Three Themes of 2021

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Introduction

And just like that, 2021 is almost over. Although the COVID-19 market crisis may seem long behind us, the after effects and structural changes have held a continued grip on financial markets. From a trend-following perspective, this environment has yielded some interesting trends and new market themes. With the end of 2021 in sight, we take a moment to review some of these themes and ponder the future of markets going into 2022.

Reflation to Inflation to Stagflation?

Reflation is a period of accelerated growth where values reflate or return to previous values. Inflation is the pure act of prices increasing and rising. Stagflation, which may be much more ominous, is a state where there is both low growth (stagnation) and inflation at the same time. Although it is not our job to make calls on macro moves, the rise in prices, particularly commodity markets, has been hard to ignore. Figure 1 plots the cumulative returns for two key reflation assets: equities and commodities (energies, agricultural commodities, and base metals) since 2019.

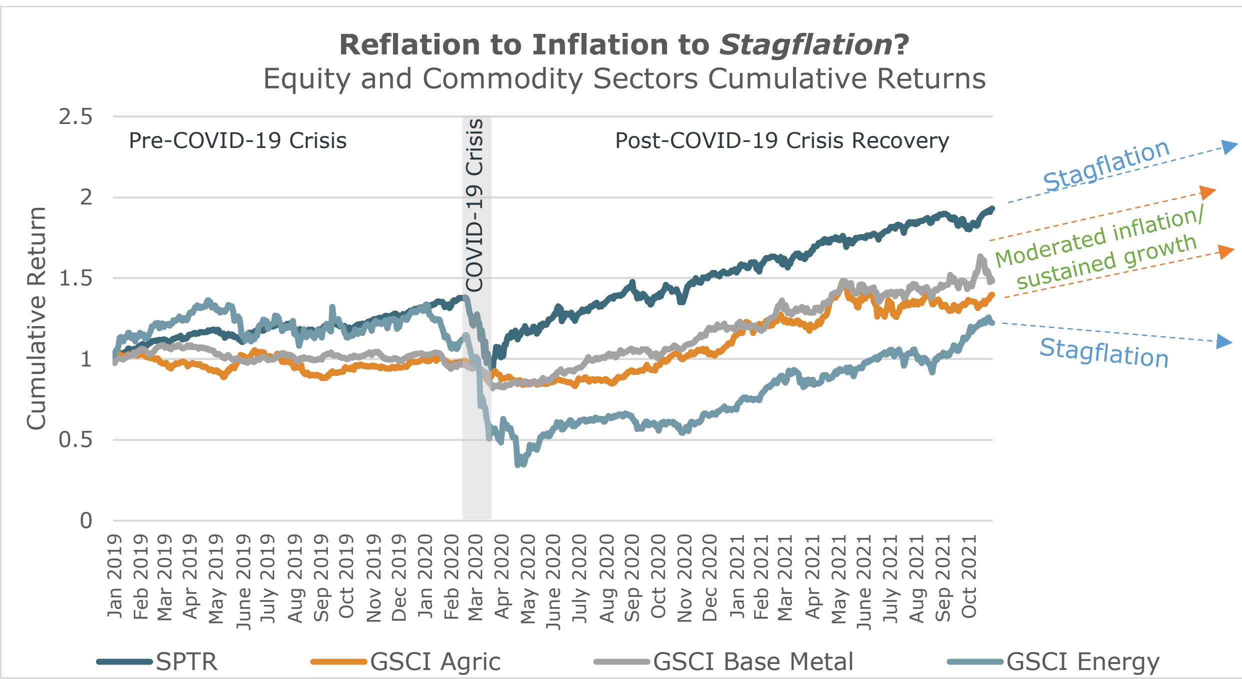


Figure 1: Cumulative returns for equity markets (S&P 500 using SPY returns) and commodity markets (an equal basket of commodities across energies, base metals, and agricultural commodities) from 2019 to October 2021. Arrows indicate potential future states if the current trends continue. Past performance is not necessarily indicative of future results. Source: AlphaSimplex, Bloomberg.

