DISTILLATE CAPITAL

RATIONAL INDEX DESIGN

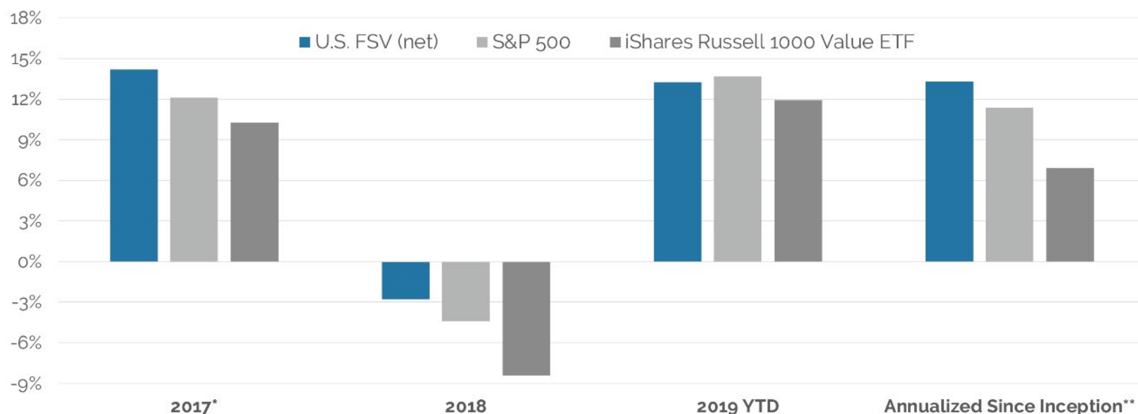
2019 Q1 Letter to Investors: Mismeasuring “Value” and the Risks in Low Beta Stocks

Strategy Summary: Distillate Capital’s U.S. Fundamental Stability & Value (U.S. FSV) strategy seeks to outperform the overall stock market over the long-term by investing in high-quality stocks with attractive valuations. Our strategy uses cash-flow-based measures of value and quality that are designed to avoid accounting distortions that we believe have rendered many traditional valuation and risk metrics less relevant in an increasingly asset-light world. Our methodology seeks to systematically exploit pricing opportunities while at the same time protecting capital in down markets.

Performance: In the strong market backdrop of the first quarter, Distillate’s U.S. FSV strategy’s first quarter total return of 13.25% after fees slightly trailed the S&P 500 total return of 13.65%. This follows outperformance in 2017 and 2018, with the result that annualized performance since inception is ahead of the S&P 500 by 1.93% on an after-fee basis (See Figure 1). Performance compared to the Russell 1000 Value Index was well ahead of the benchmark in the quarter, and annualized performance net of fees is more than 6% ahead of the index since inception.

Breaking down the relative performance versus the S&P 500 for the U.S. FSV strategy in 1Q 2019, sector selection was favorable given the overweight positions in technology and producer manufacturing, but was offset by a drag from individual stock selection. The largest detractors from relative performance were CVS and Biogen, each of which underperformed materially in the quarter and cost the portfolio around 20 basis points of relative performance.

Figure 1: Performance of Distillate Capital’s U.S. FSV Strategy (through 3/31/2019)



* Strategy inception of 5/31/2017 through 12/31/2017

** Strategy inception of 5/31/2017 through 3/31/2019

Please see important performance disclosures at the end of this document.

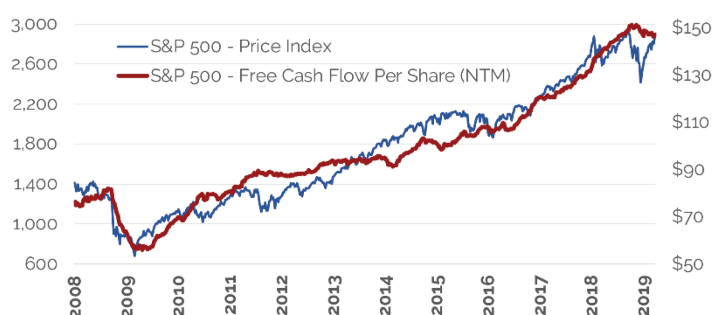
Portfolio Changes and Valuation

During late 2018, the S&P 500 sold off sharply relative to underlying fundamentals. Free cash flow estimates receded somewhat due to falling energy prices, the stronger dollar, and moderating global growth, but this was eclipsed by the much greater market price drop.

