



# Value Is in the Eye of the Beholder

February 2020

It has been a difficult couple of years for value and factor investing, and it has been no less difficult for us than others. We all owe it to ourselves to ask what we did right, what we did wrong and what we can do better going forward? Those investors smart enough or fortunate enough to have not been excessively exposed to the value drawdown ought to ask themselves if that approach still makes sense today. In this paper, we hope to: 1) give an unbiased view of the current opportunity set; and 2) describe and show empirically the relationship between value returns and the interest-rate environment.

For institutional investor, qualified investor and investment professional use only. Not for retail public distribution.

## Author



**Daniel Taylor, CFA**  
CIO, Man Numeric

## Introduction



Is now the time to ‘sin a little’ in value?”

Following a decade of growth dominating value as an investment style, there is an increasing chorus singing the virtues of value and the current opportunity set. Admittedly, much of the noise is coming from a possibly biased portion of the buy-side community, namely those that rely on value (either systematically or fundamentally). There has also been increasing pro-value commentary from the sell-side and academics, and many allocators and fiduciaries are wondering: is now the time to “sin a little”<sup>1</sup> in value?

Two general arguments are being made to justify a bullish outlook for value investing: 1) the duration and magnitude of the current value drawdown is excessive; and 2) the relatively wide spread today between cheap and expensive stocks. While there is no debate over the recent difficulties of value, and it is true that historically value has recovered strongly following periods of poor performance, that is a fairly weak intellectual argument. However, a wider-than-average disparity between cheap and expensive stocks is a more compelling argument, and worth exploring in more detail.

One other topic that deserves attention is the current relationship between value investing and the interest-rate environment. One of the reasons value has struggled so much has been the low-growth, low-inflation and declining interest-rate (both real and nominal) environment. While it is entirely unlikely that the next decade will witness a similar decline in interest rates (which would be an ongoing headwind for value investing), it is not at all clear that growth and interest rates will revert towards a historical mean (which would be a tailwind for value investing). We think investors should realise that expecting materially above average returns to value is also a bet on normalisation of the macroeconomic environment.

In this paper, we hope to: 1) give an unbiased view of the current opportunity set; and 2) describe and show empirically the relationship between value returns and the interest-rate environment.

## The Current Opportunity Set for Value

There are different methodologies to measure *valuation stretch*, and there are also multiple metrics one can focus on.<sup>2</sup> We primarily focus on two methods for measuring the degree of ‘spring-loaded’ stretch in equity valuations: *Carry* and *Convergence*.

The *Carry* methodology looks at the difference between cheap and expensive securities over time. For example, if we use dividend yield as our metric, then if the 80<sup>th</sup> percentile dividend yield is 2.8% and the 20<sup>th</sup> percentile dividend yield is 0%, our raw stretch method would be 2.8%. We could then measure this over time and see where the current opportunity lies relative to history.

$$\text{Raw Carry Value Stretch} = \left( \frac{\text{Fundamental}}{\text{Market Value}} \right)_{80^{\text{th}} \text{ percentile}} - \left( \frac{\text{Fundamental}}{\text{Market Value}} \right)_{20^{\text{th}} \text{ percentile}}$$

There are two specific issues with the Carry approach. The first is that it is sensitive to overall market levels. For example, assume the 80<sup>th</sup> percentile earnings yield is 10% and the 20<sup>th</sup> percentile earnings yield is 4%, for a raw stretch of 6%. If the market and every stock in it doubles, that raw stretch would fall from 6% to 3% (5% - 2%). The Carry method widens when the market falls (we will see that shortly in 2008) and falls when the market rises. However, to the extent that the returns to value *are* driven by Carry, this may be a reasonable outcome.

The second issue is Carry assumes growth parity between the cheap and expensive stocks, but expensive stocks generally do grow faster than cheap stocks.<sup>3</sup> Ideally, one would adjust for the dispersion in growth expectations, but in practice this is very difficult to do.

