

Convergence Long/Short Strategies

Q1-2019 Review and Commentary

“I’ve never seen a back-test I didn’t like”

—We made this up

The George Costanza Market

For those who are fans of the 1990’s hit TV series, Seinfeld, a favorite of those many hilarious episodes is the 86th episode called, “The Opposite.” In this episode, George (played by Jason Alexander), realizes that every decision he has made has been wrong, and that his life is the exact opposite of what it should be. So he experiments with doing the absolute opposite of what his normal instinct would tell him to do in life decisions or conversations.

Many aspects of the equity market in the first quarter remind us of market behavior that is the opposite of rational fundamental behavior, as fundamentals seem to have been thrown out the window in the first quarter of 2019. Several of the usual heuristics that rational market participants employ in stock selection have been flat wrong over this three-month period:

- Overpriced stocks beat inexpensive stocks
- Low quality stocks beat high quality stocks
- Companies most likely to default beat those with strong balance sheets

As our investors know, Convergence firmly believes that companies with strong and improving fundamentals outperform those with weak and deteriorating fundamentals (over the long term), and we have a wealth of empirical research to support this and we remain steadfast in our approach. No manager constantly outperforms. Therefore, when reviewing manager performance, we believe one should reflect on why the initial investment was made and not be influenced by short term performance. One should continue to hold an investment if the process and philosophy are based in sound logic and evidence. Additionally, investments with lower correlations, by definition, must generate return streams that are independent of broad cap weighted indices. Therefore, a large move in the S&P 500 Index, either positive or negative, will not translate into a similar move of a zero/low beta product that is uncorrelated to the market. Despite lower efficacy in these fundamentals in Q1, the Convergence Market Neutral Strategy has outperformed the HFRX Market Neutral index by over 450 bps and the Morningstar MN Category by over 300 bps, annualized since inception. Similarly, the Convergence Long/Short Equity strategy has outperformed both the broader equity market and its Long/Short Equity peer group net of fees since inception.

In the paragraphs that follow we will address a few questions that we have been pondering during this period of “fundamental inversion.”

- What do we think is going on?
- Has this ever happened before?
- Can this last forever?
- What do we think will happen next?

As we said above, we remain steadfast in our approach and heavily invested in our own products and strategies. We are confident in our philosophy and approach, and we believe making prudent decisions in this time of stress could prove rewarding for investors as the market snaps back to fundamentals.

What do we think is going on?

To keep things short and simple, we believe that the Federal Reserve’s tightening cycle last year was slowly turning the screws on fundamentally weak companies, especially those with high leverage that would soon face debt servicing challenges. At the end of 2018, Jerome Powell made an abrupt about-face and not only hinted about slowing the pace of rate hikes but alluded that the economy might be in a spot of trouble. The futures market shifted from 1 or 2 hikes in 2019, to 1 or 2 cuts predicted by the end of 2020. This meant that the financing troubles of risky companies were mitigated, and their stock prices subsequently exploded; no fundamental improvement, no sales spike, no margin expansion, and no earnings growth.

Has this ever happened before?

Yes. Periodically the market will trade on wild expectations, or a change in the financial weather might temporarily support risky, low-quality companies. Famous examples include the dot com bubble and the Dutch tulip crisis (to cite examples that are nearly 500 years apart). In addition to these famous examples, there are frequent, short-lived periods where fundamentals are inverted, and low-quality companies outperform their high-quality counter parts.

Here are a few examples in the recent past (not all-inclusive)

Upside-down Period	Upside-down Return	Factor	Subsequent Period	Subsequent Return
2/15 - 5/15	-5.0%	Earnings Risk	6/15 - 10/15	+10.1%
2/16 - 5/16	-4.5%	Earnings Momentum	6/16 - 11/17	+11.8%
3/14 - 6/14	-1.8%	Historic Growth	7/14 - 1/15	+5.8%
11/13 - 2/14	-2.8%	Profitability	3/14 - 11/14	+6.9%
1/15 - 7/15	-4.3%	Traditional Value	8/15 - 3/16	+9.0%
4/16 - 9/16	-4.2%	Traditional Value	10/16 - 12/16	+10.3%

Source: Convergence Investment Partners, LLC, Wilshire Associates

The table above shows examples where individual factors were inverted. Additionally, there are short time periods where more broad-based fundamental differentiation is not rewarded, such as the 3-month periods ending June 2009, June 2010, September 2011, April 2015, and May 2016. During

these periods, the 3-month average return from our long-short spread was negative. Based on our research, we believe that over longer durations, the market rewards companies based on strong or improving fundamentals, while it penalizes companies for weak or declining fundamentals.

