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Value: Two Sides of the Coin

Altaf Kassam
EMEA Head
Investment Strategy and Research

Hélène Veltman
Senior Investment Strategist
Investment Strategy and Research

STATE STREET GLOBAL ADVISORS

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Introduction

The Value factor has been under intense scrutiny lately,[1–7] having underperformed the market-cap-weighted index over the decade since the GFC, and continuing to disappoint in 2020.

The central question that many investors are asking is “Will Value *ever* come back?”

What is Value? Put simply, the Value factor aims to identify undervalued stocks. Market-cap indices can be prone to overweight highly valued stocks and underweight the lower valued, so Value investing will outperform if we have a reversal and these undervalued stocks return to their “correct” valuations (as their prices rise).

The last time we saw a sustained Value rally was in the early 2000s, in the wake of the dot-com boom. However, post the Global Financial Crisis (GFC) the factor has underperformed, now to a point where it has become too cheap to be ignored, looking like a historically attractive investment.

If Value has been underperforming relative to the benchmark, then some other stocks must have been outperforming — *anti-Value*. These stocks tend to be heavily exposed to the Growth and Quality factors. And, just as Value looks historically cheap, so Growth and Quality now appear historically expensive, leading some to call this a bubble like the dot-com boom, and similarly ripe for reversal.

Others contend that Value may remain lower for longer, in tandem with the interest rate environment that we have been experiencing since the GFC. As low interest rates are relatively more favourable to Growth than Value stocks, with rates looking to be pinned near zero or below for some time in the major developed economies, we could see Value continue to underperform relative to the benchmark.

In the rest of this piece we try and answer the central question by examining the major equity style factors in turn through the dimensions of valuation, sector exposures, and their connection to the interest rate environment.

Five Equity Factors

Based on academic research, empirical observations, and economic intuition, the five factors Value, Quality, (Low) Volatility, Momentum and (Small) Size have been shown to earn premia over medium to long horizons (from 5 up to 20 years) relative to the market-cap-weighted index.[8–11] The Growth factor on the other hand, is not a rewarded factor, and over long horizons tends to underperform, although, just as certain premia factors like Value can underperform over periods, so an unrewarded factor like Growth can outperform in the medium term, as it has recently.

Typically, these factors are captured through rules-based smart beta strategies, but they can also be harvested actively through stock selection. They can be implemented as single-factor strategies or through a combined multi-factor approach.

The logic behind — and our own approach to — these factors is shown in Figure 1.

Figure 1
Factor Overview

Factor	Expected long Term Premium	State Street Global Advisors Factor Measure
1.a Value	Inexpensive stocks should outperform more expensive stocks	• Price to Earnings • Price to Cash Flow • Price to Sales • Price to Book • Dividend Yield
1.b Growth	Potential for continued growth; can be considered the opposite of Value	• Earnings Per Share growth rate
2. Quality	Healthy companies tend to outperform less healthy companies	• Return on Assets • EPS variability • Long Term Debt/Equity Ratio
3 Volatility	Lower volatility stocks tend to generate a higher risk-adjusted return than higher volatility stocks	• Trailing 5-year standard deviation of monthly local currency total returns
4. Momentum	Stocks with good recent performance tend to continue these trends in the near term and *vice-versa* for stocks with weak recent performance	• Last 12–month return (excluding the most recent 1 month)
5. Size	Stocks of small companies tend to earn greater returns than stocks of larger companies	• Market Capitalisation (Free Float Adjusted)

There is an important distinction between the way these factors are calculated: The last three factors — Volatility, Momentum and Size are constructed using market parameters and are, in that sense, unambiguous. The first three factors Value, Growth and Quality are based on accounting parameters and can require interpretation. For example, one of the most debated accounting parameters currently is the Book Value, which is a key component of Value, but which some are declaring less relevant with the rise of intangibles.

Historical Performance of the Value, Growth and Quality Factors

We now focus on the three *accounting* factors: Value, Growth and Quality. We measure performance based on the MSCI World (Developed Market) Net Total Return indices in US dollars for each factor and the benchmark. For the Value and Growth indices we sourced MSCI index composition data back to June 2002, noting that MSCI bisects the universe almost equally between Value and Growth, so that in most cases each stock is classified as either Value or Growth (sometimes a stock is given a fractional Value/Growth classification).