Commodities, especially raw materials, have been the biggest and most persistent movers after the COVID-19 crisis in early 2020. To put this into a quant's perspective, we can measure the level of divergence or MDI (market divergence index) which measures the amount of movement in prices relative to the noise in price moves for some of the commodity futures markets. When MDI is high, this can be characterized as a highly "trendy" environment; when it is low there is a lot of noise relative to price moves. To put these moves into market context, we can decompose the MDI into positive and negative trends by separating the moves that are positive and negative. Figure 2 plots the trendiness of energy markets, base metals, and agricultural commodities since 2000, decomposed into long and short contribution. From a trend-following perspective, commodity markets have had some of the biggest and simultaneous long trends in the last two decades. Why does this matter? Commodity markets are baseline inputs to complicated production/supply and distribution pipelines. When base prices go up in a way that is clearly measurable, the concern is that this is going to transfer on to other assets over time, causing prices, wages, and general values to inflate. Commodity prices have clearly inflated already. Central bankers have been watching these values and started to note that the inflation levels they previously deemed as temporary may be more persistent than anticipated. The next question is: will equity markets be able to absorb these increased prices in such a way that growth will not be hindered or curbed going forward? With equity valuations at or close to new highs, there is a real concern that growth may not be as resilient as hoped; as supply chain disruption continues to affect markets, there is also concern that inflation will persist. If commodity prices keep running while equity markets fail to keep pace, stagflation may be realized.

