

VALUE INVESTING: CAPITULATION OR OPPORTUNITY?



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SUMMARY

Value stocks have severely underperformed in recent years, leading many investors to question the relevance of value investing or even to contemplate its demise. However, in this paper we show that the spreads between the valuations of value stocks compared with those of the most expensive stocks has been expanding in all regions and macro-sectors.

By the end of 2020, these value spreads reached the same extreme high levels last seen at the peak of the tech bubble in 2000. When looking ahead, the probability that value spreads will compress is now at its highest since their last peak spread 20 years ago.

Moreover, we show that value stocks and multi-factor strategies tend to outperform in periods of value spread compression. We thus believe that capitulating on value investing or exiting multi-factor strategies may turn out to be a costly decision.

KEYWORDS

Factor investing,
Equities, Value,
Value stocks,
Growth stocks,
Value spread,
Smart Beta,
Momentum,
Quality,
Low volatility

JEL Classification

G11,
G12,
G14,
E44

INTRODUCTION

Value stocks trade at prices below their fundamental value. If prices of stocks converge towards their fundamental values then it is natural to expect value stocks to outperform their more expensive peers, at least on average. This outperformance is known as the value premium.

Studies have indeed shown that prices of stocks trading at large discounts relative to future earnings, cash flows or book value do tend to significantly outperform those of their peers trading at large premiums. A systematic sector-neutral value strategy relying on perfect foresight of future earnings, cash flows or book value would have paid handsomely, as shown by a number of academics such as Easton et.al (1992) and Arnott et.al (2009). Thus, the key question for a successful systematic value strategy is what should one use to forecast the future fundamental value of a stock.

Quant managers tend to keep it simple and rely on the fact that fundamental values move much more slowly than stock prices. Their systematic value strategies tend to rely on simple valuation ratios like price-to-book, price-to-earnings or price-to-cash flow based on current prices and earnings, cash flows and book values. Historically, that served them well and replacing current earnings, cash flows and book values by the analysts' forecasts of those metrics, when available, proved to make little difference.

For most quantitative managers, sector neutrality is another important component of systematic value strategies, because fair values of prices relative to fundamental values for stocks in different sectors do not necessarily compare. For example, in fast-growing sectors like information technology, it makes sense to expect higher prices relative to fundamental values simply because the latter tend to grow faster than for stocks in other sectors. Sector neutrality also reduces exposure to the macroeconomic cycle by ensuring that stocks with cyclical earnings and cash flows are compared only with each other.

While such simple systematic sector-neutral value strategies did generate a positive premium on average over the long term, they also failed over shorter timeframes. Two reasons can explain what goes on in such periods of underperformance of value stocks.

First, if current earnings, cash flows and book values increasingly fail to forecast their future values, then it is natural to expect such simple systematic value strategies to fail. However, as evidenced in Richardson et.al (2012), this has not been the main reason for episodic failure of simple systematic value strategies.

Second, if stock prices diverge further from their fundamental values driven by investors' irrational exuberance and herd behaviour, then it seems obvious that value stocks should underperform. When this happens, the gap between the valuations of value stocks relative to their expensive peers, i.e. the value spread, expands. Value stocks just keep getting cheaper while their expensive peers just keep getting dearer. Such periods of value spread expansion can be painful for value investors, but tend to be followed by periods of value spread contraction characterised by strong outperformance of value stocks.

The most recent period of irrational exuberance that resulted in a large expansion of value spreads and underperformance of value stocks was the tech bubble of the late 90s. That is, until today. As we shall see, the key takeaway from this paper is that the recent underperformance of value stocks can be mainly attributed to the expansion in value spreads. Much like in the late 90s, value spreads have been expanding to similar all-time highs, in all regions and in all sectors. This brings us to believe that, looking ahead, strong outperformance of value stocks should be expected for the next few years.

We also compare our systematic sector-neutral value strategy, which has underperformed since 2018, with two well-known approaches to value investing that are not sector-neutral and which have been underperforming for significantly longer. A significant component of their long-term underperformance comes from their sector biases, which thus strongly supports the importance of neutralising sectors.

In section 3, we investigate the evolution of value spreads throughout time for World, US and Europe stocks and in different macro-sectors at the global level. We show that, everywhere, value spreads have now reached levels only ever before seen at the peak of the tech bubble in 2000. Value stocks are simply at their historic cheapest, while the opposite is the case for their expensive peers.

In section 4, we investigate the performance of different common factor styles used by multi-factor equity quant managers in their multi-factor funds, conditional to changes in value spreads. We not only consider our sector-neutral, market-neutral, risk-controlled and well-diversified factor approaches, but also the more academic non-sector-neutral and under-diversified factor approaches. With our factor styles, we show that value performance is significantly better in periods of value compression and less good in periods of value spread expansion. The same is the case for smaller capitalisation stocks, and indeed perhaps even more pronounced: The size factor only seems to be positive in periods of value spread compression. The other styles – quality, momentum and low volatility – are less sensitive to changes in value spreads. For the simpler factor styles, the differences are more acute and there is a clearer separation of their behaviour: Value and size outperform only in periods of value spread compression and underperform in periods of value spread expansion. In turn, quality, momentum and low volatility styles perform well when value spreads rise and less well when value spreads fall. In any case, multi-factor strategies tend to perform well in periods of value spread compressions, irrespective of their level of sophistication. Looking ahead, this makes us reasonably optimistic about the performance of multi-factor strategies. ■



WHAT HAS BEEN HAPPENING TO VALUE STOCKS?

