NorthCoast Asset Management

2018 Strategy Review
CAN SLIM® Investment Program

December 31, 2018

The following report provides an in-depth analysis into the objective, investment process and successes and challenges of the strategy throughout 2018.

What is CAN SLIM®? --- The NorthCoast CAN SLIM® Investment Program is a separate account strategy which encompasses the philosophy of William O'Neil's original stock selection process, CAN SLIM®. The strategy, built from the original guidelines, has evolved into a comprehensive portfolio solution for today's investor. The strategy invests in leading growth stocks in favorable market environments and scales to cash to preserve gains when bear market risk is high. Positions are managed through a combination of CAN SLIM® guidelines and a proprietary stock scoring system designed to build a comprehensive growth portfolio. Learn more about NorthCoast CAN SLIM®.

What is the objective? ---The CAN SLIM® Investment Program aims to achieve two goals, both equal in their importance to long-term performance: 1) capital appreciation and 2) downside risk protection.

CAN SLIM® aims to accomplish its stated objectives utilizing three unique tactics

① **Universe** | Create a group of equal-weighted growth stocks that historically outperform the general market

② **Stock Selection** | Select stocks that exhibit the best risk-adjusted return potential & complement existing portfolio holdings

③ **Cash Scaling** | Utilize cash as a hedge when data indicates bear market risk is rising

Three ways CAN SLIM® aims to make money:

Find a group of stocks that outperforms the general market over time

Select stocks that exhibit the best risk-adjusted return potential

Scale to cash when risk outweighs future return potential

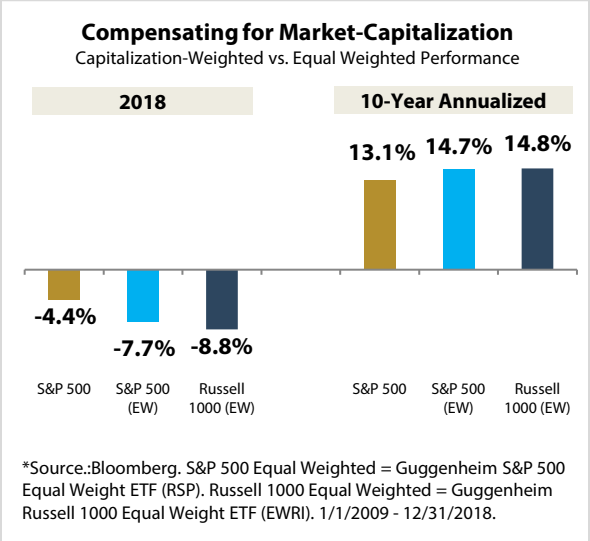
① Stock Universe – The pond from which we fish

Our research demonstrates that stock selection using a multi-factor approach is very powerful. It is preferable to seek out stocks that are balanced across these factors – attractive earnings, sustainable relative strength, quality management, and broad institutional support, among others. Therefore, before we consider which stocks to buy or sell on any given day, we must determine a universe of stocks that meets our minimum criteria. This universe is the "pond from which we fish". Within the CAN SLIM® investment strategy, our universe consists of a group of risk-adjusted stocks with factors derived from the foundation of CAN SLIM® with added attributes which have proven successful over time. While there are multiple factors that contribute to our universe, two prominent factors stood out in 2018: sector & size.

FAANG loses its bite | A group of high-flying technology names known as "FAANG"[1] have grabbed much of the headlines in recent years as the share prices of these companies continued to soar, though their sky-high valuations would make any disciplined investor think twice. These stocks enjoyed a strong start to the year, bringing into question whether these positions would ever decline, delivering an average +45% return. But as volatility kicked in, future growth concerns appeared, and valuations reached historically high levels. The bottom began to fall out. In Q4, Alphabet (GOOGL), the

[1] FAANG is the acronym of the name of the five companies in the group, **F**acebook, **A**mazon, **A**pple, **N**etflix, and **G**oogle

company responsible for Google, declined in line with the market at -13%, but Facebook (FB) dropped -20%, Amazon (AMZN) -25%, Netflix (NFLX) -29% and Apple (AAPL) -30%. These companies lost between a quarter and a third of their market worth in just three months. The decline of these companies carried the technology-heavy NASDAQ Composite Index into bear market territory. These positions still fared relatively well on an annual basis relative to the general market and not holding these positions hindered performance in CAN SLIM®. But it's important to remember the risks associated. The data in our stock selection model didn't warrant a buy at the high price level, and eventually, they corrected.