The *Convergence* methodology measures the return opportunity if cheap and expensive securities converge to valuation parity. Interestingly, it addresses the first issue above, but potentially exacerbates the second issue.

1. Cliff Asness; Cliff's Perspective: It's Time for a Venial Value-Timing Sin; 7 November 2019. 2. B/P, P/B, Forward E/P, Backward E/P, EBITDA/EV, etc, etc. 3. Ed Cole; [Value Is Dead, Long Live Value](#); February 2019.

$$\begin{aligned} &\text{Raw } \textbf{Convergence} \text{ Expected Return} \\ &= (\text{Return to Median Multiple}) 80^{\text{th}} \text{ percentile} \\ &+ (\text{Return to Median Multiple}) 20^{\text{th}} \text{ percentile} \end{aligned}$$

This method is agnostic to the overall level of the market. In the above example, if the median earnings yield is 8% (with the cheap and expensive stocks being at 10% and 4%, respectively), the expected return from convergence is 75% (the cheap stock would go up 25% and the expensive stock would fall 50%). If the market and every stock in it doubled, the expected return from convergence would not change. But this approach may be more problematic in that it inadvertently assumes cheap and expensive stocks should have the same multiple – a highly dubious proposition. Changes in fundamentals over time may drive convergence in valuation as much or more than price moves (i.e. companies that grow into their multiples).

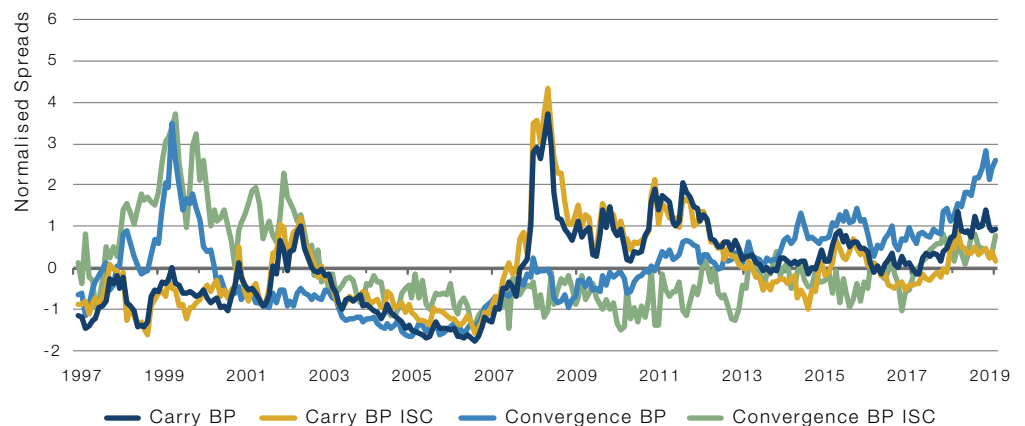


There is no perfect methodology to judge valuation dispersion (short of a crystal ball).”

In any event, there is no perfect methodology to judge valuation dispersion (short of a crystal ball). As such, to give an unbiased view of the current environment, we will show both approaches using a handful of different metrics.

So is the current opportunity in value extraordinarily wide? It is if you focus on raw B/P, at least according to the Convergence method (Figure 1). Dispersions stands at 2.6 standard deviations<sup>4</sup>, nearly as high as it was during the tech bubble. This is the most commonly used metric to display the current value opportunity (perhaps because it is also the most compelling).<sup>5</sup> Interestingly, on an industry/sector/country-adjusted basis<sup>6</sup>, the spread is still wide, but less than 1 standard deviation. How much weight should we place on B/P-based empirics? Increasingly, academics are pointing to shortcomings in book value as the economy becomes less asset intensive, and furthermore, to capitalise on the massive stretch here, one needs to take significant country and sector exposures.<sup>7</sup>