The MSCI World Value index is a well-known proxy for the performance of value stocks. The index relies on three value factors (earnings-forward-to-price and dividend yields) and five growth factors to allocate to stocks. The stocks in the index are value stocks with the least possible growth traits. Conversely, the MSCI Growth index, a proxy for the performance of growth stocks, relies on a similar methodology but is used to find growth stocks with the least possible value traits. The two indices complement each other, as explained in the methodology description MSCI (2021), and neither is sector neutral. The MSCI Value index, tends to underweight sectors like information technology, where most stocks tend to trade at a premium to fundamental values in absolute terms, and to overweight sectors like financials, where most stocks tend to trade at a discount.

In Exhibit 1, we show the performance of the MSCI Value index less the performance of the MSCI World Growth index. The returns of these two indices in excess of the MSCI World index returns are strongly negatively correlated. As show in Exhibit 1, the MSCI Value index has been underperforming the MSCI Growth index since 2007.

In Exhibit 1, we also show the HML (high-minus-low) factor strategy, which is another well-known non sector-neutral strategy of value stocks against expensive stocks. It relies only on one factor, the book-equity-to-price factor, and was proposed by Fama and French (1992) as one of the important factors explaining the cross-sectional dispersion of stock returns. It is also closely related to the investment philosophy of Benjamin Graham, often called the father of value investing, who proposed that the fundamental value of a stock should be identified with its net liquidation value, i.e. cash plus net assets. This proxy for the performance of value stocks against expensive stocks has also been performing poorly since 2007.

It is not surprising that investors relying on these two non-sector neutral proxies for value investing feel disappointed with value investing. Indeed, after such a long period of underperformance, one might validly start to question the relevance of value investing.



Exhibit 1 - Sector & beta neutral value factor vs. HML vs. MSCI Value minus MSCI Growth Cumulated excess returns. MSCI World index universe.

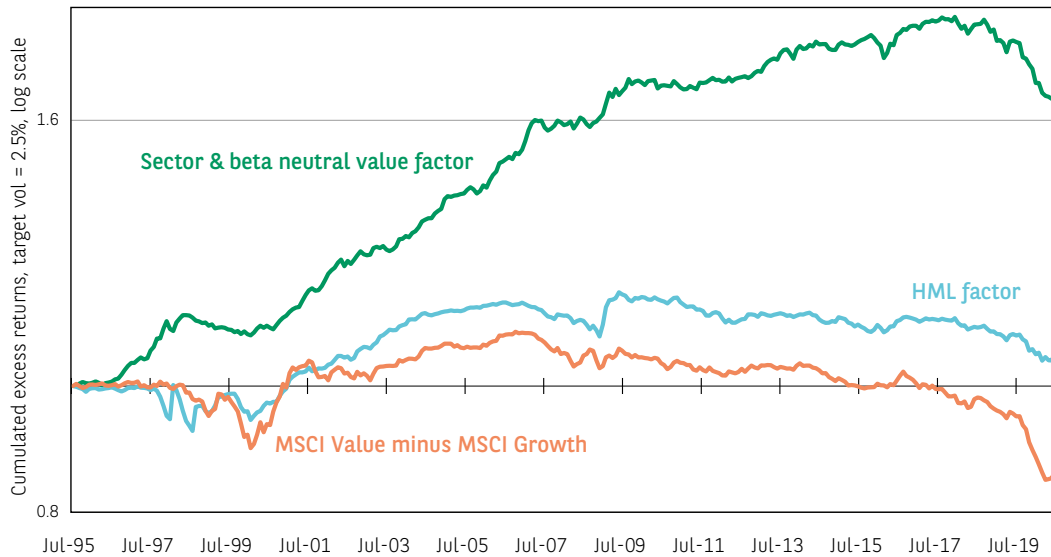


Exhibit 1. Cumulated monthly performance of three different approaches to constructing unconstrained long-short value factor portfolios, as described in the text. Based on USD net returns, monthly rebalanced and targeting 2.5% ex-ante volatility. No transaction costs. MSCI World universe since 2000 and reconstructed proxy of the MSCI World universe based upon the largest worldwide capitalisations before. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance.

However, as explained by Bellone et al. (2020), we prefer to rely on multiple dimensions of fundamental value, from diverse accounting perspectives. We even prefer to consider all of a company's financing resources – equity and debt – and to take into account the enterprise's value rather than just its equity market capitalisation.

Moreover, we believe that long-term cash flows and a company's capacity to generate profits should be the ultimate measures of fundamental value. This means relying on a diversified set of value measures, namely operating cash flow (net income for financials) to enterprise value, forward price-to-earnings and free cash flow yield instead of book-equity-to-price.

