



Minimum variance inventor explains why it can continue to outperform

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In an exclusive interview with Citywire, renowned professor of theoretical finance Robert Haugen - the inventor of the minimum variance concept - explains why minimum variance portfolios will continue to deliver the best returns in the long term.

In 1967 Professor Haugen discovered a market abnormality; that low-risk portfolios focused on the left hand side of Markowitz's Efficient Frontier would offer investors the best returns and the lowest variance in the long run. This led him to come up with the minimum variance investment theory, since taken on by many fund groups.

Some now describe this discovery as the closest it gets to a free lunch in the financial markets. However in the sixties the investment industry was firmly anchored on the efficient frontier principles and Haugen's discovery was widely ignored for almost 25 years.

'I started researching the topic around 1967 with professor Jim Heins. We looked at the returns of stock portfolios with high volatility versus low volatility and realized that, most of the time, portfolios with lower volatility performed better. We published the findings of our research in an academic journal.'

'The discovery flew in the face of the doctrine of that time because the accepted paradigm was Eugene Fama's Efficient Market Hypothesis. The industry did not take my proposal on board. In fact it did not receive much attention until the early nineties when I pressed the issue further and delivered many speeches and presentations about the research. At that point, it raised high expectations,' says Haugen.

Nowadays, companies such as Norway's Alfred Berg, which employs Professor Haugen as an academic advisor, Dutch firm Robeco, Acadian Asset Management and Axa Rosenberg are offering a range of minimum variance portfolios funds. MSCI Barra has even created indices focused on benchmarking this type of funds and billions are invested in line with the concept.

While he was being largely ignored by the investment community, Professor Haugen took revenge on the Efficient Frontier and Efficient Market Hypotheses, tearing into books from academics such as Markowitz, French and Fama during his lectures at university. Time has not tempered his passionate character and he is still keen to explain the reason why low volatility portfolios outperform in the long run.

'In my opinion, market participants in general overestimate the length of earnings trends. Due to the effect of mean reversion, those companies that are more profitable during a given period will lose their relative profitability in the future. In all lines of business, success tends to be temporary; non-permanent. A current relative advantage tends to dissipate more quickly than markets expect or

anticipate, and most likely a successful story will not repeat in future.

‘That’s especially true for growth stocks where the stock price is built on an expectation of long-term profitability. Some growth stocks may keep growing as they improve their ROE and EPS numbers. But eventually these, too, will become overpriced.

‘In addition, with high expectations for future performance, growth stocks tend to have higher levels of volatility due to the revisions in these expectations. These characteristics make them perfect candidates for lower expected returns in the future. Thus, we find that high volatility has a negative payoff over time,’ says Haugen.

For the professor, minimum variance portfolios strategies would be perfectly suited for two types of investors nowadays:

‘The first type is those who want to outperform a market index. A second type is those investors concerned about the amount of public and private debt. I think, in the US, we have increased the outstanding debt to the point of threatening capital markets.

‘As Minimum Variance Portfolio strategies perform better in bear markets, they are a good counter measure when the outstanding debt is high. If equity falls because of excessive debt, the fall will always be far less for these strategies. This is due to the fact that Minimum Variance Portfolio strategies systematically avoid stocks with credit difficulties and also because they tend to minimize the downside risk that is a trait of heavily indebted companies,’ says Haugen.

Professor Haugen does not find any evidence of small cap bias in minimum variance portfolios.

‘Quite to the contrary, small cap stocks tend to exhibit higher volatility than large cap ones. However the value trait does exist because value stocks have lower volatility as there are not such high expectations about them. Therefore they are less likely to disappoint and more likely to post high returns in the future,’ says Haugen.

He also thinks that critics of excessive fees charged by these funds are unreasonable. ‘It is worth paying the fees as they are comparable to the cost of other active strategies,’ he says.

Dr. Haugen received his PhD in Finance from the University of Illinois at Champagne-Urbana. His teaching career spanned 30 years. He held endowed chairs at the University of Wisconsin at Madison, the University of Illinois at Champagne-Urbana and the University of California, Irvine. Currently he devotes his time to his company Haugen Custom Financial Systems as well as his advisory duties for Norwegian firm Alfred Berg.

Case Closed, a paper updating his most important findings, was published in 2009.

“**In my opinion, market participants in general overestimate the length of earnings trends. Due to the effect of mean reversal, those companies that are more profitable during a given period will lose their relative profitability in the future.**”

edward

great article. I really like Dr H's approach

My own investment strategy is based around principle that taking risk is good - if i can understand it.

my three rules are:

1 i understand the drivers behind the particular stock/market volatility/behaviour (no point just living with the fact that a stock/fund/market fluctuates by X or Y%, I need to know why before I can invest in it...)

2. my risk assessments are time limited. trends that i find only apply in the short/medium term as in longer term information/drivers change and the basic laws of diminishing returns will apply

3. i always price my risk - any marginal risk i take must be priced against any marginal return i expect to make. So I like comparing returns to risk free rates (gilts) & reading sharpe ratios

i know this is basic but it works for me. i tend to avoid complex theoretical maths, they may be totally logical but the real world isnt.. After all wasn't it slavish dedication to Markowitz' models that led to the 1998 LTCM crash?...

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