

Factor Performance & Lessons from History

Stephen Lanzendorf, CFA¹

Global equity markets surged in the fourth quarter of 2019 to cap off an exceptionally strong year –the best one since 2013. Investors shrugged off concerns about flagging global growth and US/China trade conflicts that dominated the headlines earlier in 2019. Performance was strong in all regions. Emerging markets, which had trailed earlier in the year, rebounded sharply in the fourth quarter. The US was the best performing developed region in the fourth quarter and for the year.

EXHIBIT 1: GLOBAL, US LARGE CAP AND US SMALL CAP EQUITIES: CUMULATIVE PERFORMANCE 2019



The US was the best performing developed region in the fourth quarter and for the year.

Note: Global Equities are measured by the MSCI World Index, US Equities are measured by the S&P 500 Index and US Small Cap Equities are measured by the Russell 2000 Index.
Source: Bloomberg

At the same time, it was a challenging environment for active managers, who struggled to keep up with the very strong returns of their benchmarks. According to Jefferies and Lipper, only 31% of US mutual funds outperformed their benchmarks in Q4 2019, and only 32% did so for the full year.

Pundits have offered a number of possible reasons for the relative under-performance of active managers. These include large differentials in sector performance, where an underweight in the high-flying Technology sector would have pretty much guaranteed a significant performance shortfall.

A well-diversified investor might have avoided the pitfalls of these sector underweights. However, they still would have had to face the impact of poor

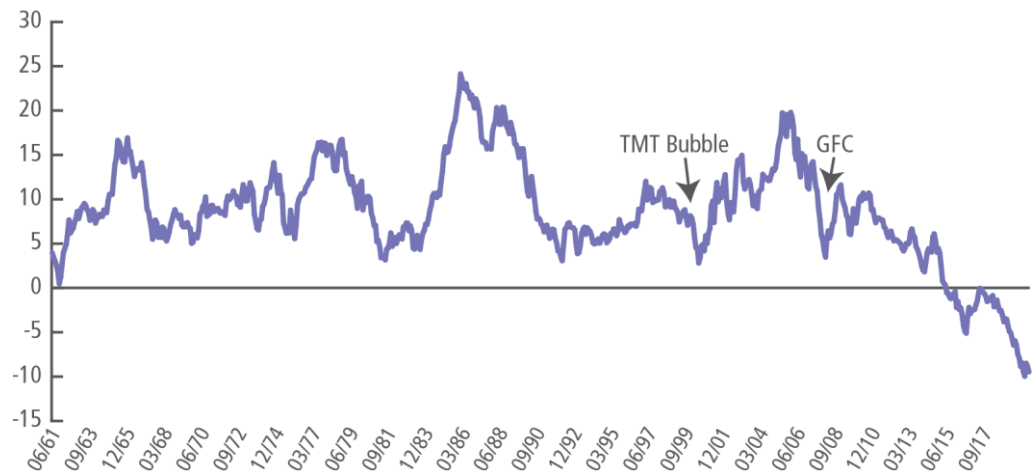
¹ Stephen Lanzendorf, CFA is a Portfolio Manager at QS Investors. This paper has benefited greatly from useful comments and discussions with the QS Research Team and QS Portfolio Management Team.

factor performance in stock selection. The performance of Valuation factors was dismal during 2019, as it has now been for several years.

Exhibit 2 below shows the performance of US stocks that appear cheap on a Cash Flow/Price basis (i.e. high Cash Flow relative to Price) vs. expensive stocks (i.e. low Cash Flow relative to Price). For most of the past 60 years, relatively cheaper stocks have outperformed more expensive stocks. However, over the past five years we have seen negative returns to such a strategy. While there have been periods when this strategy has struggled before, its current run of underperformance is extremely unusual, and more severe than any shorter-term setbacks we saw during either the Tech/Media/Telecom bubble of the 1990s or even the Global Financial Crisis (GFC).