Finally, as explained by Leote de Carvalho et al. (2017), avoiding sector biases and an exposure to market risk (beta) as well as controlling for the overall level of risk are important features that significantly enhance value strategies. Our proxy for the performance of value stocks against expensive stocks did well until 2018, and with far better long-term risk-adjusted performances than any of the non-sector-neutral approaches also shown in Exhibit 1. Its success can be attributed to the neutralisation of macro-sector exposures and beta as well as to the targeting of a constant level of volatility time.

Nevertheless, even our robust value strategy has underperformed since late 2018, and significantly so since March 2020 when coronavirus pandemic lockdowns were imposed around the world. There is no question that the recent drawdown in performance of our sector and beta neutral value approach has been severe and at odds with performances over the past 30 years. Interestingly, as shown in Exhibit 2, between 2018 and the end of 2019, the drawdown in the performance of our sector-neutral strategy of value stocks against expensive stocks was similar in terms of velocity and depth to what we saw for US value stocks in 2000. However, this time around, from the start of the coronavirus pandemic crisis in early 2020, the underperformance of value stocks accelerated and has continued to plunge since the stock market bottomed in March 2020 in all regions under consideration.

Exhibit 2 - Drawdown in cumulated performance of long-short macro-sector neutral and beta neutral value factor strategies; 2.5% targeted volatility.

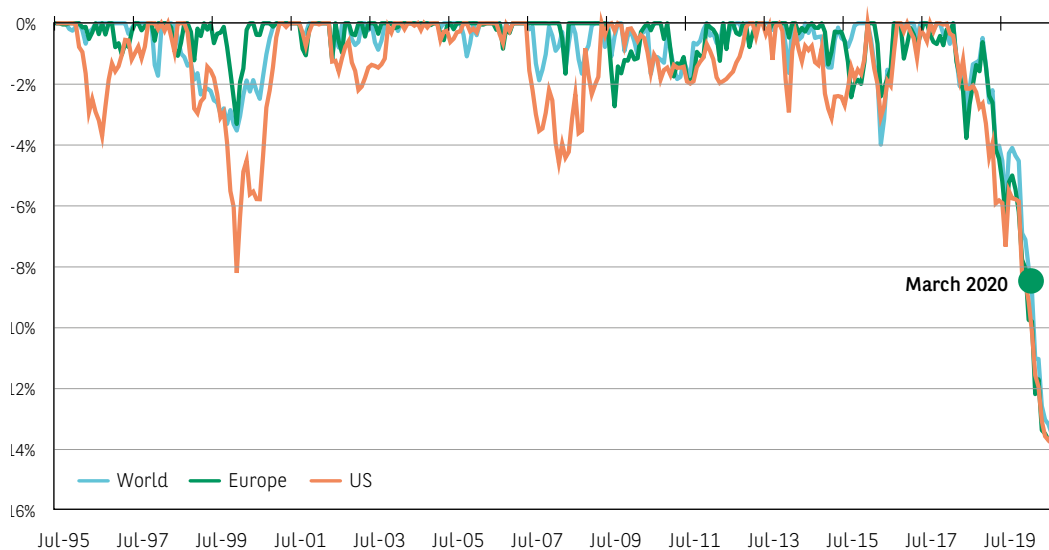


Exhibit 2. Drawdowns in cumulated monthly performance of unconstrained macro-sector-neutral and beta neutral long-short value factor portfolios / Based on USD net returns for the World and US, and EUR for Europe. Monthly rebalanced and targeting 2.5% ex-ante volatility. Stock universes are MSCI World, MSCI USA and MSCI Europe, respectively. No transaction costs. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance.

Does this mark the end for value investing? We do not think so. As we shall see below, the recent underperformance of value stocks against expensive stocks comes from prices diverging from fundamental values. Everywhere, prices are now as far removed from fundamental values as they were at the peak of the tech bubble in 2000. We do not see much room for this trend to continue. We believe that expecting prices of stocks to converge towards fundamental values remains a sensible investment philosophy and the likely trend in the coming years. ■

VALUE SPREADS REACHED LEVELS ONLY PREVIOUSLY SEEN DURING THE TECH BUBBLE

Let us now investigate how prices of stocks have been behaving relative to fundamental values. To do so, we created a composite measure of value spreads calculated from a diversified selection of valuation factors: book equity to price, tangible book equity to price, free cash flow yield (excluding financials), earnings before interest, taxes, depreciation and amortisation (EBITDA) to enterprise value (excluding financials) and forward price-to-earnings.

To calculate the value spread of each factor at the end of each month, we first rank all stocks by the factor and separate them into quintiles. We then calculate the factor median of each stock quintile (after winsorization at 1%) in the cross section of the stock universe. The value spread is calculated as the log difference between the cross-sectional medians of the first and last quintiles of stocks ranked by the valuation factor.