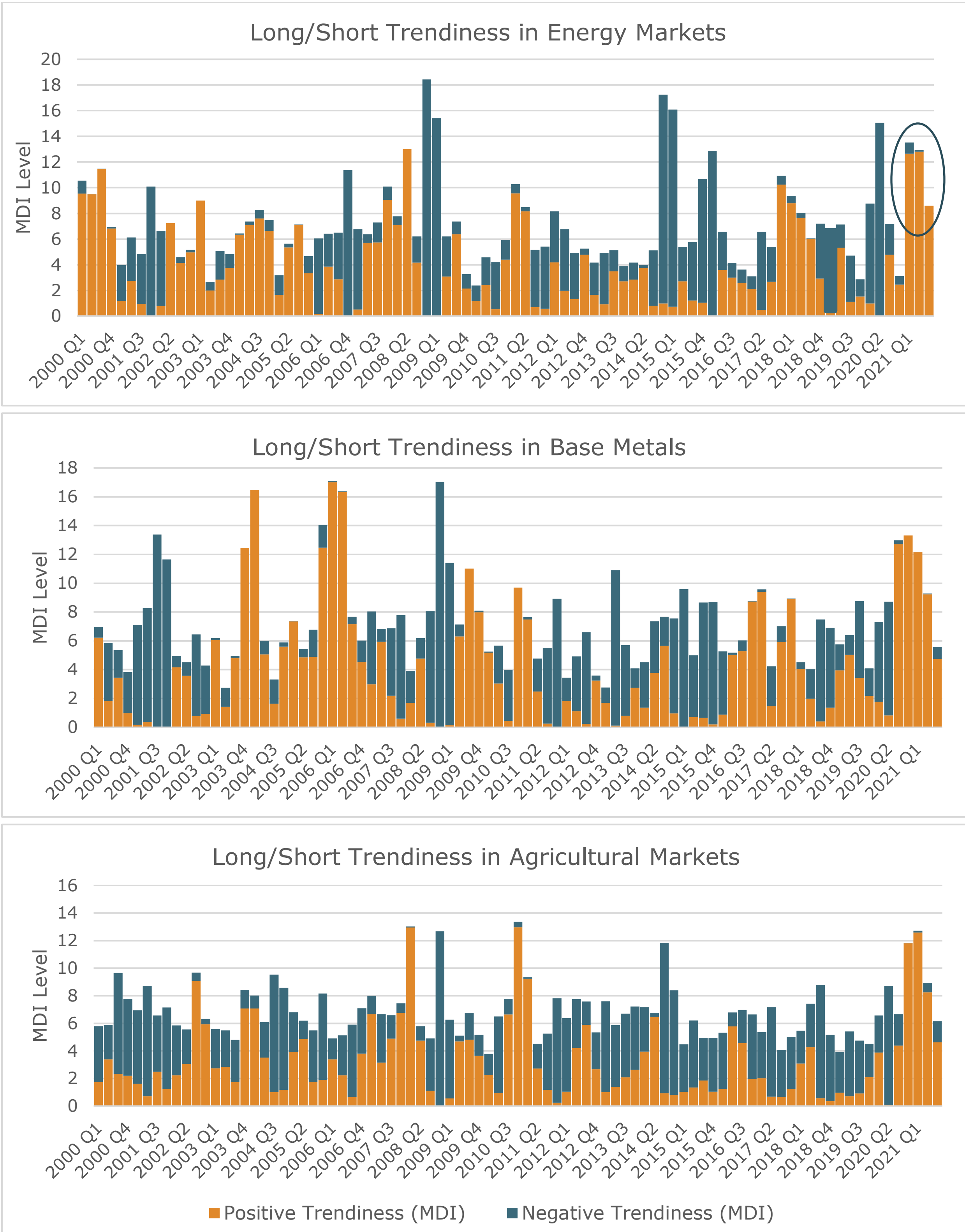


Figure 2: Trendiness in markets decomposed into long and short direction averaged quarterly from Q1 2000 to Q3 2021. In this case, the Market Divergence Index (MDI) is used to measure trends over a 100-day window. See also Greyserman and Kaminski (2014) for calculation details. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

The end of the great bond bull market

Since the great financial crises in 2008, the prospect of rising rates may not have been considered by many investors. In most markets, change seems to occur when there are true structural changes in the macro picture. Inflation may just be the only force strong enough to move markets to a rising rate environment. After so many false starts, this may still seem hard to believe. From a trend-following perspective, we tend to look at what the market prices are telling us, trends that show how people behave (i.e., what they decide to buy and sell). Since mid-2020, we have seen some interesting asset class patterns between stocks and bonds. Bond and stock correlation has been more positive during this period than over most periods in recent history, meaning that the relationship between stocks and bonds may be changing. To demonstrate this, Figure 3 plots the correlation between stocks and bonds since 2015. During certain periods in 2021, we experienced negative trend signals in bonds and positive trend signals in equities at the same time. Looking forward, we consider that this may be just a sign of things to come. Most investors may not realize that stock/bond correlation was positive in the 1970s (a period of high inflation) and that bond volatility was also much more elevated. From a technical perspective, positive correlation between stocks and bonds may signify that a period of more sustained inflation could actually lead to rising rates or, as we might call it, the end of the great bond bull market trend.

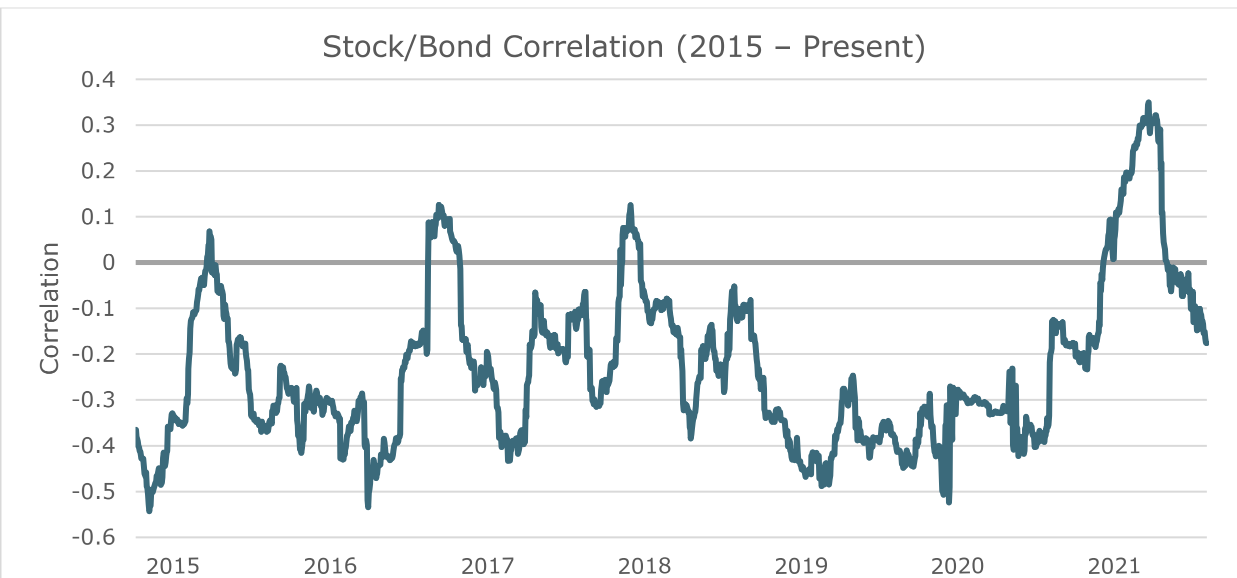


Figure 3: 100-day rolling correlation between stocks and bonds from January 1, 2015 to October 31, 2021. The S&P 500 and the JP Morgan Bond Index are used as a proxy for stock and bond returns. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Value vs. growth rotation

