



FOCUS: QUALITY

Factor Investing

msci.com



VOLATILITY



YIELD



QUALITY



MOMENTUM



VALUE



SIZE

FACTOR FOCUS: QUALITY

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 passive and active mandates.

DEFINING QUALITY

The quality factor is described in academic literature as capturing companies with durable business models and sustainable competitive advantages. Quality is categorized as a “defensive” factor, meaning it has tended to benefit during periods of economic contraction (see “Performance and Implementation”).

The quality factor has helped explain the movement of stocks that have low leverage, stable earnings and high profitability.

The MSCI Quality Index employs three fundamental variables to capture the quality factor:

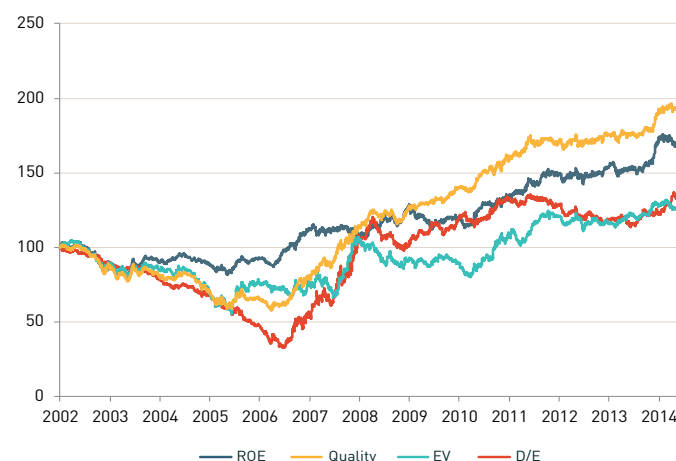
- Return on equity - which shows how effectively a company uses investments to generate earnings growth;
- Debt to equity - a measure of company leverage; and
- Earnings variability - how smooth earnings growth has been

WHY INSTITUTIONAL INVESTORS HAVE USED QUALITY STRATEGIES

The long-term outperformance of the quality factor against the market is well documented in financial literature (see references below). Nobel laureates Eugene Fama and Kenneth French, economists known for their groundbreaking work in explaining stock returns, recently revised their signature three-factor model (company size, company value and market risk) to add two quality-related factors (profitability and asset growth).

Many active strategies have emphasized quality growth as an important factor in their security selection and portfolio construction.¹ In 2012, Robert Novy-Marx published a pioneering paper that found profitability and stability were just as useful for explaining returns as traditional value measures.²

THE THREE KEY QUALITY COMPONENTS PERFORM BETTER IN COMBINATION THAN ALONE



Data from November 2002 to May 2015.