However, it is useful to separate the contribution of the value stocks to the value spread from the contribution of the expensive stocks. Thus, we focus on the geometric deviation of q_{med}^5 (q_{med}^1) which is the median valuation of the highest (lowest) quintile of stocks against q_{med}^3 which is the median valuation of the third quintile of stocks. We then standardise the time series of value spreads calculated in this way for each valuation factor by applying a z-score transformation over the entire period:

$$Value\ Spread = zscore\left(\log\left(\frac{q_{med}^5}{q_{med}^3}\right) - \log\left(\frac{q_{med}^1}{q_{med}^3}\right)\right)$$

The composite value spread is the equally weighted average of all the standardised value spreads calculated as just mentioned. In Exhibit 3, we show the composite value spread for the stocks in the MSCI World index. We define the periods of expansion and compression of value spreads. There were three major periods of value spread expansions, 1998-2000, 2007-2009 and 2018-2020, and two periods of more modest increases: 2011-2012 and 2015. Since 2018, value spreads have recorded a three-standard deviation expansion shock only comparable to what we witnessed during the tech bubble of the late 90's. We found a similar picture in the US and in Europe, as shown in Exhibit 4.

Both Exhibits 3 and 4 show that recently, in all the three regions considered, we witnessed a period when stock prices moved away from fundamental values at speeds and levels only seen during the tech bubble.

We now look at the value spread in each of the five macro-sectors considered. For this, we consider only global developed stocks. In Exhibit 5, we show the value spreads of the macro-sectors, which in our view could be qualified as COVID crisis winners. At the end of 2020, the value spread for stocks in the macro-sector information technology & communication services stocks was slightly higher than the peak of 2000 and more than three standard deviations above its historical mean. For the stocks in the defensive macro-sector (consumer staples, healthcare and utilities), the value spread is also at extremely high levels and more than two and a half standard deviations from its historical mean. It is interesting that even when comparing stocks with their peers in macro-sectors for which intangibles may play an important role, we still find value spreads at all-time highs.

In Exhibit 6, we show the value spreads for macro-sectors that are more likely to have suffered from the cyclical downturn of 2018-2020. Again, value spreads for the cyclical macro-sector (materials, consumer discretionary), for the financials macro-sector and for the energy & industrial macro-sectors reached extreme levels in the autumn of 2020, more than two and a half standard deviations above their historical means.

In conclusion, the recent underperformance of value stocks in every region and macro-sector resulted from prices moving away from fundamental values and value spreads reached extreme levels everywhere by the end of 2020. ■

WHAT HAS BEEN DRIVING VALUE SPREADS?

It can be shown empirically and analytically that our definition of the value spread is close to that of Hanauer and Blitz (2020). However, with our definition, it is easy to decompose the value spreads into two terms, one term arising from the value spread of value stocks relative to the stocks that are fairly priced, i.e. those in the third quintile, and one term from the stocks that are fairly priced relative to the most expensive stocks. As such, we may capture over time the drivers of changes in the distribution of valuations.

Exhibit 3 - Normalised value spread, MSCI World universe

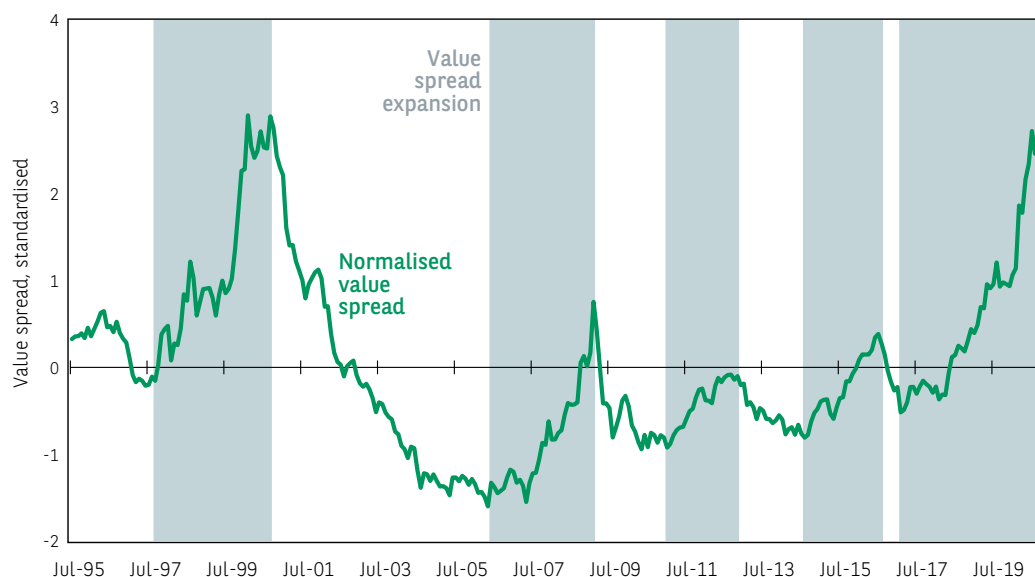


Exhibit 3. Normalised composite value spread for stocks in the MSCI World universe since 2000 and a reconstruction of its universe before. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance.