Figure 1. Global B/P Valuation Spreads



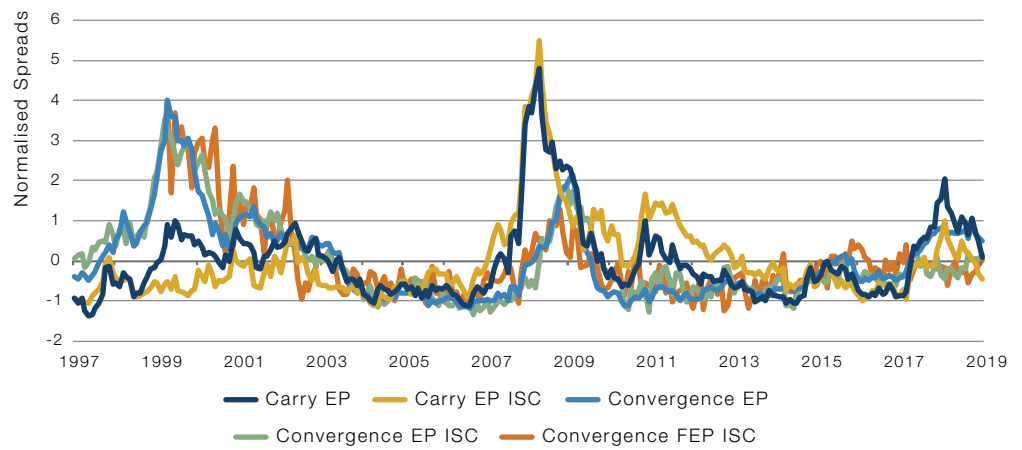
Source: Man Numeric; as of 29 November 2019. Global top 1,000 stocks by market cap.

If we focus on other, potentially more relevant metrics, we see that book value might be as good as it gets. Looking at trailing and forward E/P (Figure 2) and EBITDA/EV (Figure 3), the current opportunity appears normal. Figure 2 shows the difference between the Carry and Convergence approaches. During the late '90s bull market, the Convergence opportunity rose significantly while the Carry opportunity barely budged. During the Global Financial Crisis ('GFC'), the opposite occurred as the market fell rapidly.

4. We normalise spreads over the entire history so we can see how abnormal spreads currently are. 5. For example: Has value met its Waterloo?, Bernstein Research, 19 June, 2019; Value is Dead, Long Live Value, Oshaughnessy Asset Management, July 2019; The Value Conundrum, JPMorgan Research, June 2019. 6. Labelled ISC in the chart. 7. The Carry method does not appear as wide for B/P, but is not particularly relevant here because book value is a stock variable (measured at one point in time), not a flow variable (like almost all other value metrics such as earnings, cash flows, etc).

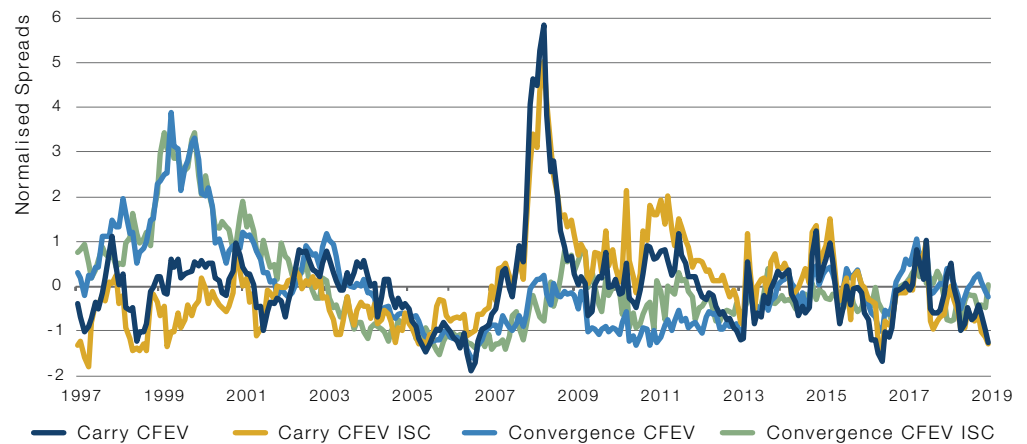


Figure 2. Global E/P Valuation Spreads



Source: Man Numeric; as of 29 November 2019. Global top 1,000 stocks by market cap.

