Reflections on Ten Years in Trend Following

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In the summer of 2010 on a warm day in Cambridge, Massachusetts, I sat in the offices of AlphaSimplex presenting a new research concept I had come up with called "**crisis alpha**." That summer in particular, when I wasn't teaching a course at MIT, I was avidly researching trend-following strategies. Post-2008, I was determined to understand why trend-following strategies performed so well in the great financial crisis. From my perspective, "If you don't know why, you don't know much"—and I wanted to know why. I wanted to understand what drove these strategies to capture what I termed "**crisis alpha**," a concept I would eventually bring to a wider audience in collaboration with the Chicago Mercantile Exchange (CME),[1] and then even later write an entire book about.[2] 488 pages to be exact—and yes, I counted. Little did I know that several years later I would be back at AlphaSimplex as a portfolio manager, living with the daily moves of a sizeable trend-following program. In 2010, my research was of clear interest to AlphaSimplex, as this was the same time that they created a liquid alternative trend-following program—one of the first of its kind. At this point, liquid alternatives were a new concept, and AlphaSimplex's goal was to disintermediate the hedge fund industry and to bring uncorrelated and diversifying strategies to a wider audience in a format that was liquid, transparent, and affordable. Ten years later it is amazing to think how much has changed, how much we have learned, and how markets and our understanding of them have evolved. To celebrate ten years of trend following at AlphaSimplex, I wanted to take time to look back on my personal journey in the great quest for "crisis alpha".

What is Crisis Alpha?

Being a trend-following nerd, I am often asked the simple question: "When does trend following work?" I usually respond that trend following generally works when things happen we don't expect, we don't anticipate, we don't appreciate, or frankly when things happen we don't necessarily want or even like. Trend followers love the uncomfortable moments, the unexpected new normal. Persistent coordinated change, often even disruptive change, can cause market prices to trend strongly into what is to come. This is most evident during periods where things are most uncertain. As a fan of trend following, I have learned with extensive analysis that in markets we can find "crisis alpha everywhere."[3] In simple terms, when things change, prices on average tend to be more persistent and in these moments following the trend is often exciting and profitable. In other words, when things are truly uncertain the market prices themselves may lead us to new directions. An equity crisis is just one type of change, often one of the most disruptive for more investors, but many different types of crisis can lead to tradable trends. To demonstrate this, Figure 1 below plots how trend following

[1] Kaminski 2011.
[2] Greyserman and Kaminski 2014.
[3] Kaminski 2017.

performed during crisis periods for equity markets.[4] In my original paper, I defined "crisis alpha" opportunities as the potential opportunities from persistent trends during periods of market stress or crisis. This concept became ever more palpable in early 2020 as equity markets faced the first real crisis period in over a decade. Speaking from my personal perspective I, like many others, have learned that when it comes to crisis alpha, *we all like the alpha but no one likes the crisis*.[5]

MF PERFORMANCE DURING THE 10 WORST QUARTERS OF EQUITY PERFORMANCE

Period	Event	S&P 500 Total Return Index	SG Trend Index	Difference
Q4 2008	Bear Market in U.S. Equities led by Financials	−21.9%	12.7%	34.6%
Q1 2020	COVID-19 Pandemic	−19.6%	2.3%	21.9%
Q3 2002	WorldCom Scandal	−17.3%	18.0%	35.3%
Q3 2001	Terrorist Attacks on World Trade Center and Pentagon	−14.7%	3.9%	18.6%
Q3 2011	European Sovereign Debt Crisis	−13.9%	2.4%	16.3%
Q4 2018	Equity Market Upsets and Increased Volatility	−13.5%	−5.1%	8.4%
Q2 2002	Continuing Aftermath of Technology Bubble Bursting	−13.4%	15.8%	29.2%
Q1 2001	Bear Market in U.S. Equities led by Technology	−11.9%	10.6%	22.5%
Q2 2010	European Sovereign Debt Crisis, "Flash Crash"	−11.4%	−3.1%	8.3%
Q1 2009	Credit Crisis Continues	−11.0%	−2.7%	8.3%