Large > Mid & Small | Unlike most market cap-weighted offerings, the CAN SLIM® investment strategy applies an equal-weighted bias to its universe. This means we do not rely heavily on the market-capitalization of a company prior to selection. Market cap-weighted offerings favor the largest companies in the index and allocate a larger portion of the investment strategy to these holdings simply based on size. Stocks like Apple, Google, Microsoft, Amazon and ExxonMobil are some examples and are generally included.

When it comes to size over time, it typically doesn't matter. The chart to the left shows that 2018 saw a reversal from the 10-year trend of the Equal Weighted S&P 500 Index outperforming the market-capitalization weighted S&P 500 Index. Looking at the 10-year performance, the equal weighted index outperforms the standard, market-cap weighted index by nearly 2% per year. We implement a similar technique as the equal-weighted index by not favoring stocks solely based on their size. In 2018, this particular factor detracted from the strategy's relative performance as larger-cap stocks outperformed mid- and small-cap stocks.

② Stock Selection - Selecting the best available

Stock selection had a sizeable positive impact throughout 2018 as winners consistently contributed to the overall portfolio. Comparing our stock selection process to baseball, it's about on-base percentage - scoring as many singles as possible. On-base percentage is proven to lead to more runs and therefore wins. It's not about always going for a homerun, which leads to a higher rate of strikeouts[2].

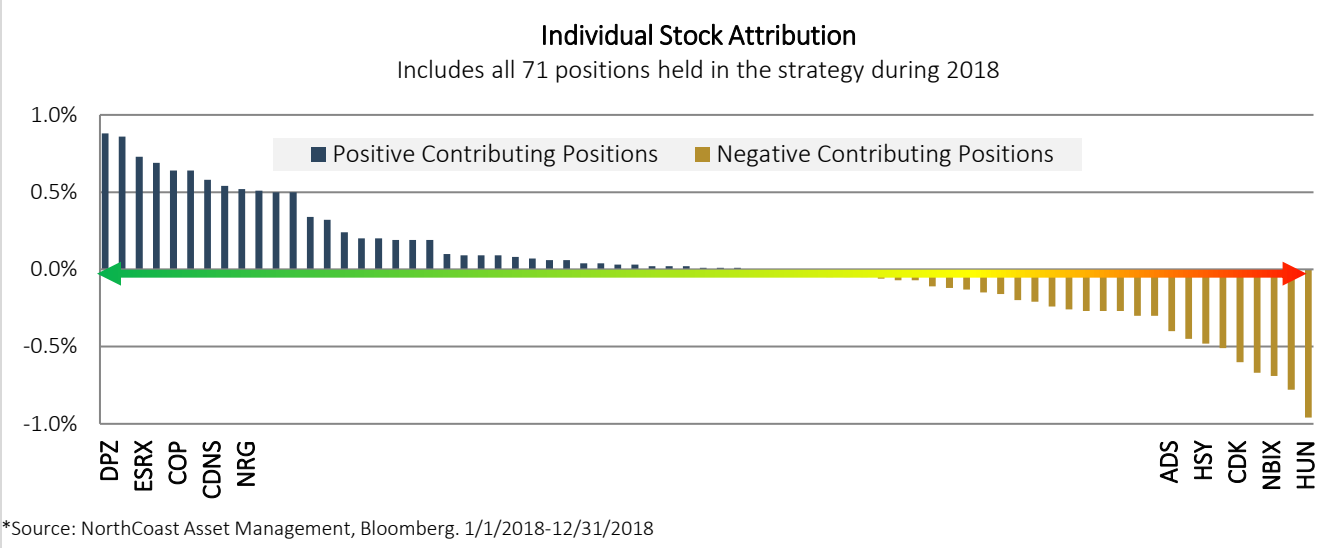
Based on historical research, we aim to add stocks to the portfolio that have the highest risk-adjusted growth potential, while also mitigating extreme loss. We want as many winners (singles) as possible. Security selection delivered on that discipline in 2018 and was beneficial as 39 of all 71 holdings positively contributed to the overall portfolio performance despite most stocks and the market being down. Stocks like Domino's Pizza (DPZ), Express Scripts (ESRX), ConocoPhillips (COP), Cadence Design Systems (CDNS) and NRG Energy (NRG) contributed a combined +3.8% impact on portfolio