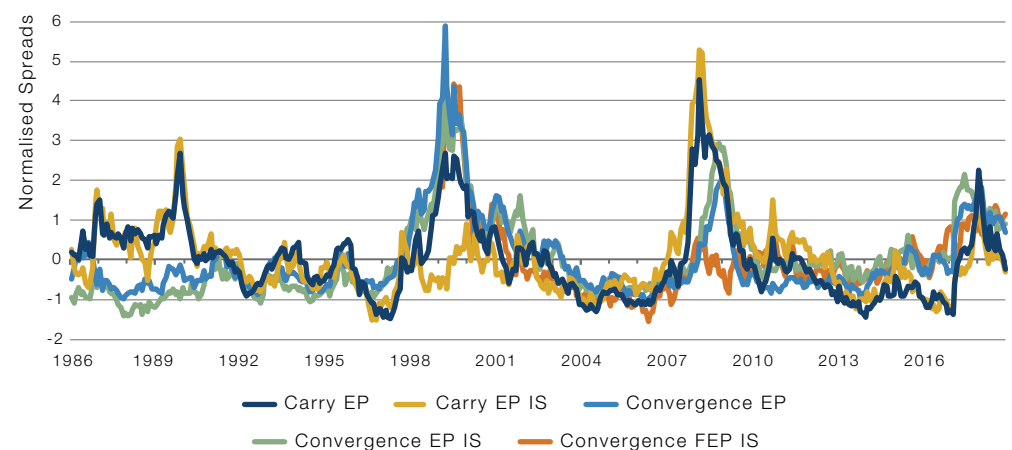
Figure 3. Global CF/EV Valuation Spreads



Source: Man Numeric; as of 29 November 2019. Global top 1,000 stocks by market cap.

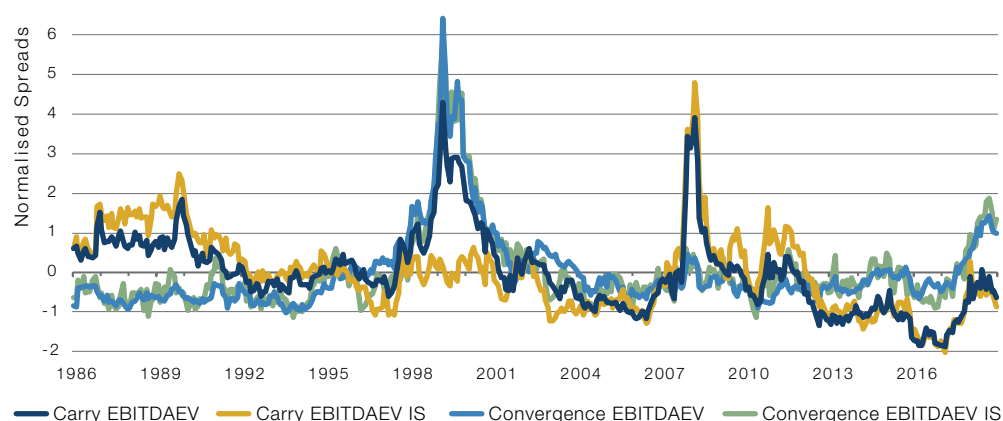
Globally, the opportunity for value appears somewhere around average looking at these various views. The US is the one area where the opportunity looks more attractive, particularly if we focus on the convergence method. Using E/P and EBITDA/EV, the industry/sector-adjusted opportunity sits around 1 standard deviation wide (Figures 4, 5), and have not often been exceeded.

