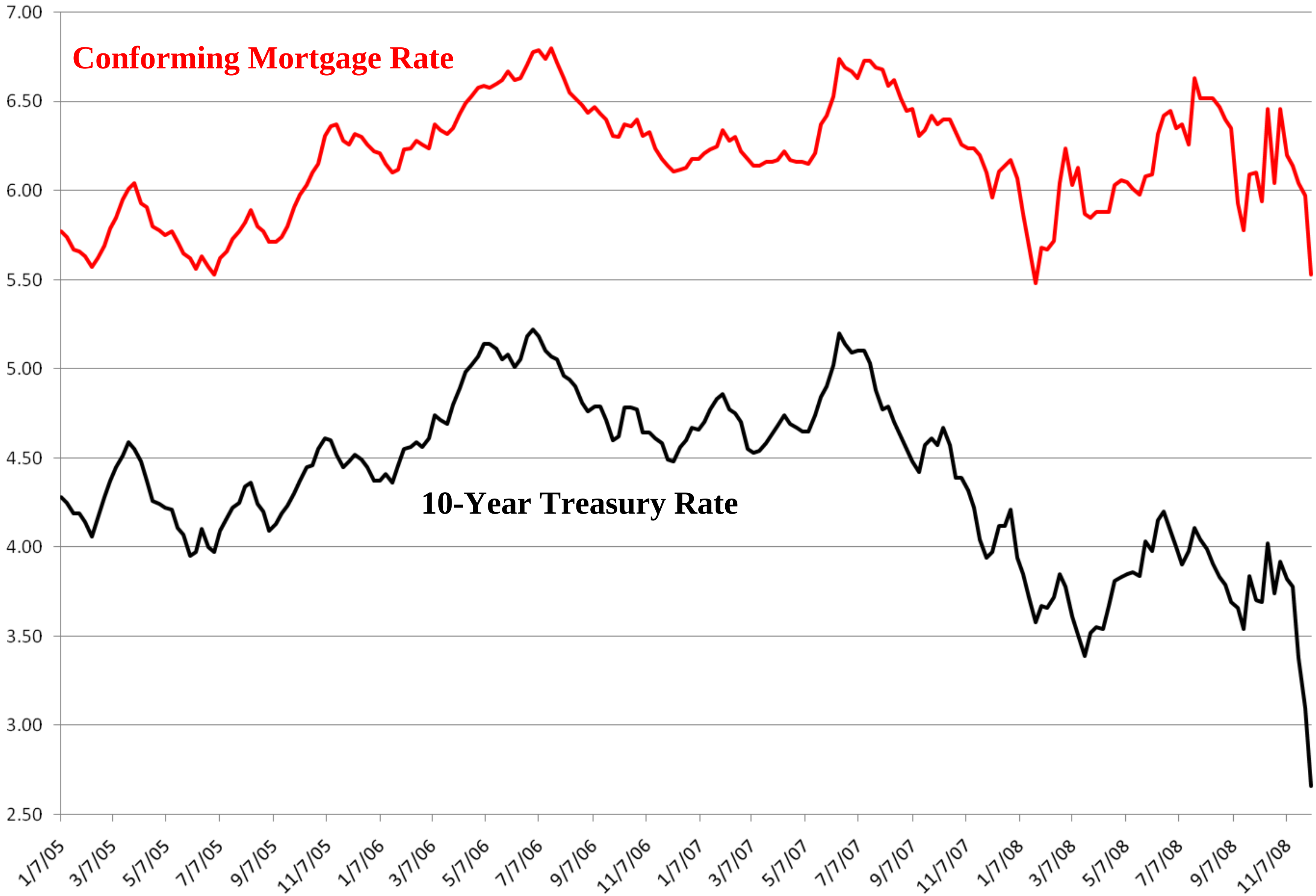
Mortgage and Treasury Rates



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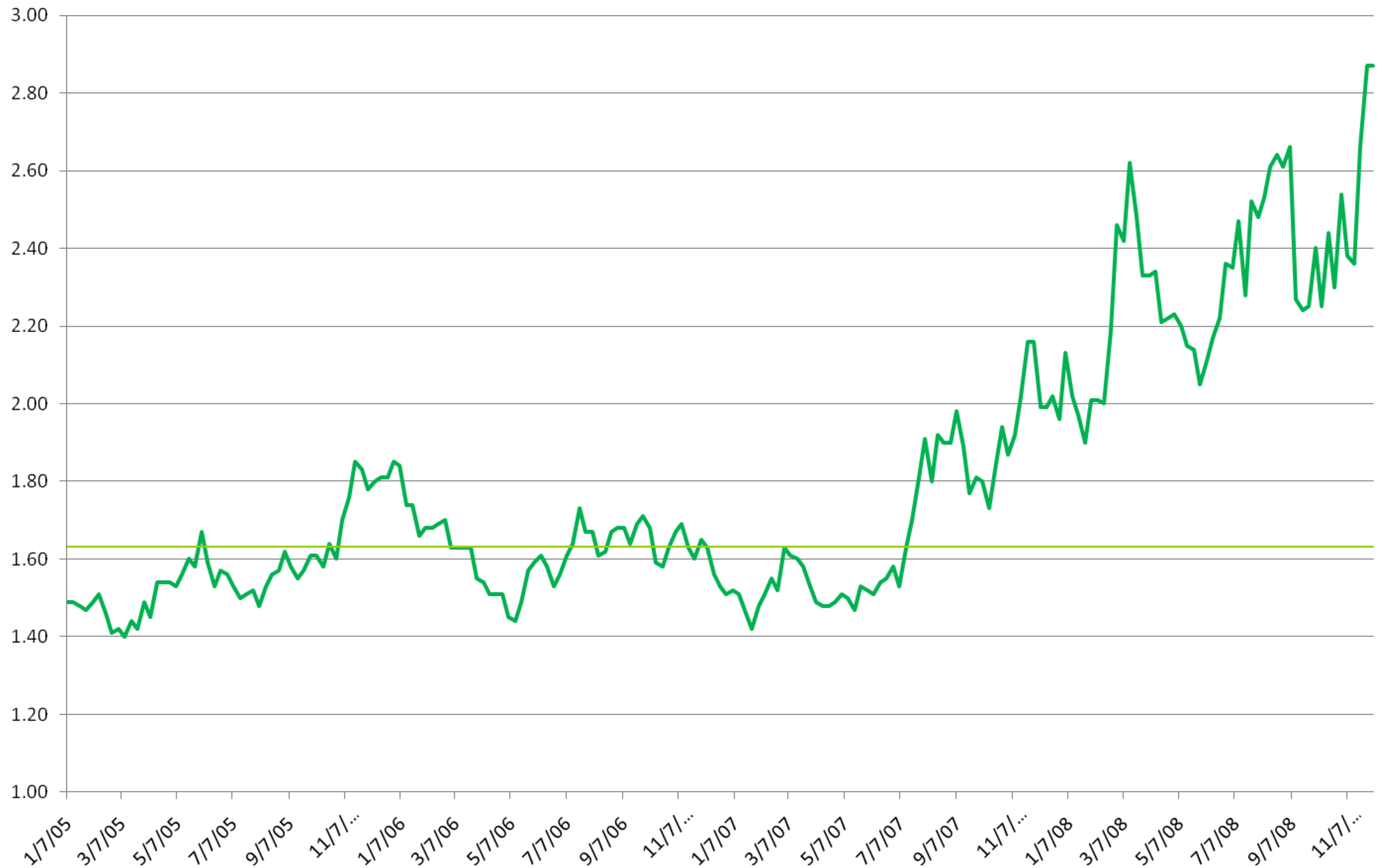
Spread between conforming mortgage rate and 10-year Treasury



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Mortgage Market Meltdown and House Prices: Imputed Rent-to-Rent Ratio

Imputed-Rent to Rent Ratio			
	Historical	2008 Q3	Difference
Spread	1.60	2.45	
ATLANTA	0.93	1.07	16%
BOSTON	0.92	1.06	15%
CHARLOTTE	0.91	1.06	16%
CHICAGO	0.99	1.11	13%
CLEVELAND	0.87	0.97	12%
DC	0.89	1.02	14%
DENVER	0.94	1.10	16%
DETROIT	0.78	0.88	12%
LOS ANGELES	0.86	1.02	19%
MIAMI	0.95	1.07	13%
MINNEAPOLIS	0.97	1.10	14%
NEW YORK	0.85	0.96	13%
PHOENIX	0.89	1.05	18%
SAN DIEGO	0.79	0.95	21%
SAN FRANCISCO	0.76	0.95	25%
TAMPA	0.95	1.08	13%