EXHIBIT 2: RETURNS TO HIGH VS. LOW CASH FLOW/PRICE STOCKS
(5 Year Moving Average, Annualized)

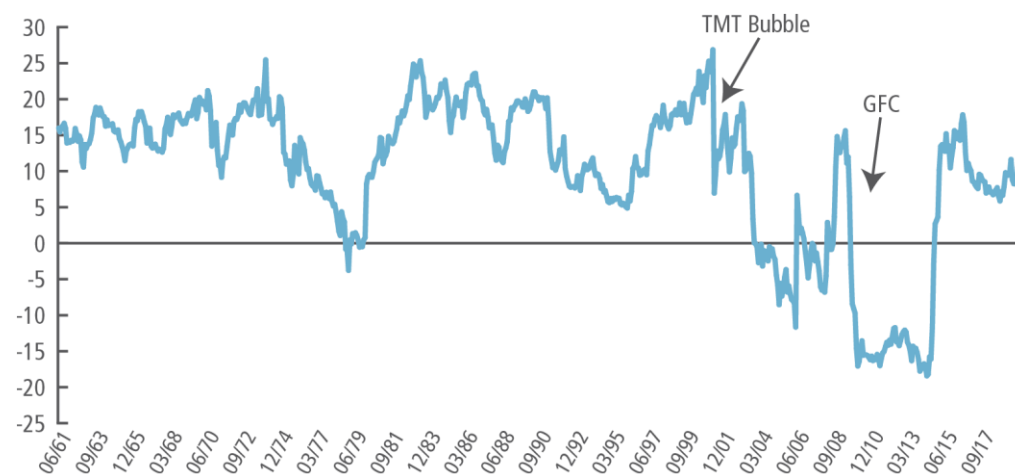
For most of the past 60 years, relatively cheaper stocks have outperformed more expensive stocks.



Source: Ken French database, 07/31/1951-11/30/2019; Highest/Lowest 10% of stocks sorted by Cash Flow/Price

We observe that this poor performance extends to a wide range of other valuation factors, including Sales/Price, Earnings/Price, and Book/Price. It is also important to note that this phenomenon has extended from the US to most other global markets. At the same time, the more volatile Price Momentum factor has returned to outperformance (Exhibit 3) after failing in the aftermath of the GFC. However, most other Sentiment factors, including Earnings Growth and Earnings Estimate Revision, have shown performance that is well below their long-term averages. This combination means that diversified factor-based investors have had very few sources of return for stock selection, making for a challenging environment.

EXHIBIT 3: RETURNS TO HIGH VS. LOW MOMENTUM STOCKS
(5 Year Moving Average, Annualized)

