FIRST QUADRANT

MARKET INSIGHT

Four Myths Regarding Systematic Macro

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Executive Summary

In this paper, we engage four common critiques of systematic macro:

- Systematic macro has underperformed discretionary macro in recent years.
- Systematic strategies are less equipped to adapt during sudden market volatility.
- After risk events, systematic strategies are slower to adjust to new market regimes.
- Systematic macro is "black box," and less transparent than discretionary macro.

We believe each of these statements is more fiction than fact, and many investment plans have the potential to benefit from a systematic macro allocation. Read on to learn why the conventional wisdom may be misleading!

Our industry, like so many others, is no stranger to myths. Systematic global macro has outperformed many investment styles over the past decade, and in recent history. Amidst the COVID-19 pandemic, mass quarantines, and an oil price war, most traditional risk assets had quite the ride in 2020, with particular turbulence in Q1. Though trading is far more orderly now than it was a year ago, we believe lessons from the recent past can help investors weather future risk events.

According to bfinance, Multi-Asset Absolute Return strategies appeared to have the most success in containing the damage in Q1 2020,[1] but that is a fairly broad class. Our own analysis, based on data from MercerInsight®,[2] suggests that systematic macro was a strong contributor to Multi-Asset Absolute Return's ability to avoid a major drawdown. The median systematic manager in our dataset delivered gains of about 0.1% in Q1, and our own systematic macro strategies fared quite well. Discretionary macro, on the other hand, struggled, losing about 5.8%, though select discretionary managers delivered exceptional returns.

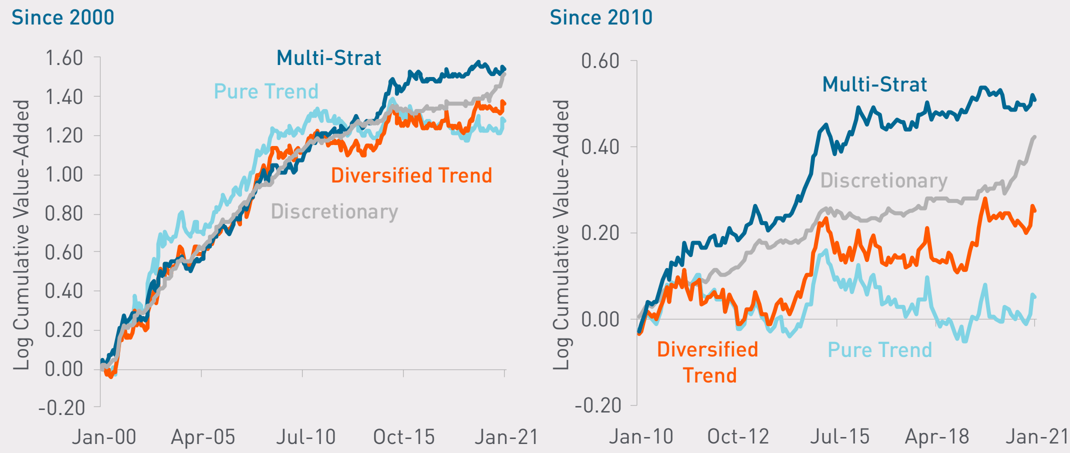
Below, we engage several common myths surrounding systematic macro, and discuss why this space may be a particularly effective diversifying solution going forward.

MYTH 1: Systematic macro has underperformed discretionary macro in recent years.

A recent analysis actually found the reverse to be true: systematic macro outperformed discretionary macro, in terms of both absolute and risk-adjusted return. These scholars also found that "for discretionary funds, more of the return can be attributed to factors than for their

Past or hypothetical performance is no guarantee of future results. Potential for profit is accompanied by possibility of loss.

FIGURE 01 - MEDIAN PERFORMANCE BY MULTI-ASSET MANAGER TYPE
(JANUARY 2000 - JANUARY 2021)



Calculation: For each manager type, the underlying return stream was generated by taking the median value across managers in that class.

Sources: First Quadrant, L.P., Mercer

systematic counterparts, *[...based on]* three sets of risk factors: traditional factors (equity, bond, credit), dynamic factors (stock value, stock size, stock momentum, FX carry), and a volatility factor."[3] The practical importance of this latter finding cannot be understated. Since macro strategies are complementary allocations for most portfolios, what matters is their marginal contribution to overall portfolio return.

Our own analysis suggests that this myth may be attributable to variation in performance among different types of systematic macro. In Figure 01 above, we depict the accumulated returns for the median discretionary manager, pure trend manager, diversified trend manager, and multi-strategy systematic manager, (left) over the last two decades and (right) over the most recent decade. The analysis shows that trend strategies fared well in the early period, but lagged in the more recent decade. Multi-Strat approaches performed comparably to discretionary from 2000-2010, but outperformed every other approach from 2010 onwards.

MYTH 2: Systematic strategies are less equipped to adapt during sudden market volatility.

