



A Preference for Discomfort

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Yikes is right! Investors continue to underperform the market by a significant margin, as Russ Kinnel of Morningstar reminds us in his 2014 version of “Mind the Gap.”¹ While many theories try to explain this persistent underperformance, I will focus on one: Too many of today’s commentators seem not to notice that our knowledge of investment markets has progressed well beyond the theories of the 1960s. Today, too many cling to the simple to understand but thoroughly refuted theory of a single market beta. Too many misinterpret today’s ongoing debate about market efficiency as supporting the long abandoned theory that all investors should hold an identical portfolio. Too many misinterpret the sound guidance from experts advising individual investors to buy and hold low cost index funds as proof that earning above market returns is unattainable.

To be sure, well informed and well intentioned commentators including Jack Bogle, David Swensen, and Warren Buffett, who advise investors to buy and hold the market in the form of a low cost index fund, are correct. Ample empirical evidence convincingly demonstrates that following such advice would allow the vast majority of investors to dramatically improve their wealth accumulation, likely by a few percentage points per year. But our present understanding of financial markets is more interesting than this conclusion, as correct and as important as it is.

A more current understanding of financial market theory and evidence helps us understand why so many investors *choose* to behave in ways that produce lower-than-market returns. We now understand not just that these investors could improve their returns by indexing, but also why they don’t, *and reciprocally why those who are willing and able to behave in a contrarian manner can and do earn market-beating returns.*²

Evolution of Finance Theory

Theories developed in the 1950s and 1960s provide the foundation of our current understanding of financial markets. Harry Markowitz introduced modern portfolio theory (MPT) with his study of portfolio selection, mean variance optimization, and the efficient frontier in 1952. In the early 1960s, building on Harry’s work, Jack Treynor and Bill Sharpe developed the capital asset pricing model (CAPM), predicting that security returns are explained by a single market beta. Also during the 1960s, Gene Fama developed the efficient market hypothesis (EMH). In the 1970s and 1980s we learned that the single equity market beta prediction of the CAPM was, at best, incomplete. In 1976 Stephen Ross proposed the Arbitrage Pricing Theory (APT), introducing an asset pricing model with multiple factors determining the returns of individual securities. In the 1980s Ross, Roll, and Chen published convincing evidence that security returns are determined by multiple factors.

The very fact that the CAPM could be *disproved* demonstrated the revolutionary nature of the insights of MPT and the CAPM. A field of study is not science unless it produces falsifiable theories. Moving on from the CAPM to APT demonstrated important scientific progress in our study of markets. Oddly, three decades after APT, the disproved single equity market beta prediction of the CAPM remains the dominant pricing theory taught in many business schools.

In the early 1990s, Fama and French introduced their famous three-factor asset pricing model. Perhaps the most important, and too often overlooked, insight we take from Fama and French’s work is the realization that any test of the EMH is really a joint test of the EMH and the particular asset pricing model used to test for efficiency. The evidence refuting the joint hypothesis of the CAPM and EMH refutes the old CAPM but not the EMH. With Fama and French’s three-factor model, the EMH was given a new lease on life—albeit with a new twist: We learned that some investors might prefer to earn higher returns than the market by owning lower priced stocks. All of the evidence gathered in the two decades since has confirmed that they can. Of course, Graham and Dodd told us much the same thing, but without the scientific evidence, in 1932.

Also in the 1990s, Dick Thaler applied and extended the behavioral economics research of Kahneman and Tversky to question not just a single pricing model but the rational decision-making assumptions of MPT and the EMH. Thaler and many others have presented convincing evidence that people’s decision-making process is far more complex than assumed by the mean variance optimization proposed by Markowitz back in 1952.³

More recently, neoclassical finance theory has cautiously embraced behavioral finance to suggest a risk premium that is both time-varying and cross-sectionally varying from one asset to the next. And so, the academic debate about market efficiency remains unresolved.⁴ For each new pricing anomaly and behavioral deviation from mean-variance optimization that we find, a more complex pricing model is proposed, taking account of a wide variety of investor preferences, which may vary through time. Despite the unresolved nature of the EMH debate, no serious finance academics believe that all investors should, in theory, hold identical portfolios.

