

Value Returns in 2021: Mirage or Oasis

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Value Returns in 2021: Mirage or Oasis

Executive Summary

Value investment styles in single stocks have experienced unrelenting losses for several years, with especially large losses in 2020.

The negative returns to value investing strategies have made “cheap” stocks cheaper and “expensive” stocks more expensive. This has created extreme spreads in valuation measures between cheap and expensive stocks.

The last time valuation spreads reached similar levels was around 2000, at the end of the technology boom. When valuation spreads normalized over several years, value investment strategies earned strong returns.

For the first time in what feels like a long time, early 2021 has produced positive value returns. This may be a sign that the overwhelmingly negative sentiment toward value stocks is finally fading.

Importantly, the positive value returns in 2021, so far, have done little to shrink the extreme value spreads created by the previous negative returns. The case for positive value returns in stock selection strategies remains strong and the potential for future value returns remains undiminished.

It may finally be the beginning of a value recovery. For now, however, these positive returns to value strategies remain light spring showers after a long, hard drought.

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1 Introduction

Value investment styles in equities have detracted from portfolio returns for several years. Simple approaches have led to losses since the financial crisis in 2008. Nearly all value styles suffered large losses in 2020. As a result, valuation spreads have widened to extreme levels.

At the beginning of 2021, value themes have shown positive returns for the first time in what feels like a long time. Following such dramatic and extended underperformance for value, there has to be concern that these early returns will turn out to be false hope. However, valuation spreads remain so wide that they will continue to exert upward pressure on value returns. When valuation spreads normalize, value strategies should see attractive returns.

Gurnani and Hentschel (2018) described poor returns to value investment strategies, wide valuation spreads, and a tendency for valuation spreads – and hence value investment returns – to mean revert. Of course, valuation spreads continued to widen for 2 more years, almost without interruption.

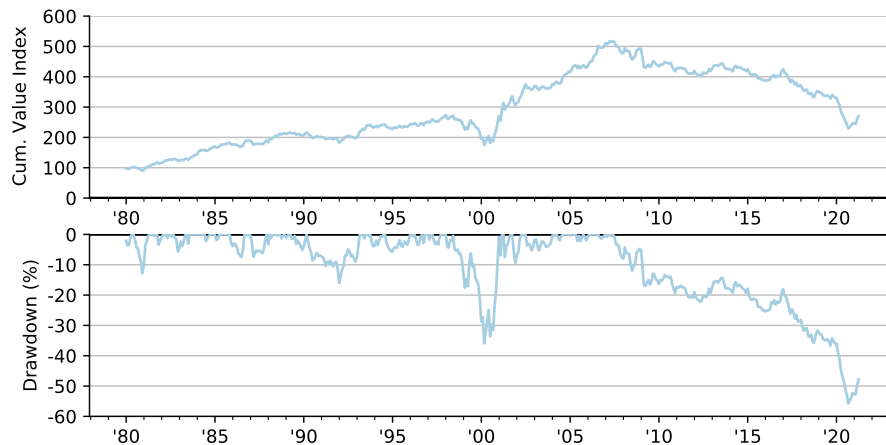
Early 2021 is the first period in several years where value investment strategies have earned positive returns. It may finally be the beginning of a value recovery. For now, however, these positive returns to value strategies remain relatively light spring showers after a long, hard drought.

2 Past Value Returns

The drawdown in value-based investment strategies in equities, especially in 2020, was so strong that the exact definition of “value” was not central to the overall outcome. Nearly any value-related approach would have lost money. This was true for US stocks and international stocks, for essentially all sectors, and for value metrics ranging from book-to-price ratios to earnings-to-price ratios, whether adjusted for growth expectations or not.