In Figure 2 we show the rolling 5-year annualised outperformances of the factor indices relative to the benchmark index. As expected, Value and Growth are near-mirror images: Value has underperformed following a short and sharp reversal post-GFC, and Growth has done the opposite. Quality initially performed like a high beta version of Growth, before retracing somewhat and then moving in lockstep with Growth over the last five years.

Figure 2
MSCI World Factor Index Rolling 5-year Out-/ Underperformance

Source: State Street Global Advisors, between 30 June 2002 and 31 December 2020. Past performance is not a reliable indicator of future performance. **Index** returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

The Interrelation of Factors and Sectors

To try and better understand these relative factor performances, we will now look at the active sector exposures of Value, Growth and Quality.

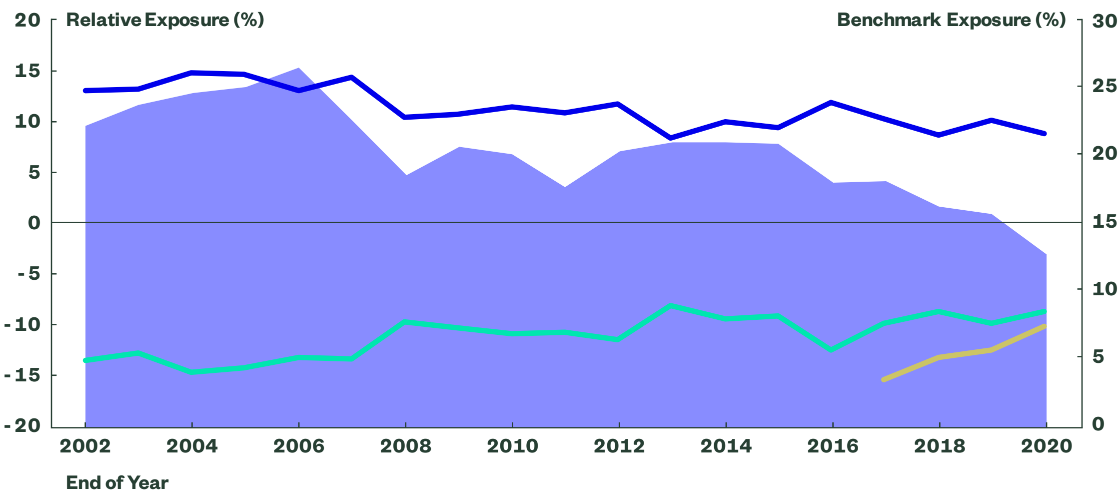
One key difference between Value and Growth is their active exposure to the Financials sector, which we show in Figure 3. We observe:

1. Value is persistently overweight to the Financial sector by between 8% to 15%.
2. Growth has a similarly steady underweight to Financials, moving from -14% initially to -9% by the end of the observation period 31 December 2020.
3. For the Quality factor, where we can only show the active sector evolution since 2017 due to limited data, we see a similar active sector exposure as Growth.

On the same graph we show how the exposure of the benchmark to the financial sector has dropped from a peak of 26% as of 31 December 2006 to 12% as of 31 December 2020.

Figure 3
Benchmark and Active Exposures of Value, Growth and Quality Factors to Financials