Can this last forever?

Logically and mathematically, we don't see how this could last for a long duration. We agree that a low-quality company, with high debt and an amazing story (fueled by investor hope) could grow to become one of the best companies in the world. However, for that to happen... sales would improve, assets would grow, debt would become cheaper, business models would improve, markets would expand, margins would improve, etc. Essentially, all company fundamentals would improve, and that stock would migrate out from a proposed short holding and into an attractively ranked long position. Think about Amazon in its infancy. As an online book retailer, the stock price valuation would have required the company to sell two books to every human alive (or something like that). As this was realized, investors sold off AMZN and it plummeted over 80% (1999-2001)¹. Obviously, over the subsequent years, the business model changed. The Company now sells everything to everyone and... you know the rest of the story. It is also important to note that these changes took many years to implement and materialize, not a few months.

What so we think will happen next?

When the fundamental rubber band gets stretched too far, it tends to snap back. To understand what typically happens after a 3-month period of underperformance, we looked back at our 15 year back-test that we created when building the market neutral portfolio². It should be noted, that back-tested performance does not represent actual performance. Please see the footnote and end disclosures for more information.

At Convergence we have a robust and systematic process that has been in place for many years, and are confident in our process of accurately modeling trading, leverage, and short borrowing costs/rebates. The Q1-2019 Market Neutral return is a -2.4 standard deviation event. This is not something we're happy about, but well within the realm of possibilities.

One of the most uncomfortable periods in our past was mid-2016. As seen in the following table, our back-test was down -5.63% in that three month period. Over the next three months, the back-test was up +0.26%, and over the next 6-months it was up +9.46%. The table below compares the back-test and Market Neutral strategy performance, net of fees

¹ Data Source: Bloomberg Finance L.P.

² Past performance does not guarantee future results. There is a potential for loss in any investment. Convergence does not guarantee any minimum level of investment performance or the success of any investment strategy. All investments involve risk and investment recommendations will not always be profitable. Where noted, certain performance information represents a 15 year back-test (period ending 12/31/18) of performance based on a combination of factor composites and historical rankings of those factors. This is a retroactive application with the benefit of hindsight. Back-tested performance is hypothetical and does not reflect trading in actual accounts. It is provided for informational purposes only to indicate historical performance had the portfolio been available over the relevant time period. Convergence did not offer long/short strategies or a Market Neutral strategy during the entire 15 year timeframe. Convergence was formed in 2008 as Mariner Quantitative Solutions, LLC and did not manage client assets prior to that time. There are limitations inherent in back-tested results, particularly that these returns do not reflect the impact that material economic and market factors may have had on the adviser's decision-making had the adviser actually managed client money. Performance results for clients that invested in our strategy will vary from the back-tested performance due to market conditions, cash flows, changing composite rankings over time, frequency and precision of rebalancing, retention of previously held securities, cash balances, varying custodian fees, and/or the timing of fee deductions. See the end disclosures for additional information on how we create the back-test.

	3-month stress	Next 3-months	Next 6 months
	4-16-6-16 Returns	7-16-9/16 Return	7/16-12/16 Return
Market Neutral strategy	-4.19%	+1.48%	+9.80%
Back-Test	-5.63%	+0.26%	+9.46%

There was also a similar 3-month period ending 4/30/09. In this case, the 3-month back-test return was -7.6%. The subsequent back-test return for the 3- and 6-month periods were 5.1% and 7.9%, respectively. For the “numbers people” out there, we looked at the rolling 3-month returns and found the average over this back-test was 2.98% (min = -7.6%, max = 11.4%, standard deviation = 3.4%).

Any signs of a change?