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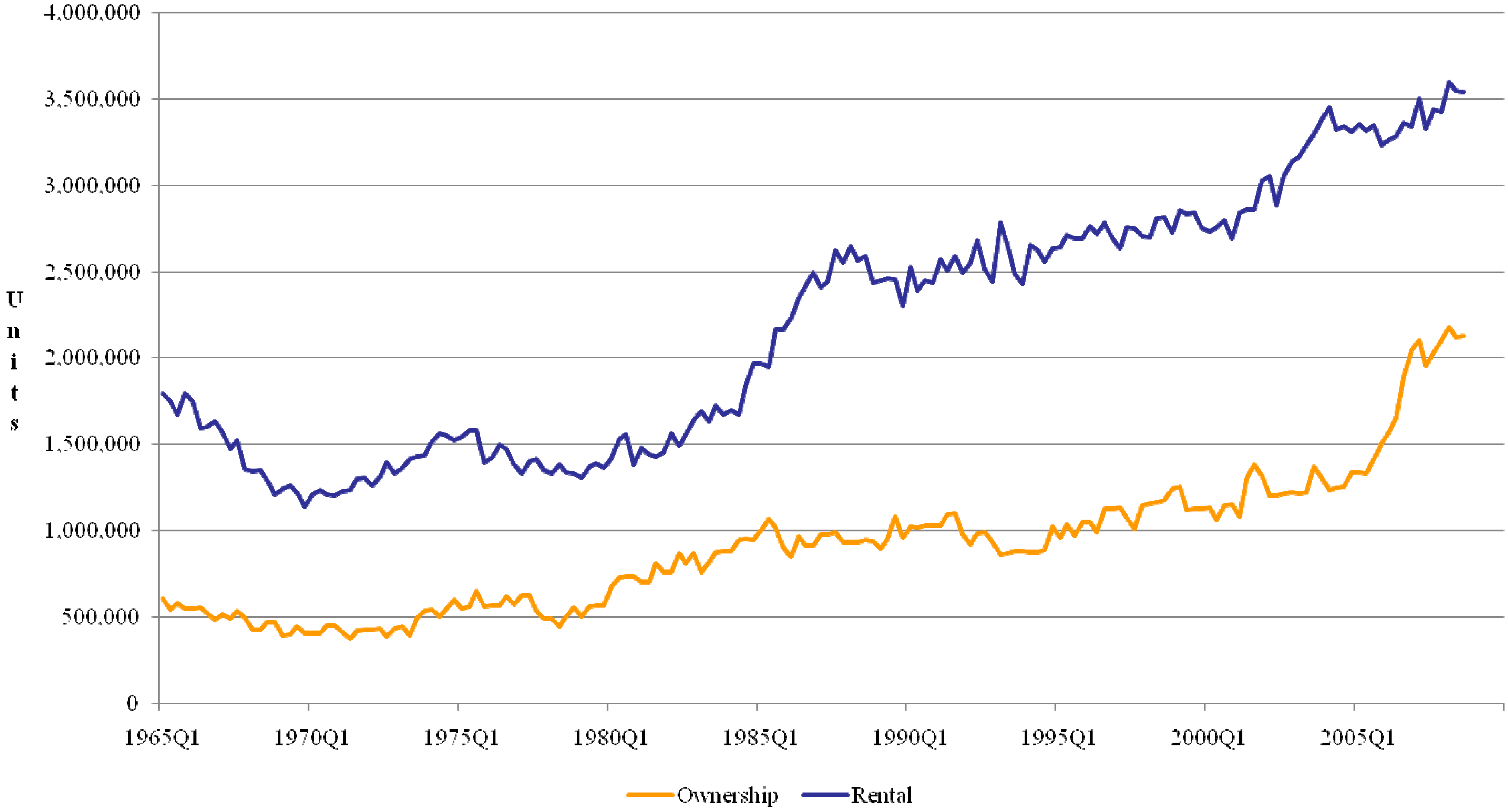
Vacant housing at an all-time high!