BM (RHS)
Value
Growth
Quality

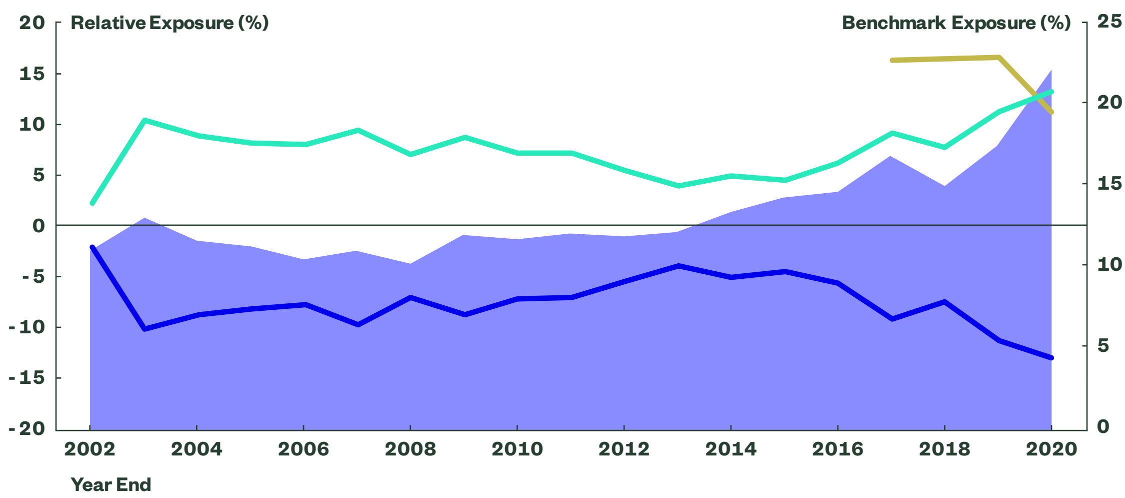


Source: State Street Global Advisors, between 30 June 2002 and 31 December 2020. Exposures are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

Another key difference between the two factors is their exposure to Information Technology (IT), where we see the following trends developing notably after 2013:

- The benchmark's exposure to the IT sector has increased sharply.
- The relative exposure of Growth to the IT sector has almost doubled. In absolute terms, the exposure of the Growth factor to IT has grown to 35% end 2020.
- The absolute exposure of Value to IT has stayed around 8%, but the *active* exposure has become more and more negative, at -13% end 2020.
- Quality has a similar active IT exposure to Growth, but this has fallen recently.

Figure 4
Benchmark and Active Exposures of Value, Growth and Quality Factors to IT



Source: State Street Global Advisors, between 30 June 2002 and 31 December 2020. Exposures are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

In Figure 5 we show the benchmark and active sector exposures of the Value, Growth and Quality factors as at end-December 2020 — we see that Value and Growth/Quality differ across the board, with the biggest differences in Financials and IT. Conversely, Growth and Quality mostly show similar active sector exposures, except for in the three consumer-focused sectors at the top of the Figure, where Growth is overweight the higher beta sectors and Quality overweight staples.

Figure 5
Benchmark and Active Sector Exposures of Value, Growth and Quality as at end-December 2020

		Relative Exposures as of 31/12/2020 (%)		
Sector	**Benchmark Weight (%)**	**Value**	**Growth**	**Quality**
Communication Services	8.9	-2.6	2.7	0.2
Consumer Discretionary	12.2	-5.2	5.3	-0.5
Consumer Staples	7.6	2.3	-2.3	6.1
Energy	2.7	2.3	-2.3	-2.7
Financials	12.8	8.7	-8.8	-10.3
Health Care	13.0	0.8	-0.8	1.5
Industrials	10.5	1.3	-1.4	1.1
Information Technology	22.1	-12.9	13.0	11.1
Materials	4.5	1.1	-1.1	-2.0
Real Estate	2.6	1.4	-1.5	-2.4
Utilities	3.1	2.8	-2.8	-3.1

Source: State Street Global Advisors. Exposures are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

Connecting Value and Financials through Price to Book

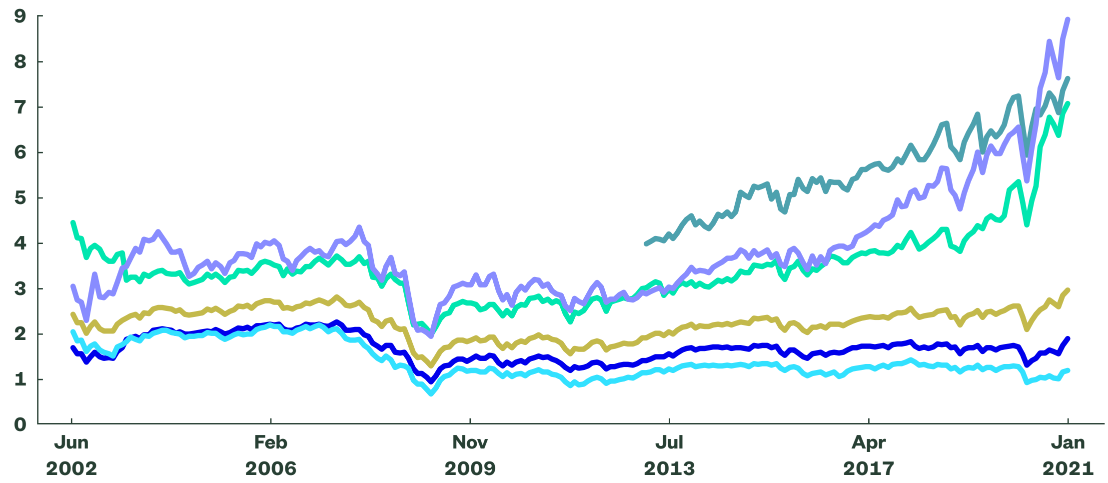
One of the main accounting parameters to assess Value is the Price-to-Book (P/B) ratio. In figure 6 we see that at least over the last 15 years, the Financials sector has consistently had the lowest P/B levels. On the other hand, the IT sector has seen its valuation accelerate upwards, particularly over the last 5 years.

