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Higher Standards for Low-Volatility Benchmarks

Examining the biases, constraints and rebalancing within widely used indices

Authors



James C. Fallon
Portfolio Manager



Molly O'Brien Quantitative Research Associate

In brief

- Actively managed low-volatility strategies are typically measured against passively constructed minimum variance indices and a cap-weighted index.
- The predominant passive low-volatility indices, such as MSCI All Country World Minimum Volatility Index and S&P Global Low Volatility Index, are deficiently constructed and maintained, therefore presenting challenging performance comparisons to MFS low-volatility portfolios.
- The public equity space is often mired in passive implementation because the market is efficient. We argue that active mandates should be considered in the low-volatility space.

MSCI Minimum Variance Index methodology

Benchmarks have been a staple of modern investing in the effort to help allocators judge manager performance. The systematic application of a rule set across any universe of stocks is easy for people to understand. The downside to the simplicity is it can lead to portfolio exposure tilts, both intended and unintended. The MSCI Minimum Volatility suite of indices provides a good example of how this plays out in this well-known benchmark. The MSCI ACW Minimum Volatility Index optimizes with the MSCI All Country World Index (ACWI), its parent index, as a starting point to produce a portfolio with the least volatility given a set of constraints using a covariance matrix. We believe this methodology at times can be too dependent on the covariance objective, as it is often driven by a lack of practical inputs regarding risk drivers. These passive solutions are also exclusively reliant on historical risk trends, which are not always ideal as trends in market risk can change abruptly.

For example, over the past two years, MSCI ACW Minimum Volatility Index has been overweight in China, Hong Kong and Taiwan by 8.23% compared to the ACWI. These countries significantly underperformed, contributing to a negative performance of the overall index, and may not provide an accurate view of how a properly diversified low-volatility strategy has performed. In recent years stocks in these countries have produced low correlations with other larger-cap developed stock, resulting in the overall lower covariance favored by a global minimum variance process that lacks practical oversight and a robust alpha driver.

Exhibit 1: MSCI ACW Minimum Volatility Index vs. ACWI country allocation

MSCI AC World Minim Volatility Index (MWM			MSCI All Country World Index (ACWI)		Variation	
Country	Average Weight	Total Return	Average Weight	Total Return	Average Weight Difference	Total Return Difference
China	6.59%	8.67%	3.12%	-12.36%	3.47%	21.03%
Hong Kong	1.99%	-22.17%	0.64%	-19.08%	1.35%	-3.09%
Taiwan	5.04%	11.10%	1.64%	21.38%	3.41%	-10.28%
Total	13.62%	-2.39%	5.39%	-10.05%	8.23%	7.66%

Source: Factset, for the period 4/9/22 to 4/30/24.

It is worth noting that names, even if they aren't lower volatility, may enter the index because they have a low correlation with the rest of the market and may reduce the risk of the portfolio. While this may help lower backward-looking predicted risk, it may not provide investors with the realized volatility reduction they are looking to achieve.

Also, the rigid, infrequent timing of passive index rebalancing can leave investors exposed to market shocks. The MSCI ACW Minimum Volatility Index is rebalanced only every six months, a window during which any range of uncertainties can rattle markets and produce circumstances that a prudent fiduciary should address.

MSCI ACW Minimum Volatility Index construction

We believe that MSCI ACW Minimum Volatility Index is poorly diversified because of its constraints. The index holds sector weights to about +/- 5% of the parent index.¹ However, over the past 10 years, aside from the energy sector (and the materials sector), nearly every sector's positioning has had a negative impact to the index.