Stocks that helped		Stocks that hurt	
Name	Portfolio Contribution	Name	Portfolio Contribution
DPZ	+0.9%	HUN	-0.9%
ESRX	+0.8%	NBIX	-0.7%
COP	+0.7%	CDK	-0.7%
CDNS	+0.7%	HSY	-0.6%
NRG	+0.6%	ADS	-0.5%

*Source: NorthCoast Asset Management, Bloomberg. 1/1/2018 - 12/31/2018

[2] Lewis, Michael. *Moneyball.* W.W. Norton & Company, 2011.

performance. Not concentrated to one individual sector, these holdings span the range from Consumer Discretionary, Energy, Health Care and Technology. While there were no stocks that significantly broke down, a few more than others contributed negatively to the portfolio: Huntsman Corp (HUN), Neurocrine Biosciences (NBIX), CDK Global (CDK), The



Hershey Company (HSY), and Alliance Data Systems (ADS).

CAN SLIM®'s high active share of 87% (as of 12/31/2018) allows individual stock selection to add value more so than closet indexing over time. Overall, there were no significant swings in any of the holdings throughout the year.

③ Cash Scaling - Finding the right time to be in (& out) of the market

The 3rd and final tactic of making money with CAN SLIM® is to determine the proper equity exposure by understanding the current risks in the market. Identifying the current risk level is accomplished through the analysis of 40+ market-moving indicators across four broad dimensions: macroeconomic, sentiment, technical, and valuation. Our research has identified specific data points as the indicators that help forecast future equity market performance. When used together, they help determine the appropriate equity exposure in the strategy (more information on how NorthCoast determines equity exposure on a daily basis is available by clicking here).