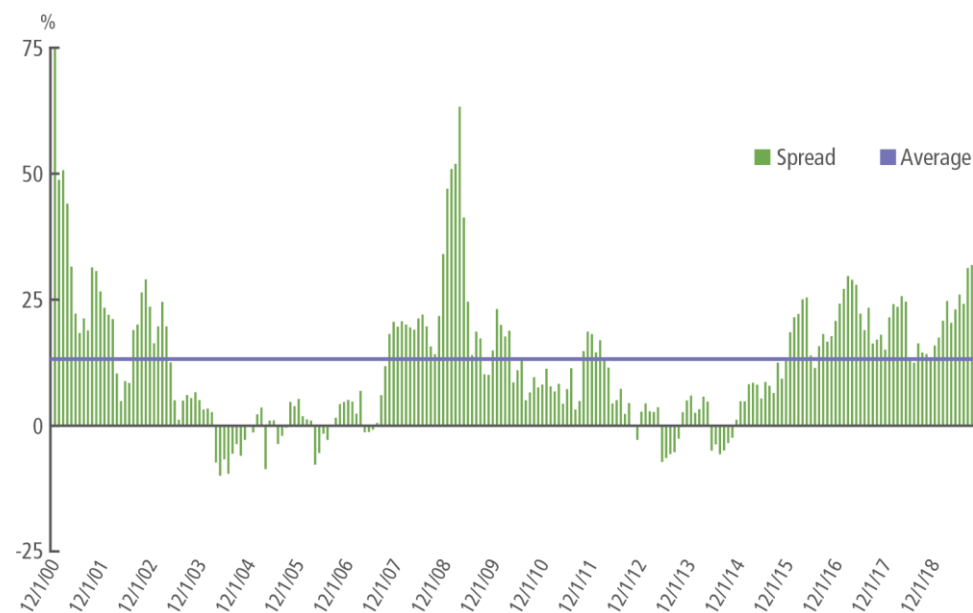


Source: Ken French database, 07/31/1951-11/30/2019; Highest/Lowest 10% of stocks sorted by prior 12-2 month return.

Even accounting for higher growth expectations for growth stocks and lower than average interest rates, which boosts the present value of future growth, the valuation spread is still wider than average.

However, the failure of investors to reward attractively valued stocks has created compelling opportunities. This can be seen in the unusually wide spread between 'cheap' and 'expensive' stocks. Undervalued stocks are currently trading at discounts that are well above historical norms, based on a variety of valuation measures. Even accounting for higher growth expectations for growth stocks and lower than average interest rates, which boosts the present value of future growth, the valuation spread is still wider than average (Exhibit 4). When spreads have reached these levels before, value-conscious investors have been rewarded by multi-year periods of strong returns.

EXHIBIT 4: VALUATION SPREAD, ADJUSTED BY FUTURE EARNINGS

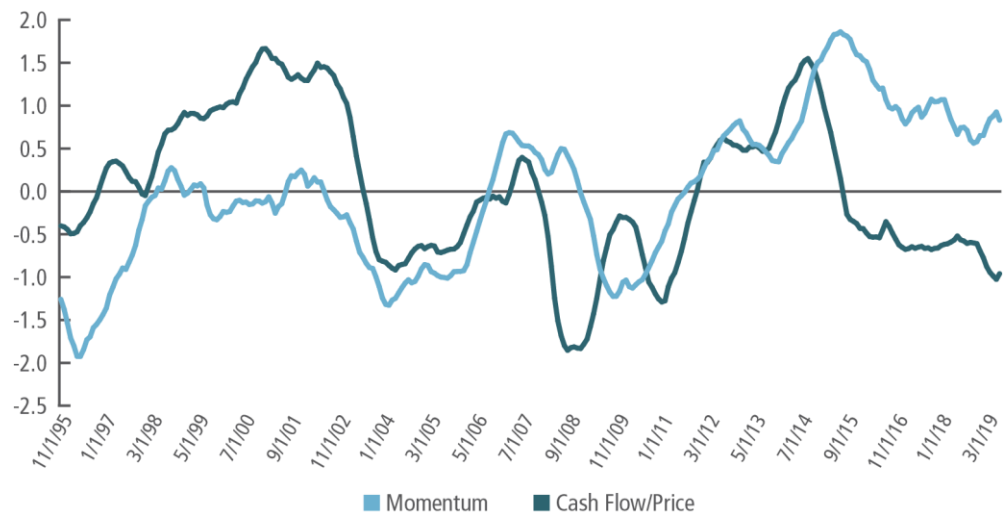


Valuation spread of High-Low B/P quintiles, adjusted by discounted future earnings; Russell 2000 universe.

Not surprisingly, investors have gravitated toward the factors that have worked, including Momentum. The graph below illustrates this by our Popularity Index, which measures the relationship between factors and short interest. When high factor ranks coincide with less shorting than usual, that factor is 'popular' (or crowded). Conversely, when a factor coincides with more shorting than usual, it is unpopular. You can see that Momentum is a relatively popular strategy, while high cash flow is unpopular. Cash flow has only been this unpopular before at the depths of the GFC, and again briefly during a market decline in 2011. In both cases, this was followed by superior returns to the factor, so we believe that investors are disregarding cash flow at their peril.

