



ALPHASIMPLEX

Crowded Trends: Safe Haven or Sour Spot in 2020?

Kathryn M. Kaminski, Ph.D., CAIA®
Chief Research Strategist,
Portfolio Manager

Ying Yang, M.F.E.
Junior Research Scientist

January 2021

Introduction

When it comes to trend following, everyone loves to talk about crowded trades. However, this concept is more challenging than it may appear. First, it is hard to determine which trades are actually crowded. Secondly, sometimes the crowded trade is actually the most profitable, in part because trend-following strategies seek to follow strong trends; by definition, a trend is a crowd. Given the plethora of trends in 2020¹, we review some definitions of crowdedness and examine which crowded trades worked and which did not for trend followers in 2020.

Measuring Crowdedness

We define crowded trades as those trades in which many investors or strategies are holding the same thing for similar reasons. For example, in the summer of 2020 gold was labeled a crowded trade. Anecdotally, the euro versus the U.S. dollar was also labeled a crowded trade during that same summer. Prices for both the euro and gold kept going up, and investors continued to buy them. Those trades were profitable as prices increased, but historically we have seen that the challenge often happens not on the way up, but on the way down. It can be difficult for investors when a crowded trade unwinds. Baltas (2018) discusses how different types of trading strategies have either stabilizing or de-stabilizing effects on these trades. For an investor, the puzzle is that sometimes crowded trades are good and sometimes crowded trades are bad. To make it even more complicated the timing can matter as well.

Over the last few years, academics and practitioners have been discussing methods for measuring the potential “crowdedness” of trades using some of the classic tricks. In one of the first papers to discuss the topic, Lou and Polk (2014) define co-momentum as abnormal return correlation among stocks commonly utilized in momentum strategies. In a review of crowding in alternative risk premia strategies, Baltas (2018) defines a joint measure of asset excess co-momentum he terms a co-metric. This measure looks at signed average pairwise correlations between residual returns of assets relative to an asset class benchmark. In simple terms, he is trying to determine crowded positions. Assets with high co-momentum are “crowded markets” and assets with lower co-momentum are “less crowded markets.”

Measuring Co-Momentum in 2020 Trends

To analyze the impact of “crowded markets” on trend following in 2020, we utilize the definition of the co-metric from Baltas (2018)². We consider a simple representative trend-following strategy. We then compare the performance of a strategy that is tilted to crowded markets minus one that does not take crowdedness into account. This creates a simple “co-momentum trend factor,” which indicates whether trends were more profitable in crowded markets or less crowded markets. Figure 1 plots the performance of the co-momentum factor

¹ Kaminski 2021.

² For this purpose, the four asset class benchmarks we use are the MSCI World Index, the JPM Government Bond Index, the U.S. Dollar Index, and the GSCI Index.

in 2020. We note that, in relative terms, crowded trends in aggregate fared better in Q1 and worse in Q4. To better examine what may be driving this difference in returns, we drill down by asset class in Figure 2, which plots the performance of the co-momentum factor by asset class.