In Figure 1 we show the cumulative return spread for the Russell 1,000 Value index minus the Russell 1,000 Growth index. This is the return an investor would have generated by investing 100% in the Russell 1,000 Value index, shorting 100% of the Russell 1,000 Growth index and holding 100% in Treasury bills. As the graph shows, stocks in Russell’s value universe have clearly lagged those in Russell’s growth universe since the financial crisis. Yet, that underperformance appears to have accelerated further in 2017. Russell identifies value stocks based on book-to-price ratios and growth stocks based on IBES long-term growth forecasts and sales-per-share growth.¹ The value underperformance over the period January 2017 to

¹See FTSE Russell (2021) for a detailed description of the Russell index methodology.

Figure 1: Russell Value Minus Growth Returns and Drawdowns

The top panel shows the cumulative return index for a hypothetical portfolio that invested 100% long in the Russell 1,000 Value index, 100% short in the Russell 1,000 Growth index, and 100% long in US Treasury bills.

The bottom panel shows the drawdowns relative to the trailing high-water mark for the returns in the top panel.

Returns are monthly from December 1979 to March 2021, gross of all fees and transaction costs. Returns will be reduced by management fees and any other expenses incurred in the management of the strategy.

Source: FTSE Russell, Bloomberg, Versor.

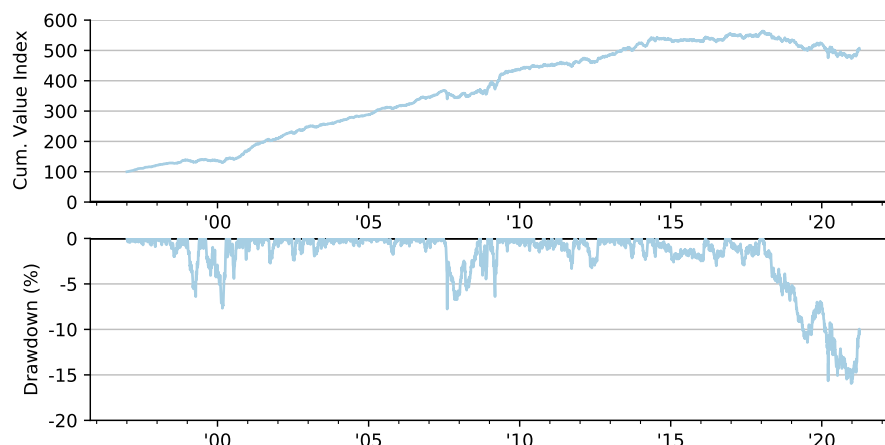
Past performance is not indicative of future results. Performance results reflect the reinvestment of income. Commodity interest trading involves substantial risk of loss.

December 2020 produced the largest drawdown in the value-minus-growth spread since the inception of the Russell style indexes in 1979. The return spread over the 2017 to 2020 period was roughly -39% . At the height of the technology boom, from January 1998 to June 2000, the cumulative value-minus-growth return for the Russell 1,000 index was -34% .

To highlight the recent underperformance of value, the bottom panel of figure 1 shows the drawdown associated with the returns in the top panel. As the figure shows, the simple Russell value-minus-growth strategy peaked before the financial crisis in 2008 and has not recovered since then. In fact, the speed and magnitude of the drawdown in 2020 was the worst since the peak of the technology boom in 1999.

One reason for the poor performance of the simple Russell 1,000 value-minus-growth strategy is that the underlying positions are persistently short stocks in the technology sector. Of course, the technology sector has outperformed the rest of the stock market over the last decade. While stocks in the sector may have appeared expensive relative to stocks in other sectors, they have not earned lower returns.

More generally, comparing a few simple valuation ratios across all stocks, regardless of sector or other firm characteristics, is a rather crude assessment

Figure 2: Value Factor Returns and Drawdowns

The top panel shows the cumulative return index for a pure, market-neutral value factor in US large-cap stocks. The underlying portfolio is 100% long “cheap” stocks, 100% short “expensive” stocks, and 100% long in US Treasury bills. The value metric is a composite of 4 different value measures based on firms’ balance sheets, income statements, and cash flow statements. The portfolios have no net exposures to the market overall, GICS industries, or about 20 other investment style composites, like momentum, for example.