Exhibit 4 - Normalised value spread, MSCI World, MSCI USA and MSCI Europe universes

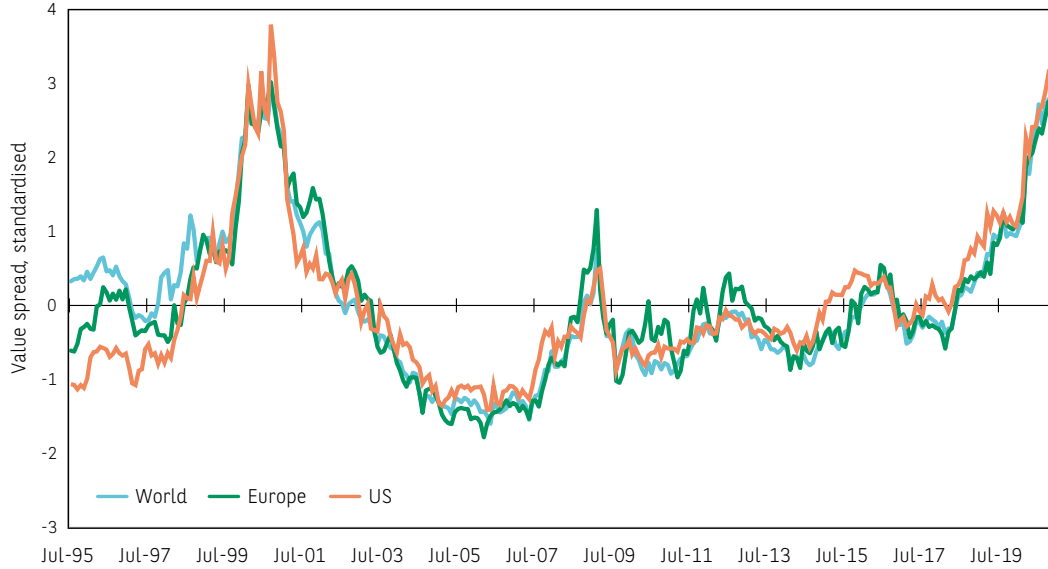


Exhibit 4. Normalised composite value spread for stocks in the MSCI World, MSCI USA and MSCI Europe universes since 2000 and reconstructions of those universes before. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance.

Exhibit 5 - Normalised value spread, COVID crisis winners, MSCI World universe

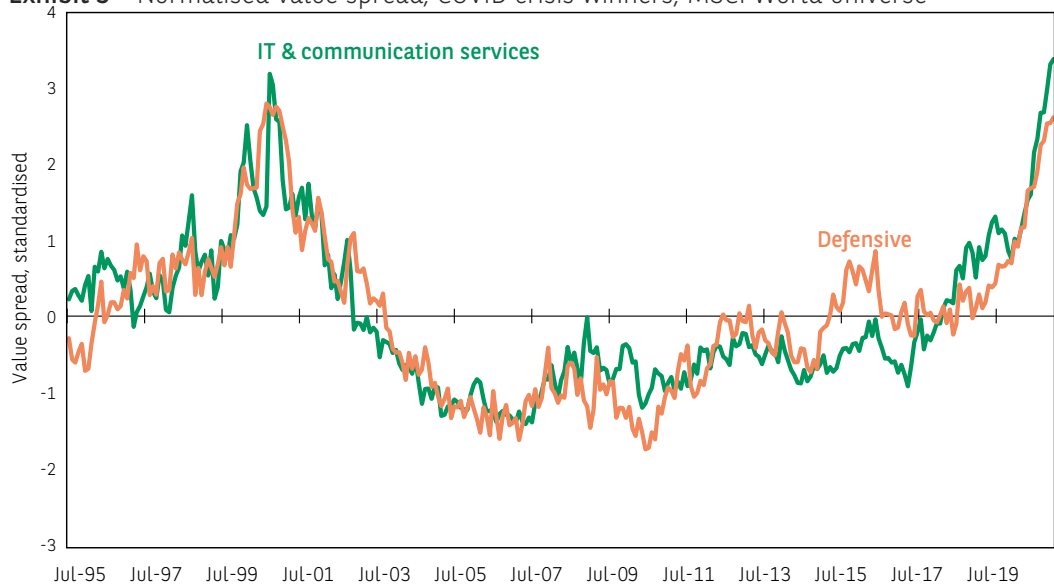


Exhibit 5. Normalised composite value spread for stocks in the MSCI World universe equity macro-sectors: IT and communications services, defensive (consumer staples, healthcare, utilities). Based on a reconstruction of the stock universe before 2000. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance

Exhibit 6 - Normalised value spread, COVID crisis losers, MSCI World universe

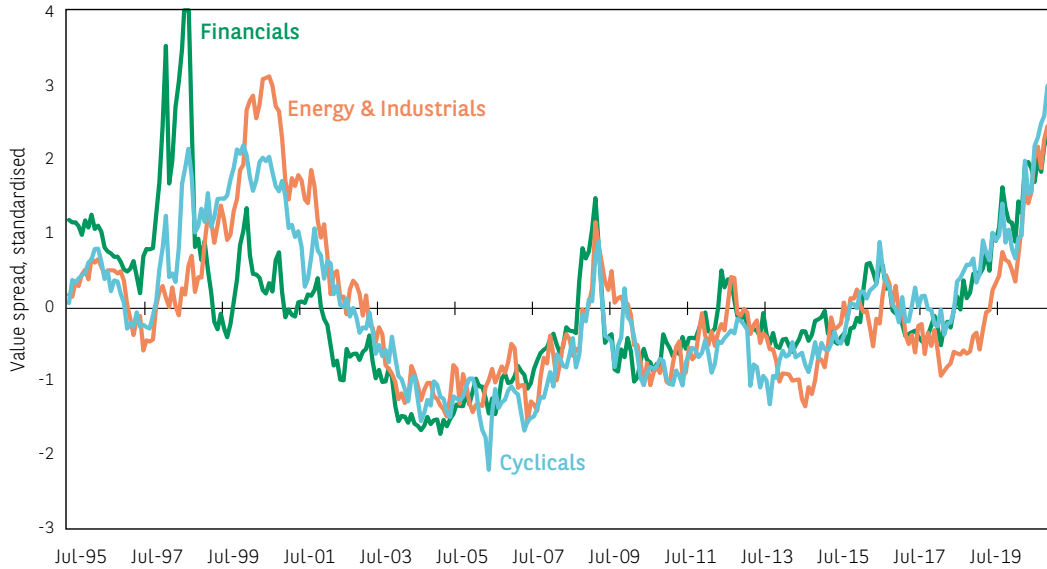


Exhibit 6. Normalised composite value spread for stocks in the MSCI World universe equity macro-sectors: cyclicals (materials, consumer discretionary), financials and energy & industrials. Based on a reconstruction of the stock universe before 2000. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance.

In Exhibit 7, we show these separate contributions to the value spread for the MSCI World stocks. The value spread can expand either because value stocks are getting cheaper or because expensive stocks are getting dearer. The dark grey line captures the value spread contribution from value stocks. When it rises, investors who are overweight value stocks are likely to suffer. The green line shows the contribution of value spreads from expensive stocks. When it rises, investors who are underweight expensive stocks are likely to suffer.

Exhibit 7 - Contributions to the value spreads, MSCI World universe

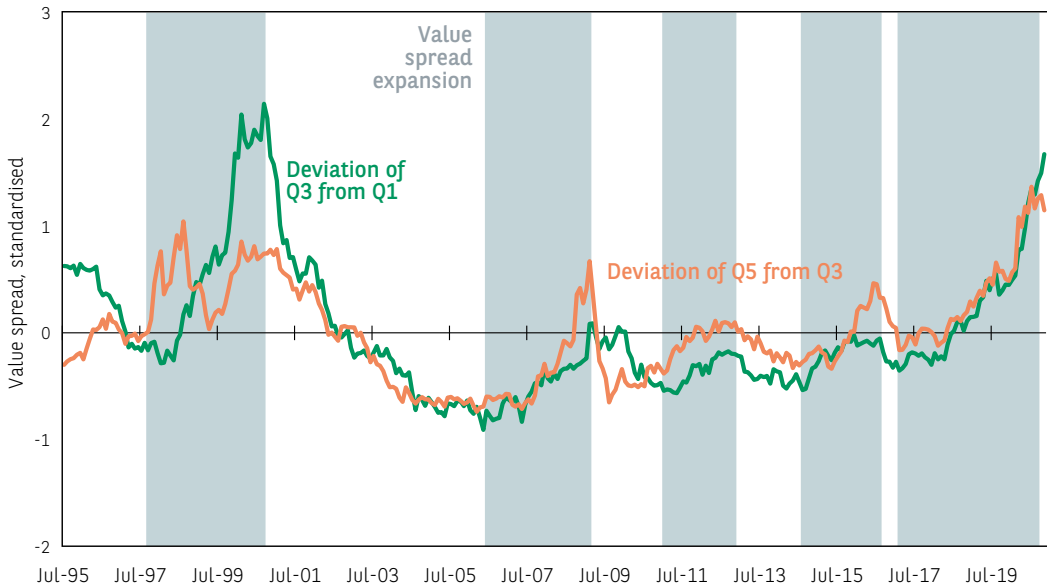


Exhibit 7. Normalised composite value spread contributions for stocks in the MSCI World universe since 2000 and a reconstruction of the universe before. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance (where Q stands for quintile).

So, what happened during the latest value factor downturn that started in 2018? What makes this time different or similar to previous periods of expansion of valuation dispersions?

If we first look at value stocks, we can see that their contribution to the value spread expansion 2018-2020 was the largest when compared to past periods of value spread expansion, i.e. 1998-2000, 2007-2008, 2010-2013 and 2015. While value stocks contributed with about a one standard deviation rise to value spread in past value spread expansion periods, they contributed with close to two standard deviations in this most recent expansion.

Most periods of value spread expansion tend to happen during times of economic slowdown. The sudden and unprecedented halt in economic activity arising from lockdowns around the world that started in the first quarter of 2020 likely triggered a flight to safety towards the most resilient stocks within each macro-sector. The severity of this crisis and the markets' overreaction to it may explain why value stocks were hit twice as hard during this episode than in previous slumps.