EQUITY PERFORMANCE DURING THE 10 WORST QUARTERS OF MF PERFORMANCE

Period	Event	S&P 500 Total Return Index	SG Trend Index	Difference
Q2 2004	Broad Stock, Bond, and Commodity Reversal	1.7%	−14.1%	-15.8%
Q2 2001	Reversals During the Dot Com Crisis	5.9%	−9.6%	-15.5%
Q2 2015	Trend Reversals in Multiple Asset Classes	0.3%	−9.4%	-9.7%
Q2 2000	Reversals During the Dot Com Crisis	−2.7%	−7.4%	-4.7%
Q3 2008	Reversals During Bear Market in U.S. Equities	−8.4%	−6.9%	1.5%
Q3 2000	Reversals During the Dot Com Crisis	−1.0%	−6.1%	-5.1%
Q3 2007	CTAs Caught Short on Bear Market Rally in U.S. Equities	2.0%	−6.0%	-8.1%
Q1 2014	Bond and Currencies Reversals	1.8%	−5.9%	-7.7%
Q4 2018	Sudden Reversals in Equity Markets	−13.5%	−5.1%	8.4%
Q2 2009	Reversals in the Aftermath of the Credit Crisis	15.9%	−5.0%	-21.0%

Figure 1: Returns from January 1, 2000 – June 30, 2020. Source: Bloomberg and CME Group. Past performance is not necessarily indicative of future results.

Trends, Trends, Everywhere

History doesn't repeat but it does tend to rhyme. In our book about trend following, Alex Greyserman and I began our study with a reflective historical perspective in mind. As typical quants, this included an ambitious 800-year analysis of trend following.[6] This analysis used somewhat subjective data with a wide range of assumptions covering a vast range of different periods in human history. For example, did you know that certain commodity markets, such as rice, date all the way back to around 1000 A.D.? The one thing that I truly learned from this data, from a long-term perspective, is that the world always changes, but there are

[4] For a balanced perspective, we also list the worst quarters of Managed Futures performance. Some of these quarters are when equity markets experienced sharp recoveries or short-term reversals.
[5] Kaminski and Yang 2020b.
[6] Greyserman and Kaminski 2014 (Chapter 1).

always trends somewhere. What drives trends may be different, but new directions or new regimes nearly always appear no matter what may be happening in markets. I have a feeling this will be all the more apparent in a post-COVID-19 world. We have no idea if it will be government intervention, inflation, global political turmoil, or ecological change that creates the trends to come. In the last ten years, we have seen trends across equities, currencies, commodities, and fixed income. We saw an energy crisis in 2014, raging bull markets in equities in 2017, yields falling towards zero in 2019, and many other unanticipated events. All of these trends are obvious after the fact, but we had no way to predict them at the time.[7]

Style Evolution

I joined the Managed Futures industry in October 2008 as a freshly minted MIT Ph.D. or, as I often joke, a recovered academic. At this point, few people knew why trend following worked; many investors were just happy that something was still positive in the wake of the global financial crisis. Managed Futures had been around for decades but it was still perceived with some disdain by classic investment professionals. The Managed Futures industry blossomed on the heels of a tremendous 2008. Later, thanks to academic research embracing trend following under the sophisticated new name "time series momentum," the strategy suddenly became more widely accepted.[8] Despite its simple beginnings, the industry has evolved substantially since the great financial crisis.

Since that summer day in 2010, I would say that the biggest changes I have seen are (1) how strategies evolved (i.e., what strategies managers use) and (2) the range of investor objectives. In 2010, there were fewer questions about trend following; investors just wanted to know why it might work. Today their questions have evolved to include how strategies respond to different market moves and what specific version of trend following will work best for their portfolio. After living through this transformation, in 2018, again in typical quant fashion, Robert Sinnott and I decided to quantify it. In our paper,[9] we used statistical methodologies to examine how managers had changed strategies over time. Consistent with our intuition, we found that trend-following strategies have in general slowed down and started including a wider range of risk premia strategies into the mix. This move has segmented products into two core groups, which I like to call: the diversifier vs. the complement. Multi-strategy Managed Futures approaches are more focused on overall diversification by adding further complexity to their programs. Pure trend-following enthusiasts (like myself) have stuck to what works for them by focusing on the complementary nature of trend-following strategies to most traditional assets. As Alex and I explained in our book, there are some tradeoffs for moving away from trend, which we called

[7] Kaminski 2017; Kaminski 2019; Kaminski 2020; Kaminski and Yang 2020a.
[8] Moskowitz, Ooi, and Pedersen 2012.
[9] Kaminski and Sinnott 2019.

the "costs of crisis alpha."[10] In general, the 2020 COVID-19 crisis seemed to show similar results. We found in 2020 that pure trend-following strategies and faster systems seemed to outperform multi-strategy and slower approaches. Using data from Kaminski and Yang (2020a), Figure 2 plots the relative performance of trend following and multi-strategy Managed Futures programs during the crisis periods of the last twenty years. In this Figure, the bubble size represents relative outperformance and the color indicates which type outperformed. The dark bubbles are crisis periods where pure trend outperformed. The bigger the bubble the larger the outperformance. To me the intuition is simple. In non-technical terms, when things get really bad a classic trend-following strategy may be able to navigate the crazy better than anything more complex.