The bottom panel shows the drawdowns relative to the trailing high-water mark for the returns in the top panel.

Returns are daily from January 3, 2000 to March 31, 2021, gross of all fees and transaction costs. Returns will be reduced by management fees and any other expenses incurred in the management of the strategy. Due to data availability, this sample period starts later than the one shown in figure 1.

Source: Versor, S&P Global, Refinitiv.

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of “value” and unlikely to earn reliable excess returns. Unfortunately, this fairly indiscriminate approach remains widely used in indexes, funds, and research publications.

In Figure 2, we show that more sophisticated measures of value vastly outperformed the Russell value-minus-growth spread after the financial crisis. Not surprisingly, the more sophisticated value strategy has higher annual returns based on more advanced value signals, lower risk based on tighter risk management, and a materially higher Sharpe ratio. While the Russell value-minus-growth spread lost money nearly continuously following the financial crises, sophisticated measures of value continued to generate positive returns in many years.

However, as value sentiment turned ever more negative starting in 2017, even sophisticated measures of value were not able to overcome the massive

negative sentiment towards value investment styles. As a result, there were large drawdowns over the last few years.

As before, the figure shows the return to a 100% long and 100% short portfolio. In this case, however, the long positions are stocks that were most attractive according to 4 valuation measures: book to price, forward earnings to price, cash-flow to price, and sales to price.² The short positions are stocks that were least attractive according to the same measures. The stocks are drawn from the most liquid US stocks, roughly equivalent to the Russell 1,000 constituents. However, the stocks are reassessed every week. Importantly, the stock valuations are measured relative to industry peers, so that the portfolio remains industry-neutral. The industry-neutral approach precludes losses that might have come from shorting technology stocks because they appeared expensive relative to utilities, for example. In addition to industry exposures, the portfolios also eliminate exposures to a large number of other style factors that might have contributed returns or volatility.³ In that sense, the portfolios are “pure” value style portfolios.

Due to limited data availability, the returns in figure 2 start significantly later than those in figure 1. As for the cruder Russell definitions of value, however, the returns were strongly negative over the last two years.

Interestingly, in both figures we can see a notable uptick in value returns for 2021. While these positive returns still pale in comparison to the preceding drawdown, they should give hope to investors who expect an eventual recovery in value returns.

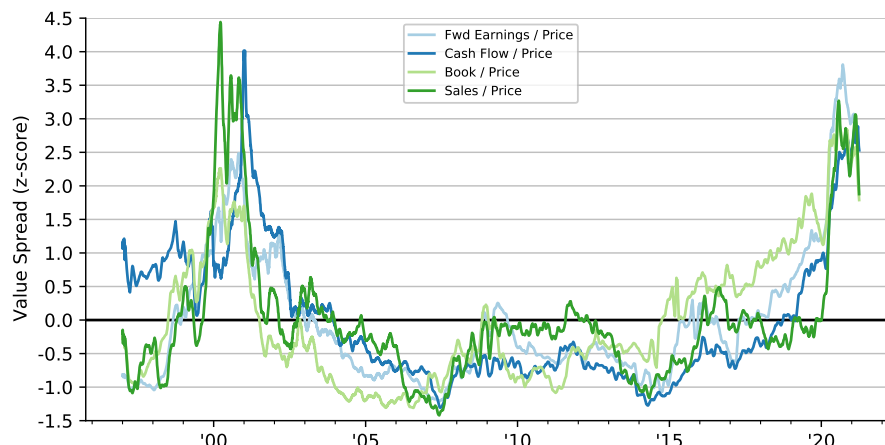
3 Value Spreads

When value investment styles generate such large negative returns, cheap stocks become cheaper and expensive stocks become more expensive. We measure this notion by tracking the intra-sector differences in valuation ratios.