These differences are partly fundamental — for Financials the P/B ratio is naturally low as the core business is on-balance sheet, so the Book Value is high. On the other hand, for a sector like Information Technology, there is usually much more to valuation than Book Value, and the value of intangibles is much higher.

Viewed this way, it is not surprising that Value is consistently overweight Financials and underweight IT.

Figure 6
P/B Ratio for Value, Growth and Quality Factors and Financials and IT Sectors

MSCI World Market Cap
Value
Growth
Quality
Financials
IT



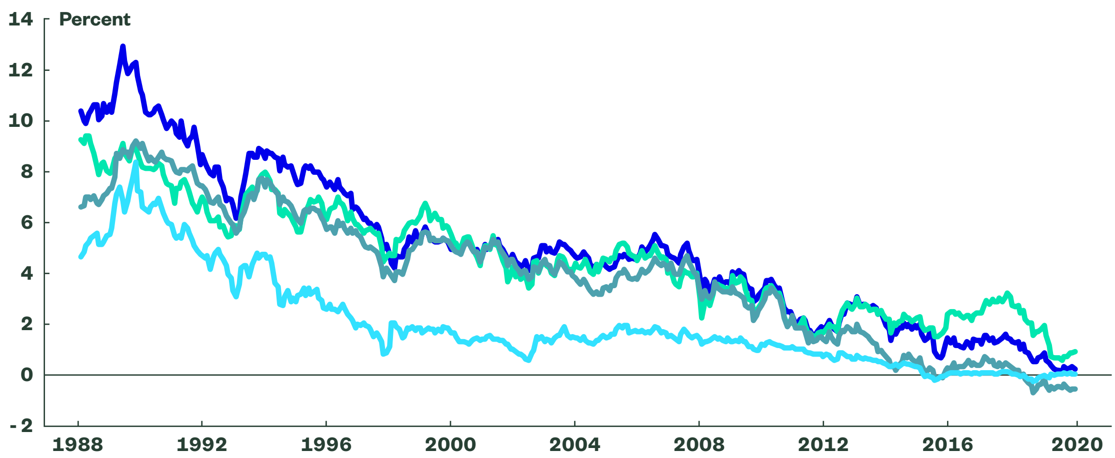
Source: MSCI, monthly data between 30 June 2002 and 31 December 2020.

Explaining the Underperformance of Value Through Macro Factors

The last 30 years has seen global interest rates across the curves move dramatically lower, and one argument for the relative outperformance of Growth vs. Value is that Growth stocks are 'longer duration' than Value, as they tend to rely more on longer-term borrowing.

Figure 7
10-year Yields on German, Japanese, US and UK Government Bonds

£
$
€
¥



Source: State Street Global Advisors, between 31 December 1988 and 31 December 2020. Past performance is not a reliable indicator of future performance.

