



Focus: Size



VALUE



SIZE



MOMENTUM



QUALITY



YIELD



VOLATILITY



GROWTH



LIQUIDITY

Factor focus:

Size

In the realm of investing, a factor is any characteristic that helps explain the long-term risk and return performance of an asset. MSCI Factor Indexes are designed to capture the return of factors which have historically demonstrated excess market returns over the long run.

MSCI Factor Indexes are rules-based, transparent indexes targeting stocks with favorable factor characteristics – as backed by robust academic findings and empirical results – and are designed for simple implementation, replicability, and use for both traditional indexed and active mandates.

Defining Size

The Size factor has captured the tendency of small-cap stocks to outperform bigger companies over the long run. Size is categorized as a “pro-cyclical” factor, meaning it has tended to benefit

during periods of economic expansion (see “Performance and Implementation”). The size premium has been part of institutional investing for decades. In the past few years, it has become a building block of many factor-based indexes.¹

The MSCI Equal Weighted Indexes tend to overweight smaller cap companies relative to the benchmark parent index

- Index constituents are weighted equally at each rebalance date, effectively removing the influence of that constituent’s price (high or low) from the index

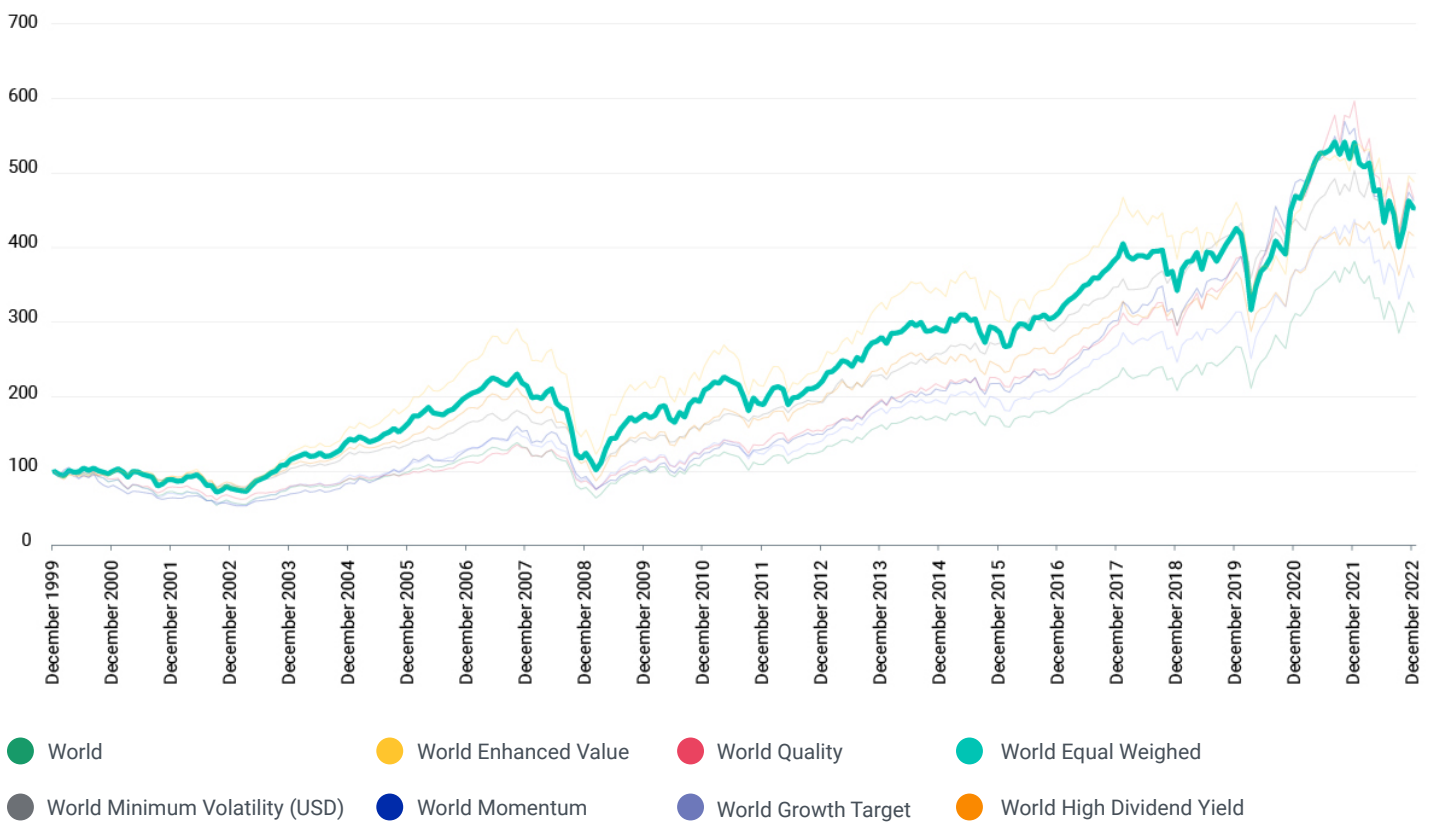
Why investors use size strategies

University of Chicago Ph.D. Rolf Banz identified the size factor in U.S. stocks in 1981.² Proponents of the size effect advance several explanations for it. Banz suggested that it stems from a flaw in the capital asset pricing model (CAPM, the standard method of projecting risk and return from stock investments) or from insufficient information about companies that get scant coverage by equity analysts. The research on size took off after economists Eugene Fama and Kenneth French included it as a key component in their influential three-factor model.

Performance & --- implementation

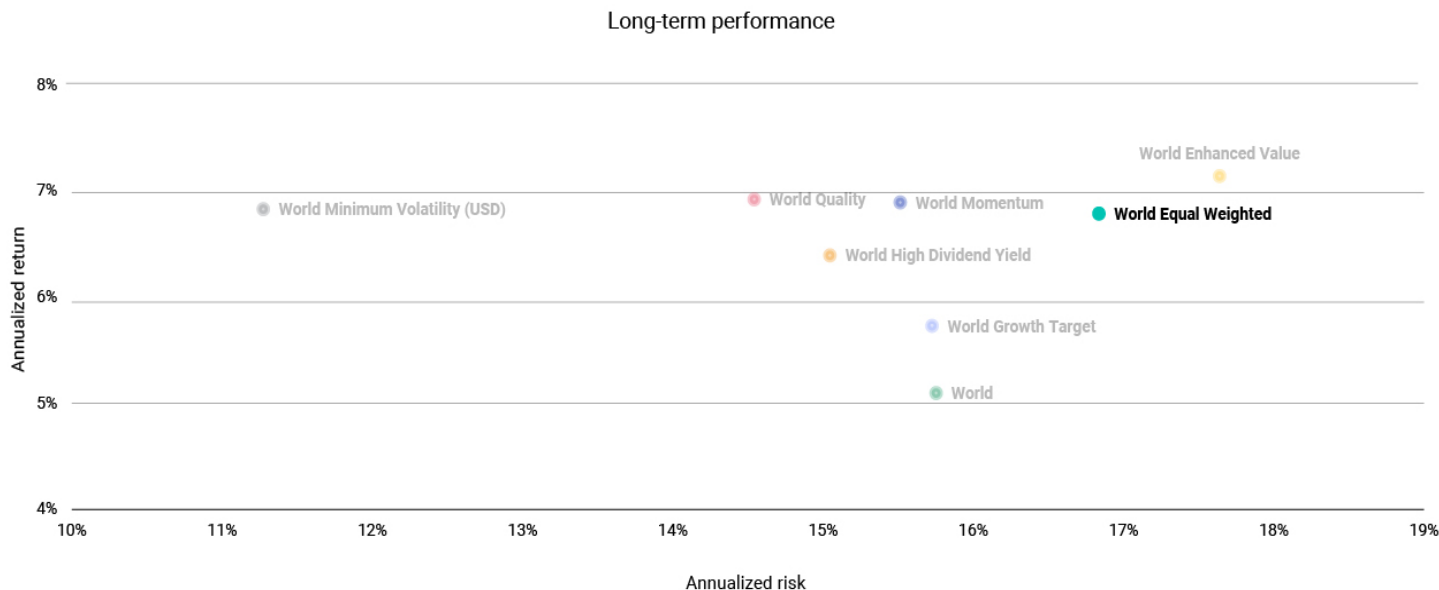
MSCI World Factor Indexes

Over time, individual factors have delivered outperformance relative to the market.