In order to focus on stock selection effects, we once again remove sector differences from our measures. In each sector, we assign positive weights to stocks with attractive earnings yields and negative weights to stocks with unattractive earnings yields. The weights are larger for more attractive stocks. The positive weights sum to 1. The negative weights sum to -1. On a given date, the thus-weighted sum of earnings yields measures the average

²We use these simple measures for presentation purposes. Actual Versor Investments portfolios use more than 20 different valuation characteristics to measure the value exposures of stocks.

³The excluded style factors include a large number of variations within themes like size, momentum, analyst sentiment, quality, and volatility.

Figure 3: Differences in Valuations

The figure shows US valuation spreads over time. Valuation spreads are the weighted average difference between the valuation ratios of stocks with attractive ratios and stocks with less attractive ratios.

In each US industrial sector and geographic region, we assign positive weights to stocks with attractive valuations and negative weights to stocks with unattractive valuations. The weights are larger for more attractive stocks. The positive weights sum to 1. The negative weights sum to -1 . For earnings yields, the weighted sum of earnings yields is the average spread in earnings yields between attractive and unattractive firms on that date. We form a regional average of such spreads by taking a weighted average across all industrial sectors.

Each of the four lines uses a different valuation ratio: analyst forecasted earnings divided by current market prices, reported cash flows divided by market prices, reported book values divided by market prices, and reported sales divided by market prices.

Value spreads are monthly data from January 1997 to February 2021. The data include approximately the largest 1,000 US stocks by liquidity and market cap.

Source: Versor, S&P Global, Refinitiv.

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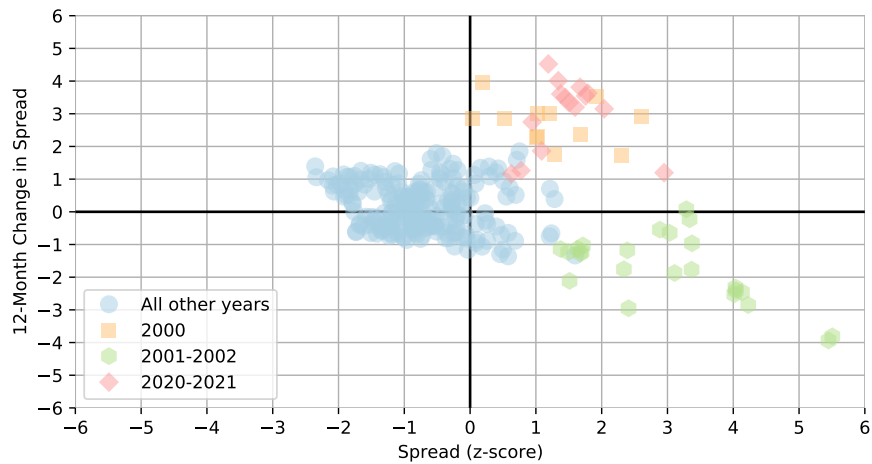
spread in earnings yields between attractive and unattractive firms on that date within a given sector. We form an overall average of such spreads by taking a weighted average across all sectors.⁴

Figure 3 shows historical spreads based on 4 different valuation measures: book to price, forward earnings to price, cash flow to price, and sales to price. The figure shows z-scores for these measures, which remove the historical means and divide by the historical standard deviations. A score of zero indicates spreads at the historical mean. A score of 1 indicates value spreads 1 standard deviation above the historical mean.

As the figure shows, several of these valuation spreads reached historical peaks near the end of 2020. These extremely unusual differences in stock valuations naturally give rise to predictions that these differences will normalize. However, the situation was similar at the end of 2019, when

⁴The sector weights are proportional to the square root of the number of stocks in each sector. This is an approximation to the capital an investment strategy might deploy in each sector. See Gurnani and Hentschel (2018) for additional details about these value spreads.

Figure 4: Mean Reversion in Value Spreads



The figure graphs US values spreads on the horizontal axis and changes in US value spreads over the subsequent 12 months on the vertical axis. The association between large spreads and subsequent declines in the spreads indicates that spreads have a tendency to revert to “normal” values. Both spreads and changes in spreads are shown in z-score units.