The assumption here is that humans react more quickly than machines. We won't argue with the assumption itself, but even if it is true, we do not think it tilts the scale in favor of discretionary macro, for several reasons:

- Many systematic strategies, including ours, incorporate models specifically designed to address abrupt changes in risk and opportunity;
- Many systematic strategies, including ours, allow for discretionary overrides if markets are being driven by conditions outside the in-house modelling sphere; and
- Quicker reaction does not necessarily result in superior outcomes.

This last point is extremely important. It can be very hard to stick to your guns in a highly volatile environment, and even more so when you want to make a contrarian trade. Systematic managers are afforded more emotional distance from their investment decisions. We believe this distance makes it easier to maintain a disciplined, consistent approach across different market regimes, particularly during bouts of volatility. In fact, we have found that risk events tend to create systematic opportunity. When volatility increases, as it did in Q1 2020, the need to reduce liquidity risk becomes the primary driver for many investors. We are often willing to take the other side of the trade if we believe liquidity needs, rather than fundamentals, are driving price movements, expecting pricing to revert toward fundamentals as volatility subsides.

Let's revisit Q1 2020, which offers a compelling case study. Figure 02 illustrates the reported distribution of performance for discretionary (left) and systematic (right) macro managers. Almost every way you slice the data, as a class, systematic macro managers outperformed their discretionary counterparts. The dispersion across manager performance was also far greater in the discretionary macro space. Many discretionary managers are likely to take more concentrated, event-driven bets related to directional markets. The nature of this approach lends itself to episodic return patterns. Systematic processes, meanwhile, tend to incorporate numerous risk controls designed to smooth out their overall return streams. In addition, our own process has a strong emphasis on relative opportunity, within an asset class. This approach does not require major market events for alpha opportunity.

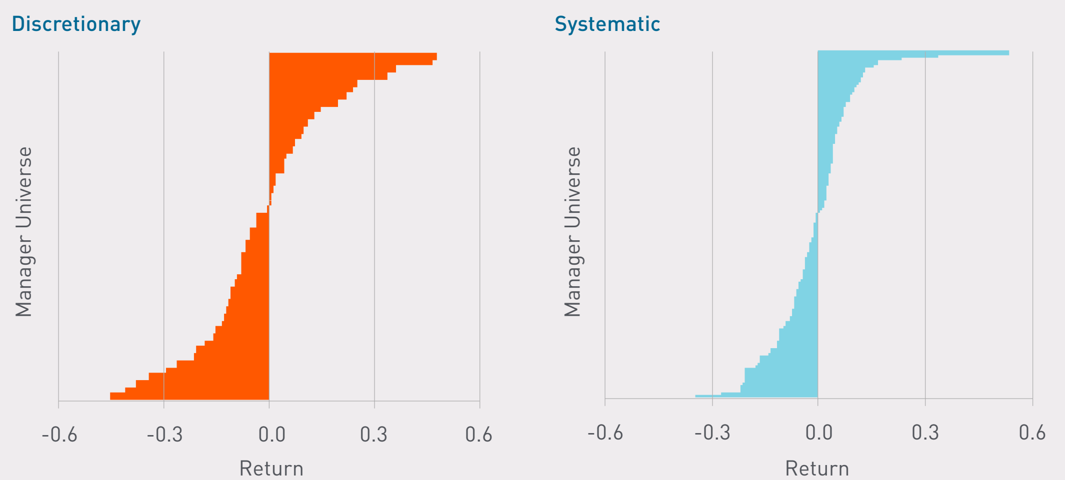
That brings us to Myth #3.

MYTH 3: After risk events, systematic strategies are slower to adjust to new market regimes.

We often hear that because systematic strategies "are so carefully designed and programmed, it can take a long period of time to make changes to them."[4] We understand the logic behind this sentiment, but nevertheless believe the conclusion is misguided, or at the very least, overly broad. This may be true of approaches that rely on finely tuned, highly engineered results, but we do not believe it is the case for systematic managers who pursue more fundamentally oriented alpha.

For starters, even in a different regime, we expect many types of behavior to be fairly consistent. All else equal, central banks faced with lower inflation will be more likely to reduce rates than those with higher inflation. Return-seeking investors will tend to gravitate toward markets with more attractive risk profiles. When a country's exports increase, foreign consumers will have to buy more of its currency to finance their purchases. These are all relationships that

FIGURE 02 - Q1 2020 PERFORMANCE BY MANAGER TYPE
(JANUARY 2020 - MARCH 2020)



Sources: First Quadrant, L.P., Mercer

we do not believe to be regime-dependent, and these are the types of relationships we model in our own macro processes.

We do agree that certain models can see reduced opportunity if markets fundamentally shift. One advantage of hypothesis-driven research is that managers can remove certain models from their processes if they believe the underlying relationship either no longer holds, or has a more understated role in market movements. For example, one of our prior models forecasted how demand for cash would impact currency markets. In this era of compressed yields, we believe (1) that investors are far less likely to look for return opportunities in the cash market, and (2) as a result, relative cash returns have limited influence on currency valuations in the current regime. Several years ago, we significantly reduced that model's risk, and eventually removed it from our processes as it became clear that low rates would persist for some time.