Rising rates is often a rather terrifying proposition for equities. Yet, in such an environment, not all equity markets will react the same. Although trend-following is a cross-asset strategy, the other key theme at the top of mind has been the potential for a long-awaited growth to value rotation. To put the headwinds against value into perspective, Figure 4 plots the relative performance differences between value and growth for both large and small stocks. From this plot, value has strongly underperformed, despite a recent reversal in 2021.

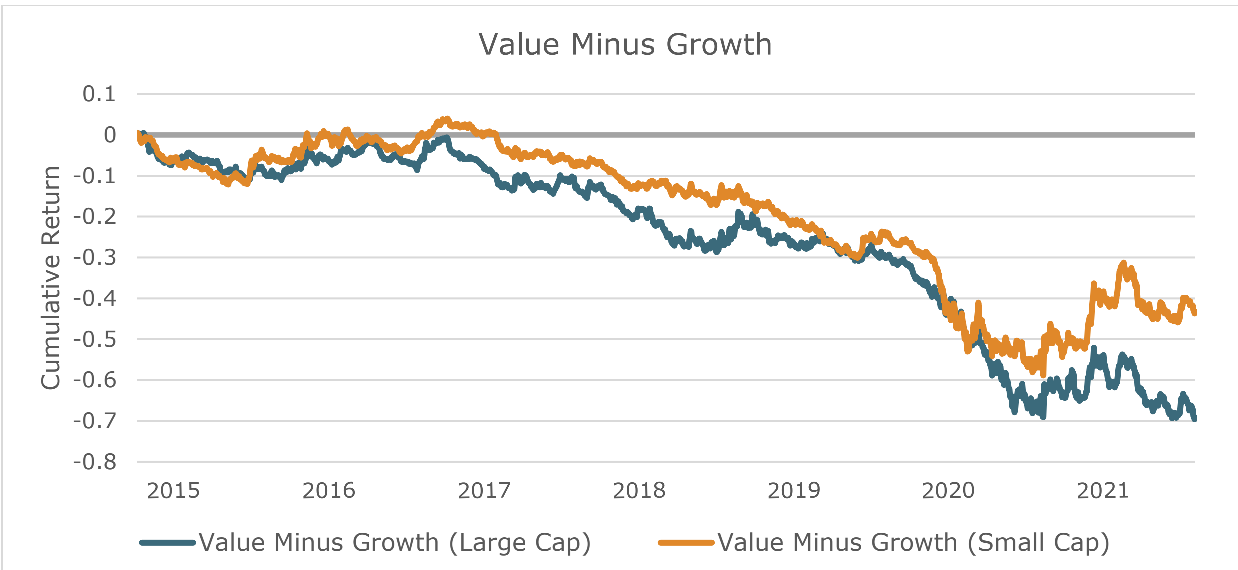


Figure 4: Value minus growth cumulative returns from 2015 to October 2021. The difference between value and growth is defined by the difference between the Dow Jones US Value and Growth Total Stock Market indices for both large cap and small cap stocks. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

From a trend-following perspective, when fixed-income signals have been short or increasingly short, this is considered a signal that rates are expected to rise. If rates do indeed rise, growth equities (or those with larger and often farther away cash flows) can face a clear hit against value equities (companies with more stable and often sooner cash flows), creating a powerful growth to value rotation. Although these moves are more intra-asset class, we have seen trend following pick up on subtle tilts in this direction. To demonstrate this relationship's growing strength in recent markets, Figure 5 plots the correlation between value minus growth and the change in the slope of the yield curve. From this graph, we can see that changes in the yield curve have had a correlation as high as 40% with the difference between value and growth. This is a rather powerful cross-asset relationship.

