

Maximizing the Systematic Opportunity with SMS

(March 2019)

In a year when very few investment strategies worked, **Systematic Multi-Strategy (SMS)** funds were generally profitable in 2018. These absolute return vehicles seek to harness the breadth of numerous systematic investment styles, aiming to deliver uncorrelated and attractive risk-adjusted performance in a wide range of market environments.

Elsewhere in the systematic landscape, performance was much more challenged. **Multi-Risk Premia** strategies posted sizable losses, with the Societe Generale Multi-Alternative Risk Premia Index down 4.7%. **Managed Futures** strategies were also down in 2018, as evidenced by the 5.8% decline for the SG CTA Index. The **Trend-Following** subset of Managed Futures strategies had the toughest time of all, with the SG Trend Index falling 8.1%.

In this piece, we will focus on Systematic Multi-Strategy (SMS), which is arguably less discussed than its systematic brethren listed above. We will explore the key features of SMS portfolios, present historical returns of representative SMS programs, and demonstrate why we believe SMS maximizes the systematic opportunity for investors.

What are the defining characteristics of SMS?

While all programs are different, SMS portfolios share a few key attributes.¹ These absolute return vehicles trade a highly liquid market set spanning multiple instruments, asset classes and regions. They typically trade a wide variety of underlying markets, including developed and emerging market financials

(equity, fixed income and currencies), commodities (traditional and exotics), and credit. Futures contracts and FX forwards tend to be the primary instruments traded, complemented by cash equities, options, interest rate swaps, credit default swaps, and others. Nearly all instruments traded are centrally-cleared, leading to very low counterparty risk for these vehicles.

Key Features of Systematic Multi-Strategy (SMS)

- Absolute return mandate
- Liquid market set spanning multiple instruments and asset classes
- Balanced mix of numerous lowly correlated investment styles
- Rigorous research protocol for validation of investment ideas
- Minimal discretionary input in signal generation and risk allocation
- Trades expressed through RV and directional implementations
- Uncorrelated to traditional assets

Source: Campbell & Company.

As the name suggests, a fundamental characteristic of SMS is diversification across alpha strategies, with portfolios including a balanced mix of numerous synergistic investment styles. Trend is often a component, along with strategies like reversion, volatility trading, multi-asset carry, short-term, fundamental and various macro styles. Trades are expressed through a combination of relative value (RV) and directional trades.²

Portfolios are managed with minimal discretionary input, using a rigorous research protocol to develop, validate and maintain investment models. Strategies may take long or short positions, providing the potential to seek returns from rising and falling markets. Performance tends to have little long-term correlation to traditional assets and many types of alternative investments.

Cumulative Returns of Representative Systematic Multi-Strategy (SMS) Programs since July 2014

More than half of the SMS Programs outperformed global equities, while nearly all outperformed the Trend Index during this period.



Source: Campbell & Company, Bloomberg Finance L.P., Barclayhedge. Cumulative net performance for representative systematic multi-strategy programs since Jul-14, when Campbell Absolute Return Program began trading in its current format. As of Dec-18.

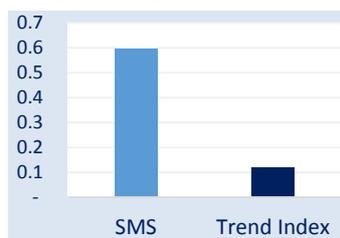
How have SMS portfolios performed historically?

We are unaware of any benchmark indices focused solely on this market segment, so we have compiled a list of 11 representative programs (not meant to be exhaustive) run by well-known institutional managers that we believe qualify as SMS, based on our understanding of their mandates.³ The cumulative performance of these programs is shown on the prior page since July 2014, when the Campbell Absolute Return Program began trading as SMS. For reference, the MSCI World and SG Trend Indices are also included (bolded). The SG Multi-Risk Premia Index is excluded due to its limited history.⁴

There are a few important takeaways from the chart. First, while performance was varied, it was generally quite positive for the managers, with all but one returning at least 15% and most outperforming global equities and trend. Second, a visual inspection suggests that SMS programs were uncorrelated to global equities, but somewhat correlated to trend. Both of these things can be confirmed quantitatively – the average correlation of the SMS managers to global equities was -0.4%, while the average correlation to the Trend Index was 65%.

While the correlation of SMS to Trend was material, the level of performance was extremely different for the two strategies. The mean performance of the SMS managers was significantly better – on a risk-adjusted basis, it was 5x better in this period.

Sharpe ratio (Rf=0) since Jul-14



Source: Campbell, Bloomberg Finance L.P., BarclayHedge. Return/risk for SMS managers (average) and SG Trend Index as of Dec-18.

Of course, the last 3+ years have been historically bad for trend following. But even in the first year of this analysis (Jul-14 to Jun-15), which included a very strong period for trend, the average Sharpe ratio (risk-free rate = 0) of the SMS managers was 1.75, exceeding the 1.52 Sharpe of the Trend Index.

In the systematic trading realm, trend following has received a great deal of attention due to its desirable statistical properties, such as positive skew, low correlation to traditional assets, and the demonstrated ability to profit during equity declines. The next table shows that SMS has offered the same desirable properties. But at the same time, without the style concentration inherent to single strategy portfolios, SMS has provided far greater risk-adjusted performance.

