

## **Testimony of Robert J. Shiller**

**Stanley B. Resor Professor of Economics and Professor of Finance, Yale University  
Co-founder and Chief Economist, MacroMarkets LLC  
Research Associate, National Bureau of Economic Research**

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Disaster and the Threat to the Broader Economy”  
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Mr. Chairman and members of the committee, I thank you for the opportunity to testify today. My name is Robert Shiller, and I am Professor of Economics and Finance at Yale University, author of the books *Irrational Exuberance* and *The New Financial Order*, Research Associate, National Bureau of Economic Research, and Co-founder and Chief Economist, MacroMarkets LLC.

In my lectures at Yale, my books, public appearances, and business dealing with the financial products as a principal in the firm MacroMarkets LLC, I have been a strong advocate for financial innovation. Financial innovation has the potential to reduce economic risks and promote economic growth. But at the same time I have argued for many years that despite financial innovations, what Allan Greenspan termed “irrational exuberance,” that is irrational optimism about investments and economic prospects, can substantially disrupt financial markets from time to time.

The roots of the current subprime crisis involve the impact of both financial innovations and irrational exuberance. Rapid financial innovation has been a good thing overall, but it has caused some mistakes to be made, mistakes that are associated with the immense speculative booms we have recently observed in the market for single family homes.

### 1. The Recent boom in Housing Prices

The most important cause of our current crisis is the housing boom that preceded it. The U.S. has, since the late 1990s, had its biggest national housing boom in history. I believe that the boom was driven by the expectations of home purchasers that further price increases were likely, if not inevitable. Thus, home buyers were willing to pay ever higher and higher prices to participate in the perceived bonanza.

Booms tend to produce financial innovations. They also produce excesses such as the decline in lending standards that generated the subprime crisis.

Figure 1 shows the dimensions of the boom according to the U.S. National S&P/Case-Shiller Home Price Index, which is produced by Fiserv Inc using methods that Karl Case of Wellesley College and I originated. The U.S. housing market gained 86% in real inflation-corrected value from 1998 to the peak in early 2006. In my view, this degree of

asset value inflation was unwarranted, and driven by excessive investor enthusiasm for housing as an investment. Since the peak, it has lost 6.5% of its real value.

Note from Figure 1 that neither the rise of home prices to 2006 nor the fall thereafter can be attributed to changes in the rental market for homes or to changes in building costs. That is part of the reason why I believe that the home price changes are basically speculative, and, I believe, driven by market psychology.

The futures market for single family homes at the Chicago Mercantile Exchange that I and my colleagues at MacroMarkets LLC helped establish last year has been in backwardation, that is, it has been implying further declines in home prices. If one corrects for inflation, it can be interpreted as predicting another 7% to 13% decline in real value by August 2008, depending on city beyond the 6.5% we have already experienced,. Since the asset values in the housing market are so large (approximately \$23 trillion) this amounts to a real loss of home value on the order of trillions of dollars by August 2008.

## 2. Impact of the Subprime Lending Fallout on the U.S. Economy

While the media has focused on lax and irresponsible lending standards, I believe that this loss in housing value is the major ultimate reason we see a crisis today. The decline in house prices stands to create future dislocations, like the credit crisis we have just seen, if home prices continue to fall. Notably, mortgages tend to default and end in foreclosure after home prices fall, since people who have purchased homes when prices were very high may see their houses now have negative net worth and, perceiving further falls coming, they no longer have the motivation to struggle to make payments. Thus, the problem is larger than simply the group of home buyers who have subprime mortgages.

Although mortgage bondholders and servicers may mobilize unprecedented resources for loan work-outs, we are very likely to see higher foreclosures in the future. Programs like FHA Secure, which appear to be focused only on assisting home owners with positive equity, will not stem the rising tide of defaults.

Declines in residential investment have been an important factor in virtually all recessions since 1950, as is shown in Figure 2. The last time we saw such declines, in 1990-91, there was a U.S. and worldwide recession, of rather short duration, but followed by a weak economy for several years. The housing boom since the late 1990s was clearly bigger than the one that preceded the 1990-91 recession, and the contraction in residential investment since last year is sharper.

I am worried that the collapse of home prices might turn out to be the most severe since the Great Depression. It is difficult to predict the depth, duration and all of the consequences of such a decline operating in a much more complex modern economy.

My own research, with Karl Case and John Quigley, has shown a strong effect of housing prices on people's spending historically, which would suggest that consumption spending would contract as home prices fall. But, even beyond the effects that we have found in past cycles, the bursting of the housing euphoria, and the attendant financial crises, may bring on a further loss of consumer confidence, given the size of the price drops and media attention the current crisis has been generating.

There is a significant risk of a recession within the next year. The Federal Reserve will undoubtedly take aggressive actions, which will mitigate its severity. But, if home price deflation persists or intensifies, they may discover that the Achille's Heel of this resilient economy is the evaporation of confidence that can accompany the end of boom psychology.

