

Five Principles for Smarter Portfolio Construction

Portfolio construction has become an increasingly important concern for advisors, thanks to two evolving trends. One is the desire to improve diversification, recognizing that in today's unusual macro environment, traditional fixed income alone may not provide an effective counterweight to a prolonged downturn in stock prices. The other is the growing use of allocation models by advisors — which not only simplify decision-making, but also encourage their clients to stay invested during periods of volatility, when emotion can lead to missteps.

At QS Investors, we take a distinctive approach to building multi-asset portfolios that reflects our firm's long history in developing systematic strategies that synthesize a huge array of inputs. Much of what we've learned through the years is captured in the five principles, which harness both quantitative and behavioral factors to help investors gain a better chance to reach their goals.

We believe investors are best served by looking ahead as well as behind.

1 Don't Just Live in the Past

The traditional mean/variance approach to portfolio construction — with allocation decisions based on historical averages of asset class returns, volatility, and correlations — may provide a reasonable starting point for investors. However, it fails to take into account many variables, including the likely impact of current and future macro conditions.

OUR VIEW: We believe investors are best served by looking ahead as well as behind. Return forecasts generated through a Black-Litterman¹ framework — in which expected

returns for various asset classes are not simply based on past averages but rather blended with proprietary views on the future direction of the markets and economy — offer a more sophisticated way to evaluate investment opportunities. This approach not only tends to be better received by investors, but more importantly, allows for expected risk and return assumptions to evolve based on the ongoing assessment of potential market conditions and their respective probabilities.

2 Beware the Tides of Sentiment

Markets are driven by human behavior, which is subject to the influence of emotion. Irrational exuberance as well as irrational pessimism can skew demand; the result can be mispriced assets and a tendency for investors to enter and exit positions at exactly the wrong time. Consider 2017, when U.S. stocks dramatically outperformed their international counterparts. That relationship may or may not be sustainable: looking longer term can head off an over-optimistic allocation to U.S. assets.

OUR VIEW: It's important to neutralize emotions tied to market movements which can impair judgement along with allocation decisions. That's why we take a rules-based approach to designing portfolios, with formalized decision-making based on robust market data and the full breadth of academic insights available. This systematic approach discourages one-off adjustments by clients in response to sudden shifts in the markets, reining in an investors' worst emotional impulses.

3 Recognize the Asymmetry of Volatility

It's axiomatic that you must take on risk to access the return potential of the market. But how much? Academics would say that people are mean-variance efficient; i.e., they operate on a utility function basis; we want this much return and we're willing to trade off this much risk.

OUR VIEW: We recognize that in real life investors do this in an asymmetrical way; they're much more averse to downside than upside risk in their portfolio. It's rare to get

an angry call from a client saying their portfolio has gained too much. Classic volatility analysis doesn't necessarily account for this. That's why, in our models, rather than seek to minimize total risk, we aim to minimize downside risk — or more specifically, a shortfall against a predefined benchmark chosen for our client's objectives. This allows us to embed the concept of loss aversion in the pursuit of achieving a client's objective.

¹Black-Litterman refers to a portfolio allocation model introduced in the 1990s by Fischer Black and Robert Litterman which allows managers greater flexibility than basic Modern Portfolio Theory.

Active management does not ensure gains or protect against market declines. Yields and dividends represent past performance and there is no guarantee they will continue to be paid.

We work hard to gauge fundamental shifts in the global economy and markets before they can adversely affect our portfolios

4 Embrace Clues From Economic Fundamentals

Maintaining a full fundamental and economic understanding of all markets, especially those outside the U.S., can be a daunting challenge for advisers. Without a framework to provide this, advisers may opt to steer their clients toward more traditional assets, potentially losing out on market opportunities and diversification potential.

OUR VIEW: We work hard to gauge fundamental shifts in the global economy and markets before they can adversely affect our portfolios, paying close attention to a host of underlying fundamentals that impact long-term views on assets. In the context of global equities, however, four metrics stand out for us as crucial:

- **Earnings growth** — Specifically, real earnings growth, not nominal earnings growth, which matters a lot when you're evaluating assets from a country like Brazil where inflation is a serious consideration.

- **Dividends** — We view them primarily as a proxy for cash flow and a key input in evaluating stock yields.

- **Valuation** — Which assets are undervalued, and which are cheap for good reason? We periodically adjust our core valuation metric (earnings yield) to reflect economic and political uncertainty. Things that concern some investors about emerging markets, for example — social unrest, economic stability, rule of law — are accounted for in this way.