The MSCI World Equal Weighted Index has historically generated excess returns over the long run with a 1.7% annual return over the MSCI World Index since 1999 as represented above.

Long-term performance: December 1999 - December 2022



Although factor strategies have exhibited long-term outperformance, in the short-term, factor performance has been cyclical and has generated periods of underperformance.

Size-based investing has been an integral part of the investment process for decades. More recently, transparent and rules-based factor indexes have become effective tools to gain exposure to the size premium.

How factors have performed relative to each other:

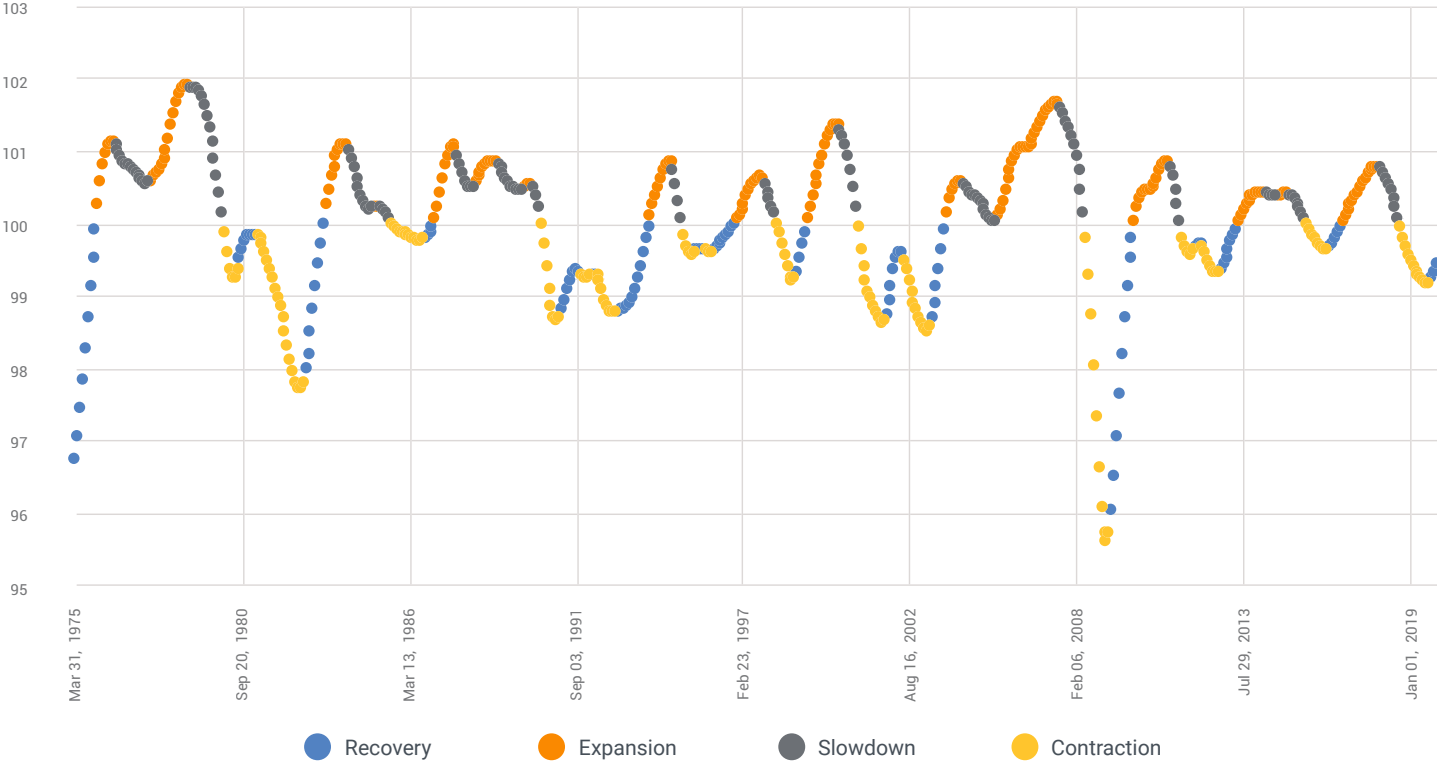
Size

| 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------|--------|--------|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|
| 1.5% | -4.5% | -9.6% | 56.7% | 28.6% | 28.4% | 31.0% | 19.9% | -29.2% | 42.0% | 18.2% | 8.0% | 16.7% | 32.7% | 12.1% | 5.8% | 10.3% | 32.6% | -1.4% | 36.7% | 28.7% | 26.1% | -3.9% |
| 1.2% | -8.0% | -9.8% | 50.4% | 24.1% | 17.2% | 28.9% | 16.8% | -33.5% | 41.9% | 16.5% | 4.8% | 16.5% | 30.7% | 9.0% | 4.5% | 9.4% | 26.6% | -2.4% | 28.4% | 22.7% | 22.3% | -9.2% |
| 0.3% | -10.0% | -13.6% | 40.1% | 21.3% | 15.2% | 22.1% | 11.4% | -37.8% | 33.8% | 12.8% | 4.8% | 15.0% | 30.3% | 7.0% | 4.2% | 8.9% | 26.6% | -5.1% | 28.3% | 18.1% | 20.8% | -9.3% |
| -2.1% | -11.5% | -14.4% | 33.8% | 20.8% | 12.5% | 21.8% | 10.3% | -39.9% | 33.5% | 12.3% | 4.4% | 14.8% | 27.7% | 5.5% | 1.2% | 8.9% | 23.9% | -6.7% | 27.4% | 16.5% | 18.2% | -16.4% |
| -10.2% | -12.1% | -15.1% | 30.5% | 20.0% | 10.0% | 21.2% | 9.6% | -40.3% | 31.9% | 11.4% | -5.0% | 14.7% | 27.4% | 4.6% | -0.3% | 8.2% | 23.1% | -8.2% | 24.5% | 10.1% | 16.8% | -17.3% |