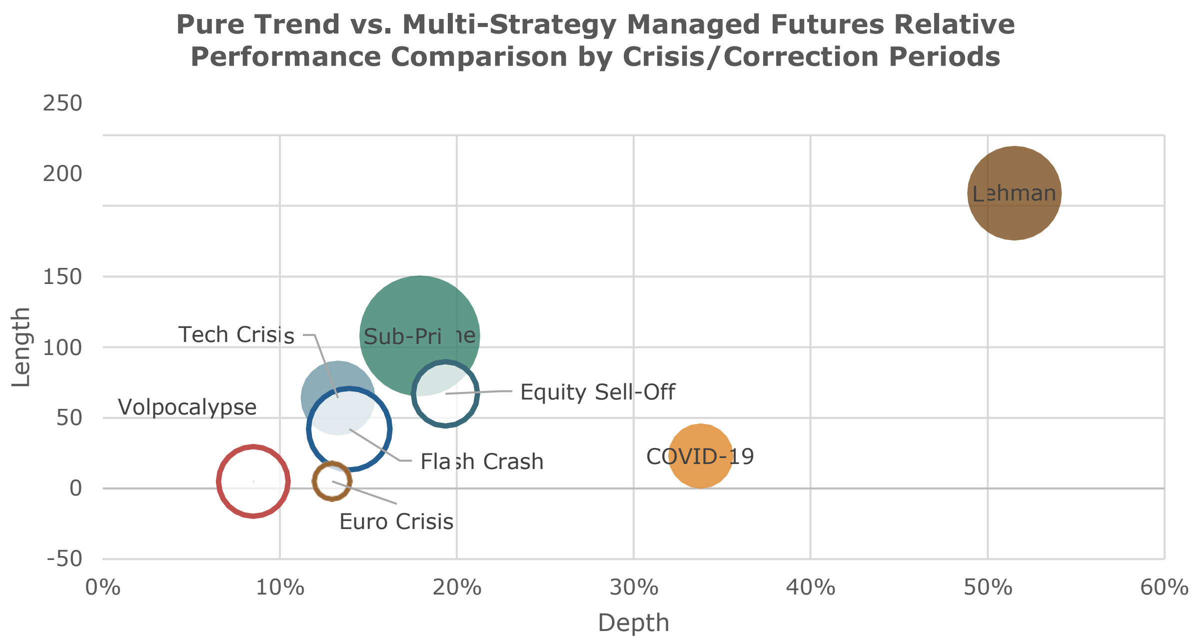

Figure 2: A visual representation of the relative performance difference between pure trend (using the SG Trend Index) and multi-strategy (using the SG CTA Index) Managed Futures approaches during Crisis/Correction periods for the S&P 500 Total Return Index from 1992 to 2020. Each crisis/correction period is defined as the peak-to-trough loss. For certain periods such as the tech bubble, there are several waves of losses which warrant distinct time periods; only the first wave of losses is included here. The shaded circles demonstrate when pure trend outperforms and the clear circles show when multi-strategy outperforms. The size of the circles represents the magnitude of the return differences during each crisis or correction period. Past performance is not necessarily indicative of future results. Source: Kaminski and Yang (2020a).

Once a Trend-Follower, Always a Trend-Follower

2020 has taxed many of us in new and unexpected ways. It has been a time when I am truly grateful to be a systematic manager, as making judgement calls in the heat of the moment this year seems a daunting task. It is very comforting to follow a well thought-out and researched systematic process. Yet, although trend followers are systematic managers, few

[10] Greyserman and Kaminski 2014 (Chapter 14).

of us would have imagined a world where we would also be both *systematic and remote*. But the world changes, people adapt, and we find new ways to solve old problems. Ten years after the launch of the AlphaSimplex Managed Futures Strategy, the most exciting part of looking back is how much we have learned, how many different market environments we have endured, and how much we continue to innovate and adapt. As a pure trend-following enthusiast, I remain optimistic for the future even as the world ahead still remains uncertain. For those of us who appreciate uncertainty, this is a both a time of stress and also a time of opportunity. After 800 plus years of trend following, I'm looking forward to the next ten years.

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