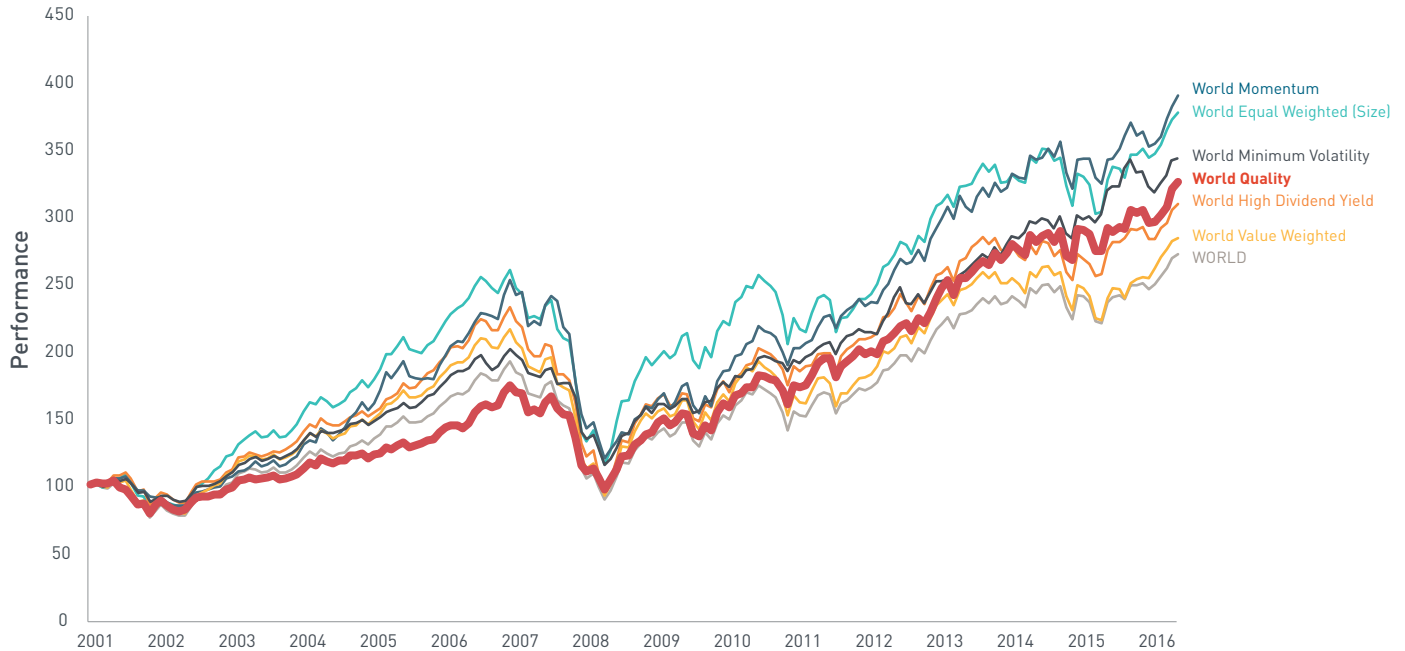


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PERFORMANCE & IMPLEMENTATION

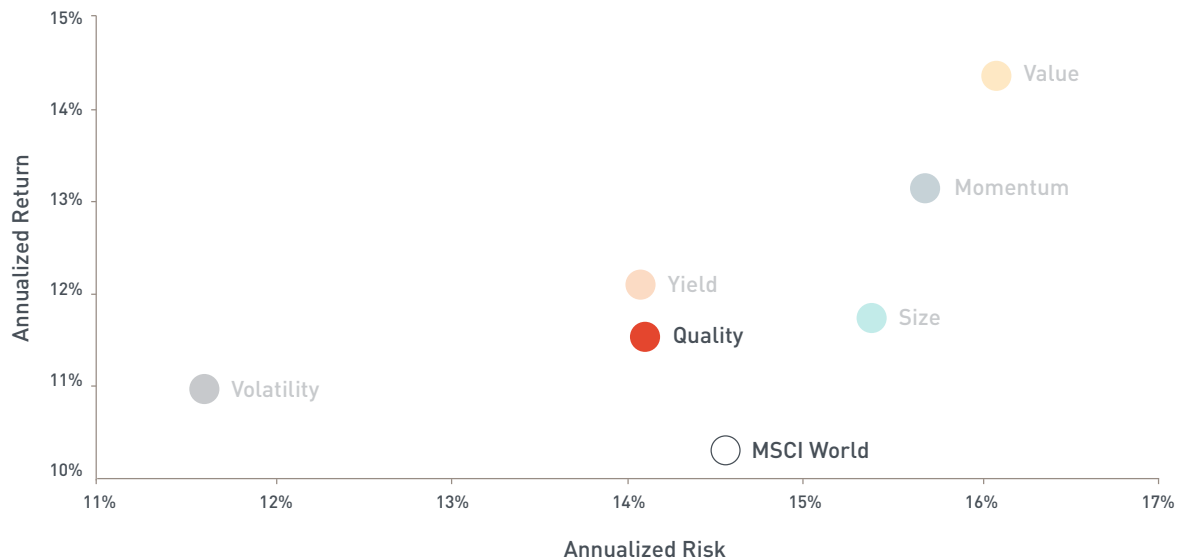
Over time, individual factors have delivered outperformance relative to the market (see chart below).