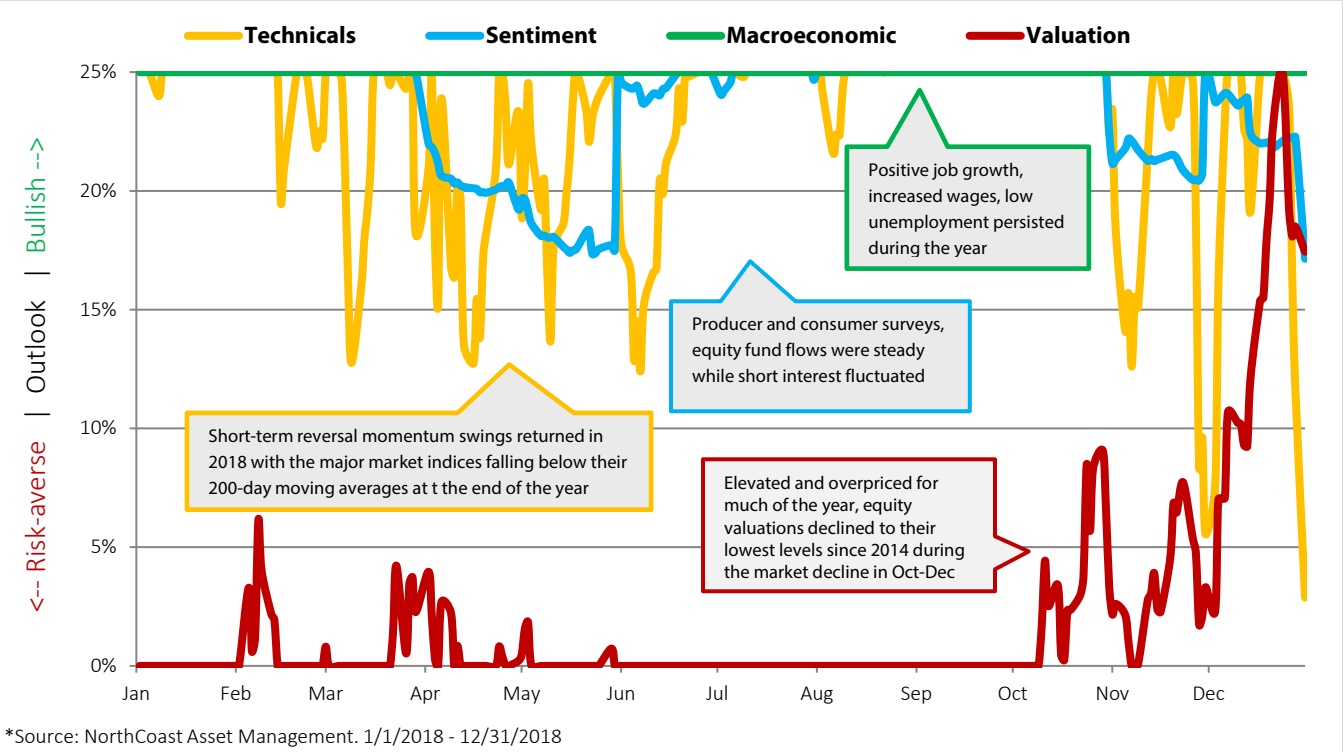
These adjustments in equity exposure, also known as "Cash Scaling", constitute the primary tactic to preserve capital in the portfolio. Each of the four dimensions represents approximately a quarter of the investment level. If each of the four dimensions were bullish, we would be 100% invested in equities. If data points within any of the dimensions indicated a more risk-averse environment, we'd adjust the exposure accordingly. The aggregate is key as no one individual dimension should dictate overall exposure. The dimensions can vary - even drastically - but the overall score is critical to a risk-adjusted target exposure.

NorthCoast maintained a cautiously opportunistic exposure throughout 2018 | Entering 2018 as the 10th year of a historic bull run, any reasonable investor would have doubts about the continuation of positive equity growth. Hedging equity risk is no easy task, and should be handled with extreme oversight, discipline and control. Our daily, systematic investment process which relies on over 40 individual data points to determine the proper equity exposure proved its mettle in 2018. Let's take a look at how the strategy navigated the markets quarter-by-quarter.

● **Macroeconomic** ● **Sentiment** ● **Technical** ● **Valuation** | The chart below displays the 2018 daily exposure target according to the individual dimensions. Each dimension indicated varying levels of target exposure throughout the year

but when combined, led to a variable outlook throughout 2018, with periods of optimism and causes for concern. Our equity exposure ranged between 65%-100% throughout 2018, with an **average level of 80%**.

