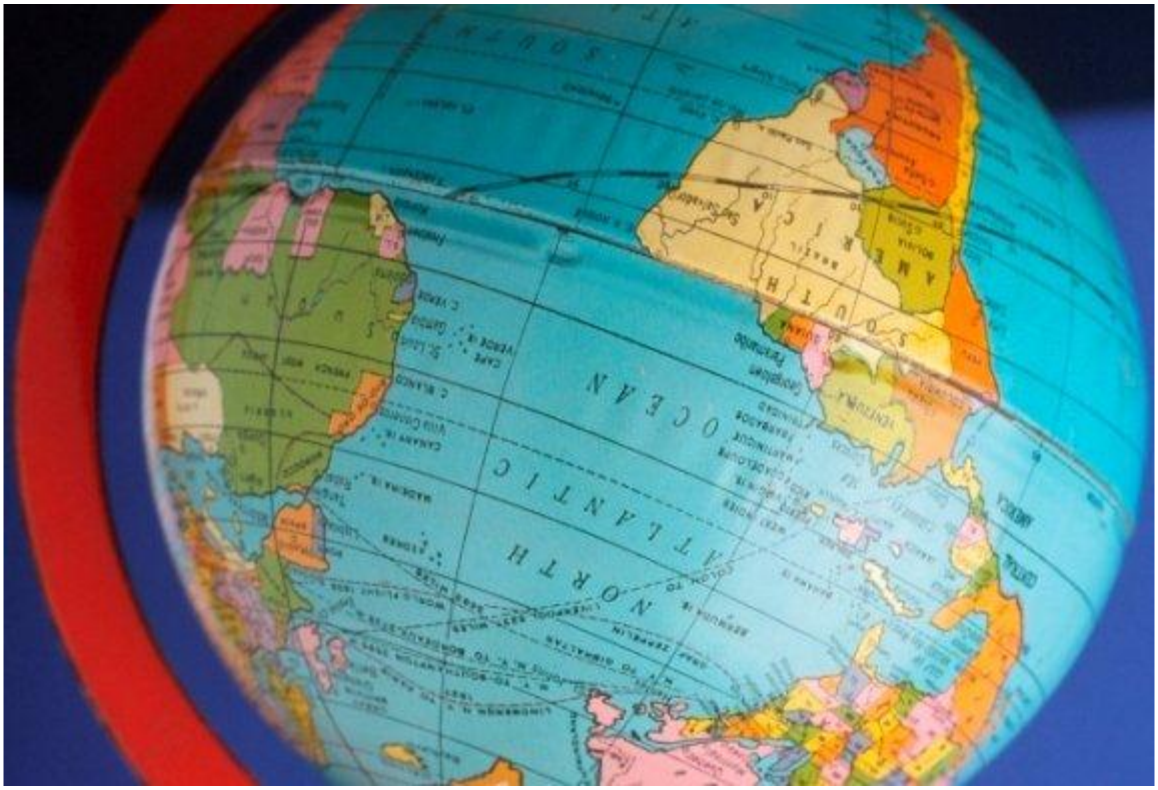
Is modern portfolio theory all bunk?

New academic research shows low-risk stocks outperform high-risk stocks; 'one of the most startling facts in finance'

By **Jeff Benjamin**
April 19, 2012 2:16 pm ET



A basic tenet of modern portfolio theory is that investors who are willing to take on greater risk can expect a greater reward. But a new study released this week turns that belief on its head, claiming that less risky stocks, as measured by volatility, actually outperform more risky, or more volatile, stocks.

Veteran quantitative investment analyst and economist Robert Haugen studied every stock market in the world from 1990 to 2011 and found that the average return of the least volatile stocks outperformed the most volatile stocks by an average of 17 percentage points.

For U.S. equities, the study found that the least volatile 10% of stocks had an average return of 12.2% over the period, while the most volatile 10% combined for an average decline of 8.8%.

“We found that in every one of the world's markets, higher volatility equals lower returns,” Mr. Haugen said. “Does this fly in the face of modern portfolio theory? You're damn right it does.”

Mr. Haugen, president of Haugen Custom Financial Systems, has been pounding this drum since 1969 when, as a professor of finance at the University of Wisconsin, he wrote his first paper on the subject.

His message is getting across.

“Classic investment theory says that you get rewarded for risk, but this [focus on low-risk investments] is an anomaly that is quite well academically documented,” said Ian Webster, managing director at **Russell Investments**.

A year ago, Russell launched two sets of exchange-traded funds that separately track the least volatile and most volatile stocks in two broad market indexes.

From its launch May 27 through last Tuesday, the Russell 1000 Low-Volatility ETF (**LVOL**) gained 5%, while its counterpart Russell High-Volatility ETF (**HVOL**) declined by 4%.

The Russell 2000 Low-Volatility ETF (**SLVY**), over the same period, gained 2.6%, while its counterpart the Russell 2000 High-Volatility ETF (**SHVY**) fell by 15.3%.

The strategy is designed for full three- to five-year market cycles, so the one-year history of the Russell funds illustrates its action only over a concentrated period of time.

“Lower-risk investments won't participate in your runaway bull markets or junk rallies, but they also don't lose as much in a down market, so it is essentially a case of winning by not losing,” said Michael McCune, a portfolio manager at Robeco Investment Management, which manages more than $195 billion, including $2.8 billion in low-volatility strategies.

Research in this area, which can be traced back to at least five decades, shows that stocks with lower beta, or market correlation, over the long term consistently outperform stocks that are more highly correlated to market risk.

“It is one of the most startling facts in finance, and it certainly runs against all of our intuition on the subject,” said Ryan Taliaferro, portfolio manager at Acadian Asset Management LLC, which manages $50 billion in separate account assets, including $3 billion in low-risk strategies.

“The research shows that risky stocks don't on average enjoy higher returns, and it doesn't seem to be the case in any time period in any geography,” he added.

Earlier this month, Acadian was awarded a Graham and Dodd Scroll Award by the CFA Institute for the firm's 2011 research paper, “Benchmarks as Limits to Arbitrage: Understanding the Low-Volatility Anomaly.”

According to Mr. Taliaferro, low-risk investing will continue to work as long as there are investors subscribing to the efficient market theory that risk is rewarded with returns.

In essence, there wouldn't be low-volatility stocks if investor activity didn't create high-volatility stocks.

“We know from literature that certain forms of risks are irresistibly attractive to people,” he said. “Human psychology is the only explanation for why people would pay too much for a risky stock.”

In stock market parlance, the psychological impulses that drive this behavior often are summed up as “fear and greed.”

But even human nature isn't enough to drive the separation between low-risk and high-risk stocks, Mr. Taliaferro said.

“You also need an institutional component to explain why sophisticated investors don't show up and solve the problem,” he said. “We think the answer is that institutional investors are tied to mandates that are tied to benchmarks.”

Simply put, most money managers are focused on outperforming their benchmarks without adding risk. And because risk is measured on a relative basis, a portfolio that moves up and down less than its benchmark is perceived as more risky on a relative basis because it is considered less correlated. But on an actual basis, a fund that gains 50% when a benchmark gains 100%, and then loses 25% when a benchmark loses 50% is less volatile.

“It's that kind of investor behavior that is creating the anomaly, and we need that subset of investors that can't see the advantages of low-risk investing in order to create the opportunity,” Mr. Taliaferro said. “We have to have people chasing high risk and we have to have institutions reluctant to take on tracking error.”