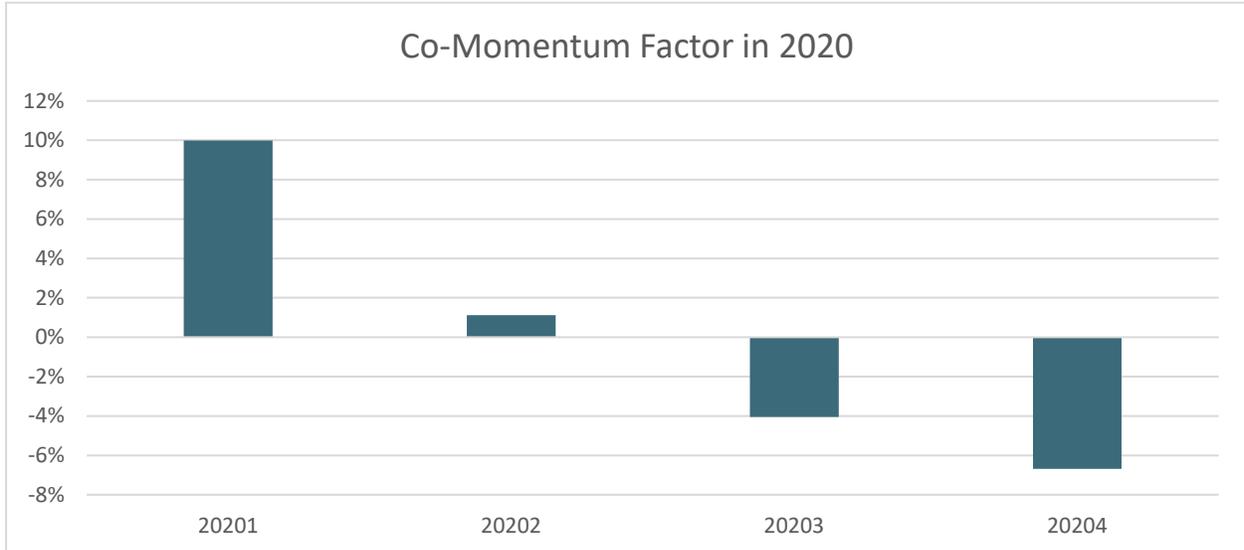


Figure 1. The Co-Momentum Trend Factor in 2020. This factor is the difference between a representative trend-following system that is tilted to crowded trends (as measured by the Baltas 2018 co-metric) and the same trend-following system without a tilt to crowded trend markets. The four asset class benchmarks are the MSCI World Index, the JPM Government Bond Index, the U.S. Dollar Index, and the GSCI Index. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

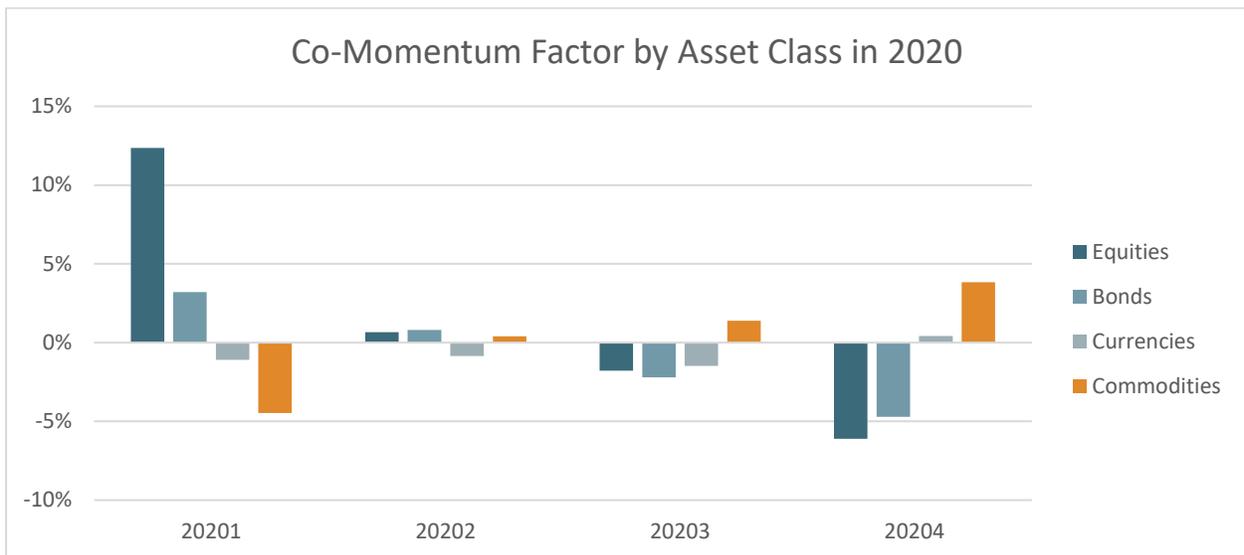


Figure 2. The Co-Momentum Trend Factor in 2020 by asset class. This factor is the difference between a representative trend-following system that is tilted to crowded trends (as measured by the Baltas 2018 co-metric) and the same trend-following system without a tilt to crowded trend markets. The four asset class benchmarks are the MSCI World Index, the JPM Government Bond Index, the U.S. Dollar Index, and the GSCI Index. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

