

Volatility is not risk

The investment industry uses the terms ‘risk’ and ‘volatility’ almost interchangeably, though they aren’t exactly the same thing.

Risk is the possibility you might need your capital but cannot access it, perhaps because the capital value is impaired or it tied up in illiquid investments. Volatility is merely the standard deviation of returns. It’s a measure of the degree to which asset values move up and down.

Consider an equity that falls by 10% every day for 10 days. This stock exhibits zero volatility, despite the fact it is losing much of its value: lots of risk, for sure, but zero volatility (see chart below).

This seems like a comical illustration. It would be funny, I suppose, if volatility wasn’t a large part of the mathematical underpinnings of industry-standard risk methodologies, and the premier measure of risk in the asset management industry.

Volatility as a measure of risk

Volatility is eminently measurable – in hindsight. It’s a readily standardised, ie comparable, metric, too. It reduces something very complex down to a single number on a spreadsheet. For these reasons, it’s a highly seductive measure of risk. Questioning the primacy of volatility is almost heresy.

The seeming simplicity of volatility gives rise to some inter-

esting investment behaviours, however. Consider this: both investors and risk analysts freely speak of predicted volatility. Predicted volatility is volatility forecasted into the future. There would rightly be much scepticism if we spoke about an equity’s predicted drawdown – or, for that matter, predicted return – over a given time period.

But volatility and its related language (half-lives, correlations, Greek letters) are shrouded in an air of confidence, of methodical surety and scientific precision. We should be as sceptical about predictions regarding volatility as we are about predictions of drawdown and return, particularly within an asset class as inherently unpredictable as equities.

Putting tools to the test

Risk analysis tools based on volatility are an industry staple, including when applied to equity portfolios. Furthermore, equity portfolio construction tools often use volatility as either an input or a desired outcome. The appropriateness of these frameworks may depend on the type of strategy being evaluated.

For instance, volatility-based tools may work well when evaluating portfolios comprising hundreds of stocks, invested across a full range of industries and regions, and across an assortment of companies of variable quality and fundamental resilience.



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However, for concentrated, active, ie not benchmark-hugging, strategies, which only invest in a selection of resilient and high-quality businesses, volatility-based portfolio and risk tools can fail completely.

To illustrate this point, I ran one of our global portfolios through a standard tool designed to reduce volatility. The model’s feedback was startling.

To reduce volatility (the model’s measure of risk), it was suggested we sell some highly liquid, dividend-paying, durable, economically resilient businesses, and add a Middle Eastern bank, a North American resource company, two Japanese banks and a Canadian bank.

While it is mathematically correct this would have reduced portfolio volatility historically, it’s a struggle to imagine how this course of action would help reduce potential future drawdowns, particularly in times of economic and market weakness.

Here, the model is prioritising what I call ‘theoretical diversification’ over reducing drawdowns. Volatility-based frameworks prefer a manager to own a little of everything, rather than

to be more concentrated – even if the concentration is in a selection of some of the most resilient businesses on the planet.

Additionally, the model’s underlying hope is that historical stock correlations persist, though it’s often been demonstrated that these crack precisely when you need them the most: during periods of severe economic and market stress. This is why I refer to the diversification benefits as ‘theoretical’.

As these volatility-based risk and portfolio management tools push fund managers to own more and more stocks of differing characteristics (a little of everything), portfolios will necessarily begin to more closely resemble their benchmarks.

The objective of minimising historical volatilities – and, for that matter, minimising historical factor exposures – rather than seeking a more practical, fundamental way of reducing future drawdowns, can come at the expense of truly active equity management.

After all, what’s more diversified and factor-neutral than a global benchmark comprised of thousands of stocks? **LW**

An investment that falls by 10% every day

