



## Hope, Greed and Fear: The Psychology behind the Financial Crisis

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To explain the current economic crisis, the world of finance has a particular lexicon -- including, for example, credit default swaps, mark-to-market and securitized subprime mortgages. Psychologists, on the other hand, might use very different terms: hope, greed and fear.

The language of psychology helps to address the fact that behind every cut-and-dried statistic about falling home prices and other indicators of economic decline, lies an ever-shifting horde of homeowners, bankers, business owners, unwitting investors -- in short, people. And people often pay no heed to fine-tuned economic models by doing things that are not rational, are not in their best interest, and are justified not by numbers -- but by emotion.



"There are spreadsheets and financial statements and models and rules and regulations," said [Carolyn Marvin](#), a professor at the University of Pennsylvania's Annenberg School for Communications. "On the other hand, there are these *feelings* we have."

Emotion, it can be argued, not only helped to lead America into the current economic crisis but may also be helping to keep it there. At a recent conference called, "Crisis of Confidence: The Recession and the Economy of Fear," sponsored by the University of Pennsylvania's Department of Psychiatry and the Psychoanalytic Center of Philadelphia, an interdisciplinary panel explored the psychological elements behind today's economy.

"Is there a systematic way to think about our feelings when it comes to the economy?" asked Marvin, the panel moderator. The word "confidence" itself has a double edge to it, encompassing optimism on the one hand and delusion on the other. And could there be a psychological tinge to economic vocabulary itself? "The powers that be are avoiding the word 'depression,'" Marvin pointed out, "which describes not only a state of the market but certainly a clinical condition."

Psychological factors are at work behind the crisis, the panel agreed, although each focused on a different element: mania and over-optimism behind the housing bubble, a lack of self-control by consumers hooked on debt, and the shock and feelings of betrayal of many Americans who thought they were making safe investments, but now find themselves facing a frightening and uncertain future.

### 'An Aspect of Mania'

Like so many others in history, today's economic crisis began with a bubble, according to Wharton finance professor [Richard Herring](#). "Bubbles occur when people are willing to buy something simply because they believe they can sell it for a higher price. [Bubbles] often have an aspect of mania."

Property bubbles are nothing new, said Herring, who presented a chart of home prices during a 400-year period in Herengracht, a canal area in central Amsterdam. Over those centuries, real home prices increased annually by only 0.2% on average, "but in between, [they were] up 100%, down 50%. There was huge volatility."

Real estate booms and busts happen in very long cycles -- on average about every 20 years.

Consequently, when housing prices are going up, few remember that they ever went down. This was certainly the case in the recent crisis, since housing prices only went up between 1975 and 2006. According to Herring, property markets are especially prone to booms and busts because of their nature: They have no central clearinghouse of information about prices, transaction costs are high and trading is infrequent, and the supply of property is relatively fixed in the short term. Because the cycles are decades long, it is difficult to tell what a piece of property should be worth in the long run. "We really don't know what the price should be, so it's always difficult to tell whether you are looking at a bubble or simply improving fundamentals of the economy."

Housing booms and busts are "almost always linked to the banking system," Herring added. "When something good happens in an economy, it tends to drive up real estate prices, and banks tend to lend to support that, because people now have collateral." Optimism about rising prices feeds the frenzy, and as an increasing number of novice investors enter the market, prices and enthusiasm also increase. "You get into this upward spiral that can take you a very long way for a very long time. You may ask where the supervisors and regulators are in all of this, and often, they tend to support it. They really like to see loans that are collateralized by real estate because it's tangible."

Call it "the fallacy of misplaced concreteness," Herring quipped, showing a slide of a half-built skyscraper from a recent property boom-gone-bust in Thailand, "but really it's the fallacy of misplaced concrete." Again, emotion plays heavily into the cycle. People suffer "disaster myopia," either because they simply can't imagine a downturn happening, or they assume the probability of it happening is so low that it really isn't worth worrying about, Herring stated.

### Ever-rising Home Prices

"I think we agree that over-optimism is perhaps a lot of what got us into this mess," said Wharton business and public policy professor [Jeremy Tobacman](#), a panel participant. "There was rampant over-optimism about housing prices."

Tobacman pointed to a survey by Case and Shiller in 2003 of homeowner attitudes in four major markets -- Boston, Milwaukee, Los Angeles and San Francisco. In all four markets, more than 80% of homeowners surveyed said they believed home prices would rise over the next few years. When homeowners were asked how much they expected the price to change in the next months, mean responses ranged from 7.2% in Boston to 10.5% in Los Angeles.

"Even more astonishing than these one-year numbers are the numbers for decades," Tobacman noted. When faced with the question, "On average over the next 10 years, how much do you expect the value of your property to change each year?" homeowners in Milwaukee said they expected prices to rise by 11.7%. Homeowners in San Francisco said they expected a 15.7% return.

People often make poor economic choices because they are overly optimistic about what they will do in the future, Tobacman said. For example, people transfer credit card balances over to cards with high long-term interest rates because they believe they will pay everything off before the much lower teaser rate expires. (Most don't.) Borrowers who default on payday loans typically pay interest amounting to 90% of the loan's principal before they finally give up and stop making payments.

One study of a health club found that members who worked out on average just four times a month chose to pay a monthly membership fee of \$85, even though the gym also offered a pay-as-you-go rate of \$10 per visit. "When people are polled about their beliefs [as to] what they're going to do, there is a radical refusal to accept reality," said Tobacman. "Myopia may be willful in that we don't want to contemplate undesired outcomes."