However, when we look at the contribution from expensive stocks towards the recent expansion in value spreads, it looks more reminiscent of the years of the tech bubble. Indeed, the contributions from the expensive stocks (green line) during the periods 1998-2000 and 2018-2020 are comparable, both recording a shock of more than two standard deviations upwards.

From this decomposition of contributions to the spread value expansion, the extension of the drawdown in the performance of our sector-neutral value strategy has been explained mainly by underweighting expensive stocks, which did not stop getting dearer. The COVID crisis likely amplified the recent flight to growth stocks that has kept accelerating since 2018, with investors happy to buy growth stocks at increasingly expensive valuations, further adding to the suffering of value investors. ■



WHAT ARE THE RISKS OF IGNORING THE VALUE FACTOR?

From Exhibit 1, it is not surprising that an increasing number of investors are challenging the relevance of the exposures to value stocks in their portfolios. However, taking into account our analysis of value spreads, what are the risks of capitulating on value stocks now at the start of 2021?

In Table 1-A, we show the performance of value, quality, momentum and low-risk styles for MSCI World stocks based on similar robust macro-sector-neutral and beta-neutral factor strategies. Each style is a simple combination of some of the most commonly used factors. They were chosen based on their diversification effect. For value, we used forward price-to-earnings, free cash flow yield and operating cash flow (net income for financials) to enterprise value. For quality, we used return on capital employed, free cash flow to assets and a measure of accruals, preferring low accruals. For low risk, we used the three-year historical volatility of each stock. For momentum, we used a measure of historical stock returns over the medium term and earnings analysts' revisions. We consider the case in relation to MSCI World index stocks.

We include a multi-factor composite based on the aggregation of the four factor styles relying on an equal risk-contribution weighting scheme. For illustration, we also include a low-size factor, also based on a macro-sector-neutral and beta-neutral strategy.

Based on the same value spread expansion and compression periods in Exhibit 7, we found a good balance of the number of observations in both regimes: 134 months for expansion and 171 months for compression. We calculated the risk-adjusted returns conditional to the value spread regime of each factor style strategy and of the multi-factor composite.



In **Table 1-B**, we conduct the same exercise while now relying on more traditional factor style approaches. Here we use the HML value factor strategy that relies on the book-equity-to-price. We also include a proxy of the quality factor, RMW (robust minus weak), relying just on return on capital employed. We include the momentum factor, UMD (up minus down), based on 12-month returns minus one-month returns. The raw low-volatility factor is based on three-year historical volatility. To capture the factor style performance that is more representative of what many equity investors tend to have in mind, these factor strategies, qualified as raw, are neither sector-neutral nor beta-neutral.

From **Table 1-A**, based on the macro-sector-neutral and beta-neutral factor styles we find that:

- The value factor underperformed (outperformed) against its historical mean risk-adjusted returns and across the list of style factors during periods of value spread expansion (compression).
- The momentum factor underperformed (outperformed) against the historical mean and across style factors during periods of value spread compression (expansion).
- The quality and low volatility factors as well as the multi-factor composite performed equally well in both regimes of value spread changes.

Factors	INFORMATION RATIO		
	Full period	Value spread expansion	Value spread compression
Value	0.8	0.1	2.0
t-stat	(4.1)	(0.2)	(7.7)
Quality	1.4	1.4	1.3
t-stat	(6.9)	(4.8)	(4.7)
Low Vol	0.6	0.6	0.5
t-stat	(2.9)	(2.1)	(1.9)
Momentum	0.6	0.8	0.3
t-stat	(3.1)	(2.8)	(1.1)
Multifactor Composite	1.3	1.1	1.6
t-stat	(6.5)	(3.6)	(6)
Low Size	0.0	-0.5	0.8
t-stat	(0)	(-1.5)	(2.9)
MSCI World	0.3	0.2	0.6
t-stat	(1.7)	(0.5)	(2.4)
Sample size (months)	305	134	171

Factors	INFORMATION RATIO		
	Full period	Value spread expansion	Value spread compression
HML Value Raw	0.1	-0.4	1.3
t-stat	(0.5)	(-1.4)	(4.9)
RMW Quality Raw	0.6	0.7	0.4
t-stat	(2.9)	(2.4)	(1.5)
Low Vol Raw	0.2	0.3	0.0
t-stat	(0.8)	(0.9)	(0.1)
UMD Momentum Raw	0.3	0.5	0.0
t-stat	(1.4)	(1.7)	(-0.1)
Multifactor Composite Raw	0.7	0.3	1.2
t-stat	(3.8)	(1)	(4.4)
Low Size Raw	0.1	-0.5	0.9
t-stat	(0.5)	(-1.5)	(3.4)
MSCI World	0.3	0.2	0.6
t-stat	(1.7)	(0.5)	(2.4)
Sample size (months)	305	134	171

Tables 1-A and 1-B. Information ratios of equity styles conditional to value spread regimes for stocks in the MSCI World universe. Based on monthly net returns in USD. Student t-statistics are provided in below brackets. Period 31-Jul-1995 – 30-Nov-2020. No transaction costs. Factors in Table 1-A are macro-sector and beta neutral and based on a target volatility approach with each style based on a diversified set of factors as described in the text. Factors in Table 1-B are neither sector nor beta neutral and each style depends on a single raw factor. Source: Bloomberg, FactSet, Worldscope, IBES, Exshare-ICE, BNP Paribas Asset Management. For illustration only. Past performance is not indicative of future performance.

