

Quality factor explained by profitability: Robert Novy-Marx



[Amanda White](#) June 10, 2015



Among academic classifications, and the subsequent implementation of factor investing, “quality” is one of the newer areas of investigation. Robert Novy-Marx, the Lori and Alan S. Zekelman Professor of Finance at the University of Rochester, is leading the charge on the academic justification of quality as a factor, although he has a “jaded scepticism” about the nomenclature.

“It’s a marketing term,” he says. But what he is certain about, however, is that quality exists as a phenomenon, and for value investors their portfolios are enhanced by including quality stocks alongside value stocks.

“Quality is interesting because it has the power of predicting price as well as valuations do, it’s another way of trading value,” he says. “Quality predicts about as well as valuations, and while the strategies are similar to value philosophically they are dissimilar to value in most other ways so they are attractive to value investors.”

Partly because quality as a measure is new, there are a lot of interpretations of how it should be defined, or what it means.

For Novy-Marx “profitability subsumes most of what’s going on in quality.”

“I don’t like quality as a term, it is better to take a profitability tilt directly,” he says.

Novy-Marx has done extensive investigation into the performance of six different quality measures including Benjamin Graham’s quality definition of low levels of debt, long history of paying dividends and earnings growth, Jeremy Grantham’s definition of high returns, stable returns and low leverage, and the defensive measure of low beta, low volatility and low leverage.

He finds that quality strategies are negatively correlated with traditional value and profitability is the only measure that has an outperformance.

“Profitability not explained by value, it has a strong tilt to growth,” he says.

“Highly profitable stocks are growth stocks that outperform, and growth stocks with high returns are even harder to explain.”

“Quality tilts to low beta, large cap and growth and controlling for profitability explains a lot. The real benefit to these strategies comes from getting rid of the big value tilt, you get lower tracking errors and lower drawdowns.”

Novy-Marx believes that profitability, as a measure of quality, is also a more direct way of accessing the risk/return trade-off that some investors have gained from a defensive, or low volatility tilt.

In this way he believes that low volatility portfolios are inefficient and instead advocates that investors access an unprofitable, small growth exclusion directly.

“Low volatility is not a bad way of excluding high volatility and will help the portfolio perform. But it is not best way to do it. Low volatility is not distinct from other factors,” he says.

“This is a high volatility anomaly, not low volatility. We are not talking about the outperformance of low volatility but the terrible performance of high volatility.”

Novy-Marx, who is a consultant to Dimensional Fund Advisors, says the small caps exposure explains more cross sectional volatility than any other factor.

There is a size tilt in low volatility, and a slight value tilt. But interestingly profitability also explains volatility, he says.

“Low profits and being small is the best predictor of high volatility,” he says. “Being more profitable means less volatility – this is a very stable relationship and good predictor.”

Novy-Marx compares a defensive or low volatility portfolio to value and profitability in the same size deciles and discovers there is not one alpha.

“You don’t gain anything from trading an additional defensive (low volatility) portfolio,” he says. “Value and profitability have big alphas, but defensive doesn’t once you control for the size you’re trading in. By avoiding high volatility then you are avoiding small growth stocks, which has been good timing because they dramatically underperformed. But you get clearer and more transactionally efficient transactions by looking at more persistent signals.”

Dimensional introduced profitability factors into portfolios from the beginning of last year, starting with its small cap portfolios and progressing to value and emerging market portfolios.

Novy-Marx is concerned that academics and investors are manipulating data, at their peril.

He says that the idea that multi-signal strategies can be evaluated as one signal is “fiction”.

“All signals must be evaluated separately. If they work well together but not individually it should be a big concern for you.”

“People are over fitting the data. Using the information of individual signals and looking backwards then putting it together completely changes it. The issues around data mining are scary.”

“Data mining is always an issue, but it’s much scarier with multi-signal strategies. This doesn’t mean you shouldn’t combine good strategies but you need to test and believe in each one individually.”



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