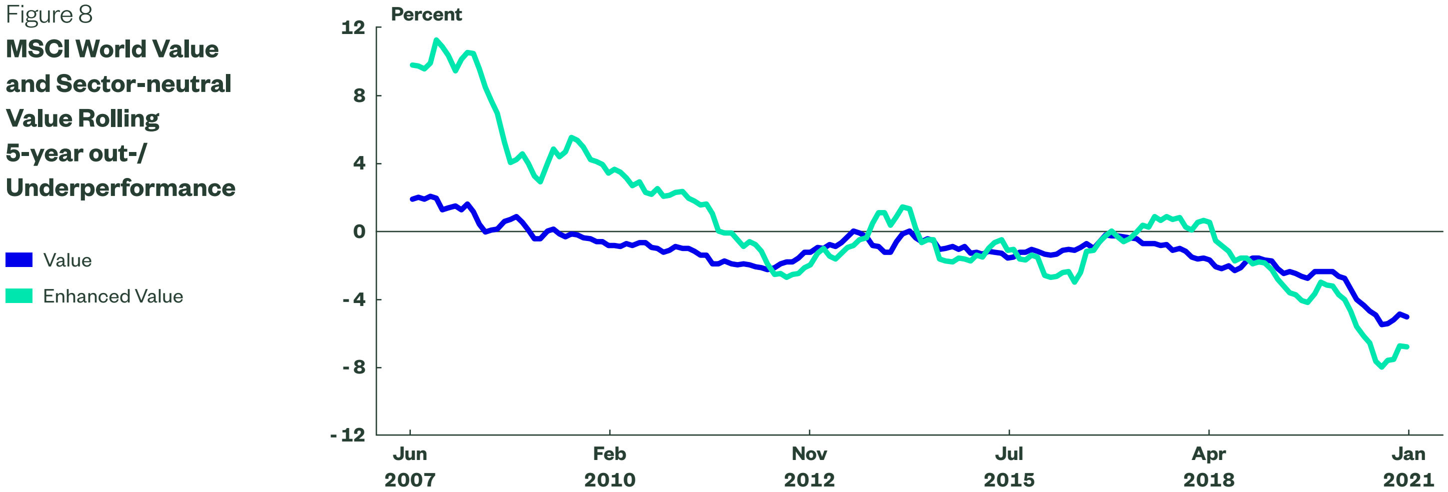
Going back to our sectoral analysis, Value suffers additional headwinds due to its large active exposure Financials, which tend to struggle in a low interest rate environment.

What if We Neutralise the Sector Effect?

To try and neutralise the underperformance of Value, we can attempt to tackle one of the root causes: the large active sector exposures. This is addressed by constructing our factors in a sector-neutral way, for example in MSCI's Enhanced Value index.

As can be seen in Figure 8, sector-neutral Value initially showed strong outperformance relative to the benchmark, but performance has since fallen away strongly, and this underperformance has accelerated over the last 3 years.

Figure 8
MSCI World Value and Sector-neutral Value Rolling 5-year out-/Underperformance



Source: State Street Global Advisors, between 30 June 2002 and 31 December 2020. Past performance is not a reliable indicator of future performance. **Index** returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

Given active sector exposures can no longer explain the underperformance of sector-neutral value, we need to look elsewhere. It turns out that the active currency exposures of Value and sector-neutral Value are very different, especially for USD and JPY. In fact, we see in Figure 9 that at the absolute level, the around 66% USD exposure in both the benchmark and Value factors, is reduced by almost 30% when we neutralise Value's sector exposure.

Figure 9
Top Four Largest Currency Exposures for the Benchmark, Value and Sector-neutral Value

		Active Exposures (%)	
Currency	**BM Weight (%)**	**Value**	**Sector-Neutral Value**
EUR	9.9	0.8	8.0
GBP	4.3	1.5	5.1
JPY	7.8	-0.3	18.8
USD	66.2	-0.3	-25.8

Source: State Street Global Advisors, as at 31 December 2020. Exposures are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

If we look a little closer, we see that this currency bias is a symptom of, for example, a large move away from US banks in the Benchmark and standard Value factor, towards European and Japanese banks in sector-neutral Value, which have suffered the same macro headwinds. The problem has been shifted from an active sector to an active currency problem, but not eliminated.

Investing in Value While Avoiding "Value Traps" — Adding Quality

Although it seems like the issues facing the Value factor are long term and structural, it is possible to solve these by investing in a combination of Value with another premium factor, for example Quality. (Note: Combining Value and Growth would generate little excess return over the longer term as Growth is not a premium factor, and the Value and Growth indices are constructed as opposites.)

Adding the Quality factor helps avoid the *Value trap* whereby companies which appear to have *cheap* valuations do not see these valuations revert in an acceptable timeframe, by adding a layer of business viability. In quantitative terms, the correlation of monthly excess returns between Value and Quality has been -0.53 over our observation period, quantifying the fundamental diversification.

