

1 JULY 2021 - 4 MINUTE READ

Despite having a reduced allocation in recent years, trend following remains the largest individual signal allocation within The Winton Fund's multi-strategy portfolio and has been the primary driver of returns year-to-date. We have long argued that trading speed is an important differentiator between trend-following strategies and the topic has been subject to continual research throughout the firm's history. Here, we discuss the challenges associated with selecting a trading speed and the rationale behind our choice of speed, before touching on other areas of focus in our research.

## Forecasting Trading Speed and Our Decision to Slow Down

Identifying the optimal trading speed for a trend-following strategy over a given period is straightforward after the fact. Equally, it is easy to construct an ex-post rationale to explain why one speed did better than another. This leads to the alluring implication that such explanations can help inform what speed of trading is likely to perform best in the immediate future. Though in reality, forecasting which trading speed is likely to be optimal in the future – and adapting one's strategy in response – is difficult.

Towards the end of the 2000s, we started to slow down the speed of our trend-following strategy, having identified in our research a downtrend in the performance of the faster systems we were running at the time. The idea that slowing down our models could improve both gross and net returns (that is, returns before and after transaction costs) was not necessarily intuitive. Far more appealing was the thought that trading just a bit faster than our peers would allow us to enter and exit positions ahead of the crowd. Nevertheless, we followed the empirical evidence and slowed down our systems. Our subsequent absolute and industry-relative performance suggests that the decision was both well-timed and somewhat unique among our CTA peers. Five years after slowing down, and with other firms beginning to follow suit, we shared our research in a paper published in 2013.

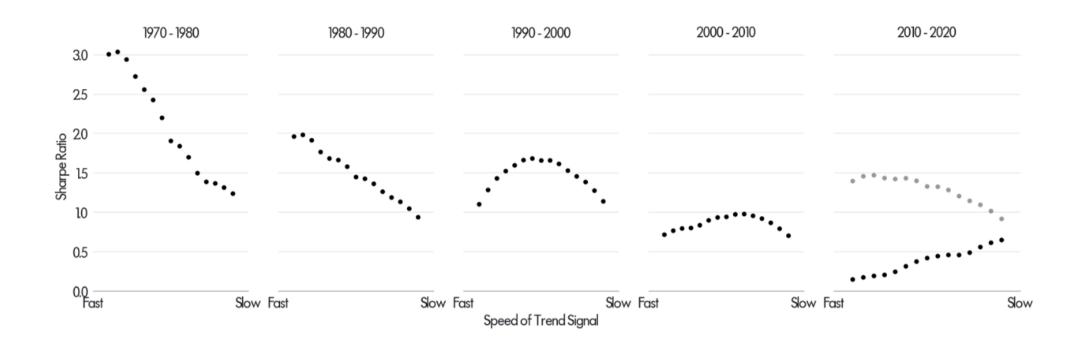
Around the same time, new entrants were entering the space, offering simple trend-following products with lower fees. Consistent with their "alternative beta" frameworks, these firms appeared to optimise trading speeds to what their backtests showed worked best over the previous 40 years, resulting in



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to 2020 period in black. The 40-year backtests did not capture the evolving market behaviour and were thus poor predictors of future performance, a risk we warned about at the time in <a href="our paper">our paper</a> titled Show me the Beta: Managed Futures Confront Alternative Beta.

## 10-Year Gross Sharpe Ratios for 15 Different Speeds of Trend-Following Strategy



Winton Capital Management Limited, as at 31 December 2020. Speeds range from 4/12 to 64/192 day moving average crossovers. Past performance is not indicative of future results. These simulations are shown for illustrative purposes to demonstrate how trend-following strategies work. It does not represent a simulation of a Winton product.

## A Closer Look at the Last Decade

While the 10-year Sharpe ratios in the previous figure are essential for identifying long-term trends in the returns of different speeds of trend following, they conceal intra-decade performance. In the following charts, we drill down into returns since 2010, comparing the performance of a fast and slow strategy side-by-side. The chart on the left shows how slower systems have outperformed faster systems over this period. Faster systems outperformed slower systems in certain calendar years (2012 and 2020, for example), yet performance has been disappointing overall, with lower returns over most meaningful investment horizons and deeper drawdowns.

Importantly, both the following and previous analyses exclude transaction costs, which would have had a greater impact on faster strategies. Some peers have linked a slowdown in trading speeds across the industry to asset growth, suggesting that managers have been forced to make their strategies more scalable by reducing trading. These analyses show that a slower approach would have been better, regardless of market footprint.

## **Gross Performance of a Fast and Slow Trend-Following Strategy Since 2010**



Winton Capital Management Limited, as at 30 June 2021. Fast trend following: 8/24 moving average crossover system; Slow trend following: 32/96 moving average crossover system. Both strategies are geared to a 10% annualised volatility. Past performance is not indicative of future results. These simulations are shown for illustrative purposes to demonstrate how trend-following strategies work. It does not represent a simulation of a Winton product.





We were fortunate that slowing down trading became advantageous at the same time that our assets under advisement increased, as we did not have to trade off speed against transaction costs – it was simply better to trade more slowly. While we have much more flexibility now that we are operating at lower levels of assets, our research continues to suggest that we should maintain overall a medium-toslow trading speed.

As the previous plots show, faster trend following has staged a recovery since 2018, faring particularly well in 2020, where the strategy was able to reposition for the "risk-on" market recovery from the second quarter more quickly. This phenomenon has not continued into 2021, however, with slower systems once again outperforming. Speeding up trading based on recent performance may once again be premature. Had we done so in January, the fund's trend-following strategy would be underperforming its current medium-to-slow system year-to-date.

Our experience has taught us how a considered, evidence-based approach is important for setting trading speeds. If, for example, we had overreacted to the outperformance of faster systems in 2012, we would have fared poorly over most meaningful investment horizons since. We thus continually monitor the performance of various speeds of trend following, but at the same time, resist the temptation to over-optimise to the recent past.

We have undertaken many research projects over the years to identify methods of adjusting trend following speed based on one or more conditioning variables. A system that could detect a change in market regime and correctly speed up or slow down trading in response would of course be extremely valuable, but such research needs to be conducted with care to avoid overfitting. We continue to explore real-time methods for adjusting trading speeds that statistically improve upon our current approach.