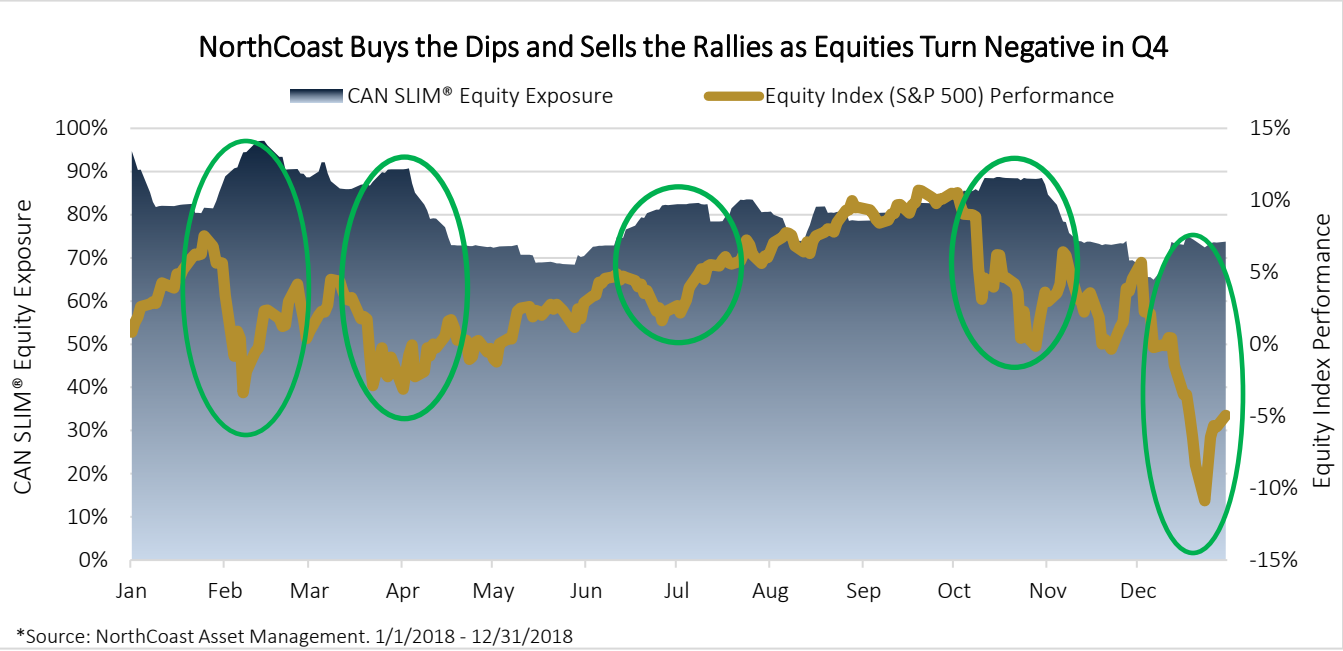
2018 Daily Outlook ("Navigator")



*Source: NorthCoast Asset Management. 1/1/2018 - 12/31/2018

Q1 | January saw both a very hot start to the year for equities as well as the largest daily decline since August of last year. Low yields had been supporting the sky-high equity valuations but, as bond yields increased, they began to impact our outlook on future return potential. With early risks of 2018 taking shape, we began to decrease exposure from 95% to 85%. At the end of January into February, the market sold off, declining almost 8% in just over a week. Viewed as an overreaction, we sent out research explaining our continued opportunistic position ("An Expected Change in Volatility"). Markets rebounded over the next month. Overall, the first quarter experienced a large increase in market volatility and surprising headline risk. However, our outlook remained positive. Beneath the headlines, fundamentals remained strong with the U.S. and global economies expanding along with corporate earnings. Aided by rebounding producer and consumer survey results and long-term market momentum, the majority of macroeconomic, sentiment and technical indicators were positive.

Q2 | Our model recognized elevated levels of risk in the equity market and we reduced exposure accordingly, reaching a 70% equity exposure at the end of April and maintaining that posture into June. Among the key indicators, only the macroeconomic data remained bullish during this stretch. P/E multiples continued to make equities overpriced versus historical averages, a relatively low volatility index (VIX) predicted possible complacency in the bull run and key consumer surveys, such as the University of Michigan Consumer Sentiment survey, decreased over multiple months. Sentiment data provided a cautiously optimistic stance as U.S. consumers, now with reported higher wages, were more upbeat about their current financial situations. Alternatively, the U.S. administration's additional tariffs on China raised trade concerns which could increase uncertainty and dampen the collective consumer and producer sentiment. The late June pullback provided a buying opportunity and we increased our exposure to 80% to close out the quarter.