From Figure 2, equity markets and commodity markets seemed to be the most impacted by crowding in trends in 2020. Intuitively, this makes sense. Despite big moves in Q1, the bond market remained relatively range-bound over the year. Currencies moved back and forth throughout the year based on changing themes, which contributed to noise relative to the U.S. dollar. In equity markets, by contrast, crowded trends seemed to be a safe haven in Q1 as investors moved together in reaction to the COVID-19 crisis. In Q4, on the other hand, crowded trends seemed to underperform. Commodities experienced the opposite pattern. Crowded trends underperformed in Q1 and outperformed in Q4, with commodity trends providing gains in both quarters.

To examine this further, the next figures and tables plot the co-momentum factors for equities and commodities. Figure 3 and Table 1 plot the performance of the equity co-momentum factor in each quarter and list the corresponding equity markets ranked by their average co-momentum scores for each quarter. For simplicity, we label equity markets by their geographical region. From Table 1, we see that European markets were more crowded in Q1 than U.S. markets as we entered the COVID-19 crisis. In the latter half of the year, U.S. markets had more crowded trends, which were less successful than Emerging Market and International Developed Market trends.

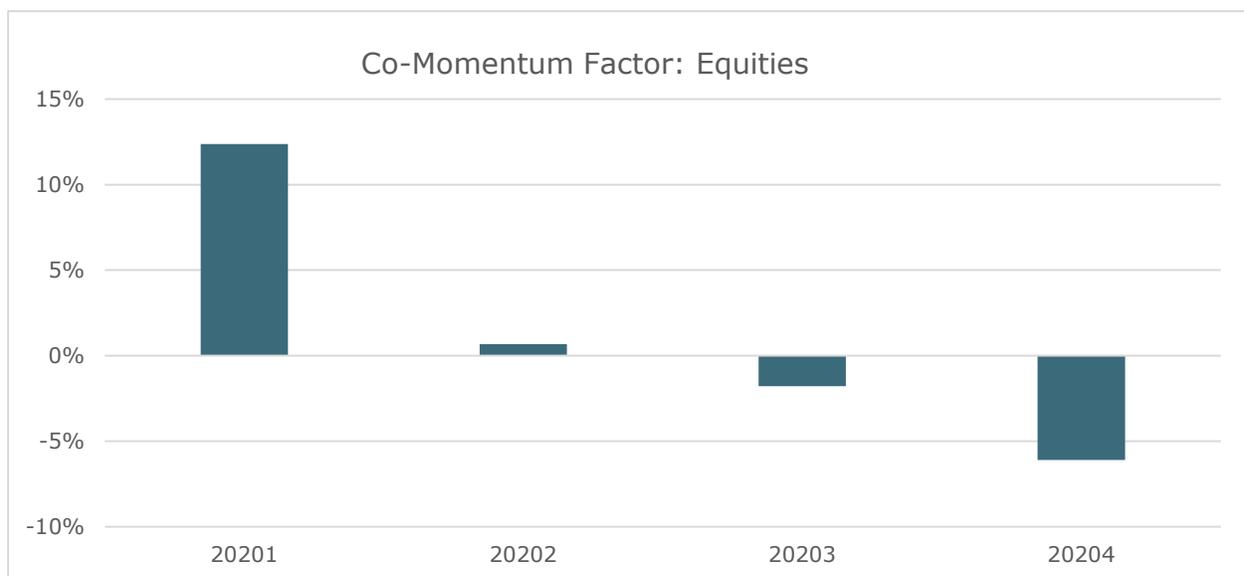


Figure 3. The Co-Momentum Trend Factor in 2020 for equity markets. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Co-Momentum Scores: Equities by Market