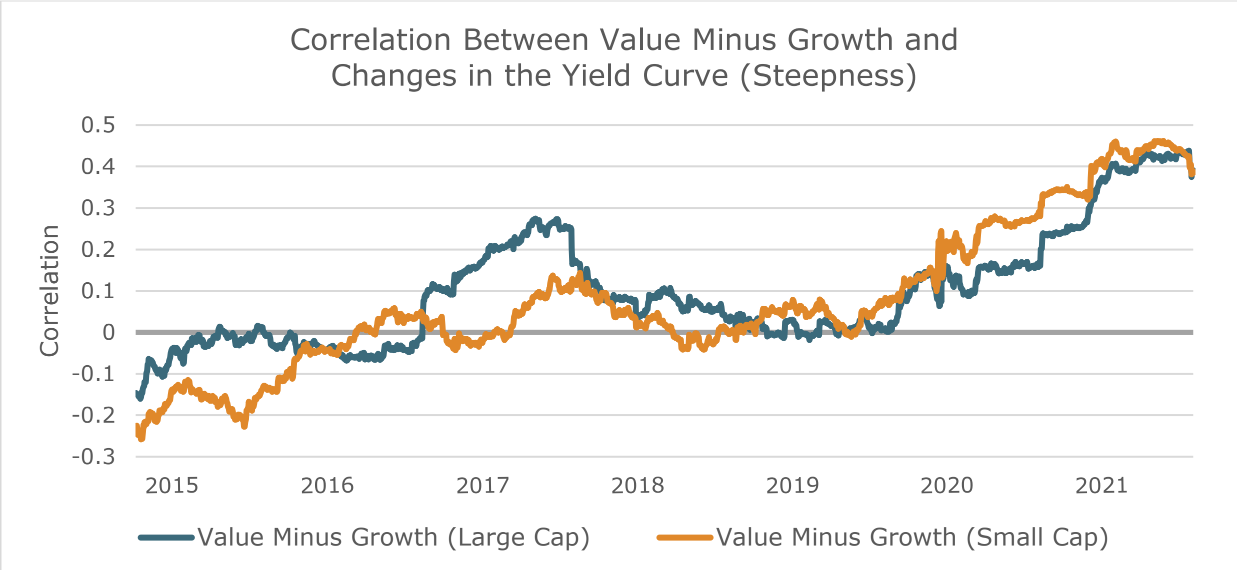
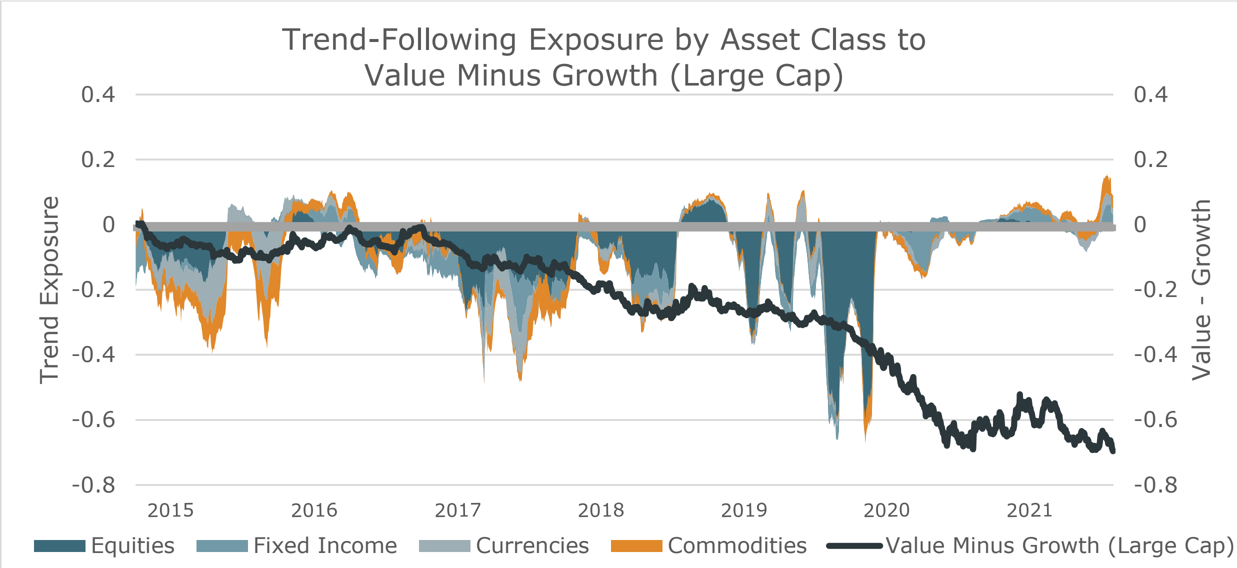