Implications for Investors

So what is an investor to make of the evolving theory? Is the stock market inefficient or do investors have varying preferences? When some investors choose to buy stocks of companies that have been successful and shun those whose prices have fallen, are they irrational or do they have a valid behavioral preference? Is the choice to pay a premium price for a stock that may plausibly quintuple irrational, or is it a preference for positively skewed upside, like a lottery ticket? Is the choice to actively trade irrational, or do some investors receive non-monetary rewards from this short-term quest for instant gratification? Is the choice to take more risk as the market rises and to reduce risk as the market declines irrational, or is it a preference for portfolio insurance?

Whether we label investor choices as irrational behaviors or valid preferences, the results for investors' wealth accumulation are clear. In 2000, Terry Odean and Brad Barber documented that average individuals' investing behavior caused them to underperform the market by 1.5% per year, *even before taking account of fees and expenses*. In the 2014 update to his seminal 2005 white paper, "Mind the Gap," Kinnel shows that over the last 10 years the average mutual fund investor earned 2.5% less—on a dollar-weighted basis—than their funds delivered on a time-weighted basis. (In U.S. equity mutual funds, the gap was 1.7% per annum.) Their buy and sell decisions were *that bad!* Clearly, Bogle, Swensen, and Buffett are absolutely correct: most investors would accumulate more wealth by changing their behavior to buy and hold low cost index funds.

Most people, however, do not follow this advice. Whether from irrationality, time-varying risk-aversion, fear, greed, or other reasons, investors continue to actively trade, chasing fads and shunning past disappointments. This predictable behavior, which objectively and materially detracts from the returns of most investors, is the source of the above-market returns earned by a few others, notably including Swensen, Buffett, and John Bogle, Jr. (Jack's son!).

Today, above-market returns are readily available through simple, transparent, low cost, smart beta strategies.⁵ The excess returns are not relentless. If markets are rewarding momentum, growth, and risk aversion—in other words, when the "fear premium" for out-of-favor assets is growing—these strategies will lag the markets, until the markets begin to reward discomfort again. If we label the predictable behavior that lowers the returns of most investors as irrational, then smart beta exploits market inefficiency. If we label investors' predictable behavior as rational preferences, then these higher expected returns are fair compensation for tolerating discomfort.

The question an investor should ask is: "What is my preference? Do I choose to fund alpha for others with my own comfort-seeking behavior, harvest alpha from others with a disciplined tolerance for discomfort, or remain passive?" It's a legitimate choice that we make, whether we realize it or not. The evidence is clear, however, that a preference for the disciplined contrarian approach is likely to result in more wealth over time than the alternatives.

Endnotes

1. Russel Kinnel, "Mind the Gap 2014," Morningstar (Fund Spy), February 27, 2014.
2. Rob Arnott has suggested that much of the controversy about market efficiency could have been obviated if the term "fear premium" had been used, instead of "risk premium." After all, does today's buyer of Twitter feel fear when buying the stock, or excitement at being part of an adventuresome future? If the latter, should the stock be priced to offer a positive or a negative "risk premium," regardless what beta is evident in its share price behavior? With a "fear premium," CAPM's beta would define the market-clearing equilibrium condition, and the "fear premium" would drive many of the observed market anomalies, a rising and falling "fear premium" would drive the growth/value cycle, and manifestations and nuances in the "fear premium" might even point the way towards a marriage of behavioral finance and neoclassical finance theory.
3. As with most of the legends of finance, who first propounded these wonderful theories, Harry Markowitz is the first to welcome these additional insights, and to acknowledge the limitations of a careless or naïve application of his own beloved optimization methods.
4. We would, however, question whether there is really much difference between an inefficient market and a market in which the discount rate can vary widely from one asset to another and over time. We would go so far as to suggest that EMH is, to borrow James Montier's choice expression, as dead as Monty Python's parrot.
5. See Feifei Li, Vitali Kalesnik, and Jason Hsu, 2012, "An Investor's Guide to Smart Beta Strategies," AAIJ Journal, December; and Robert D. Arnott, Jason Hsu, Vitali Kalesnik, and Phil Tindall, 2013, "The Surprising Alpha from Malkiel's Monkey and Upside-Down Strategies," Journal of Portfolio Management, vol. 39 no. 4 (Summer):91–105.

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