| -12.5% | -16.5% | -16.5% | 26.0% | 19.3% | 8.5% | 20.7% | 7.3% | -41.9% | 30.8% | 9.3% | -5.4% | 13.7% | 26.5% | 4.6% | -1.0% | 8.2% | 22.9% | -8.5% | 24.3% | 3.3% | 15.4% | -17.7% |
| -12.9% | -19.4% | -19.4% | 25.9% | 15.2% | 8.3% | 19.1% | 6.4% | -42.4% | 17.2% | 9.1% | -9.3% | 13.3% | 22.9% | 3.4% | -2.4% | 5.1% | 19.2% | -11.8% | 24.0% | 1.0% | 15.0% | -17.8% |
| -18.9% | -20.5% | -19.5% | 22.0% | 12.7% | 6.0% | 16.8% | 6.1% | -42.6% | 14.8% | 7.2% | -11.0% | 8.9% | 19.4% | 3.3% | -2.7% | 4.7% | 18.0% | -13.4% | 19.8% | -3.3% | 14.8% | -21.9% |

- World
- World Enhanced Value
- World Quality
- World Equal Weighed
- World Minimum Volatility (USD)
- World Momentum
- World Growth Target
- World High Dividend Yield

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Macro effects on factor performance



In general, factor performance has been cyclical in nature. Individual factors have been shown to outperform during different macroeconomic environments.

Conclusion _____

Although size-based investing has been a strategy for decades, it is only in recent years that transparent, rules-based indexes have provided effective ways to expose portfolios to the size premium. The advent of products such as the MSCI Equal Weighted Indexes, in addition to small cap, and size tilt indexes, gives investors several ways to access the size premium.

Footnotes _____

- 1 Oberoi R., A. Rao, L. Mrig and R.A. Subramanian (2016). "One Size Does Not Fit All: Understanding Factor Investing." MSCI Research Insight.
- 2 Banz, R.W. (1981). "The Relationship between Return and Market Value of Common Stocks." Journal of Financial Economics, Vol. 9, No. 1, pp. 3-18.



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