Figure 4. US E/P Valuation Spreads



Source: Man Numeric; as of 29 November 2019. US top 1,000 stocks by market cap.

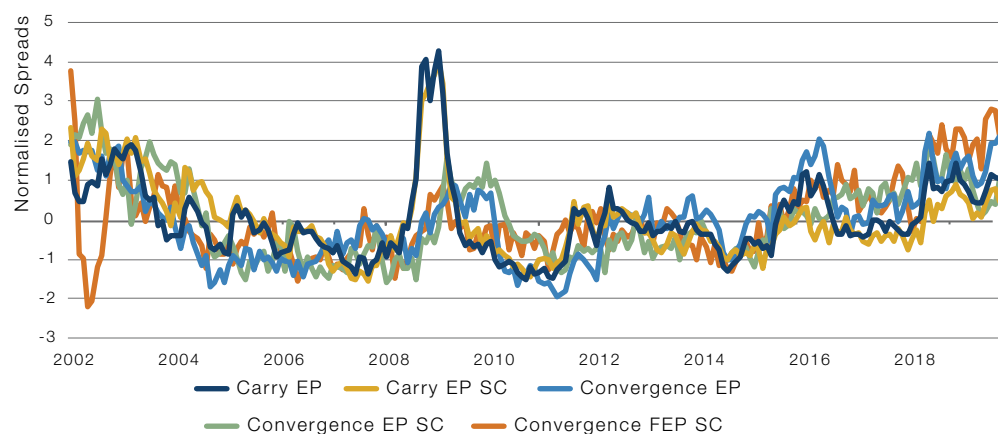
Figure 5. US EBITDA/EV Valuation Spreads



Source: Man Numeric; as of 29 November 2019. US top 1,000 stocks by market cap.

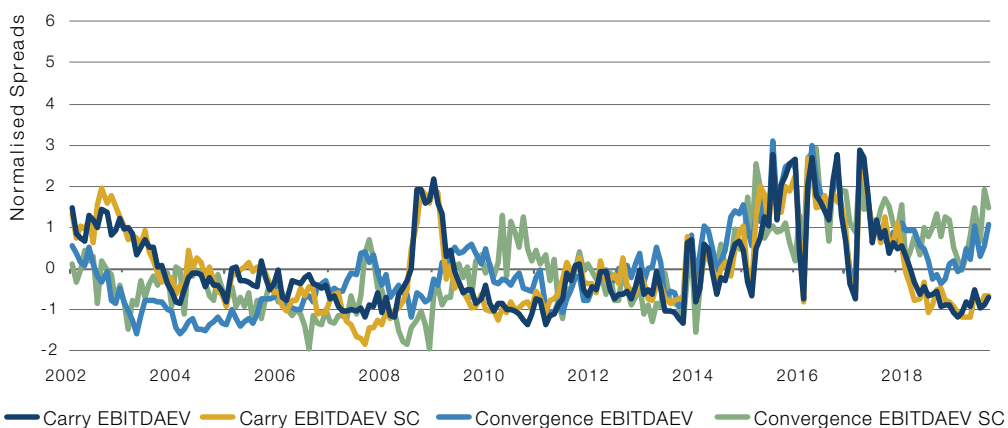
Indeed, from a value perspective, the opportunity in the US appears more attractive than developed markets more broadly, as the opportunities in Europe and Japan appear average.<sup>8</sup> Another area where value does appear modestly attractive relative to history is emerging markets (Figures 6, 7). In fact, on a forward E/P basis, the opportunity is as wide as it has been since the inception of that data. It is likely that the difference between trailing and forward E/P spreads in EM suggests the market is sceptical of an expected rebound in earnings in cheap stocks.

Figure 6. Emerging Markets E/P Valuation Spreads



Source: Man Numeric; as of 29 November 2019. Emerging-market top 500 stocks by market cap.