	Q1	Q2	Q3	Q4
More Co-Momentum	FTSE MIB (Italy)	CAC 40 (France)	S&P 500 (U.S.)	S&P MidCap 400 (U.S.)
	DAX (Germany)	FTSE MIB (Italy)	S&P TSX 60 (Canada)	Russell 2000 (U.S.)
	DJ EURO STOXX 50 (Europe)	DAX (Germany)	IBEX 35 (Spain)	S&P 500 (U.S.)
	IBEX 35 (Spain)	DJ EURO STOXX 50 (Europe)	DJIA (U.S.)	DJIA (U.S.)
	Nikkei 225 (Japan)	IBEX 35 (Spain)	S&P MidCap 400 (U.S.)	CAC 40 (France)
	OMXS 30 (Sweden)	Hang Seng China Enterprises	CAC 40 (France)	IBEX 35 (Spain)
	TOPIX (Japan)	Hang Seng (Hong Kong)	MSCI Singapore (Singapore)	FTSE MIB (Italy)
	CAC 40 (France)	AEX (The Netherlands)	Russell 2000 (U.S.)	DJ EURO STOXX 50 (Europe)
	MSCI EAFE	Nikkei 225 (Japan)	NASDAQ 100 (U.S.)	S&P TSX 60 (Canada)
	AEX (The Netherlands)	TOPIX (Japan)	SPI 200 (Australia)	FTSE 100 (U.K.)
Less Co-Momentum	FTSE JSE Top 40 (South Africa)	MSCI EAFE	Hang Seng (Hong Kong)	Hang Seng (Hong Kong)
	Hang Seng China Enterprises	FTSE JSE Top 40 (South Africa)	FTSE 100 (U.K.)	MSCI Singapore (Singapore)
	Hang Seng (Hong Kong)	Russell 2000 (U.S.)	Hang Seng China Enterprises	MSCI EAFE
	SPI 200 (Australia)	OMXS 30 (Sweden)	MSCI Emerging Markets	Hang Seng China Enterprises
	FTSE 100 (U.K.)	MSCI Singapore (Singapore)	China A50 (China)	DAX (Germany)
	MSCI Emerging Markets	MSCI Emerging Markets	OMXS 30 (Sweden)	SPI 200 (Australia)
	MSCI Singapore (Singapore)	FTSE 100 (U.K.)	FTSE MIB (Italy)	MSCI Emerging Markets
	S&P TSX 60 (Canada)	China A50 (China)	MSCI EAFE	OMXS 30 (Sweden)
	MSCI Taiwan (Taiwan)	MSCI Taiwan (Taiwan)	DJ EURO STOXX 50 (Europe)	AEX (The Netherlands)
	China A50 (China)	NASDAQ 100 (U.S.)	DAX (Germany)	FTSE JSE Top 40 (South Africa)
Russell 2000 (U.S.)	S&P 500 (U.S.)	FTSE JSE Top 40 (South Africa)	NASDAQ 100 (U.S.)	
NASDAQ 100 (U.S.)	S&P MidCap 400 (U.S.)	MSCI Taiwan (Taiwan)	China A50 (China)	
S&P MidCap 400 (U.S.)	SPI 200 (Australia)	AEX (The Netherlands)	MSCI Taiwan (Taiwan)	
S&P 500 (U.S.)	S&P TSX 60 (Canada)	Nikkei 225 (Japan)	TOPIX (Japan)	
DJIA (U.S.)	DJIA (U.S.)	TOPIX (Japan)	Nikkei 225 (Japan)	

Legend:	U.S.	Emerging Markets	International Developed
---------	------	------------------	-------------------------

Table 1. The Co-Momentum Trend Scores in 2020 for equity markets, ranked by their average co-momentum scores for each quarter. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Figure 4 and Table 2 plot the performance of the commodity co-momentum factor in each quarter and list the corresponding commodity markets ranked by their average co-momentum scores for each quarter. For simplicity, we label commodity markets by their sub-class groupings. From Table 2, we see that in commodity markets, agricultural commodities remained somewhat crowded in 2020, with the soy complex leading the pack in the second half of the year. Energies remained less crowded, so tilting away from energy markets seemed to be a detractor in Q1 but may have been positive later in the year.