Exhibit 2: MSCI ACW Minimum Volatility Index vs. ACWI sector allocation

	MSCI All Country Minimum Volatility Index		MSCI All Country World Index		Allocation Effect Contribution to
GICS Sector	Average Weight	Total Return	Average Weight	Total Return	Return
Communication Services	10.97	38.44	8.45	121.12	-0.42
Consumer Discretionary	6.89	140.82	10.70	133.66	0.05
Consumer Staples	14.29	93.99	8.52	77.28	-2.94
Energy	1.59	10.88	5.70	39.63	6.65
Financials	15.02	136.48	18.01	100.34	-1.83
Health Care	15.06	162.49	11.85	134.12	-1.76
Industrials	10.28	126.78	10.53	124.60	0.25
Information Technology	9.66	172.60	15.30	457.85	-13.95
Materials	3.72	83.91	4.88	74.61	2.04
Real Estate	4.32	54.37	2.94	41.29	0.08
Utilities	8.19	95.19	3.12	66.46	-3.56
[Unassigned]	0.00	0.21	0.00	19.12	-0.01
Total	100.00	109.53	100.00	131.35	-15.40

Source: Factset, for the period 4/30/14 to 4/30/24. Allocation Effect represents the return difference that results from the difference in sector weights when comparing the two indices.

The MSCI ACW Minimum Volatility Index does not utilize regional constraints in its construction methodology. This has led to past unintended biases, such as in recent years being broadly underweight Europe while heavily overweight emerging markets.

S&P Global Low Volatility Index

Although also heavily dependent on historical risk, the S&P Global Low Volatility Index has a different — but also deficient in terms of diversification and alpha drivers — approach to construct its index. It identifies the 300 least volatile stocks in the S&P Global Large/Midcap universe and assigns weights proportionally to the inverse of volatility. Similar to MSCI ACW Minimum Volatility Index, the S&P Global Low Volatility Index does not have what we believe are reasonable country constraints. Taiwan makes up 15.3% of the index and includes many of its top holdings, despite the parent index having a 2.01% weight in Taiwan. Although the index does rebalance quarterly, it is not representative of the stable high-quality companies low-volatility investors want to own.

Exhibit 3: S&P Global Low Volatility country breakdown

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Country/Region Breakdown						
Country/Region Breakdown	# of Constituents	Index Weight (%)				
United States	48	15.7				
Taiwan	39	15.3				
apan	45	13.9				
Canada	33	10.1				
Australia	18	5.8				
Malaysia	13	5.7				
Jnited Kingdom	12	4.0				
Singapore	10	3.5				
Germany	9	2.8				
hailand	8	2.4				

Source: S&P Global. Data as of 4/30/24.

The objective of low-volatility equity strategies is to deliver strong risk-adjusted returns at a lower level of absolute risk. In order to avoid the index issues identified above, we believe a simpler and more intuitive method for benchmark low-volatility managers would be to compare them to the capitalization-weighted market index and assess using risk-adjusted performance metrics such as Sharpe ratio and alpha or the strategy's down capture ratio. Each of these risk-adjusted performance metrics provides a suitable barometer for determining if the low-volatility manager has provided the intended benefit, especially in down markets.

Conclusion

MFS low-volatility portfolios are constructed very differently than MSCI AC World Minimum Volatility and S&P Global Low Volatility indices. The MFS approach to low volatility seeks to provide long-term growth of capital and reduce downside market exposure through investments primarily in less volatile securities selected through a blend of fundamental and quantitative research. We construct a low-volatility portfolio that bases stock selection not only on a stock's volatility but also utilizes fundamental and quantitative research to determine whether a stock's valuation properly reflects a company's growth and return prospects, as well as the risk involved. From the broader global investable universe, MFS eliminates from consideration approximately 40% or more of the most historically volatile equity securities This allows us to broaden our opportunity set to benefit from enhanced diversification and provide us the ability to research a broader set of stocks. Low-volatility investing does not try to beat the indices, but instead looks to provide a risk/return profile superior to that of a passive investment in the cap-weighted market index. Therefore, we are not comfortable solely comparing MFS low volatility strategies to passive strategies.

Endnotes

¹ MSCI Minimum Volatility Indexes Methodology.

² https://www.spqlobal.com/spdji/en/indices/dividends-factors/sp-qlobal-low-volatility-index/#overview – methodology pdf.

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