Figure 7. Emerging Markets EBITDA/EV Valuation Spreads



Source: Man Numeric; as of 29 November 2019. Emerging-market top 500 stocks by market cap.

8. Data available upon request.

## Value and Interest Rates

One of the key investment themes of the last decade has been the inextricable march towards zero (or negative) nominal interest rates. In reality, this trend began nearly four decades ago in the US following a successful effort to defeat inflation, and travelled to Japan and other developed markets over the next decade. More than 20 years ago, 10-year nominal interest rates in Japan fell below 1%. Although they quickly rebounded above 2%, they have slowly and steadily marched from 2% to 0% over the last two decades, and they have literally been within 50 basis points of zero for the last five years.

Why are we discussing this?

Importantly because it at least raises the possibility that this low-growth, low-inflation, low-interest rate environment that the rest of the developed world has been introduced to over the last few years may have legs. And that environment (or a change in that environment were it to occur) has implications on the prospective performance of value.

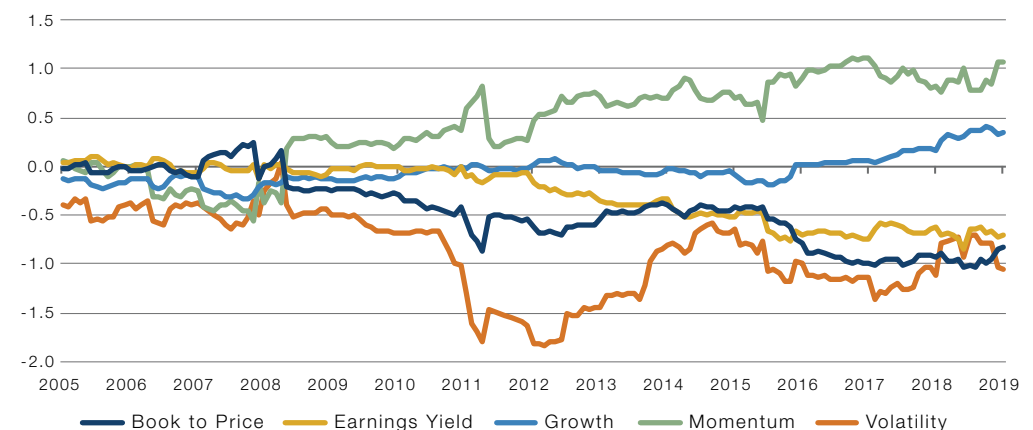
There are two potential relationships between value and interest rates. The first is an indirect relationship: an increase in interest rates reflects an improvement in the economic environment which is better for value stocks because they may be more economically sensitive. This relationship does not always hold (for example after the tech bubble), but is intuitive. The second relationship is direct: value equities are lower duration than growth equities because they derive more of their value from near-term economics relative to their growth counterparts. So, a material decline in interest rates would have (and we believe has had) a negative impact on value. A material rise in interest rates would likely be a boon to value investors – but how likely is that? At a minimum, we should be aware that value is a pseudo-short duration strategy.

Empirically, is this actually playing out in equity markets? Increasingly, it has been. During the chaos of the GFC, a lot of relationships were drowned in noise. However, over the last decade, momentum and growth returns have been increasingly positively related to US 10-year treasury returns. On the opposite side, book-to-price and earnings yield today have rolling ex-post betas to US 10-year treasury returns of between -0.70 and -0.85.<sup>9</sup> Today, one can almost predict the returns to naïve factors merely by looking at what interest rates are doing. This relationship could change over time, as there is some empirical evidence a low level of interest rates may be conducive to this effect.<sup>10</sup>



At a minimum, we should be aware that value is a pseudo-short duration strategy.”

Figure 8. Rolling 36-Month Beta of Global Factor Returns to US 10-Year Treasury Returns



Source: Man Numeric; as of 1 December 2019.

