

ESSAY

THE MYTH OF IRRATIONAL EXUBERANCE:
What Really Caused the Housing Crisis

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Exposing the Myth of Irrational Exuberance

Much has been written about the causes of the foreclosure crisis. Blame has been placed on everyone from irresponsible homeowners to greedy real estate agents, appraisers, and lenders, to sloppy investors, to apathetic government regulators. Others have blamed a "boom psychology", contending that market participants got carried away by a collective and irrational belief in never-ending house price appreciation. This view is the most recent incantation of Alan Greenspan's now famous expression, "irrational exuberance." In his 2008 book *The Subprime Solution*, Robert J. Shiller sees boom thinking as the main cause of today's mortgage foreclosure crisis, as he writes that: "...the most important single element to be reckoned with in understanding this or any other speculative boom is the social contagion of boom thinking."

We do not accept the premise that the global financial crisis was rooted in some sort of mass delusion. Instead, we contend that the major cause was very real: market participants acting in a rational manner in response to short term economic incentives led to the boom and subsequent bust in housing markets, the credit crisis, and the deep recession. If anything, it was the meteoric growth in risky lending that fueled the run up in prices, affecting the psychology of market participants along the way.

Why is this important? If the key causes of the crisis were "irrational" and "psychological" there is little to be done except hope for more sober behavior next time. In contrast, if the key cause was real economic incentives, as we contend it was, then action to change these incentives is justified. If the market as currently structured is unable to police itself, it is clear that the regulatory structure needs to change. Who will assume this responsibility -- whether a committee of regulators or a single regulator (and which one) -- is currently in debate. More importantly, how and what they regulate should address the concrete causes of the crisis, which we set out to explain below.

Loose Underwriting, Promoted by Excess Capital and Global Demand for High Yielding Investments

As is often the case with inter-related forces, the short-term economic incentives leading to the crisis are not easy to disentangle. As a starting point, we point to the seeming oversupply of capital around the globe starting in the late 1990s. In a Wall Street Journal 2005 article, Greg Ip and Mark Whitehouse reported that there was an unprecedented wave of capital flowing around the world, with all of its owners anxiously searching for a better return. In 2005, world pension funds, insurance and mutual funds had \$46 trillion at their disposal, up almost a third from 2000 (June 16, 2005).

In his blog *Abnormal Returns*, Tadas Viskanta documents that the savings glut led to lower returns on traditional investments. As a result, investors around the world became interested in riskier assets because of their potentially high returns. Capital market firms that issued these assets benefited greatly as more and more money was drawn to more lucrative (at least in the short term) but more risky assets.

With its higher yields, the then emerging subprime market provided an ideal outlet for the excess capital searching for higher returns. Until fairly recently, subprime loans were a relatively small share of the overall lending market. These loans carried higher rates and fees to compensate for the perceived higher risk of lending to borrowers who could not get a standard (prime) loan. The subprime market mushroomed from \$35 billion 1994 to \$665 billion in 2005, and represented nearly a quarter of all mortgages by 2006.

Over the years, the demand from Wall Street for the higher return (riskier) assets helped fuel a rapid decline in underwriting standards in subprime and related forms of non-traditional mortgages. The high-cost subprime mortgage had its roots in the home equity refinance market. When the growing demand of Wall Street outgrew the supply of such loans, subprime lending expanded in the home purchase market. Adjustable rate mortgages became increasingly popular. The offering further expanded to include short term teaser rates that adjusted to a fully indexed rate within a few years, interest only periods, negatively amortizing mortgages and the now infamous pay-option ARM that combined all these elements. At the same time underwriting standards grew ever more flexible, once the prior standard was seen as an obstacle to continued lending growth. Down payments got smaller while less and less attention was paid to the borrowers' fundamental ability to repay.

Each of these iterations opened new opportunities to produce more loans, via a fee-driven supply chain. Originators of high cost/subprime mortgages made all their money up-front, through fees paid by borrowers (and often financed in the loan amount) and by investors (in the form of yield spread premiums). Brokers originated the loans, passed them to the lender, and were out of picture, profiting even if borrowers later defaulted. Lenders in turn sold the loans to Wall Street. Wall Street packaged these loans into increasingly complex securities and sold them to investors, earning fees for issuing and managing the securities over time. Credit rating agencies rated the investments, and got a fee if the issuance was successful, and then they too were out of the picture. Ultimately, it was the investor who carried the risk but with the promise of higher returns and the presence of credit enhancement mechanisms from reputable companies such as American Insurance Group (AIG) in place, they felt there was little to fear.

Domestic and international investors exhibited a seemingly endless appetite for the higher returns promised by these riskier assets and instruments. Kay Aaron reports that subprime securitization grew exponentially from only \$11 billion in 1994 to \$814 billion by 2006.

Regulatory Actions and Failures Promoted Risky Behaviors

Concurrently, the actions of regulators provided a strong market signal to other actors. These actions can be grouped into two categories: encouragement of easy credit and nontraditional mortgages that led to over leverage in the market, and a laissez-faire attitude.

Economists believe that the Federal Reserve's reduction in a key interest rate in 2004 was a key factor in the ensuing crisis. The cut in rate was in response to deflation fears, that is, the concern that prices would go down, not up. Sustained low interest rates encouraged borrowing that led to higher prices. Shiller contends that it is possible that the government and its regulators were excessively focused on preventing recession and deflation because they honestly saw the home

price increases as continuing -- if at a reduced rate -- indefinitely, even if they were to implement a monetary policy that would feed the bubble (p. 48).