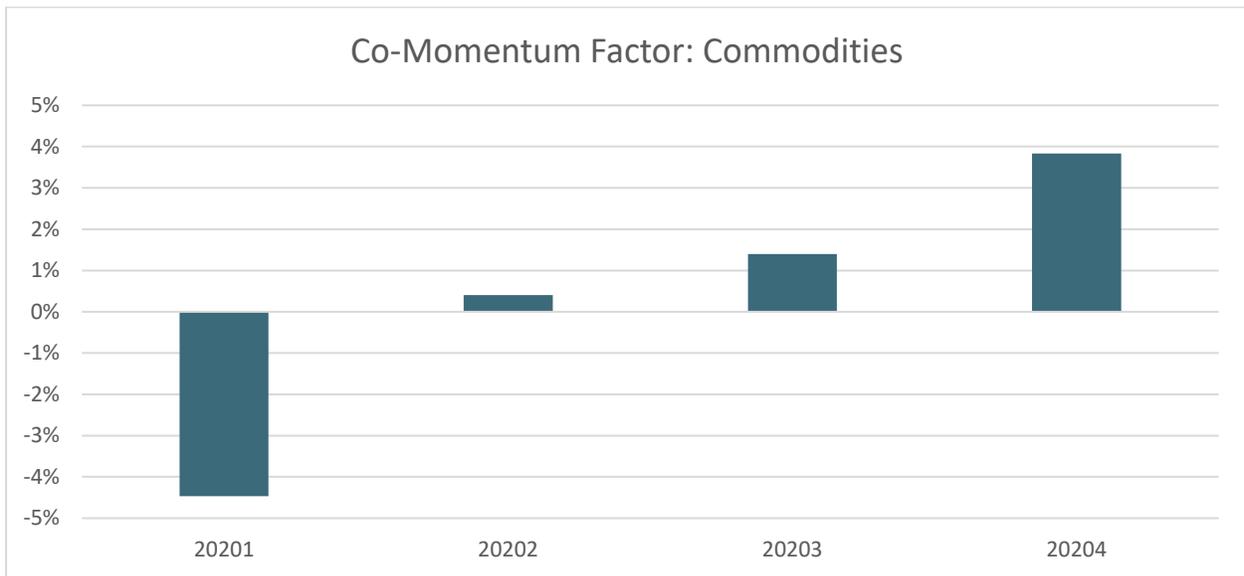


Figure 4. The Co-Momentum Trend Factor in 2020 for commodity markets. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Co-Momentum Scores: Commodities by Market

	Q1	Q2	Q3	Q4
More Co-Momentum	Cotton	Soybeans	Lean Hogs	Corn
	Copper (LME)	Sugar	Soybeans	Soybeans
	Copper (CMX)	Zinc	Soymeal	Soymeal
	Nickel	Copper (CMX)	Soyoil	Soyoil
	Cocoa	Cocoa	Natural Gas	Natural Gas
	Platinum	Soymeal	Nickel	Gasoline
	Soyoil	Lean Hogs	Gold	Palladium
	Soybeans	Platinum	Aluminum	Platinum
	Live Cattle	Copper (LME)	Wheat	Nickel
	Wheat	Gold	Palladium	Brent Crude Oil
	Gasoline	Nickel	Live Cattle	Crude Oil
	Aluminum	Soyoil	Cotton	Aluminum
	Coffee	Silver	Platinum	Lean Hogs
	Natural Gas	Aluminum	Coffee	Live Cattle
	Palladium	Live Cattle	Cocoa	Gold
Less Co-Momentum	Sugar	Wheat	Sugar	Coffee
	Zinc	Gas Oil	Silver	Silver
	Gas Oil	Cotton	Gasoline	Copper (CMX)
	Corn	Natural Gas	Brent Crude Oil	Cocoa
	Heating Oil	Palladium	Zinc	Sugar
	Brent Crude Oil	Coffee	Copper (LME)	Heating Oil
	Lean Hogs	Corn	Copper (CMX)	Gas Oil
	Soymeal	Heating Oil	Heating Oil	Wheat
	Gold	Gasoline	Crude Oil	Cotton
	Crude Oil	Brent Crude Oil	Gas Oil	Copper (LME)
	Silver	Crude Oil	Corn	Zinc