9. As of 30 December 2019. 10. Not shown, but longer-term data suggests a similar relationship may have existed during the low interest rate environment of the 1950s and early 1960s.

## Conclusion



The two geographies that do stand out as having above-average dispersion, and hence above average outlooks, are the US and emerging markets. But neither case would appear to be of the table pounding variety (at least not to these authors). ”

---

It has been a difficult couple of years for value and factor investing, and it has been no less difficult for us than others. We all owe it to ourselves to ask what we did right, what we did wrong and what we can do better going forward? Those investors smart enough or fortunate enough to have not been excessively exposed to the value drawdown ought to ask themselves if that approach still makes sense today. Investors who have suffered through this drawdown (like ourselves), but also lived through and eventually prospered after similar periods historically, need to determine how similar the current environment is to historical episodes and how we can best position ourselves for the future. Perhaps we relied too heavily on value before, but that should not inform our decision today. Is now the time to add value exposure? Or do we still have too much value exposure?

Looking at the totality of the evidence, the outlook for value may not be quite as rosy as many investors expect. While it is clear that the dispersion in raw B/P multiples is particularly wide by historical standards, it is not clear that the dispersion in relative value metrics is materially wider than normal. The two geographies that do stand out as having above-average dispersion, and hence above average outlooks, are the US and emerging markets. But neither case would appear to be of the table pounding variety (at least not to these authors).

Additionally, it is imperative to understand the relationship between the performance of value and interest rates. While we do not expect interest rates to decline at the same rate as the last several decades (that would be more or less impossible), we do believe ‘lower for longer’ might be an actual thing; this would not preclude positive performance for value, but also does not necessarily support an extreme recovery. Lower economic uncertainty around global trade and the US elections or a broad economic recovery would likely help value and drive interest rates up; however, a higher level of interest rates may have consequences on overall market valuations, particularly in the US.

So what are we going to do with this information? While we strive for a balanced and multidisciplinary approach to investing, the totality of this data might suggest opportunities to over or underemphasize value in the context of our broader process. With the benefit of hindsight, the narrow value opportunity a few years ago, and again in the mid 2000s, may have signaled an opportunity to de-emphasize value. Today, the opportunity for value is a little bit in the eye of the beholder, as some investors are extremely bullish, while we are more balanced, but constructive, especially in the US and emerging markets.

*With contribution from: Paul Njoroge, Yudi Lu and Hang Yang.*

## Author

---

### **Daniel Taylor, CFA**

CIO, Man Numeric



Daniel ('Dan') Taylor is CIO of Man Numeric. He also serves on the Man Group Executive Committee and the Man Numeric Investment Committee.

Dan has had multiple roles at Man Numeric since joining as an intern in 1998, including director of small cap strategies, head of hedge fund strategies, and senior member of Man Numeric's strategic alpha research team. During his tenure at Man Numeric, Dan has conducted a wide range of research, including areas such as momentum, earnings quality, valuation, investor behavior, and market timing.

Dan holds a Bachelor of Arts degree in economics with honors from Harvard University. He is also a CFA charterholder.



## Important Information

This information is communicated and/or distributed by the relevant Man entity identified below (collectively the 'Company') subject to the following conditions and restriction in their respective jurisdictions.

Opinions expressed are those of the author and may not be shared by all personnel of Man Group plc ('Man'). These opinions are subject to change without notice, are for information purposes only and do not constitute an offer or invitation to make an investment in any financial instrument or in any product to which the Company and/or its affiliates provides investment advisory or any other financial services. Any organisations, financial instrument or products described in this material are mentioned for reference purposes only which should not be considered a recommendation for their purchase or sale. Neither the Company nor the authors shall be liable to any person for any action taken on the basis of the information provided. Some statements contained in this material concerning goals, strategies, outlook or other non-historical matters may be forward-looking statements and are based on current indicators and expectations. These forward-looking statements speak only as of the date on which they are made, and the Company undertakes no obligation to update or revise any forward-looking statements. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those contained in the statements. The Company and/or its affiliates may or may not have a position in any financial instrument mentioned and may or may not be actively trading in any such securities. This material is proprietary information of the Company and its affiliates and may not be reproduced or otherwise disseminated in whole or in part without prior written consent from the Company. The Company believes the content to be accurate. However accuracy is not warranted or guaranteed. The Company does not assume any liability in the case of incorrectly reported or incomplete information. Unless stated otherwise all information is provided by the Company. Past performance is not indicative of future results.