EXHIBIT 5: MOMENTUM IS POPULAR, CASH FLOW IS NOT

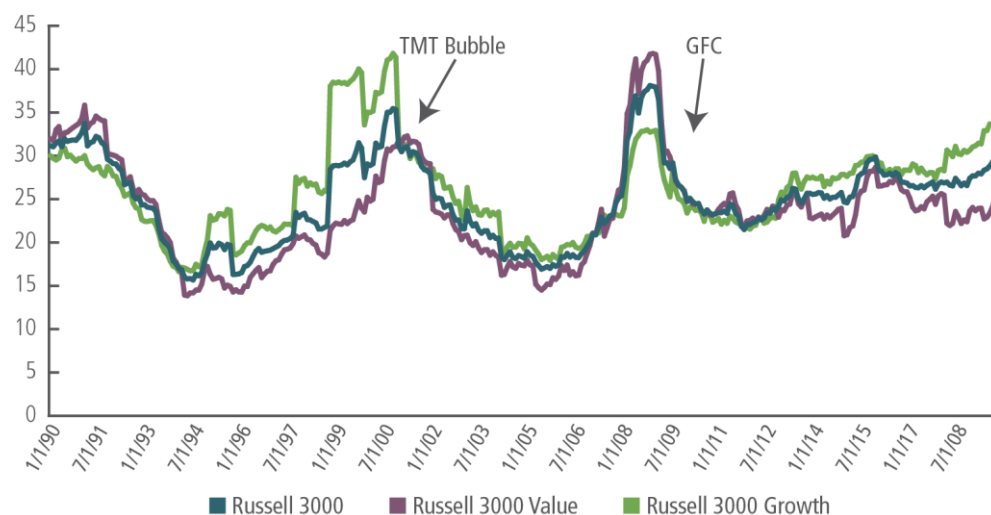
Cash Flow (as a factor) has only been this unpopular before at the depths of the GFC, and again briefly during a market decline in 2011. Superior returns to the factor then followed.



Popularity Index = -1 * correlation of factor with short interest/float, 12 mo MA of z-score; Russell 3000 Index
Source: FTSE Russell, Thomson Reuters, QS Investors

An indication of market risk that could lead to a narrowing in these valuation spreads is the increase in the number of companies with no earnings, especially in the growth segment of the market. Exhibit 6 shows that the percentage of constituents in the Russell 3000 Growth Index with no earnings has increased steadily to nearly 35%. The effect is even more dramatic among smaller stocks, with nearly 45% Russell 2000 Growth companies having no earnings, a level not seen since the Tech (Dot-Com) Bubble in the late 1990s.

EXHIBIT 6: PERCENTAGE OF STOCKS WITH NO EARNINGS



Source: FTSE Russell, Thomson Reuters, QS Investors

The percentage of stocks with no earnings that comprise the Russell 3000 Growth Index is reminiscent of those levels observed before the Great Financial Crisis and the burst of the Tech Bubble...

That period was followed by a multi-year period of success for valuation measures. From September 1, 2000 (height of the market before the Tech Bubble burst) through October 9, 2007 (height of the market before the GFC), the Russell 3000 Value posted a cumulative total return of 83.51%. By contrast, the Russell 3000 Growth was -23.39% over the same period (a difference of 10,690 basis points).

US and global equity investors can celebrate very strong returns in 2019, probably exceeding the expectations they had at the beginning of the year. At the same time, active managers are disappointed that they fell short of these very successful benchmarks. As challenging as this environment has been for active management, we find reasons for optimism. While investors have shifted their preference away from stocks that trade at attractive valuations, there is no reason to think that this is permanent. We have seen this happen before, with good outcomes for those who maintained their valuation discipline. Indeed, the opportunity for investors who use a valuation component is larger than usual, as cheap stocks look even cheaper on a relative basis and expensive stocks look stretched. We think that it is inevitable that investors will move away from money-losing companies and back to those who generate strong earnings and cash flow for their investors.

IMPORTANT INFORMATION

The strategy outlined is not currently offered and as such, no clients are invested in this strategy. It is purely hypothetical and the performance returns and other statistics were calculated by QS Investors using published data sources, which have been noted throughout this paper.

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