Yes. We think we are seeing this “unfundamental” period reach the bottom. Negative factor spreads are shrinking, and some are starting to level off. For corroboration, we look beyond our own factor research to the Holt Team at Credit Suisse (with whom David originally worked to develop our process) that has developed numerous useful and robust factor blends. Comparing the returns of the HTUSWINC Index (the “HOLT Worst in Class,” and “HOLT Best in Class”) we believe we can see the spread no longer expanding. These factors rank stocks based on a combined score of Quality, Momentum, and Valuation. Since the inception of these factor indexes, the Holt Best in Class has handsomely outperformed the HOLT Worst in Class. (see the chart below)



Source: Bloomberg Finance L.P.

For the quarter, the Credit Suisse Worst in Class basket of stocks was up 25.6%, while the Best in Class basket was up only 13.8%. While the past is not a predictor of the future, in previous environments of such fundamental inversion, the subsequent relative returns from a fundamental ranking process have been quite strong. Finally, the charts below show the two indexes (normalized as of 03/31/2018) and their cumulative spread. We believe a bottom is forming in the spread chart at the end of Q1 2019 seen below.



Source: Bloomberg Finance L.P.

If history is any guide, these un-fundamental regimes are short-lived. They tend to stall after three months and then “snap back” to normal within 6-12 months. These periods can create opportunities for shrewd and discerning market participants who can execute on the “buy low, sell high” mentality that many claim to espouse. As we said above, we remain steadfast in our approach and heavily invested in our own products and strategies. We are confident in our philosophy and approach and feel that it’s just a matter of time until the market snaps back to fundamentals.

Stay fundamental.

Overview of performance

The S&P 500 Index ended the first quarter of 2019 at 2,834, only 3.3% below the all-time high of 2,931 on September 20, 2018. This statistic obviously ignores the Q4 sell off and the equally powerful Q1 rebound. This highlights the fact that long-term focused investors might be more relaxed if they looked at their portfolios less. Let's look at how most indexes fared in Q1. The S&P 500 Index was up 13.7% and the Russell 1000 Index was up 14.0%. Growth beat value in the first quarter. Russell 1000 Growth was up 16.1% and its value counterpart was up 11.9%. This continues a "Growth over Value" trend that has been in place since early 2017. Small cap names, as represented by the Russell 2000 Index, ended the quarter up 14.6% while large cap internationals (MSCI EAFE Index) lagged, up 10.2%. Our strategies performed quite well in the downdraft of Q4-2018, and partially participated in the low-quality rally that manifested itself in Q1-2019. Although we never seek to underperform, we understand that in a market driven by human investors, underperformance of even a sound philosophy is a periodic occurrence.

The Convergence Market Neutral strategy delivered a negative return in Q1-2019, ending the quarter down -5.41%. Our market neutral strategy is typically 110%/80% in its long-short exposure and seeks to maintain a forward-looking beta of 0.0-0.2. Since its May 2015 inception, the strategy has delivered a 4.01% average annual return, net of fees. Our large cap Long/Short strategy ended the quarter up 3.86%, while the Russell 3000 Index benchmark was up 14.0%. This strategy maintained approximately 45% of its capital in short positions in the first quarter. Since its 2009 inception, the large cap Long/Short strategy has delivered a 13.06% average annual return, net of fees. All returns are stated net of fees and inclusive of reinvested dividends.

Beyond looking at the returns for each strategy in total, it is important to understand how the long and short sides of each portfolio performed. The spread between long and short holdings provides insight into how the market is rewarding/penalizing stocks based on fundamental rankings.³

During the first quarter's "junk rally," unsurprisingly, our Market Neutral strategy was unable to generate positive spread between longs and shorts. Our long positions failed to keep pace with the Russell 3000 Index, trailing by around 250 basis points, and our short positions significantly outperformed the index (bad for shorts.) Over the trailing twelve months, our Market Neutral longs trailed the Russell 3000 Index; however, our short positions underperformed (good for shorts) the index by over 200 basis points.

Over the past three months, the large cap Long/Short strategy performance delivered positive returns, but trailed the broad Russell 3000 Index. The strategy was hampered by both the long and short positions during the quarter. The short positions, just like our Market Neutral strategy, significantly outperformed the Russell 3000 Index (bad for shorts.) In the trailing twelve months, the Long/Short strategy generated a small negative long-short spread. This negative spread was primarily from the long positions, as the shorts underperformed (good for shorts) the index by around 300 basis points.