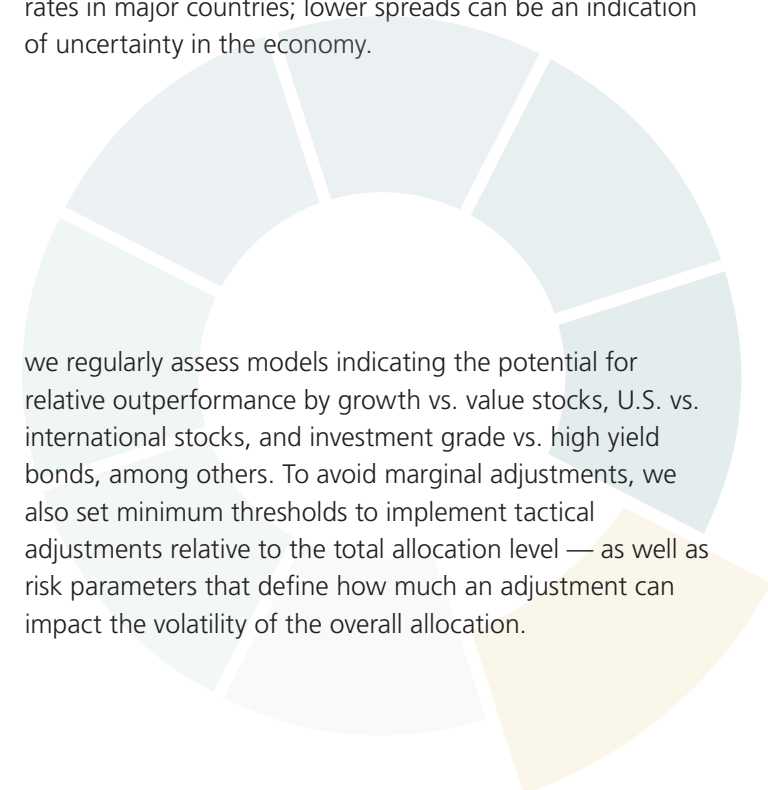
- **Term spreads** — One key metric we focus on is the difference between two- and ten-year government interest rates in major countries; lower spreads can be an indication of uncertainty in the economy.

5 Double Down on Data

Individual investors have limited access to and ability to process macroeconomic and fundamental data — resulting in subjective decisions about where to apply attention in response to evolving conditions in the market.

OUR VIEW: As a quantitative firm, we are committed to using massive amounts of available data and exploring multiple ideas and scenarios simultaneously. To do this, we look at data in isolation as well as in relation to other data;

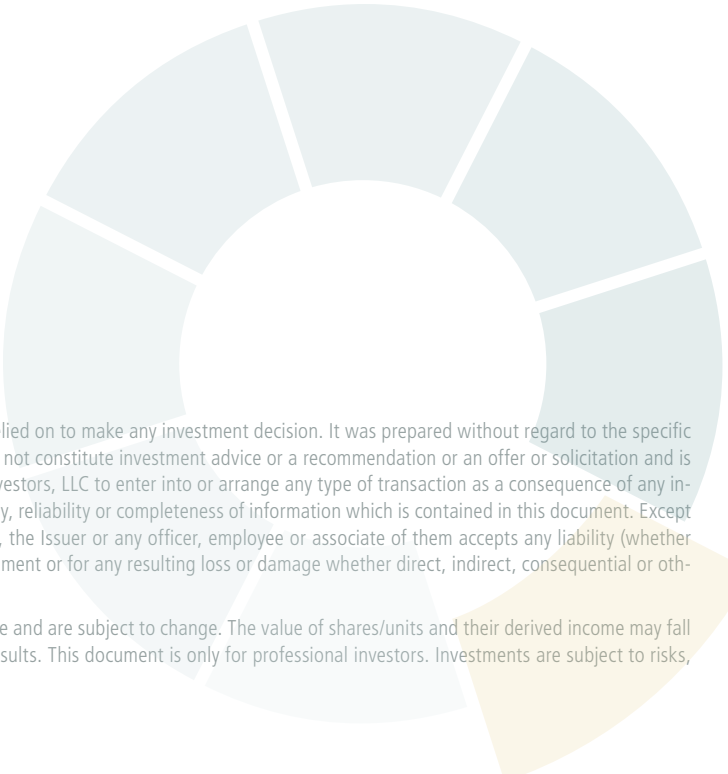
we regularly assess models indicating the potential for relative outperformance by growth vs. value stocks, U.S. vs. international stocks, and investment grade vs. high yield bonds, among others. To avoid marginal adjustments, we also set minimum thresholds to implement tactical adjustments relative to the total allocation level — as well as risk parameters that define how much an adjustment can impact the volatility of the overall allocation.



Conclusion

Asset allocation remains a hot topic for advisers now. In part that's because the legacy of the financial crisis is still with us. After a decade in which asset classes have often not behaved as expected and conventional wisdom about the role of various asset classes and sub-classes in a diversified portfolio has shifted, many are skeptical of whether traditional allocation models are sufficient to address investors' long-term objectives.

Our conviction is that these concerns are real, but can be well addressed through the use of dynamic multi-asset allocations that draw on the kind of experience and expertise offered by quantitative managers like QS Investors.



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