Why SMS?

We believe that SMS maximizes the potential opportunity for systematic investors. With numerous underlying strategies,

Protective Properties since July 2014

	Trend Index	SMS
Average Return in Down Months for MSCI World Index	0.3%	0.7%
Skew	-2%	+4%
Correlation to MSCI World Index	9.0%	-0.4%

Source: Campbell & Company, Bloomberg Finance L.P., BarclayHedge. As of Dec-18.

SMS has the ability to dynamically (and systematically) allocate capital to the most compelling trades, providing the opportunity to capture trends that break out without single strategy risk. This has led to a performance profile that has exhibited protective tendencies, but has also been attractive on a stand-alone basis. In short, we believe that these highly liquid vehicles offer a very compelling balance between absolute return and diversification.

Now, following a year of turbulence in 2018, there are indications that lowly correlated, diversifying strategies may play an important role in investor portfolios in the upcoming year. Of course there is no way to know how things will play out, but we *do* know that the geopolitical landscape is littered with uncertainty. Brexit, global trade tensions, Chinese economic concerns and monetary policy anxiety (to name a few) all have the potential to impact global markets in a profound way. With so many risks on the horizon, it may be a good time to ensure portfolios include diversifying strategies like SMS.

About Campbell's SMS Program: Campbell Absolute Return ("CAR")

Campbell's SMS program ("CAR") includes short-term, macro, momentum, reversion, multi-asset carry and fundamental strategies traded across 150 futures/forward/swap markets and nearly 5,000 individual stocks in the US, Europe and Japan. The program has operated as SMS since July 2014, and its performance has been extremely competitive, with significant outperformance versus the MSCI World Index, the SG CTA Index, the SG Trend Index, and many of its SMS competitors.

Campbell has an extensive track record in each of CAR's underlying investment styles: the firm has traded short-term since 2010, macro since 2001, market neutral cash equities since 2000 and trend following since 1972. However, prior to July 2014, each of those investment styles was offered either on a stand-alone basis, or as a complement to a heavily trend-dominated portfolio. Extensive research into portfolio and risk allocation led us to dramatically alter the composition of CAR in 2014, when it was re-constituted as SMS.

The Campbell Absolute Return program will be offered in a UCITS-compliant format for the first time in 2019. Several changes were made to accommodate UCITS regulations and investor preferences – for example, commodity indices were removed and the volatility target was slightly revised. But the core program remains the same, and we are thrilled to be offering CAR to UCITS investors.

ENDNOTES:

1 The growth of the SMS segment has represented a process of convergence from multiple directions. Some managers in the space had their roots as quantitative equity specialists, later expanding into futures and other derivatives. Others got their start as macro managers or even as traditional multi-strategy hedge funds. The heritage of different firms may result in subtle differences in features such as strategy and market mix. But it's fair to say that all SMS managers, regardless of their origins, share a core belief in the value of the systematic process. They also share some common features, which we describe in this paper.

2 Examples of relative value trades include cross-country (i.e., spread between German Bund and US T-Note), term structure (i.e., US 2 year versus 10 year rates) cross-asset within a sector (i.e., Corn versus

Wheat), and sector-neutral (i.e., Apple stock versus a basket of tech stocks). While RV is sometimes grouped as a distinct alpha strategy, it can also be viewed as applying existing alpha strategies (i.e., macro, reversion, carry, momentum) to a new set of synthetic markets, where each synthetic market is defined as the relevant spread or basket of underlying directional markets.

3 This list is limited by the fact that many programs do not report performance publicly (particularly those that are closed to new assets), while others have limited track records extending back less than four years.

4 The Societe Generale Multi-Alternative Risk Premia Index was launched in January 2018, with backfilled data available since January 2016.



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Pro Forma Performance is only an approximate means of modifying historical records to reflect certain aspects of the economic terms of the portfolio and constitute no more than mathematical adjustments to actual performance numbers. Pro forma returns have inherent limitations and give no effect whatsoever to such factors as possible changes in trading approach that may have resulted from the different fee structure. Campbell & Company believes the method used above provides a fair representation of the pro forma effect of different fees and expenses on the representative trading results with respect to the portfolios.

Campbell Absolute Return Portfolio (Founders): The Campbell Absolute Return Portfolio performance included is the actual performance of a representative account, adjusted pro forma. All performance information is shown net of fees and expenses, except where noted as gross. Please note that an investment in the Portfolio may incur additional operating expenses, depending primarily on the structure of the vehicle used for investment. Unless otherwise noted, the returns shown are total returns, which include any earnings on cash or investment gains. The returns included are actual returns of a representative account, adjusted pro forma and shown net of a 1.00% management fee, a 15% performance fee, average trading costs of 0.60%, and interest income, net of any fees paid for active cash management. Campbell began trading the representative account in July 2002. As of May 1, 2004, the representative account began trading pursuant to the Absolute Return Portfolio. Prior to this date, 50% of the representative account was allocated to the Campbell Managed Futures Portfolio and 50% to the Long/Short Equity Portfolio. The assets of the representative account used are considered to be proprietary as 50% percent or more of the beneficial interest of the account is owned or controlled by Campbell & Company or its affiliates.