³ The following spread returns are looking at the difference between our long positions and our short positions over the period discussed (as opposed to linked monthly spread returns)

The table below shows the industry groups from which each strategy had the most/least absolute return contribution in the first quarter of 2019.

Strategy	Top Contributor to Performance	Top Detractor from Performance
Market Neutral Long	Software & Services	Automobile & Components
Market Neutral Short	Food & Staples Retailing	Software & Services
Long/Short Equity Long	Software & Services	Pharma, Bio & Life Sciences
Long/Short Equity Short	Food & Staples Retailing	Pharma, Bio & Life Sciences

Among the detractors, it is unsurprising to see groups with high idiosyncratic (or firm specific) risk, like Biotech, as well as groups with many hope stocks that have poor fundamentals and which trade on expectations as lofty as their valuations, like Software.

Factor Analysis

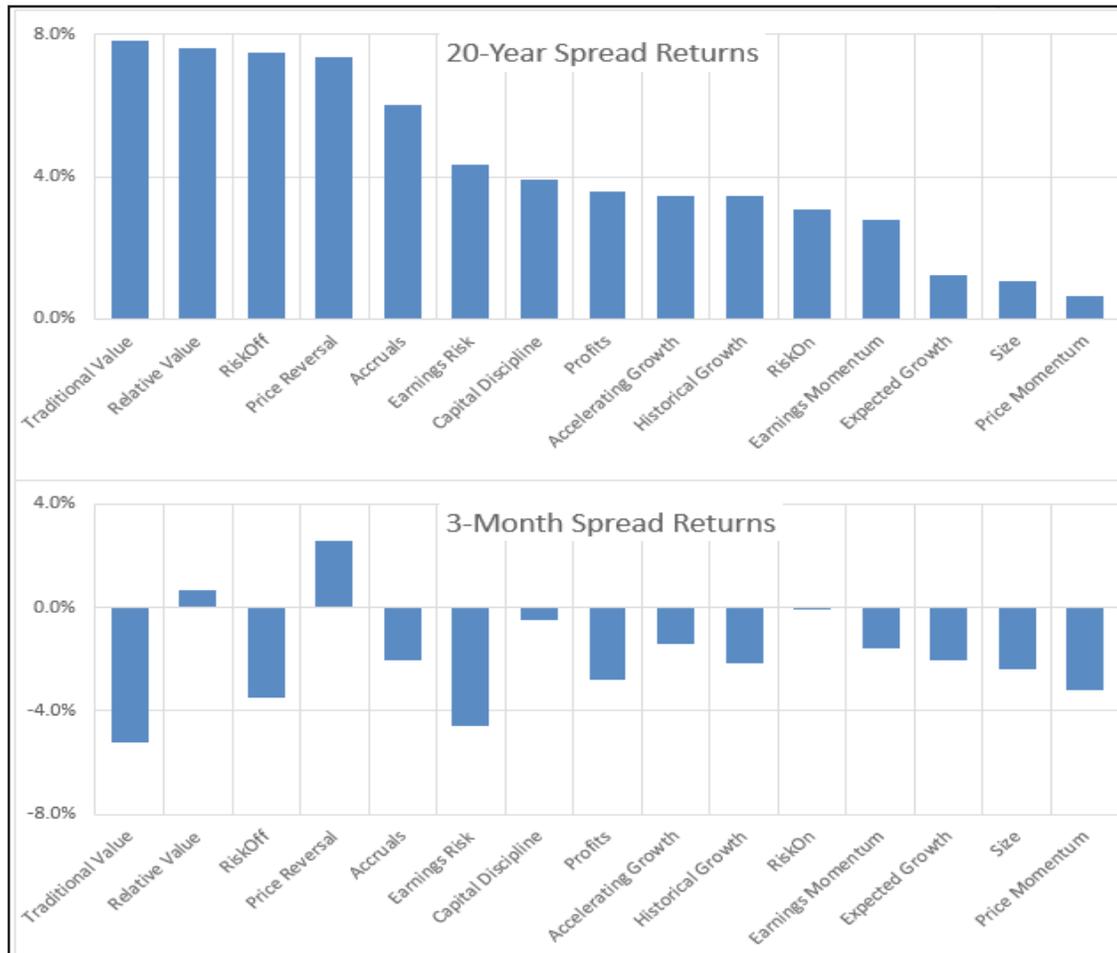
The following table shows the top and bottom three performing factors over different time periods. We ranked all 15 factor composites by quintile spread return to show that what can work over the long term is not always true in the short term (see disclosures for a definition of quintile spread return).