Current as of Quarter 3, 2008
Source: US Census
US Residential Vacancy

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So what should policy makers do?

- Original "Hubbard-Mayer" proposal
- Fix the mortgage market: lower mortgage spreads to their 20-year average of 1.6 percent (mortgage rate of about 5.25%)
- Create modern HOLC to share losses on negative equity (similar to "Hope for Homeowners" but less punitive for lenders)
  - Lenders write-off one-half the loss
  - Taxpayers pay half the loss, get some future appreciation on the house
  - Borrower gives up future appreciation for the loss write-down

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Cost of the proposal

- Lower mortgage rates do not cost the government as it would return mortgage market to normal functioning
- Increased government balance sheet use is offset by tangible assets (newly underwritten mortgages with borrowers who have verified income)
- HOLC provision costs $121 billion, but taxpayers receive future equity to offset this expense

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Why do this?

- *Do something now!* (not wait for courts or legislation)
- *No private mortgage market*: Govt is originating more than 90% of mortgages, so it is setting rates
- *Hold up house prices by 10-17 percent nat*ionally relative to where they would fall if the mortgage market remains broken
  – 20% house price decline led to $600 billion in losses for banks, what prices fall another 15%?
  – Taxpayers on the hook for nearly $6 trillion in guarantees due to Fannie, Freddie, Ginnie, AIG, and NY Fed…

Macroeconomic stimulus

- Total stimulus of $118 billion *per year*
- 20 million homeowners can refinance existing mortgages, saving an average of $350/month
  - $39 billion lower interest payments *per year*
  - $16 billion lower payments on lower loan balances from HOLC
  - Lower amortization of $42 billion
- Additional wealth effect of $63 billion thru reduced house price declines of $1.8 trillion (with a marginal propensity to consume from housing wealth of 3.5%)

Other benefits

- Help make houses affordable for first-time buyers
- Dramatic program to improve confidence in the housing market
- Remove millions of mortgages from troubled and conflicted servicers
- Refinance borrowers into 30-year, fixed-rate mortgages
- Benefits many homeowners, not just the most over-levered borrowers

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“Leaked” US Treasury Proposal

- Mortgage rate of 4.5% for purchase money mortgages only through end of 2009
- Primary vehicle: Fannie and Freddie (minimum 10% down)
- Additional program through FHA for lower down payment mortgages
- Questions:
  - How to ensure retail rate stays at 4.5%
  - Mechanism is still unclear; likely involve Fed facility

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Why is this a good plan?

- **Once in a lifetime opportunity to purchase a house at a time of already very low prices!**
- Appreciably improve homeownership and reduce housing inventory
  - About 4.6 million houses on the market
  - 2.1 million vacant houses
- Add up to 2.2 million additional homeowners (see regression below)
- Change consumer perceptions of additional price declines

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What is needed next?

- Extend plan to refinancings
  - Easily done without extensive legislation
  - Could be 20 million or more refinancings with bulk of homeowners saving $400/month or more (this is the equivalent of a new car!)
  - No cost to government with low US Treasury rates

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What about foreclosures?

- Bankruptcy reform is not the answer
  - Servicers receive no additional fees to do costly workouts (Gan and Mayer, 2007)
    - Servicers have strong incentive to foreclose instead of workout loans (higher fees for foreclosure and senior to all other obligations)
    - But servicers have exactly the same incentive to go to bankruptcy instead of working out loans (higher fees for bankruptcy)
  - 3 million delinquent loans, 52 million loans that are current
  - Risk of higher rates and lower LTVs in the future

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What about foreclosures?

- Our tentative proposal (Mayer, Morrison, Piskorski)
  - Create a fund to pay servicers for successfully working out loans (funded by industry)
  - Most workouts fail, so fee is only paid if borrower is current for at least 6-12 months
  - Set minimum percent of income for workout payments (some loans should not be worked-out)
  - Loan forbearance instead of principal write-down

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Conclusions

- Real estate prices are sensitive to interest rates
- Malfunctioning credit markets are hammering US house prices, even in markets with little exposure to subprime lending
- Government intervention can immediately ensure more normal functioning mortgage and housing markets, saving millions from foreclosure
- Foreclosure prevention through re-working servicer incentives
- Covered bond-like structure may provide a new model for residential and commercial mortgages