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Behavioral finance: Finance with normal people

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Abstract

Behavioral finance is under construction as a solid structure of finance. It incorporates parts of standard finance, replaces others, and includes bridges between theory, evidence, and practice.

Behavioral finance substitutes normal people for the rational people in standard finance. It substitutes behavioral portfolio theory for mean-variance portfolio theory, and behavioral asset pricing model for the CAPM and other models where expected returns are determined only by risk. Behavioral finance also distinguishes rational markets from hard-to-beat markets in the discussion of efficient markets, a distinction that is often blurred in standard finance, and it examines why so many investors believe that it is easy to beat the market. Moreover, behavioral finance expands the domain of finance beyond portfolios, asset pricing, and market efficiency and is set to continue that expansion while adhering to the scientific rigor introduced by standard finance.

We often hear that behavioral finance is nothing more than a collection of stories about investors swayed by cognitive errors and misleading emotions; that its lacks the solid structure of standard finance. Yet today's standard finance is no longer solid, as wide cracks have opened between its theory and the evidence. This article extends Statman (2010), offering an outline of behavioral finance as a solid structure that incorporates parts of standard finance, replaces others, and includes bridges between theory, evidence, and practice.

Behavioral finance is finance with normal people in it, people like you and me. Standard finance, in contrast, is finance with rational people in it. Normal people are not irrational. Indeed, we are mostly intelligent and usually 'normal-smart.' But sometimes we are 'normal-stupid,' swayed by cognitive errors such as hindsight and overconfidence, and misleading emotions such as exaggerated fear or unrealistic hope.

Standard finance is built on four foundation blocks:

1. People are rational,
2. Markets are efficient,
3. People should design portfolios by the rules of mean-variance portfolio theory and do so, and,
4. Expected returns of investments are described by standard asset pricing theory, where differences in expected returns are determined only by differences in risk.

Behavioral finance offers an alternative foundation block for each of the foundation blocks of standard finance. According to behavioral finance:

1. People are normal,
2. Markets are not efficient, even if they are difficult to beat,
3. People design portfolios by the rules of behavioral portfolio theory and,
4. Expected returns of investments are described by behavioral asset pricing theory, where differences in expected returns are determined by more than differences in risk.

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1. Normal investors

Miller and Modigliani (1961) described investors as rational in their article on dividends. Rational investors, they wrote, are investors who "always prefer more wealth to less and are indifferent as to whether a given increment to their wealth takes the form of cash payments or an increase in the market value of their holdings of shares." This is a good beginning of a description of rational investors.

Shefrin and Statman (1984) argued that investors' wants, cognitive errors, and emotions affect their preferences for particular stocks. Miller (1986) responded: "[S]tocks are usually more than just the abstract 'bundles of return' of our economic models. Behind each holding may be a story of family business, family quarrels, legacies received, divorce settlements, and a host of other considerations almost totally irrelevant to our theories of portfolio selection. That we abstract from all these stories in building our models, is not because the stories are uninteresting but because they may be too interesting and thereby distract us from the pervasive market forces that should be our principal concern." (p. S467).

Yet questions about the effects of family business, family quarrels, legacies, and divorce settlements are questions of finance. We might splurge our parents' bequest money but feel compelled to preserve for our children money they labeled legacy. We might be reluctant to sell stocks and spend their proceeds, yet ready to spend dividends. Moreover, pervasive market forces are powered by our behavior. We cannot hope to understand these forces unless we understand our behavior.

Rational investors are immune to framing errors, the cognitive errors that lead many normal investors to conclude, in error, that a dollar in the form of dividends from shares of a stock is different in substance from a dollar in the form of the shares themselves when, in truth, the two dollars are different only in frame. Moreover, rational investors are immune to the entire range of cognitive errors and misleading emotions beyond framing errors.

Normal investors, unlike rational ones, are not immune to cognitive errors and misleading emotions. Yet normal investors are not all alike, varying in their wants of utilitarian, expressive, and emotional benefits and standing at places along the range from normal-ignorant to normal-knowledgeable. Knowledgeable investors have learned, imperfectly and with much effort, to overcome their cognitive errors and misleading emotions through science-based knowledge. Knowledgeable investors know, for example, that the cognitive error of hindsight fools them into believing that the future is as easy to forecast as the past. Still, even knowledgeable investors find it difficult to resist the intuition of hindsight, and sometimes they fail.

Ignorant investors have not learned to overcome their cognitive errors and misleading emotions through science-based knowledge. Moreover, some ignorant investors mistrust scientific evidence. Sapienza and Zingales (2013) asked economic experts and average Americans whether they agree or disagree with statements such as "It is hard to predict stock prices." They found that 100% of economic experts agreed that it is hard to predict stock prices, whereas only 55% of average Americans agreed. The mistrust of average Americans in science is evident in the fact that the proportion of average Americans who agree that it is hard to predict stock prices declined from 55% to 42% when told that economic experts agree that such forecasts are difficult.

In truth, there is much evidence that it is difficult to forecast stock prices. For example, Fisher and Statman (2000) examined the ability of three groups of investors to predict stock prices: individual investors, writers of investment newsletters, and Wall Street strategists. They found that none are good at predicting stock prices. Indeed, predictions of high returns were followed by relatively low returns more often than they were followed by relatively high returns. And predictions of low returns were followed by relatively high returns more often than they are followed by relatively low returns.

2. What normal investors really want: utilitarian, expressive, and emotional benefits

Ask investors what benefits they want from their investments and they are likely to say: high returns with low risk. What more is there to want? In truth, we want more benefits from our investments as we want from almost all products and services.

We want three kinds of benefits, utilitarian, expressive and emotional, described in Statman (1999, 2011). Utilitarian benefits are the answer to the question, What does it do for me and my pocketbook? The utilitarian benefits of a car are in ferrying us from one place to another, and the utilitarian benefits of investments are in increasing our wealth with high returns and low risk.

Expressive benefits convey to us and to others our values, tastes, and status. They answer the question, What does it say about me to others and to me? An environmentally friendly Prius hybrid, like an environmental mutual fund, expresses environmental responsibility, whereas a stately Bentley, like a hedge fund, expresses high status.

Emotional benefits are the answer to the question, How does it make me feel? A Prius and environmental mutual funds make us feel virtuous, whereas a Bentley and hedge funds make us feel proud.

We regularly speak about emotions as if 'emotions' are shorthand for 'misleading emotions.' We are often advised to set aside emotions when we make investment decisions. But this advice is neither feasible nor smart. Emotions complement reason more often than they interfere with it, and the interaction between emotions and reason is mostly beneficial, often critically so. Emotions prevent us from being lost in thought when it is time to act, and emotions reinforce lessons we must learn.

Emotional benefits come with positive emotions such as exuberance, hope, or pride. We seek these emotional benefits and are regularly willing to pay for them with utilitarian dollars. The desire for the benefits of hope motivates lottery players to pay a dollar for lottery tickets that pay, on average, only 50 cents. And the desire for the benefits of hope

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