The spreads are averages of multiple valuation spreads, like those shown in Figure 3. Spreads and spread changes are monthly data from January 1997 to March 2021. In order to measure the spread changes over the subsequent 12 months, the last recorded spread is for March 2020. The spreads are based on US large-cap and mid-cap stocks.

The color coding identifies the end dates for spread changes: orange squares for months in 2000, green hexagons for 2001-2002, red diamonds for 2020-2021, and blue circles for all other dates.

Source: Versor, S&P Global, Refinitiv.

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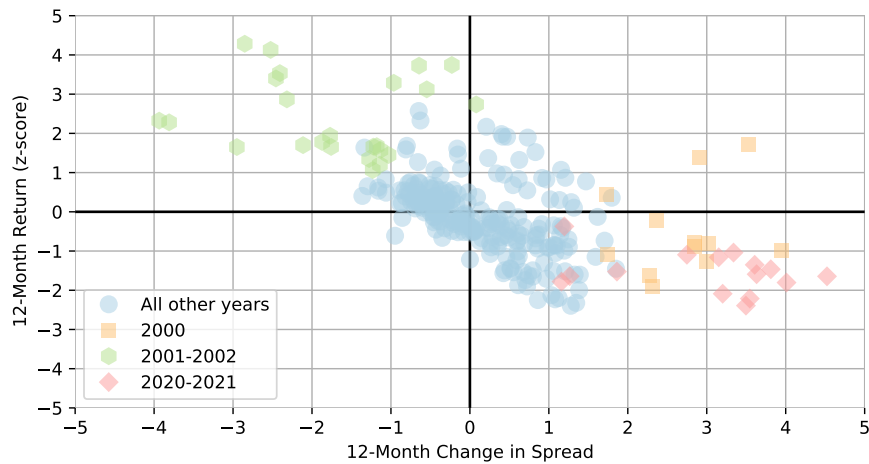
valuation spreads were already high. Of course, we now know that things got worse from there.

Although the positive value returns for early 2021 had a tendency to reduce the value spreads, that effect remains modest for now. There is still plenty of room for positive value returns before the spreads revert to historically more typical levels.

Figure 4 shows that wide value spreads are generally followed by a decline in those spreads. The figure shows historical spreads along the horizontal axis. Wide spreads are toward the right end. The vertical axis shows changes in spreads over the following 12 months. Negative changes correspond to compression in spreads, at the bottom of the vertical axis. As the figure shows, wide spreads historically have been followed by spread compression.

Notably, the association between spreads and subsequent 12-month spread changes was much weaker during the peak of the technology boom. The 12-month spread changes ending in 2000, associated with spreads a

Figure 5: Changes in Value Spreads and Value Returns



The figure graphs the annual change in US value spreads on the horizontal axis and the contemporaneous returns to US value portfolios on the vertical axis. Both spread changes and returns are shown in z-score units.

The spreads are averages of multiple valuation spreads, like those shown in Figure 3. The returns are for the corresponding average portfolios. Spread changes and returns are measured each month from January 1997 to March 2021. The spreads and returns are based on US large-cap and mid-cap stocks.

The color coding identifies the end dates for returns and spread changes: orange squares for months in 2000, green hexagons for 2001-2002, red diamonds for 2020-2021, and blue circles for all other dates.

Source: Versor, S&P Global, Refinitiv.

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year earlier, are marked by orange squares. A similarly unusual episode occurred over the last year. Spread changes ending in January 2020 to March 2021 are marked with red diamonds. During these two exceptional periods, wide value spreads were associated with further widening of those spreads. According to the figure, the behavior of value spreads during 2020 was roughly as unusual as during the peak of the technology boom. Importantly, however, the wide spreads created by the technology boom were strongly associated with subsequent spread normalization, marked with green hexagons.