MSCI WORLD FACTOR INDEXES



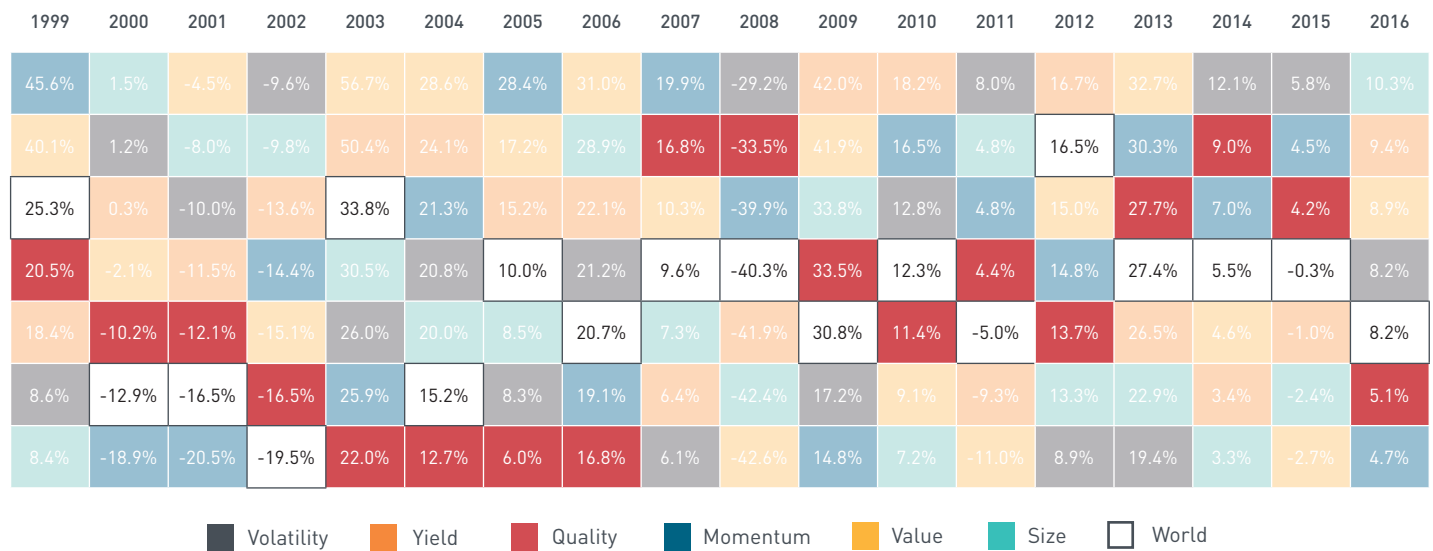
From a longer-term perspective, the simulated MSCI Quality Index generated an annualized return of over 11% during a 40-year period (see chart below). In comparison to the other key factors MSCI has identified, the MSCI Quality Index has tended to reside in the middle of the group in terms of long-term annualized risk, or volatility.