In the first quarter of 2019, free cash flow estimates continued to moderate slightly, but the S&P 500 price recovered from its previous decline (**See Figure 1**). Consequently, the free cash flow yield for the index is now back in line with the recent average of just over 5%.[1]

The S&P 500's price drop in Q4 2018 far exceeded the moderation in consensus expectations for free cash flow, but prices caught up with fundamentals in Q1 2019.

Figure 1: S&P 500 Price vs. Free Cash Flow Per Share



Source: FactSet

For Distillate's U.S. FSV Strategy, the strong price recovery in the market in the first quarter contributed in several ways to this quarter's rebalanced portfolio.

While the overall market moved sharply higher, a number of holdings did substantially better. Consequently, the valuations of these stocks became stretched such that they were no longer attractive and have been sold. This was particularly true in the technology sector, where the portfolio weight was reduced significantly.

There were also a number of stocks that lagged the strong recovery and where relative valuations became much more attractive. This explains a number of the newly added names as well as the big increase in the staples weight.

After rebalancing, the weighted average free cash flow yield for the portfolio at the beginning of Q2 2019 is 6.0% versus a comparable yield of 5.2% for the S&P 500. The rebalanced U.S. FSV portfolio also has significantly more stable long-term fundamentals and less financial leverage than the S&P 500 Index, as shown in **Table 1**.

Distillate Capital's U.S. FSV Strategy is less expensive, more fundamentally stable, and less levered than the S&P 500.

Table 1: U.S. FSV Portfolio Characteristics

	U.S. FSV Strategy	S&P 500
Free Cash Flow Yield[1]	6.0%	5.2%
P/E[2]	18.7	21.4
Fundamental Stability[3]	0.87	0.67
Leverage[4]	1.0	1.4

*as of 4/5/2019

Sector Changes: Sector changes in the recent portfolio rebalancing are consistent with a reallocation from outperforming sectors to underperforming ones where cash flow estimates have generally held up. The biggest increase was in the consumer staples sector, which lagged considerably in Q1 2019 and rose from a weight of just 1.4% to 8% now, making it slightly larger than its weight in the S&P 500. The largest decrease was in the technology sector, which outperformed substantially and was reduced from around 34% to 26% of the portfolio, which is still somewhat larger than the S&P 500 weight of roughly 21%.

New Buys: The largest new purchases to the portfolio were Amazon and Walmart. Amazon is a company that exemplifies the distortions that an asset-light business exhibits with traditional valuation metrics like price-to-book (P/B) or price-to-earnings (P/E). Amazon derives its value to investors from intangible assets like its algorithms, supply-chain, user network, and data. Physical assets are less important to Amazon's cash generating abilities and thus book value, which largely measures physical and not intellectual assets, is not a useful metric to gauge Amazon's value.

There are likewise a number of accounting issues, most notably the treatment of research and development, that substantially impact Amazon's reported net income and make earnings per share a less relevant figure. Free cash generation, on the other hand, gives a much better sense of the company's true value creation.

From the Q4 2018 market drop through the Q1 2019 recovery, Amazon has modestly lagged the overall market. At the same time, Amazon's projected free cash flows have substantially outpaced the market and so its relative valuation has become significantly more attractive such that it was added to the portfolio.

[1] Free Cash Flow Yield is based on the next-twelve-month free cash flow estimate relative to market capitalization. Stocks without estimates in the index are excluded and the remaining names are reweighted based on those exclusions.
[2] P/E is based on consensus estimates for next-twelve-months and excludes P/Es over 250 and under 0 to avoid the distortion from outliers.
[3] Fundamental stability is Distillate Capital's proprietary measure of through-cycle cash flow stability with a higher value indicating greater stability.
[4] Leverage is based on Distillate Capital's proprietary measure of indebtedness which looks at the ratio of adjusted net debt to an adjusted measure of forecast Earnings Before Interest, Taxation, Depreciation, and Amortization (EBITDA.)

Walmart is an example of a company that underperformed considerably in Q1 2019. With the backdrop of stable underlying free cash generation, the stock now looks like an attractive opportunity to invest in a very high quality very consistent company at a reasonable price.

Sells: The largest positions that exited the portfolio were Facebook and Comcast. Facebook was sold as its valuation became less appealing as a result of strong price performance. Comcast was exited as its financial leverage now surpasses our threshold following a massive debt issuance in the quarter.

Adds: The weights in individual holdings are influenced by each company's estimated normalized free cash generation. As a result, we added to several holdings where relative price declines significantly exceeded changes in projected free cash flows.