	3 mo	6 mo	12 mo	5 yr	10 yr	20 yr
Top 3	Price Reversal	Earnings Risk	Earnings Risk	Earnings Risk	Price Reversal	Traditional Value
	Relative Value	Size	Capital Discipline	Capital Discipline	RiskOn	RiskOff
	RiskOn	Price Reversal	Price Momentum	Price Momentum	Traditional Value	Price Reversal
Bottom 3	RiskOff	Sales Growth	RiskOn	Expected Growth	Historical Growth	Price Momentum
	Earnings Risk	Price Momentum	Size	Traditional Value	Profits	Size
	Traditional Value	Traditional Value	Traditional Value	RiskOn	Price Momentum	Expected Growth

Source: Convergence Investment Partners, Wilshire Analytics.

At the end of Q3-2018, the above table overwhelmingly favored Price Momentum, a factor that tends to work late in a bull market. In the Q4-2018 sell off, we saw risk aversion type factors move into the top factors for the trailing 3 months, specifically Earnings Risk and RiskOff. Most recently, in the low quality Q1-2019 rebound it is no surprise to see that the technical, mean-reverting factor (Price Reversal) has been most effective. Additionally, the growth over value trend that has been in place since early 2017, has forced our Traditional Value composite to be the worst factor in all 3 of the recent periods observed. This is especially noteworthy that over the longer term, value is the BEST performing factor composite, and this is inclusive of the recent challenging performance.

The table below shows a complete analysis of what factors worked in Q1-2019, and their trailing 20-year returns. This table shows the long-short quintile spread returns of all the factor composites we monitor and employ at Convergence Investment Partners.⁴



Source: Convergence Investment Partners, LLC, Wilshire Associates

When looking at the 20-year chart, one easily observes that all Convergence Factor composites have generated a positive spread. When looking at the shorter 3-month period, only Price Reversal had a meaningful positive spread return. Even more startling, is the comparison of Traditional Value’s 20-year return to the most recent 3-months. We found that **overvalued names outperformed undervalued names** by an amazing 5.3% in Q1 and 12.9% over the trailing 12 months! These results run contrary to the well documented thesis practiced by famously successful investors such as Warren Buffet and Benjamin Graham.

⁴ These returns are linked monthly spread returns as opposed to the difference between the 12 month long and short holdings.

In order to better observe thematic changes in factor efficacy, we created the following chart which shows spreads returns of 3-month periods over the past 3 years. These are ranked from highest spread return to lowest spread return for each quarter (see the legend below).



ACC	Accruals	HG	Historical Growth	RV	Relative Value
AG	Accelerating Growth	PM	Price Momentum	SZ	Size
CD	Capital Discipline	PR	Price Reversal	TV	Traditional Value
EM	Earnings Momentum	PT	Profits	RON	RiskOn
ER	Earnings Risk	RSK	RiskOff	EG	Expected Growth

How is Convergence positioned?

The following table illustrates a few of the many fundamental factors that we utilize to rank the relative attractiveness within our investment process. The values shown for each factor represent the weighted average value of that specific factor and the broader market overall as of March 29, 2019.

Average Fundamental Statistics of Long & Short Holdings for each Strategy:

Category	Factor	LONG		Market	SHORT	
		Market Neutral	Core Plus	Russell 3000 Index	Market Neutral	Core Plus
Value	Price to Earnings	14.9	18.9	22.2	60.7	111.3
Value	Price to Free Cash Flow	11.9	11.9	19.6	-10.0	-15.5
Value	Free Cash Flow to Enterprise Value	6.9%	6.7%	3.9%	-3.5%	-2.6%
Profitability	Net Income Improvement	25.8%	24.6%	16.1%	5.4%	4.3%
Profitability	Cash Flow to Sales	24%	24%	18%	-74%	-121%
Capital Discipline	Change in Shares Outstanding	-2.8	-2.9	-0.1	11.6	11.1
Capital Discipline	Dividend Growth (5 yr cumulative)	123%	141%	97%	39%	26%
Quality	Accruals/Assets	0.5%	0.4%	4.3%	14.9%	15.8%
Quality	Return on Assets (ROA)	7.8%	7.7%	8.1%	0.7%	-1.3%
Earnings Growth	Consecutive Qtrs Earnings Growth	1.9	1.7	1.8	0.1	-0.3
Earnings Growth	Slope of Earnings	0.55	0.56	0.33	0.23	0.24
Cash Flow Growth	Consecutive Qtrs Cash Flow Growth	1.7	1.7	1.5	-0.4	-0.6

As of 3/29/2019; Source: Wilshire Analytics & Convergence Investment Partners. All values included.

As the table above demonstrates, the Convergence fundamental stock picking methodology leads us toward holdings in the long portfolios with strong cash flow, earnings, profits and other desirable financial characteristics, at reasonable valuations. Over time, companies with these ingredients tend to reward investors as these are signs of healthy and growing companies with competitively strong business models. Conversely, the Convergence process also identifies companies with weak or declining fundamentals demonstrated in the statistics, and our research has shown this to be effective in sourcing alpha from shorting.

Let us know if you would like to discuss our portfolio exposures or any other aspect relative to recent portfolio results.

Thank you for your support!

Disclosures

Past performance is no guarantee of future results.

Source of all factor data: Convergence Investment Partners.

No graph, chart, or formula should in and of itself be used to determine which securities to buy or sell.

Any investment contains risk including the risk of total loss. There is no guarantee that an investment will meet its investment objectives.

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Strategy performance portrayed relates only to the adviser's clients invested in the portfolio that meet the criteria for inclusion in composite performance. The Strategy returns are presented net of fees. Net of fee performance returns are presented after actual standard management fees, actual performance-based management fees and all trading expenses. No other fees are deducted aside from trading and management fees for the calculation of net of fee performance. Returns include the reinvestment of income.

Back-tested data: Back-tested performance assumes monthly rebalance at month-end and a one percent management fee. Additionally, Convergence uses end-of-day price and assumes one cent per share of commission (this is an inflated rate to reflect both implicit and explicit trading costs). The debit rate assumed is the fed funds rate plus 45 basis points (sourced from FRED) and the credit rate assumed is the fed funds rate minus 80 basis points (blended to reflect a combination of GC and hard-to-borrows). The back-test is industry group neutral and assumes leverage of 110% long and 85% short. Also, trading required for cash flows is not reflected and the benefit from securities lending is excluded. Back-tested performance assumes monthly rebalance at month-end and a one percent management fee. Additionally, Convergence uses end-of-day price and assumes one cent per share of commission (this is an inflated rate to reflect both implicit and explicit trading costs). The debit rate assumed is the fed funds rate plus 45 basis points (sourced from FRED) and the credit rate assumed is the fed funds rate minus 80 basis points (blended to reflect a combination of GC and hard-to-borrows). The back-test is industry group neutral and assumes leverage of 110% long and 85% short. Also, trading required for cash flows is not reflected and the benefit from securities lending is excluded.

The Russell 1000 Index, Russell 2000 Index and the Russell 3000 Index are measures of the performance of the largest 1000, 2000, and 3000 US companies respectively. They are constructed to provide a comprehensive, unbiased, and stable barometer of the broad market and it is reconstituted annually to ensure new and growing equities are reflected. The S&P 500 Index is a market-value weighted index provided by Standard & Poor's comprised of 500 stocks chosen for market size and industry group representation. Comparison to any index is for illustrative purposes only and the volatility of the benchmark may be materially different from the volatility of the strategies due to varying degrees of diversification and/or other factors. Index performance returns do not reflect any management fees, transaction costs, or expenses. Indices are unmanaged. You cannot invest directly in an index.

Quintile spread return: The return difference between the top 20% of stocks and the bottom 20% of stocks as ranked by a specific factor or statistic, such as Price-to-Earnings ratio or 5-year earnings growth rate. Convergence views most factors on an industry group neutral basis where industry group weights are fixed based on the selection universe/index weights.