A case for the defence

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The path to success begins with knowing your objective, understanding the path and accepting the exposures required to achieve the goal...

Any deviation from this trajectory will require input measurement and recalibration to stay the course toward reaching success. To this end, the inclusion of defensive strategies requires an understanding of the role their presence has as they sit alongside the array of 'traditional' equity strategies: defensive equities contribute returns to the total portfolio with a frequency which tends to be uncorrelated to other long-only equity strategies, zagging when others zig.

Models typically include some kind of input to measure risk at the security level, which may be statistical (for instance standard deviation, beta), fundamental (for instance measures of quality or value), or some combination thereof. Estimates of stock volatility must strike a balance between being outdated and overweighting recent history. It's in these estimates that you might consider the real 'secret sauce' of these strategies, as constructing an effective defensive portfolio is impossible without reliable assessments of a stock's volatility moving forward.

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Measurements of risk: individual stock and portfolio

At the portfolio level, heuristic strategies may assume a reduction in risk as a natural residual based on the low volatility stocks they include, without assigning an explicit objective function to them within their process. Beyond that, many quantitative managers tout their 'proprietary' portfolio optimisation designed to minimise risk, but it's critical to dig deeper into what this really means. Are they merely applying weighting limits for diversification following their selection model screen? Are they genuinely accounting for correlation between stocks, or is their optimisation no more than a slightly more sophisticated weighting scheme on top of a ranking approach? In other words, is the heavy lifting already done in the screening step, to the point that there's little room left in a narrow universe to really take advantage of a covariance matrix?

While more naïve, passive-seeming smart beta options are plentiful, many managers aren't content to rely on the low volatility 'anomaly' to match or beat the market over the long term. They may prefer to add an alpha source to the mix – often their proprietary return forecast model, be it based on valuation, momentum, or more exotic combinations of factors.

But even low or minimum volatility indexes aren't truly passive by comparison to their cap-weighted counterparts. Index providers make subjective decisions that resemble those of active strategies – about constraints, rebalancing frequency, and even optimising for currency risk. The result may be far more variability between index providers, who are taking substantially different approaches to construction. And, in some cases, they may have less transparency than actively managed strategies!

Evaluating results

Methods for quantifying the expectations and effectiveness of defensive equity strategies range from the common to the more esoteric or convoluted. Here we present the metrics you might expect to find on the 'back of the envelope', along with some interesting, less-common but still-insightful measurements.

Given the frequently asymmetric nature of these strategies by design, a sample size of real or even back-tested results, including a full market cycle, is necessary for setting expectations across all market environments. Reducing these statistics to a single annualised figure for the entire period may work as a shorthand to summarise their long-term outcomes, but for some, rolling periods (for instance one, three, or even five years) can help illuminate variations over time within those different environments.

Classifying their outcomes

Despite the substantial growth in AUM over the last 10 years, live track records available for this category are still relatively short, and precious few include anything resembling a full market cycle. Descriptions of approaches are far easier

to come by than long-term data points of live results.

Consequently we attempt to group these strategies largely by their stated objectives – an imperfect and overlapping dichotomy, but hopefully a nevertheless useful framework.

The impact of defensive equity is varied and distinct. Assuming you plan to keep the overall weight of your equity allocation unchanged, you might then ask how much exposure you should allocate to defensive equity strategies. The answer will depend largely on the time-horizon, your sensitivity to volatility and drawdown tolerance. While the one certainty of a guarantee is its expense, the alternative – considering the inclusion of defensive equity strategies in your diversified portfolio – can prove to be effective in smoothing out the journey toward reaching your desired investment outcome. «

RISK	Common	Less-Common
Volatility	*Historical (ex-post) standard deviation of returns.* Frequently used to describe the strategy's reduction in risk relative to a cap-weighted index.	*Estimated, forward-looking (ex-ante) holdings-based risk.* When reliable, it can be a method for examining a strategy's risk positioning relative to the market at a specific point in time.
Beta Exposure	*The historical (ex-post) beta of returns relative to the index.* May reveal persistent or dynamic defensive positioning relative to the market environment.	*Predicted (ex-ante) holdings-based beta.* Like estimated risk, designed to measure a strategy's sensitivity to market moves at a particular moment, as opposed to where it's been.
Downside Risk	*Maximum drawdown, relative to the index.* A singular measurement of downside protection compared to the worst of the market.	*Downside deviation: standard deviation of negative relative returns (either versus cash or an equity benchmark).* Isolates volatility risk to the downside, or 'bad' risk, from more-useful volatility on the upside that can drive returns.
RETURN	**Common**	**Less-Common**
	Annualised return AND upside and downside capture. Establishes expectations for alpha, as well as asymmetry of returns in various risk regimes.	*Mean and difference of upside and downside capture, along with average index return over the two environments.* The mean indicates how defensive a strategy is over a full market cycle, while the difference reflects how well a strategy maximises the asymmetry of returns. Defensive strategies should protect more on the downside than they miss on the upside, or they're no better than replacing a portion of equities with cash.
EFFICIENCY	**Common**	**Less-Common**
	Sharpe ratio: a strategy's return less cash, divided by ***standard deviation***. A Sharpe ratio higher than the benchmark should be a minimum requirement for any defensive equity strategy worth considering.	*Sortino ratio: a strategy's return less cash, divided by* ***downside deviation***. Similar to Sharpe ratio, but penalises for downside volatility only.