How Investors Make Decisions

by Mark Henricks on May 18, 2011

Classical economics says that investors make decisions based on available information to produce markets that price efficiently. In other words, since a sufficiently large amount of the market’s capital is managed by well-informed investors, the market should behave as though all investors were equally well-informed or had adopted an optimal strategy based on the available information.

But real-world phenomena such as bubbles (where assets are overpriced) and busts (such as the current overly depressed housing prices) seem to poke holes in efficient-market explanations that assume all investors are both equally well-informed and use that information in predictable ways.

Lisa Koonce examines how investors use accounting information, especially when that use is outside of normal expectations. Her expertise, behavioral accounting, is part of an emerging research discipline that combines psychology with economics. Behavioral accounting research explores the reasons that events such as the recent housing bust occur — events that seem to defy the rational behavior so-called efficient markets should produce.

Koonce, the Deloitte & Touche Professor of Accounting at the McCombs School of Business, wrote an article in 2007 for the Review of Accounting Studies about an experiment that examined participants’ opinions about derivatives. These controversial instruments — once described by Warren Buffett as “financial weapons of mass destruction” — are widely viewed as one cause of the recent crisis that shook global financial systems. Despite derivatives’ less-than-stellar reputation, Koonce’s research revealed that investors felt more favorably toward firms that employed derivatives than firms that shunned them. “That was a surprise,” she says.

Indeed it was, but like much behavioral research, Koonce’s study hasn’t gained much attention in academic circles. That’s because, although behavioral finance and accounting has been around as a field since at least the 1970s, it’s been overshadowed by efficient market theory. That may be changing, Koonce says.

“People are interested in it now because it can explain things that don’t seem expected,” she says. In the wake of the housing bubble, it’s become clear that investors at all levels make financial decisions that don’t always make sense.

The Psychology Behind Investor Decision-Making

Behavioral accounting studies like Koonce’s look into the psychological factors that behind investment decisions. For example, in the idealized world of efficient markets, where all investors are assumed to act rationally and predictably based on their understanding of available information, an investor would always choose to unload a losing investment in order to take another, more promising position. But in the real world, an investor driven by the innate human propensity to place more weight on a loss than on a gain might refuse to sell the money-loser in hopes of someday breaking even, even when a better opportunity opens.

“Economics doesn’t explain that,” Koonce notes. “That’s where psychology comes in.”

Much of Koonce’s work interests rulemakers such as the Financial Accounting Standards Board (FASB), the organization that the Securities and Exchange Commission (SEC) has designated as responsible for setting accounting standards for publicly traded companies in the U.S. FASB uses her research in setting generally accepted accounting principles (GAAP) that govern how companies should present financial statements so they are most useful to investors. One project in process will help determine how firms might best account for hybrid securities such as convertible bonds, which have elements of both debt and equity instruments. “We’re testing whether it [how firms account for hybrid securities] makes a difference,” she says. “And it does.”

Psychology also makes a difference to Gurdur Caginalp, a professor of mathematics at the University of Pittsburgh. Caginalp co-authored the 2008 paper “The dynamics of trader motivations in asset bubbles,” published in the Journal of Economic Behavior & Organization. In the article, Caginalp concludes that momentum investors, who, for instance, buy stocks with prices that are rising in expectation the trend will continue, are largely responsible for the timing of economic
bubbles and busts. A bubble occurs when these investors hold a large amount of cash, and the subsequent bust results they find themselves short on cash.

Like Koonce, Caginalp is somewhat frustrated by the lack of attention researchers pay to studying the behavioral explanations for asset bubbles and other economic events. "There's a bubble going on somewhere at any moment," he says. "Now that it's been 10 years since the high-tech bubble and crash, how many papers have been written examining it? The number is very small."

**Inadequate Data Fuels Unrealistic Expectations**

Better understanding of investor decision-making might help to prevent bubbles. For instance, Caginalp says many investors are reluctant to admit that they sometimes make decisions based on inadequate data. Lenders as well as buyers of the mortgage-backed securities that helped fuel the housing bubble unrealistically expected that defaults would be more sporadic rather than widespread. A more realistic appraisal of these securities' value would have made them less popular for buyers. That in turn would have tightened the market for the mortgages that comprised these securities, making it less tempting for lenders to accept risky mortgages. The end result might well have been to damp down the overvaluation of houses.

Caginalp compares the lenders' unrealistic mindset regarding risk to the overconfidence of a persistent gambler. "What these lenders were doing is similar to betting on all the numbers on the roulette wheel except the number 13," Caginalp says. "Unless 13 comes up, he gets a return of about 3 percent."

Such a gambler might place that wager several dozen times, producing an impressive string of 3 percent quarterly returns. "However, you know that at some point, whether it's the third time or the 30th time, you're going to lose all your money," Caginalp observes.

Similarly, an investor who looks at a market event that occurs several dozen times doesn't know whether that event can guide a sound investment in the long run. Caginalp says this pursuit of short-term gains paved the way for the housing bubble.

**Risk and Diversification**

Bubbles also interest San Francisco State University assistant finance professor Todd Feldman. In a 2010 article published in the *Journal of Economic Behavior & Organisation*, Feldman describes a model for examining how behavior of portfolio managers can affect financial crises. In the model, managers guided by conventional thinking — acting rationally and without bias — don't create crises. But when Feldman added behavioral elements — e.g., inflated confidence based on good results, or an abundance of caution due to poor results — to the model, he found that even slight losses triggered actions that resulted in steep and broad declines in asset values.

The culprit, Feldman says, is over-leveraging, which is itself encouraged by diversification. "At first diversification is helpful. It reduces risk," Feldman notes. But once they have diversified their investments, managers tend to become more comfortable taking risks. As a result, they ramp up leverage.

When managers are highly leveraged, they have to react very quickly to even slight declines in asset values or risk losing everything. For individual managers, the strategy makes sense. "But when you have a lot of managers all thinking they're doing the optimal thing, the macro outcome is too much leverage in the market," Feldman says.

One behavioral assumption in Feldman's models is that investors weight losses more heavily than gains, and they weight current losses more heavily than past losses. From a rational economic sense this is silly. But according to behavioral economists, it's just the way humans are. These unpredictable and less-than-rational biases are what behaviorists are trying to incorporate into the world of finance and accounting.

For the moment behavioral accounting and finance remain uncharted territory for many economists. But Koonce says her McCombs students react positively when she describes some of the questions her experiments seek to answer. And the accounting rulemakers are increasingly interested in learning more about how psychology shapes investor decision. "It is getting out there," Koonce says.

**Mentioned in this Article**

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