Q3 | Despite unsettling news in the tech sector, U.S. equities rose in July on a more optimistic trade outlook, generally positive earnings data and economic growth. Lagging growth abroad was a point of concern with important events such as Brexit decisions and trade discussions on the horizon. Domestically, the economy remained strong but trade uncertainty still casted a shadow. Technology stocks and more positive economic data bolstered U.S. equities in August despite continued trade uneasiness. The bull market became arguably the longest on record in August. The Federal Reserve would raise rates again in September, the 3rd time this year, putting pressure on bond issuances with higher borrowing costs, stoking fear of possibly less private-sector investment. Despite only a modest rise in September, the S&P 500 had its best quarterly return since 2013. The strong quarterly returns for U.S. equities were a sign that investors were prioritizing the solid corporate earnings and positive economic data over global trade tensions. Throughout Q3, we averaged an 80% equity exposure.

Q4 | Equities experienced one of their worst Octobers in a decade when major indices fell over -16%. The almost +3% move over the final two days of the month buoyed stocks for a temporary relief but they still finished the month down almost -7%, the index's worst month in 7 years. Rising interest rates, a stronger dollar, and continued escalation of trade conflicts with China could have all attributed to falling stock prices as investors reevaluated their outlook on future growth. The brief pullback provided a small buying opportunity as we increased exposure to 88%, a final high point on the year. As equities experienced a modest bump in November, we removed exposure in anticipation of further decline to end the year. We entered December with 30% cash and reached a high cash level of 35% after the 1st week of trading. Then as stocks continued to trade negatively with major volatility, we marginally increased our equity exposure throughout the month as valuations became more attractive along with the lack of real economic data warranting a substantial decline.

Cash is King | The cash held in the portfolio was a helpful contributor to the overall performance in 2018. Among the most beneficial time frames was at the end of Q4, when the strategy held an approximately 30% cash position throughout December as near-term growth outlook was hindered. While stocks declined -9% on the month, the defensive cash position buoyed the CAN SLIM® Investment Strategy, which declined only -5.7% in December, softening the blow. In fact, the cash in the strategy had a greater positive impact on overall performance than any individual holding during the entire year.

Conclusion

In 2018, NorthCoast CAN SLIM® produced a performance return of -2.1%, outperforming our competitors and the general market index (Aggressive Allocation Category Average, -7.8%; Tactical Allocation Category Average, -7.7%; S&P 500 Index, -4.9%).

The CAN SLIM® strategy is an "all-weather" strategy, designed to take advantage of growth markets, while also preserve capital when markets turn south. The key tactics that help deliver performance - a strong universe, superior stock selection, and cash scaling - don't always work in harmony. Sometimes cash in the portfolio hurts, like in 2017. But cash management in 2018 helped smooth out a volatile Q4 and end the year with a modest loss. Stock selection was also beneficial in 2018, a year where the majority of stocks declined, CAN SLIM® held a majority of winners.

Our flagship strategy delivered a market-beating result but it's hard to be enthusiastic when other strategies struggled. Across the general landscape of investable asset classes, 2018 was a disappointment. It was a year in where cash was king and nothing made money - not bonds, stocks, alternative, nor commodities. However, the CAN SLIM® Investment Program was able to escape the volatility and mitigate the significant losses that crippled many other active managers.

Important Disclosure Information

Morningstar Aggressive Allocation Category portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold larger positions in stocks than moderate-allocation portfolios. These portfolios typically have 70% to 90% of assets in equities and the remainder in fixed income and cash. Aggressive Allocation includes 445 funds. Data provided by Morningstar.

Morningstar Tactical Allocation Category portfolios seek to provide capital appreciation and income by actively shifting allocations between asset classes. These portfolios have material shifts across equity regions and bond sectors on a frequent basis. The cumulative asset class exposure changes must exceed 10% over the measurement period. Tactical Allocation includes 329 funds. Data provided by Morningstar.

S&P 500 Index; The Standard & Poor's 500, often abbreviated as the S&P 500, or just the S&P, is an American stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The S&P 500 index components and their weightings are determined by S&P Dow Jones Indices. It is generally considered a proxy for the total market.

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