Naturally, when value spreads compress value investment strategies earn positive returns. Figure 5 shows that this has happened historically. Value strategies are long “cheap” stocks and short “expensive” stocks. A rise in the price of the “cheap” long positions and decline in the price of the “expensive” short positions leads to value spread compression and positive value returns. Conversely, when value spreads expand, value strategies tend to suffer losses. As the figure shows, the association between 12-month spread changes and contemporaneous 12-month returns is more

reliable than the association between spreads and subsequent 12-month spread changes in figure 4. Even during the technology boom and in 2020, marked by the orange squares and red diamonds, respectively, an increase in valuation spreads was accompanied by negative value returns.

Based on the historical experience documented in figure 5, we are confident that value investment strategies will earn strong returns when value spreads normalize from their recent extremes. Based on the historical experience documented in figure 4, we know that wide spreads are generally – but not always – followed by compression in value spreads. As figure 4 shows, there have been exceptional periods where already wide spreads expanded further: 2020 is a key example of this unusual behavior. The main question appears to be when value spreads will normalize.

4 Why Value Now?

The severe negative performance of value investment styles has coincided with very unusual economic circumstances: direct and sustained government support for financial markets. Given the rarity of this policy stance, it is difficult to prove that record-low interest rates and record-high stock prices caused poor value returns. However, record-low interest rates should produce lower long-term discount rates and increase the present value of far-away profits. To the extent this happened, it should have contributed to the underperformance of value investment styles that favor current assets and income over long-term, speculative growth prospects.

Covid relief programs have again produced a range of government support efforts. In early 2021, however, there were signs that the rapid increase in government debt required to fund these programs may finally stop interest rates from falling ever lower. Should interest rates inch higher, they may disappoint investors who priced stocks based on extremely low discount rates. A repricing of stocks based on higher interest rates should produce lower stock prices and favor value investments.

Even though higher interest rates may lead to lower equity returns, this does not have a direct effect on *market-neutral* value portfolios. On balance, however, environments with moderate or low equity market returns tend to be better for value investments. Especially investors concerned about higher interest rates and lower stock prices should find market-neutral value investments attractive.

Looking at the early 2000s, figure 3 shows that value spreads declined from a peak similar to current levels. Value spreads continued to fall over the next 5 years, well past 2005. Figures 1 and 2 show that value investment

strategies had very strong returns during the 2000 to 2004 period: Going long the Russell 1,000 Value index and short the Russell 1,000 Growth index earned more than 100% cumulative returns; the simulated pure value strategy described in figure 2 earned similar returns but at lower risk. These returns accrued both during the initial overall market decline and the subsequent market recovery. Both simulated strategies use leverage of 100% long and 100% short, for illustration. Actual implementation often run at higher leverage, which amplifies returns. Although there surely are differences between 2001 and 2021, and there remains uncertainty about when value spreads will normalize, a material decline in value spreads should produce strong returns for value investment strategies.

5 Summary

For several years, there has been much discussion of value investment strategies for stocks. Simplistic approaches to value investing, in particular, have suffered nearly uninterrupted losses since the financial crisis. In 2020, however, basically all value investment styles for stocks suffered extreme losses. Regardless of the details of the value measures, using them for security selection produced large negative returns.

The negative returns to value investing strategies have made “cheap” stocks cheaper and “expensive” stocks more expensive. This has created extreme spreads in valuation measures between cheap and expensive stocks.

The last time valuation spreads reached similar levels was around 2000, at the end of the technology boom. When valuation spreads normalized over several years, value investment strategies earned strong returns. Even then, these returns were not based simply on betting against technology stocks. Valuations within sectors normalized as well, and led to strong returns for more sophisticated, industry-neutral value investment strategies.

For the first time in what feels like a long time, early 2021 has produced positive value returns. This may be a sign that the overwhelmingly negative sentiment toward value stocks is finally fading.

Importantly, the positive value returns in 2021, so far, have done little to shrink the extreme value spreads created by the previous negative returns. The case for positive value returns in stock selection strategies remains strong, the potential for future value returns remains undiminished – but also largely unrealized for now.

6 References

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