Figure 5: Realized 250-day correlation between value minus growth and changes in the slope of the yield curve. Value minus growth is defined as the difference between the returns for the Dow Jones Value and Growth indices from 2015 to October 2021. The slope of the yield curve is proxied by the difference between the 10-Year and 2-Year U.S. Treasury Note yields. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Finally, does this stock-specific intra-sector theme impact a cross-asset strategy like trend following? Yes, of course: it changes the way trends occur. To examine this, Figure 6 plots the estimated beta of trend following to value minus growth since 2015, decomposed by asset class contribution. From this graph, we can see that trend-following strategies have followed the downturn in value versus growth as a general theme and been much more positive to value minus growth in recent periods. The trend is still somewhat noisy in 2021 but there seems to be some indication that the long value versus growth theme may be on pause or in flux.



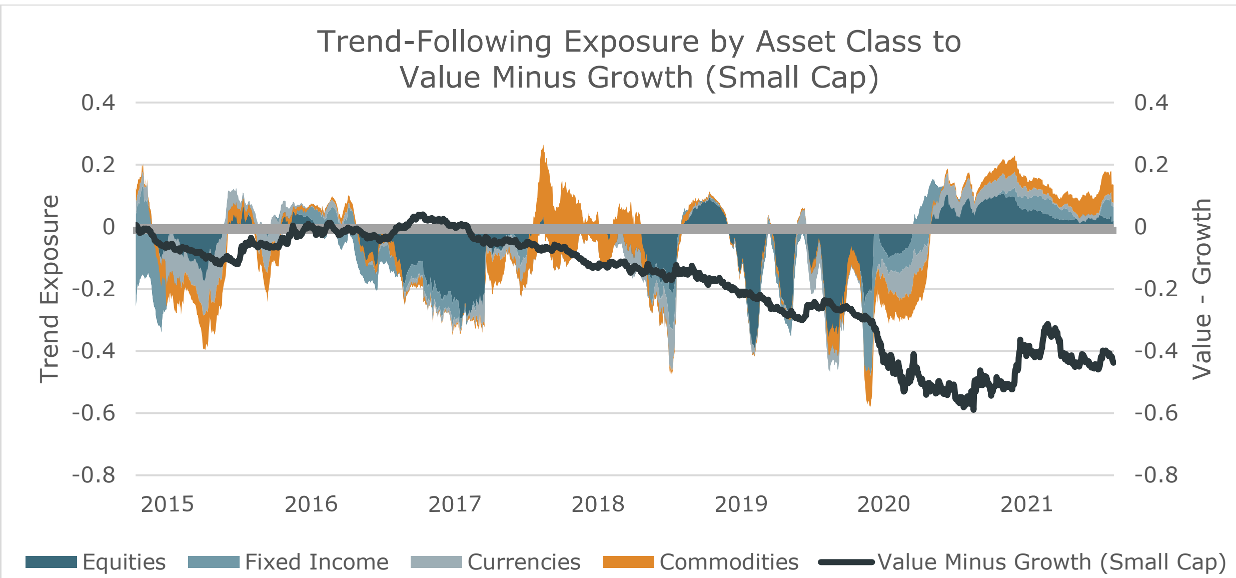


Figure 6: Estimated trend-following beta (trend exposure) to value minus growth decomposed by asset class contribution using a 250-day window. For each day, the trend exposure is estimated as a position weighted average beta of each market to value minus growth (RHS) and the corresponding beta is plotted in the graph (LHS). Cumulative returns for value minus growth for large or small cap companies is plotted on the same graphs for comparison. Data from January 1, 2015 to October 31, 2021. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

Summary

2021 has been a year of transition, a year of changing correlations, and a year for big moves in commodity markets. From a trend-following perspective, we focus on three key themes: inflation, rising rates, and secular rotations in equity markets. These themes present a potential change from the trends of recent history. For strategies that like change, these moves can lead to interesting trends in global markets as we move into a potentially new and higher inflationary regime.

References

- Greyserman, Alex, and Kathryn M. Kaminski. 2014. *Trend Following with Managed Futures: The Search for Crisis Alpha*. New York: Wiley Trading.

About the Authors

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