### 3. Effects on Home Ownership Levels

The promotion of homeownership in this country among the poor and disadvantaged, as well as our veterans, has been a worthy cause. The Federal Housing Administration, the Veterans Administration, and Rural Housing Services have helped many people buy homes who otherwise could not afford them. Minorities have particularly benefited. Home ownership promotes a sense of belonging and participation in our country. I strongly believe that these past efforts, which have raised homeownership, have contributed to the feeling of harmony and good will that we treasure in America.

But most of the gains in homeownership that we have seen in the last decade are not attributable primarily due to these government institutions. On the plus side, they have been due to financial innovations driven by the private sector. These innovations delivered benefits, including lower mortgage interest rates for U.S. homebuyers, and new institutions to distribute the related credit and collateral risks around the globe. Unfortunately, as the distance between originators and the ultimate investors in subprime assets grew and risk was managed more efficiently, so too did the underwriting complacency.

The layered risks and opacity of certain securities backed by recent vintage subprime mortgages are unprecedented. Riskier mortgage products – such as those entailing a low down-payment, negative amortization, limited documentation, no documentation, payment options, adjustable rates, and subprime credit – have been offered for decades by portfolio lenders and specialty finance companies. However, in the past few years alone, individual loans with a growing combination of these risks have been promoted, originated, funded, and securitized in the mainstream of mortgage finance. The housing boom and the global appetite for outsized returns enabled a large playing field to develop quickly. The rules of the game were loose and untested, and play was largely unregulated.

A sharp distinction should be made between promoting home ownership for low income individuals and promoting home ownership in general. We do not need to feed the housing boom any more, or to bail out middle income people who tried to make huge profits in the housing boom.

It is among lower-income Americans that the crisis is most severe. Indeed, according to the three-tier Fiserv/Case-Shiller Home Price Indices that track appreciation rates by price segment for major cities, the housing boom since 1998 has been more concentrated in low price homes than high-price homes. This fact is consistent with our observation that the growth of subprime loans has been an important driver of home prices. It also suggests that lower-priced homes may therefore fall further if the contraction continues, setting the stage for disproportionate negative wealth effects for American making the contraction in home owners with low incomes especially burdensome.

#### 4. Some Recommendations

The FHA, the GSEs, private mortgage investors and mortgage servicers should be incentivized to further assist the lower-income and minority borrowers and others who have been victimized by fraudulent and predatory lending practices in the recent boom. We should create, along lines advocated by Harvard Law professor Elizabeth Warren, a Financial Product Safety Commission, patterned after the Consumer Product Safety Commission, to deter poor lending practices in the future. Formal safeguards against the practices and influences that generate systematic home appraisal inflation are also long overdue in the mortgage lending industry. We should, at the same time, promote other risk managing innovations in housing, such as home equity insurance, shared equity mortgages, home price warranties, and down-payment-insured home mortgages. All of these risk-management vehicles will help mitigate the severity of impact on individual homeowners when we next encounter a boom-bust cycle in home prices.

#### 5. Attachments

I attach two recent papers of mine that expand on ideas in this testimony. The first is "Understanding Recent Trends in House Prices and Home Ownership" which was presented at Housing, Housing Finance, and Monetary Policy," an economic symposium sponsored by the Federal Reserve Bank of Kansas City in Jackson Hole, Wyoming, on August 31-September 1, 2007. The second is "Low Long-Term Interest Rates and High Asset Prices" which was presented at the "Celebration of Brookings Papers on Economic Activity" Conference, Brookings Institution, Washington DC, September 6 and 7, 2007.