LONG-TERM PERFORMANCE: JANUARY 1976 TO DECEMBER 2016



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

HOW THE SIX FACTORS HAVE PERFORMED RELATIVE TO EACH OTHER: **QUALITY**

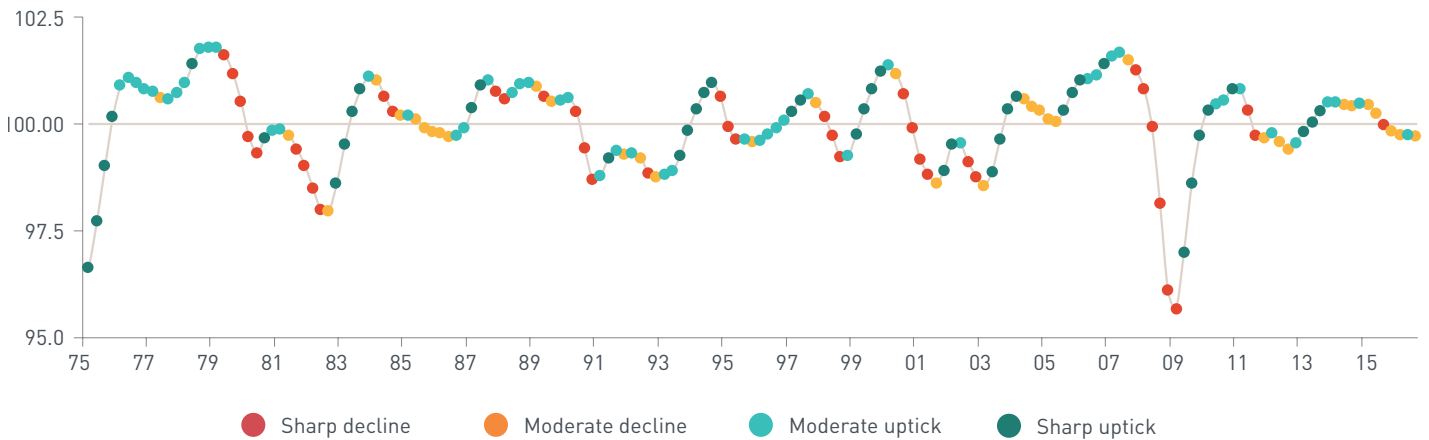


The analysis and observations in this report are limited solely to the period of the relevant historical data, backtest or simulation. Past performance — whether actual, back tested or simulated — is no indication or guarantee of future performance. None of the information or analysis herein is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision or asset allocation and should not be relied on as such.

The time periods covered in the charts in this paper were dictated by the data available when we conducted the simulations which produced them.

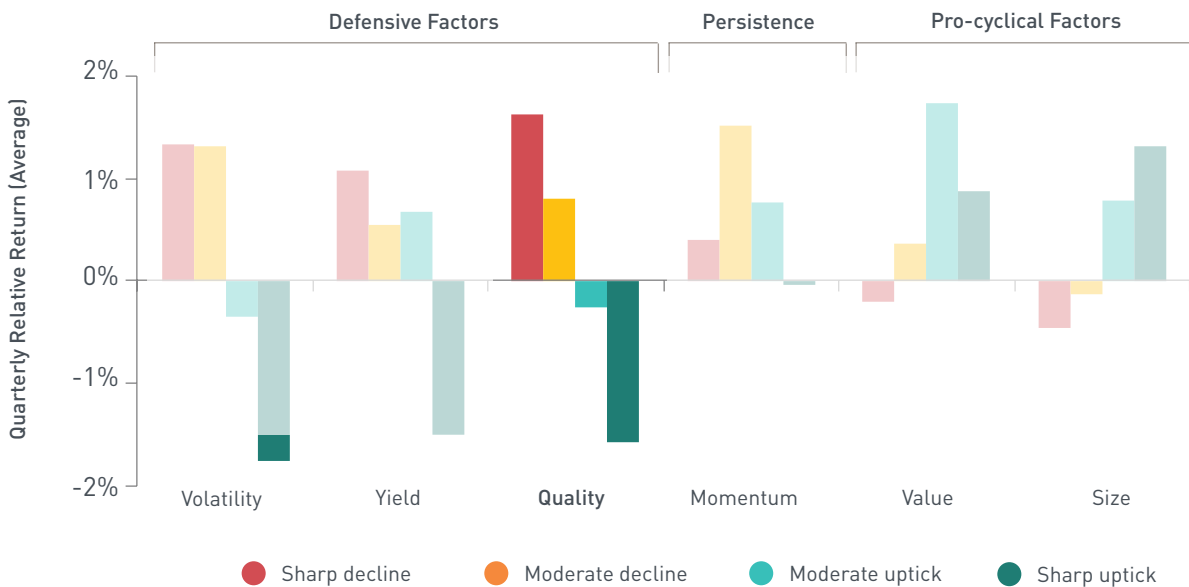
There are frequently material differences between backtested or simulated performance results and actual results subsequently achieved by any investment strategy

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. As the charts on this page illustrate, the quality factor falls into the “defensive” category, meaning that this type of strategy historically outperformed during declining market conditions over the study period.

The Composite Leading Indicator used here, designed to provide early-warning signals on business-cycle turning points, is an aggregate time series displaying a reasonably consistent leading relationship with the reference series for the macroeconomic cycle.



Data from November 28, 1975 to September 30, 2016.



QUALITY

CONCLUSION

The quality factor aims to reflect the performance of companies with durable business models and sustainable competitive advantages. This is achieved by targeting companies that tend to have high ROE, stable earnings, and strong balance sheets with low financial leverage. Institutional investors consider quality for additional sources of return and/or for diversification purposes. Quality has also traditionally served as a defensive factor when a flight to quality occurs.

FOOTNOTES & REFERENCES

1 Asness, C. S., A. Frazzini and L.H. Pederson, L. H. (2013). "Quality Minus Junk," s.l.: Working Paper, AQR Capital Management.

2 Novy-Marx, R. (2012). "The Other Side of Value: The Gross Profitability Premium." *Journal of Financial Economics*, Volume 108, pp. 1-28.

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