The largest increased weight was Biogen, which saw its stock price drop on the news that it was discontinuing trials of an Alzheimer's drug called Aducanumab. While this weakened sentiment and reduced the company's long-term growth prospects, the company is still expected to generate significant free cash flow for many years to come.

In relation to Biogen's enterprise value, or market cap plus net debt, free cash flows are expected to exceed 10% of its enterprise value per year over the coming years. While there are concerns about the company's long-term growth prospects as a result of the Aducanumab failure, the stock is now priced such that it could retire all its shares and debt in under ten years. As a result, we believe the stock is discounting a scenario such that in order to perform well, it does not need to grow at all, but rather simply maintain relatively stable cash generation over the long-term. Given the lack of debt and a solid mix of products beyond Aducanumab, we believe this presents an attractive risk/reward skew for the stock.

Another addition was in the shares of Abbvie. The story with Abbvie is very similar to Biogen where the stock dropped on long-term growth concerns despite substantial near-term cash-flow strength. Like Biogen, the stock now looks extremely inexpensive relative to solid near-term free cash flow expectations and we think it is discounting a negative scenario that leaves substantial room for upside with relatively protected downside.

Trims: The largest reductions in the portfolio resulting from the Q2 2019 rebalance were Apple, Alphabet, Cisco, and IBM.

Other than Alphabet, the parent of Google, these stocks outperformed the S&P 500 and were reduced as a result. Alphabet performed in line with the market, but has seen surging capital expenditures reduce free cash flow expectations and its weight in the portfolio declined as a consequence.

Value Mismeasurement

There has been a lot of discussion about the underperformance of value investing as a strategy and when it will make a comeback. We think this discussion is largely missing the point and that there is a bigger and more important story underneath.

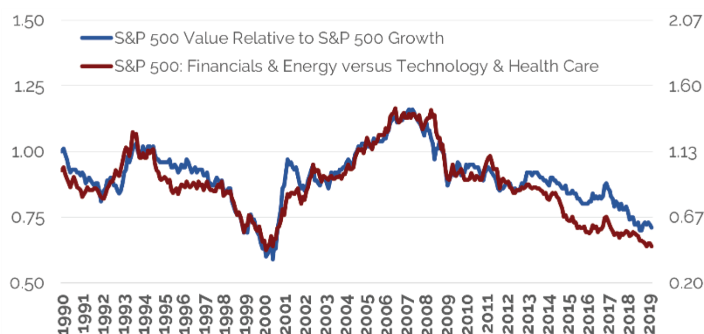
We are value investors by nature and have spent decades as such. We firmly believe in the benefit of paying less for an asset and appreciate more and more via the study of human nature that behavioral biases can create systematic mis-pricings that make such opportunities available. Since human nature has not changed, it makes little sense to us that value investing has for some reason ceased to work. Yet traditional value indexes would suggest is has. We think the issue is not with value investing, but with outdated definitions of value that are used to create common benchmarks.

In general, value indices rely on P/B either exclusively (as with the Russell 1000 Value Index) or in some combination with other traditional measures of value (as with the S&P 500 Value Index). The used metrics, and P/B in particular, have become less meaningful as companies now derive more of their value from intangible assets and research and development in particular. This helps to explain why Warren Buffett abandoned the use of book value in his 2018 Berkshire Hathaway annual letter, saying it had "lost the relevance it once had". But despite the world's most successful investor saying it is no longer useful, P/B continues to be a major determinant of "value" in the calculation of major value indices and thus the funds that track them.

One result of the continued reliance on book value is that value indexes chronically overweight stocks that are heavy in traditional accounting assets like those in the financial and energy sectors. Consequently, those two sectors are persistently large weights in those benchmarks and value indexes can end up merely tracking the performance of these sectors (**See Figure 2**).

Due to accounting issues, most value indexes may be little more than unintended exposures to asset-intensive sectors. The performance of the S&P 500 Value Index relative to the Growth Index closely tracks the performance of the Financial & Energy sectors vs. Tech & Healthcare.

Figure 2: Russell 1000 Value Index Sector Bias



Source: FactSet

The value versus growth performance tracks almost perfectly the financial and energy versus technology and healthcare performance. We believe this highlights that rather than value benchmarks representing opportunities to invest in underpriced securities in the classic sense of Ben Graham, which was the intent, the change in our economy and related accounting distortions have left value indices as simple collections of highly asset-intensive sectors like financials and energy. Without fully appreciating this issue, the wait for "value" to recover may in fact be a very long wait and one that is not related to the true performance of inexpensive securities.