Unless stated otherwise this information is communicated by the relevant entity listed below.

**Australia:** To the extent this material is distributed in Australia it is communicated by Man Investments Australia Limited ABN 47 002 747 480 AFSL 240581, which is regulated by the Australian Securities & Investments Commission (ASIC). This information has been prepared without taking into account anyone's objectives, financial situation or needs.

**Austria/Germany/Liechtenstein:** To the extent this material is distributed in Austria, Germany and/or Liechtenstein it is communicated by Man (Europe) AG, which is authorised and regulated by the Liechtenstein Financial Market Authority (FMA). Man (Europe) AG is registered in the Principality of Liechtenstein no. FL-0002.420.371-2. Man (Europe) AG is an associated participant in the investor compensation scheme, which is operated by the Deposit Guarantee and Investor Compensation Foundation PCC (FL-0002.039.614-1) and corresponds with EU law. Further information is available on the Foundation's website under [www.eas-liechtenstein.li](http://www.eas-liechtenstein.li). This material is of a promotional nature.

**European Economic Area:** Unless indicated otherwise this material is communicated in the European Economic Area by Man Asset Management (Ireland) Limited ('MAMIL') which is registered in Ireland under company number 250493 and has its registered office at 70 Sir John Rogerson's Quay, Grand Canal Dock, Dublin 2, Ireland. MAMIL is authorised and regulated by the Central Bank of Ireland under number C22513.

**Hong Kong:** To the extent this material is distributed in Hong Kong, this material is communicated by Man Investments (Hong Kong) Limited and has not been reviewed by the Securities and Futures Commission in Hong Kong. This material can only be communicated to intermediaries, and professional clients who are within one of the professional investor exemptions contained in the Securities and Futures Ordinance and must not be relied upon by any other person(s).

**Switzerland:** To the extent this material is distributed in Switzerland, this material is communicated by Man Investments AG, which is regulated by the Swiss Financial Market Authority FINMA.

**United Kingdom:** Unless indicated otherwise this material is communicated in the United Kingdom by Man Solutions Limited ('MSL') which is an investment company as defined in section 833 of the Companies Act 2006. MSL is registered in England and Wales under number 3385362 and has its registered office at Riverbank House, 2 Swan Lane, London, EC4R 3AD, United Kingdom. MSL is authorised and regulated by the UK Financial Conduct Authority (the 'FCA') under number 185637.

**United States:** To the extent this material is distributed in the United States, it is communicated and distributed by Man Investments, Inc. ('Man Investments'). Man Investments is registered as a broker-dealer with the SEC and is a member of the Financial Industry Regulatory Authority ('FINRA'). Man Investments is also a member of the Securities Investor Protection Corporation ('SIPC'). Man Investments is a wholly owned subsidiary of Man Group plc. The registration and memberships described above in no way imply a certain level of skill or expertise or that the SEC, FINRA or the SIPC have endorsed Man Investments. Man Investments, 452 Fifth Avenue, 27th fl., New York, NY 10018.

This material is proprietary information and may not be reproduced or otherwise disseminated in whole or in part without prior written consent. Any data services and information available from public sources used in the creation of this material are believed to be reliable. However accuracy is not warranted or guaranteed. ©Man 2020.

020/1748156/S/US/GL/I/A