Finally, if markets do experience a regime shift, systematic managers may be able to get some sense of how their processes would have performed in similar periods in history. Right now, it seems likely that markets will be subject to multiple episodes of volatility, at least in the short term. Systematic managers can assess how their models would have performed during the Great Recession, even if they did not trade during the period. In fact, high-quality systematic managers will already have conducted a thorough analysis on the robustness of their strategies in different environments. We believe it is harder for discretionary managers to get this same kind of baseline assessment of how their approach will perform following a regime change.

MYTH 4: Systematic macro is "black box," and less transparent than discretionary macro.

We don't think this myth is outright false as much as it is over-generalized. We agree that some systematic processes, macro or otherwise, are so highly concealed and machine-driven that it is hard to identify the relationships driving their forecasts. We would argue, though, that for many systematic processes, it is easy to identify which models are driving overall positioning and/or performance. In our own macro strategies, each model identifies a market catalyst (e.g. housing prices), a market group that responds to the catalyst (e.g. central banks), and their expected impact on asset pricing (e.g. bond returns). For each model, we can observe its forecast for each asset in its universe. We also know its risk allocation. We can use these two pieces of information to estimate the underlying contribution of that model (and its underlying factor) to our target holdings.

Discretionary processes rarely incorporate such a transparent combination of factors. Here we will make a bold claim: contrary to popular opinion, we believe that discretionary processes, by their very nature, lack transparency. Discretionary managers evaluate a broad array of bottom-up factors, and then make an investment decision. How much did Factor A influence the decision, versus Factor B? A high-quality discretionary manager probably has an intuitive idea of which factors were the overriding influence, but it is undeniably harder to quantify each factor's contribution without an algorithm. And of course, there is always the possibility that other factors, outside the discretionary manager's formalized framework, had an overriding influence.

Taking a broader perspective, it is for these reasons that we believe it is easier for systematic managers to avoid cognitive biases and style drift. Our industry is one of constant evolution. Any process, systematic or discretionary, evolves as new drivers become prominent and long-established drivers fade. Successful investment managers, systematic and discretionary alike, adapt and modify their insights. In a systematic process, it is more obvious when a new factor enters the framework, or an old one leaves. It is also much easier to identify how the forecasting is expected to change, and how that evolution will influence its expected return stream. As we pointed out in our address of myth #3, backtests may not be as formalized in discretionary frameworks.

Going a step further, this heightened transparency surrounding evolutions in the process also helps systematic strategies avoid undesired style drift, as well as key person risk.

Conclusion

After the risk events in Q1 2020, markets stabilized, with many assets fully recovering by year-end. Market sentiment has been fairly bullish lately, as the vaccine rollout offers some hope for a path toward economic recovery. That said, equity volatility has remained above historical norms, and the growth and inflation outlooks are mired in uncertainty.

The most recent foray into bear market territory, however brief, highlights the importance of adequate diversification. We believe this is particularly difficult to achieve in the current market environment, given the possibility of higher inflation and the changing properties of bonds. Given these unique challenges, we believe there is a strong case for cash-efficient, highly liquid alternatives, either as standalone investments or alpha overlays. Based on the evidence described above, we argue that systematic macro may be particularly effective in navigating market shifts in a risk-controlled fashion. As we consider the myths to be unfounded, we believe more investors should turn to solutions like systematic macro to help target the return and diversification they seek.

Endnotes

[1]Stevens, Chris. Are Multi Asset Strategies Delivering for Investors?." bfinance. April 2020. https://www.bfinance.com/insights/are-multi-asset-strategies-delivering-for-investors/.

[2]Results generated by Mercerinsight® are hypothetical and are not intended to project past or future value of actual investments or holdings. In no event shall Mercer or any of its service providers be liable to any persons or entities for reliance on any data contained in Mercerinsight®, the results of any analysis of, or any conclusions drawn from, the data supplied in Mercerinsight® or any report prepared by a user that includes data and analyses from Mercerinsight®. Past performance is not a reliable indicator of future performance. You should not rely on past performance to make investment decisions

[3]Harvey, Campbell R., Rattray, Sandy, Sinclair, Andrew, & Van Hemert, Otto. "Man vs. Machine: Comparing Discretionary and Systematic Hedge Fund Performance." Journal of Portfolio Management. Summer 2017, 43 (4): pp. 55-69. Accessed via https://faculty.fuqua.duke.edu/~charvey/Research/Published_Papers/P130_Man_vs_machine.pdf.

[4]Scharma, Rishab. "Systematic vs. Discretionary CTA's: Understanding Each Investment." 27 Feb. 2012. https://www.managedfuturesinvesting.com/systematic-vs-discretionary-ctas-understanding-each-investment/.

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