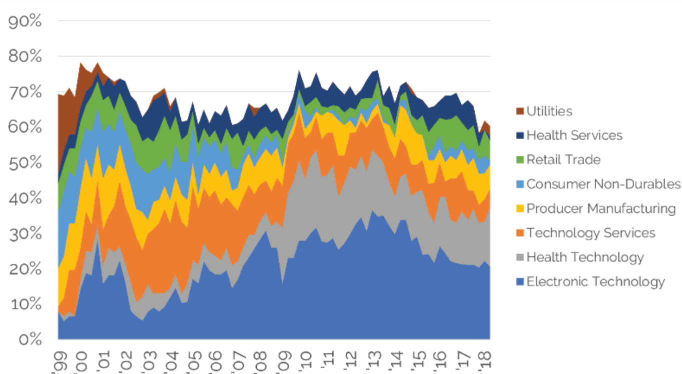
This distortion to traditional valuation metrics is the reason we employ bespoke cash-flow-based measures of value and quality. Measuring value consistently across our starting universe with these metrics, instead of value failing as a strategy, we see less expensive stocks continuing to outperform more expensive ones.

Also of interest, the least expensive 20% of stocks on our methodology have come from a variety of sectors rather than those typically identified with value benchmarks and sector weights have shifted considerably over time (**See Figure 3**). These weights in our value model are quite intuitive in retrospect. For example, the technology weight was low during the dot-com bubble in the early 2000's, but very large around 2013 when stocks like Apple and Microsoft were notably inexpensive relative to their underlying free cash generation. Since then, the technology weight has receding somewhat following the sector's outperformance.

Instead of asking when value will recover and simply hoping for a rebound, we think the better question is why value has struggled at all. An exploration of this we think would reveal that the underperformance lies in outdated definitions of value rather than the concept of value, which we think remains as strong as ever.

Sector weights among the most attractively valued stocks on our methodology are diverse over time.

Figure 3: Sector Weights of the Cheapest 20% of U.S. Large Cap Stocks on DCP Methodology[5]



Low Beta Risks

Another issue of significance is that investors may be currently mistaking low beta for low risk. Low volatility investment vehicles have gathered assets and attention in recent years from investors seeking safety. Historically, low beta stocks have done very well due to the "low beta anomaly" in which these lower volatility stocks produce lower average returns but superior compounded returns because they tend to preserve capital in down markets. Since investors earn compounded returns, this is the measure that matters.

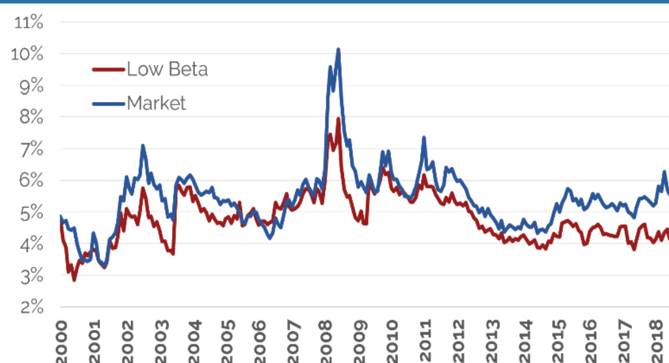
While we wholeheartedly agree with the importance of preserving capital in down markets and have specifically designed the U.S. FSV strategy with this goal, we see several troubling signs for low beta stocks that may prevent them from providing the same kind of downside cushion in the future that they have exhibited in the past.

First, low beta stocks are historically expensive relative to the market. This is clear in looking at free cash yields on stocks in the lowest third of the market sorted by beta, compared to the market overall (**See Figure 4**). That the stocks are relatively expensive is not a surprise as investors have shifted into low-beta stocks without regard to their valuation. Going forward, however, a high price is itself a risk and thus forward returns may struggle to match the overall market.

The second significant and typically ignored issue with low-beta stocks is that they have become more financially leveraged over time. We measure leverage in this case using a ratio of net debt (inclusive of off-balance sheet leases) relative to the most recent year's lease-adjusted earnings before interest taxation depreciation and amortization, or EBITDA.

Stocks in the lowest third of the market by beta look expensive relative to the market as a whole.