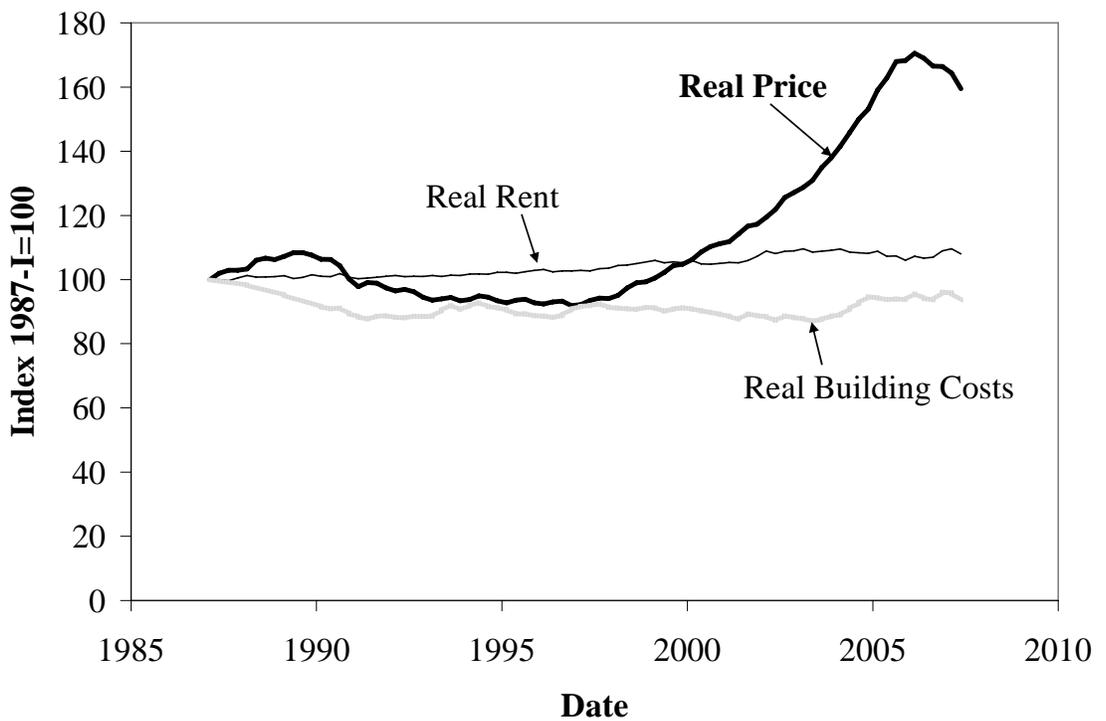


Figure 1: Real US Home Prices, Real Owners Equivalent Rent, and Real Building Costs, quarterly 1987-I to 2007-II. Source: Robert J. Shiller: “Understanding Recent Trends in House Prices and Home Ownership” Federal Reserve Bank of Kansas City Jackson Hole Symposium, September 2007 [attachment to this testimony]. Real US Home Price is the S&P/Case-Shiller U.S. National Home Price Index deflated by the Consumer Price Index (CPI-U) for the first month of the quarter rescaled to 1987-I=100. Real Owners Equivalent Rent is the U.S. Bureau of Labor Statistics Owners Equivalent Rent December 1982=100 from the CPI-U divided by the CPI-U, all items, 1982-4=100, both for the first month of the quarter, rescaled to 1987-I=100. Real building cost is the McGraw-Hill Construction/Engineering News Record Building Cost Index for the first month of the quarter (except for the years 1987, 1988 and 1989 where the index is only annual) deflated by the CPI-U for that month.

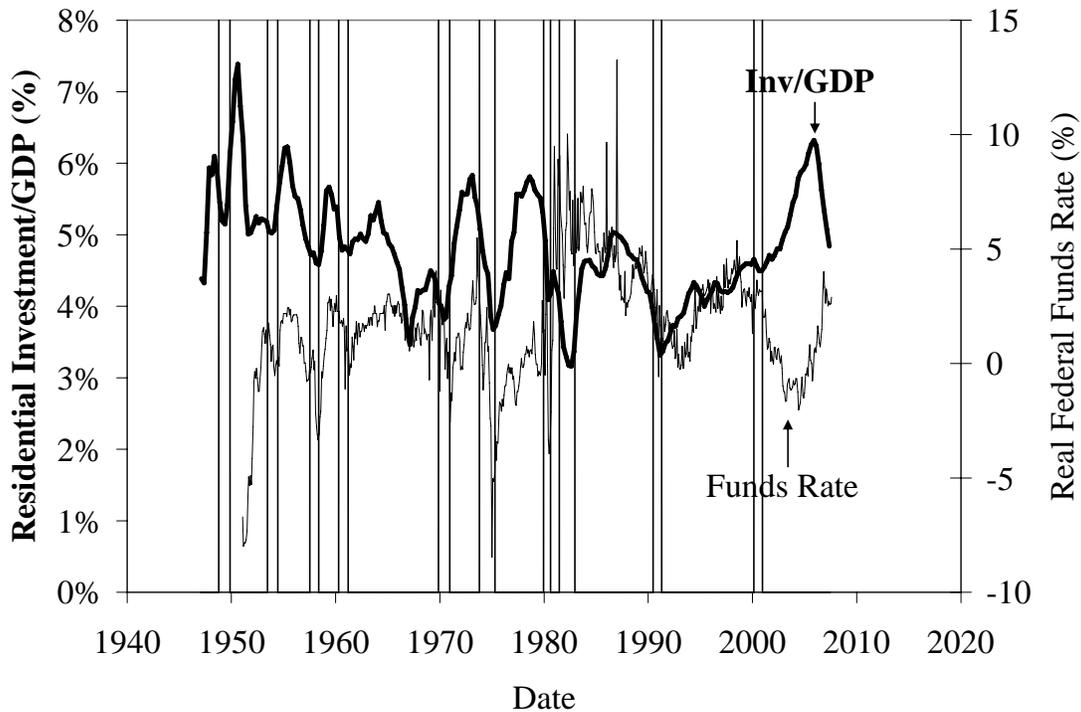


Figure 2: Residential Investment as Percent of GDP (quarterly, 1947-I to 2007-II) and Real Federal Funds Rate (monthly January 1947 to July 2007). Source: Robert J. Shiller: “Understanding Recent Trends in House Prices and Home Ownership,” Federal Reserve Bank of Kansas City Jackson Hole Symposium, September 2007 [attachment to this testimony]. Residential Investment and GDP are nominal values from National Income and Product Accounts. Real federal funds rate, end of month, is computed by subtracting the rate of increase of CPI-U for the 12 months up to and including the month. Recessions as defined by the National Bureau of Economic Research are shown as the narrow areas between adjacent vertical lines.