Legend:	Agricultural and Livestock	Base Metals	Precious Metals	Energies
---------	----------------------------	-------------	-----------------	----------

Table 2. The Co-Momentum Trend Scores in 2020 for commodity markets, ranked by their average co-momentum scores for each quarter. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Summary

To follow the trend is to be part of the crowd. When trend-following markets move together there is both opportunity for gain and opportunity for pain. A closer look at which markets were crowded in 2020 demonstrates that the crowded trends in equities in Q1 were actually not the most painful. Later in the year, crowded trends in commodities worked while crowded trends in equities and bonds were negative. The bottom line is that it is hard to disentangle a good crowd from a good trend or a bad crowd from a bad trend.

References

- Baltas, Nick. 2018. "The Impact of Crowding in Systematic ARP Investing." *Goldman Sachs STS Insights*. Issue 1, June 2018.
- Kaminski, Kathryn M. 2021. "Trends Everywhere in 2020." *AlphaSimplex Insights*. <https://www.alphasimplex.com/insight/trends-everywhere-2020/>.
- Lou, Dong, and Christopher Polk. 2014. "Comomentum: Inferring Arbitrage Activity from Return Correlations." Working Paper.

About the Authors

Kathryn M. Kaminski, Ph.D., CAIA® is the Chief Research Strategist at AlphaSimplex Group. As Chief Research Strategist, Dr. Kaminski conducts applied research, leads strategic research initiatives, focuses on portfolio construction and risk management, and engages in product development. She also serves as a co-portfolio manager for the AlphaSimplex Managed Futures Strategy. Dr. Kaminski's research and industry commentary have been published in a wide range of industry publications as well as academic journals. She is the co-author of the book *Trend Following with Managed Futures: The Search for Crisis Alpha* (2014). Dr. Kaminski holds a B.S. in Electrical Engineering and Ph.D. in Operations Research from MIT.

Ying Yang, M.F.E., is a Junior Research Scientist at AlphaSimplex Group. As a Junior Research Scientist, Ms. Yang focuses on applied research and supports the portfolio management teams. Ms. Yang earned both a B.S. in Mathematics and Physics and a B.A. in Economics and Management from Tsinghua University as well as an M.F.E. from the Haas School of Business at the University of California at Berkeley.

Contact Information

For more information, please contact:
clientservices@alphasimplex.com
617-475-7100

Disclosures

Past performance is not necessarily indicative of future results. Managed Futures strategies can be considered alternative investment strategies. Alternative investments involve unique risks that may be different from those associated with traditional investments, including illiquidity and the potential for amplified losses or gains. Investors should fully understand the risks associated with any investment prior to investing. Commodity-related investments, including derivatives, may be affected by a number of factors including commodity prices, world events, import controls, and economic conditions and therefore may involve substantial risk of loss.

The illustrations and examples presented in this document were created by AlphaSimplex based on unaudited external data and internal methodologies. Accordingly, while the underlying data were obtained from sources believed to be reliable, AlphaSimplex provides no assurances as to the accuracy or completeness of these illustrations and examples. The views and opinions expressed are as of 12/31/2020 and may change based on market and other conditions. There can be no assurance that developments will transpire as forecasted, and actual results may vary. All investments are subject to risk, including risk of loss.

This document has been prepared for informational purposes only and should not be construed as investment advice. AlphaSimplex is not registered or authorized in all jurisdictions and the strategy described may not be available to all investors in a jurisdiction. Any provision of investment services by AlphaSimplex would only be possible if it was in compliance with all applicable laws and regulations, including, but not limited to, obtaining any required registrations. This material should not be considered a solicitation to buy or an offer to sell any product or service to any person in any jurisdiction where such activity would be unlawful.

Publication: January 2021. Copyright © 2021 by AlphaSimplex Group, LLC. All Rights Reserved.