For comparison in Figure 10 we show the correlation of excess returns among Value, Quality, Minimum Volatility, Momentum and Small Size over our observation period. We can see that low correlations of excess returns, and hence potent potential for diversification, exists among the different factors.

In Figure 11 we plot the historical rolling 5-year excess performance of two factor baskets. The first is an equal-weighted basket of Value and Quality, the second an equal-weighted basket of Value, Quality, Minimum Volatility and Momentum. We see diversification at work as for the two multifactor baskets the 5-year annualised excess performances are mostly positive and in the times they dip below zero, the depth and duration is not severe.

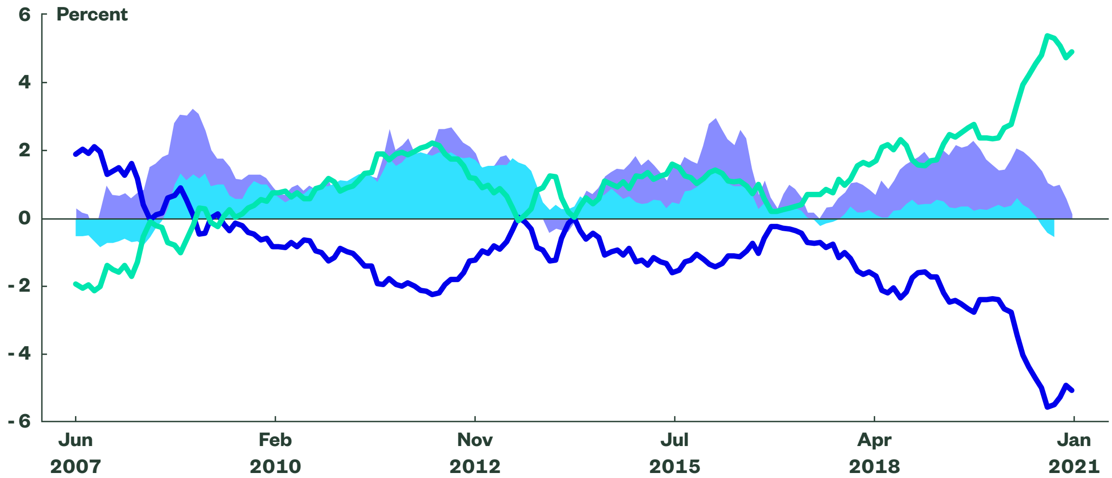
Figure 10
Correlation of Excess Returns

Correlation	Value (%)	Quality (%)	Min Vol (%)	Momentum (%)	Small Size (%)
Value	100	-53	-4	-49	31
Quality		100	48	40	-58
Min Vol			100	34	-19
Momentum				100	-14
Small Size					100

Source: State Street Global Advisors, as between 30 June 2002 and 31 December 2020.

Figure 11
5-year Rolling out-/ Underperformance Relative to MSCI World of Two Multi-Factor Baskets

Value
Growth
25% Value + 25% Quality + 25% Vol + 25% MoM
50% Value + 50% Quality



Source: State Street Global Advisors, between 30 June 2002 and 31 December 2020. Returns do not represent those of an index but were achieved by mathematically combining the actual performance data of the Value, Growth, Quality and Momentum factors. The performance assumes no transaction and rebalancing costs, so actual results will differ.

Summary Remarks

We have examined the large relative differences between the Value and Growth factors through a sector lens and found the reasons to be linked to the consistent overexposure of Value to the Financials sector and its underexposure to Technology, which is reversed for Growth. The overexposure of Value to Financials can in part be explained by the Financial sector's structurally low Price/Book ratio. Financials also tend to suffer in a low interest rate environment. So, if rates are to remain lower for longer then Financials, and thus Value, could underperform for longer as well.

One possible solution might be to take a sector-neutral approach to Value. However, when we looked at one such approach, the sector bias was transformed to a country/currency bias, but did not alleviate the macro headwinds and the underperformance.

Finally, abandoning Value and moving to Growth appears challenging given the high current valuations of Growth stocks. Another approach which remains invested in Value is to diversify it with other factors, for example Quality. Indeed, for clients who are agnostic on single factor exposures, a multi-factor approach can help earn the premia on multiple factors while diversifying risk.

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