Figure 4: Average Free Cash Flow Yield For Low Beta Stocks vs. the S&P 500 Overall[6]

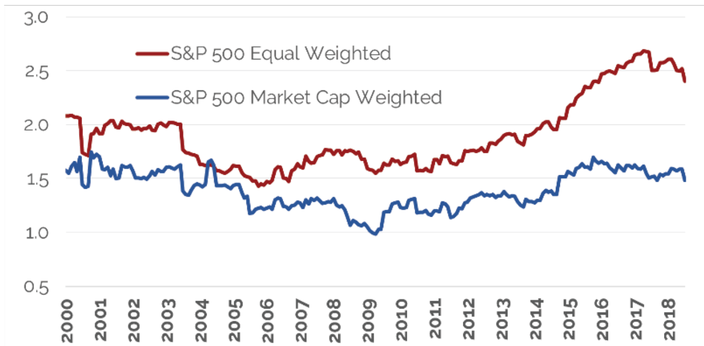


[5] See disclosure section for additional information about Distilled Cash Yield.

[6] Beta is calculated over 3 years. Free cash flow yield is the ratio of free cash flow to market capitalization using 1 year forward estimates post '09 and trailing 1 year prior.

While leverage for the market overall is not elevate, debt levels for the average company are quite high.

Figure 5: S&P 500 Leverage[7]



Source: FactSet

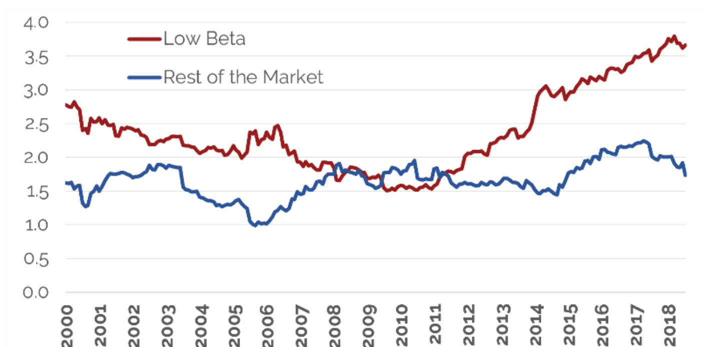
While leverage for the S&P 500 overall does not look concerning on this measure of indebtedness, debt levels for the average company have increased substantially. This is evident in a comparison of leverage for the overall market, measured on a market-cap weighted basis, versus leverage for the average stock, measured on an equal-weight basis. (**See Figure 5**.) This divergence is caused by low leverage and even net cash positions among a few very large stocks.

When the market is dissected by beta, the leverage story becomes even more telling. Leverage for the average stock in the medium and high beta thirds of the market is in line with historical levels, but leverage for low beta stocks has increased significantly (**See Figure 6**.)

So, rather than low beta behaving as low risk, we see that low beta stocks look both expensive versus the market and more highly levered. Both issues are concerning from a capital preservation standpoint should economic conditions become more difficult.

The increase in leverage for average S&P 500 company has been concentrated in low beta stocks. Leverage for stocks in the middle and top third of beta is in line with historical levels.

Figure 6: S&P 500 Leverage Among Low Beta Stocks[8]



Source: FactSet

Investment Implications:

We see two significant issues that are drawing investors to solutions that are likely to disappoint.

First, value as a long-standing successful and intuitive strategy is under fire and many have questioned whether value investing is simply a thing of the past. But taking the underlying definition of value as a given, in our estimation, is a mistake. Definitions of value that were once comparable and led investors to true valuation opportunities are now instead leading investors to portfolios with certain accounting qualities that in all likelihood have nothing to do with the economic price of the shares. Investors in such value indexes or funds closely tied to them should evaluate the valuation methodology used and question whether this makes sense in a world where intangible rather than tangible assets are increasingly the drivers of free cash generation.

We measure valuation with a free cash flow methodology specifically to avoid this issue. Using this approach we see that value investing is, in fact, still providing good returns to investors.

The second implication from this update is that there may be more risk in low beta stocks than many investors realize. While we are certainly not making a macroeconomic prediction of an impending downturn or saying that high levels of leverage are likely to be problematic anytime soon, debt levels are elevated and do pose a risk over the long-term. This appears especially true in the case of low beta stocks, where much of the leverage has accumulated. Since these stocks also look expensive from a historical perspective, we think there are reasons that low beta stocks may not provide the downside protection in the future that investors may be expecting.

[7] Leverage is based on adjusted net relative to the most recent year's lease-adjusted earnings before interest taxation depreciation and amortization, or EBITDA.

[8] Beta is based on trailing 3 years vs. the S&P 500 and low beta stocks are considered as those in the bottom third of the market.

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