Concurrently, the Federal Reserve was encouraging Americans to borrow more by assuming more risk. [In a 2004 speech](#) Greenspan complained that borrowers were wasting money by not choosing adjustable rate mortgages:

"American consumers might benefit if lenders provided greater mortgage-product alternatives to the traditional fixed-rate mortgage...To the degree that households are driven by fears of payment shocks, but are willing to manage their own interest-rate risks, the traditional fixed-rate mortgage may be an expensive method of financing a home."

It is reasonable to assume that statements such as the above sent a strong signal to market participants. Not surprisingly, lenders began to offer ever more "innovative" products regardless of their appropriateness to the circumstances of individual borrowers.

Early signs of problems associated with high cost/subprime lending date back to before 1999, when North Carolina passed the nation's first state anti-predatory lending law. Yet Washington seemed uninterested in enacting new regulation to reign in Wall Street and the rest of the industry. On the contrary, Federal regulators preempted national lenders and their subsidiaries from state laws aimed at curtailing the worst practices.

Why this lack of interest? We suggest two reasons. First, the Bush administration and then Federal Reserve Chairman Greenspan shared a belief that markets police themselves effectively. The second reason for government inaction may have been more pragmatic. Consumer spending accounts for over two thirds of all economic activity in the U.S. Wages remained relatively flat during 2000-2005. Thus consumption during those years was fueled in large part by accessing home equity as prices continued to rise due to the increasing availability of ever more flexible high cost/subprime mortgages. It is unlikely that the administration in power wanted to curtail growth by limiting the availability of toxic loan instruments that made much of the consumption, the economic growth, and the optimism possible.

Irrational? Think Again...

The irrational exuberance of irresponsible homeowners and many of those involved in the home buying process has received much of blame for the crisis. But, were the actions of homeowners and others really irrational (ie: based on boom psychology) or were there basic economic incentives and market forces distorting the homebuying process that provided the motivation?

We rely on an example to identify the dynamic forces at play. Assume two identical borrowers, with the same income, wealth, and other characteristics from an underwriting perspective. The only difference between Jane and Jack is their degree of risk aversion. They are both trying to buy John's house. Being more risk averse, Jane pre-qualifies for a 30 year, 6% fixed rate mortgage and escrow of property taxes and insurance. She should be able to borrow \$160,000. In contrast, Jack pre-qualifies for a \$250,000 adjustable rate mortgage with a 3% teaser rate and no escrow. For the same monthly payment, even if Jane puts down 20% of her own money, she can only offer \$200,000, not even close to what Jack can offer before making any down payment. It

is not difficult to guess who is going to make the higher bid for John's house. John ends up selling the house to Jack for \$225,000.

Now Maria, John's neighbor, decides to sell her house. At the suggestion of her real estate agent, who checks the recent sales in her neighborhood (including John's), Maria puts her house for sale for 220,000. Jane is still looking for a house. What kind of mortgage does Jane need to make a successful bid for Maria's house? Jane has a choice to make. She can bid for Mary's house relying on a fixed rate mortgage again instead of a riskier product. But will her bid be successful? Not likely. As the market evolved, product "innovations" enabled similar borrowers to borrow even greater amounts, making Jane's offer less and less competitive. Alternatively, it can be argued that she could try to buy a home in another neighborhood where property values are lower. In the short term, such an option may be feasible, but over time, with hundreds or thousands of transactions, the only way to have a successful bid (afford a home) in a given market will be to rely on a risky mortgage.

These Hobson's choices ripple through the home buying process. Jane's real estate agent, who encourages people to buy only as much house as they can well afford, earns lower commissions and ultimately loses business to Jack's agent who promotes higher priced homes; Jane's mortgage broker, who counsels against taking out a risky mortgage that is only temporarily affordable thus scuttling the deal, will never receive another referral from Jack's agent; the appraiser referred by Jane's broker, who carefully calculates a reasonable value regardless of whether it justifies the offer price, will get no further business from Jack's popular mortgage broker.

As the discussion above suggests, the amount that can be borrowed with ever more flexible (and riskier) mortgage instruments is an economic reality. Clearly, market participants did not simply follow a herd mentality in disregard of their own "independent, individually collected information (Shiller, p. 47)." No, the herd was driven by very rational factors.

Irrational exuberance? We think not. Market participants responding rationally to a range of short term economic incentives are the root causes of the crisis. Concerned with deflation, government and regulators reduced the cost of credit and promoted the use of nontraditional mortgage instruments which bid up prices. Investors and lenders demand for high yielding investment options led to the creation and promotion of ever more innovative mortgage products that allowed loan applicants to borrow more and more with less and less. Home purchasers bid the prices of houses up ever higher with each new lending innovation. Initially, the crisis was precipitated by the inability to meet the exorbitant long term cost of these mortgages by an increasing number of borrowers.

There is no need to rely on irrational exuberance/boom psychology to diagnose this crisis or identify solutions. In fact, such reliance is at best a distraction because it hides the needed discussion on the very real short term economic incentives that were in place. Moreover, it also hides the fact that the market was unable to police itself to eliminate these incentives. This inability provides the strongest justification for a more effective government regulation of financial markets.

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