- Even gross of transaction costs, it would have been remarkably difficult to outperform the risk contribution-weighted multi-factor composite with a factor timing strategy based on the value spread. Investors would need almost perfect foresight to pick the best factor: Value during value spread compression and quality during value spread expansion. In both regimes, the multi-factor composite risk-adjusted returns ranked second.
- Market risk-adjusted returns were higher in value spread compression regimes.
- The macro-sector and beta-neutral low-size factor delivered negative returns during the value spread expansions. Smaller capitalisation stocks only tend to outperform in periods of value compression.

From **Table 1-B**, focusing on raw factors, most of these conclusions hold true, allowing for some nuances. The HML value factor also underperformed (outperformed) against its historical mean and across style factors during times of value spread expansion (compression), but i) the HML factor performance since 1995 is close to zero and ii) the risk-adjusted returns are slightly negative in periods of value spread expansion.

The UMD momentum factor and the raw low-volatility factor delivered a positive, though barely significant, performance during phases of value spread expansion only. In periods of value spread compression they failed to deliver any performance.

The RMW quality factor as well as the raw multi-factor composite delivered positive performances in both regimes of value spread changes, with the RMW performing slightly better in periods of value spreads expansion and the raw multi-factor composite performing slightly better in periods of value spread compression. Eventually, picking up the best single raw factor based on the value spread, even with a strategy timed with perfect foresight, would have barely outperformed a diversified multi-factor composite raw aggregation of factor styles relying on an equal risk-contribution weighting scheme, gross of transaction costs. ■

CONCLUSIONS

The writing of this paper was motivated by the recent poor performance not only of traditional value and multi-factor strategies but also of the more robust sector-neutral and beta-neutral risk-controlled value and multi-factor strategies. While the performance of the latter has been significantly better for longer, even these failed in the most recent period. Investors and academics have been increasingly worried that the value premium may have simply passed away. These concerns seem justified given the lacklustre performance of the HML value factor over the past 10 years and the strength of the 2018-2020 value downturn.

Is value investing dead? As explained in this paper, we do not think so. The recent underperformance of value stocks can be explained by a significant expansion in value spreads, with stock prices moving away from fundamental values rather than converging in all regions and in all macro-sectors.

It is interesting that even when comparing stocks for which intangibles may play an important role relative to peers, we still find that value spreads in those sectors are at all-time highs. The COVID crisis of 2020 seems to have amplified a flight to expensive growth that has kept accelerating since early 2018. During this phase, investors seemed eager to buy growth stocks at ever-rising valuations, adding more to the pain inflicted on value investors.

We showed that at the end of 2020, value spreads reached levels last seen at the peak of the tech bubble in 2000. We believe such spreads in valuations are neither justified nor sustainable. Value stocks are simply as cheap, relatively speaking, as they have ever been, while the opposite is the case for expensive stocks. While irrational exuberance can be sustained or could even continue for some time yet, compression of value spreads over the next few years is the more likely scenario, in our view. That should be positive for value stocks, small capitalisation stocks and for diversified multi-factor investing approaches.

We also investigated the performance of different factor style strategies conditional to value spread regimes. Risk-adjusted returns of the simpler raw style factors, which are neither sector-neutral nor beta-neutral, can be sensitive to the regime of changes in value spreads, i.e. expansion or compression. Raw value and size factors tend to outperform in periods of value spread compression and to underperform in periods of value spread expansion.

In turn, raw quality, momentum and low volatility styles tend to performed well in periods of value spread expansion and less well in periods of value spread compression. However, when those factor style strategies were replaced by more robust strategies, i.e. ones that were better diversified, sector-neutral, beta-neutral and risk-controlled, the differences in risk-adjusted returns conditional to the regime of value spread changes tended to be significantly reduced.

Well-diversified sector-neutral and beta-neutral multi-factor strategies tend to perform well in both regimes of changes in value spreads and almost as well as the top-performing factor style in each regime. Outperforming this risk contribution-weighted multi-factor composite with a factor-timing strategy based on value spreads is not possible without perfect foresight of the regimes to pick the best factor. A factor-timing strategy based on value spread regimes is thus unlikely to outperform this multi-factor composite.

With value spreads now at levels last seen at the peak of the tech bubble everywhere, we expect a period of value spread compression in the coming years. Capitulating on the value style right now might turn out to be a costly experience. Multi-factor strategies also tend to perform well in periods of value spread compression, irrespective of their level of sophistication. Thus, we feel optimistic not only about the likely performance of value stocks, but also about the performance of multi-factor strategies. ■

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