In the recent bubble, both buyers and lenders were overly optimistic about what the future would bring. Buyers ignored the possibility that they might not be able to keep up on payments because they assumed the prices of homes would go up and they would be able to sell or refinance. Likewise, lenders ignored the possibility of default because rising home prices had made it easy to get bad loans off the books. Tobacman shared a quote from John Kenneth Galbraith's *The Great Crash*, a history of the events leading up to the Great Depression: "The bankers were also a source of encouragement to those who wished to believe in the permanence of the boom. A great many of them abandoned their historic role as the guardians of the nation's fiscal pessimism and enjoyed a brief respite of

optimism."

Said Tobacman: "I think the question is, when exactly does this powerful impetus to believe in a rosy future get disciplined by the market and when does it get out of hand?"

The explosion of consumer debt behind the crisis is also an issue of self-control, University of Pennsylvania psychology professor [Angela Lee Duckworth](#) noted. "It's a perennial human problem, to delay gratification. We all struggle, from little children to the oldest and wisest, with the problem of self-control."

Duckworth defined self-control as the ability to negotiate a situation in which there are two choices and one is obviously superior, but the other choice is nevertheless more tempting. For example, a dieter faced with a chocolate cake knows that it is best not to eat it, but often makes a choice to eat it anyway. In the case of the housing bubble, homebuyers failed to exercise self-control when they bought larger homes than they knew they could afford. Lenders failed to exercise self-control when they chose to write shaky mortgages in order to bank short-term profits.

For years, Americans have saved less and consumed more, Duckworth said. She pointed to the conclusion of a recent editorial in *The Wall Street Journal* by Chapman University research associate Steven Gjerstand and Chapman University economics professor and 2002 Nobel Laureate Vernon L. Smith: "A financial crisis that originates in consumer debt, especially in consumer debt concentrated at the low end of the wealth and income distribution, can be transmitted quickly and forcefully into the financial system. It appears that we're witnessing the second great consumer debt crash, the end of a massive consumption binge," the editorial stated.

Added Duckworth: "It seems that my father was right during those conversations around the dinner table when he would say, 'Americans are living beyond their means.' I guess we were. And I think that's in part because all human beings want to live beyond their means."

Self-control is an aptitude that changes dramatically over a lifetime, according to Duckworth. This is because the prefrontal cortex, the area of the brain that allows human beings to control impulses and delay gratification, matures more slowly than other parts of the brain. "Sub cortical regions and the brain stem are more or less online as soon as you're born, if not very soon after ... so emotion and impulse in these areas are functioning at full throttle" right away, she said. But the prefrontal cortex is not fully developed until a person is much older -- somewhere in the late 20s and possibly as late as the early 50s.

"There's a lag problem here, where we have our emotions and we have our impulses ... but you have to wait until you're at least 25 before the frontal cortex is in great shape to actually rein in those lower-level desires."

Studies by psychologist Walter Mischel that measure how well a preschool child could delay gratification (asking the child to choose between eating one marshmallow now or getting two later) predicted a range of outcomes that happened later in life, from SAT scores to divorce to use of crack cocaine, Duckworth noted. "I think that these almost unbelievable findings are in fact believable, because Walter Mischel was able to distill in a simple testing situation the classic human dilemma that we all face every day, which is: more later, or a little bit now?"

These and later studies on delayed gratification have shown that self-discipline is a bigger predictor of later success than other factors such as I.Q., Duckworth stated. A better understanding of the psychology of self-control could help "develop government policies that would presumably accommodate the realities of human nature."

### **A Question of Trust**

"What happens when the bubble breaks, as it inevitably does?" Herring asked. The pendulum swings back to the other extreme. "People find it all too easy to imagine that bad things can happen to the market and they withdraw. And they tend to overshoot. They will act very, very risk averse for quite a long time until they are persuaded that [real estate] is once again a safe asset to hold."

According to David M. Sachs, a training and supervision analyst at the Psychoanalytic Center of Philadelphia, the crisis today is not one of confidence, but one of trust. "Abusive financial practices were unchecked by personal moral controls that prohibit individual criminal behavior, as in the case of [Bernard] Madoff, and by complex financial manipulations, as in the case of AIG." The public, expecting to be protected from such abuse, has suffered a trauma of loss similar to that after 9/11. "Normal expectations of what is safe and dependable were abruptly shattered," Sachs noted. "As is typical of post-traumatic states, planning for the future could not be based on old assumptions about what is safe and what is dangerous. A radical reversal of how to be gratified occurred."

People now feel more gratified saving money than spending it, Sachs suggested. They have trouble trusting promises from the government because they feel the government has let them down.

He framed his argument with a fictional patient named Betty Q. Public, a librarian with two teenage children and a husband, John, who had recently lost his job. "She felt betrayed because she and her husband had invested conservatively and were double-crossed by dishonest, greedy businessmen, and now she distrusted the government that had failed to protect them from corporate dishonesty. Not only that, but she had little trust in things turning around soon enough to enable her and her husband to accomplish their previous goals.

"By no means a sophisticated economist, she knew ... that some people had become fantastically wealthy by misusing other people's money -- hers included," Sachs said. "In short, John and Betty had done everything right and were being punished, while the dishonest people were going unpunished."

Helping an individual recover from a traumatic experience provides a useful analogy for understanding how to help the economy recover from its own traumatic experience, Sachs pointed out. The public will need to "hold the perpetrators of the economic disaster responsible and take what actions they can to prevent them from harming the economy again." In addition, the public will have to see proof that government and business leaders can behave responsibly before they will trust them again, he argued.

"Once a person has been traumatized, promises ... are experienced as dangerous -- not safe -- because they require trust to believe," said Sachs. "It is up to the victim to decide when she can trust again. This takes time."

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