



ALPHASIMPLEX

Three Themes of 2021

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

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

November 2021

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.

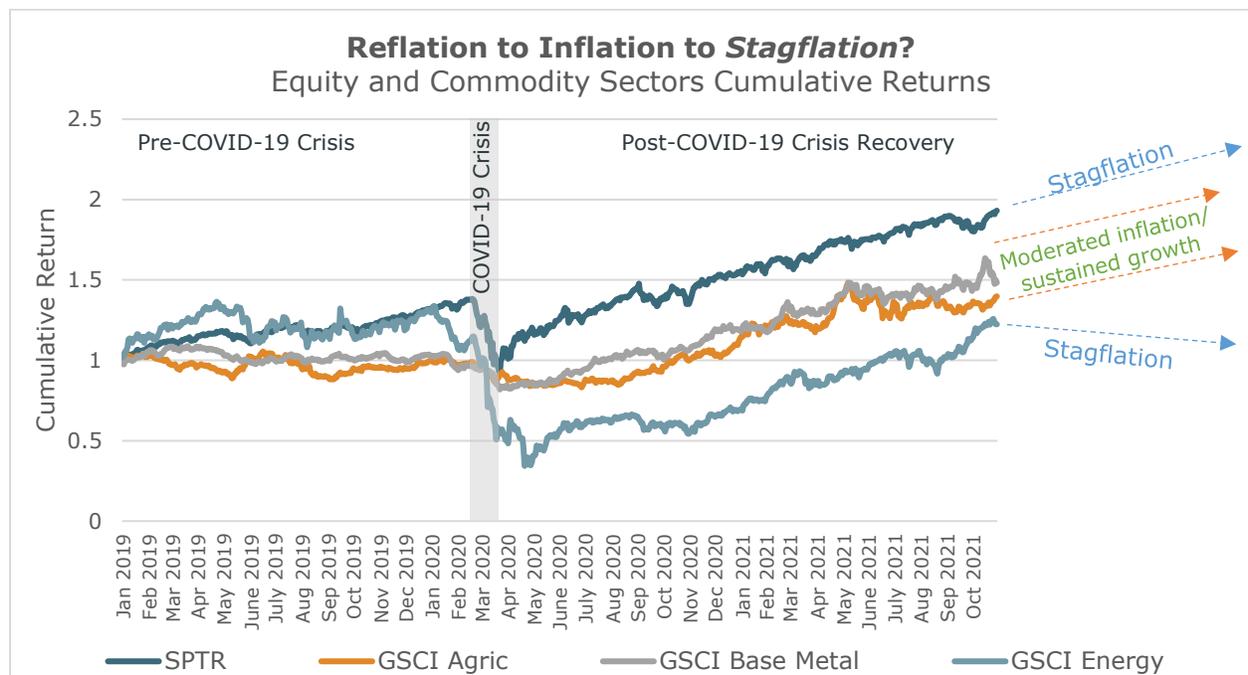


Figure 1: Cumulative returns for equity markets (S&P 500 using SPY returns) and commodity markets (an equal basket of commodities across energies, base metals, and agricultural commodities) from 2019 to October 2021. Arrows indicate potential future states if the current trends continue. Past performance 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.

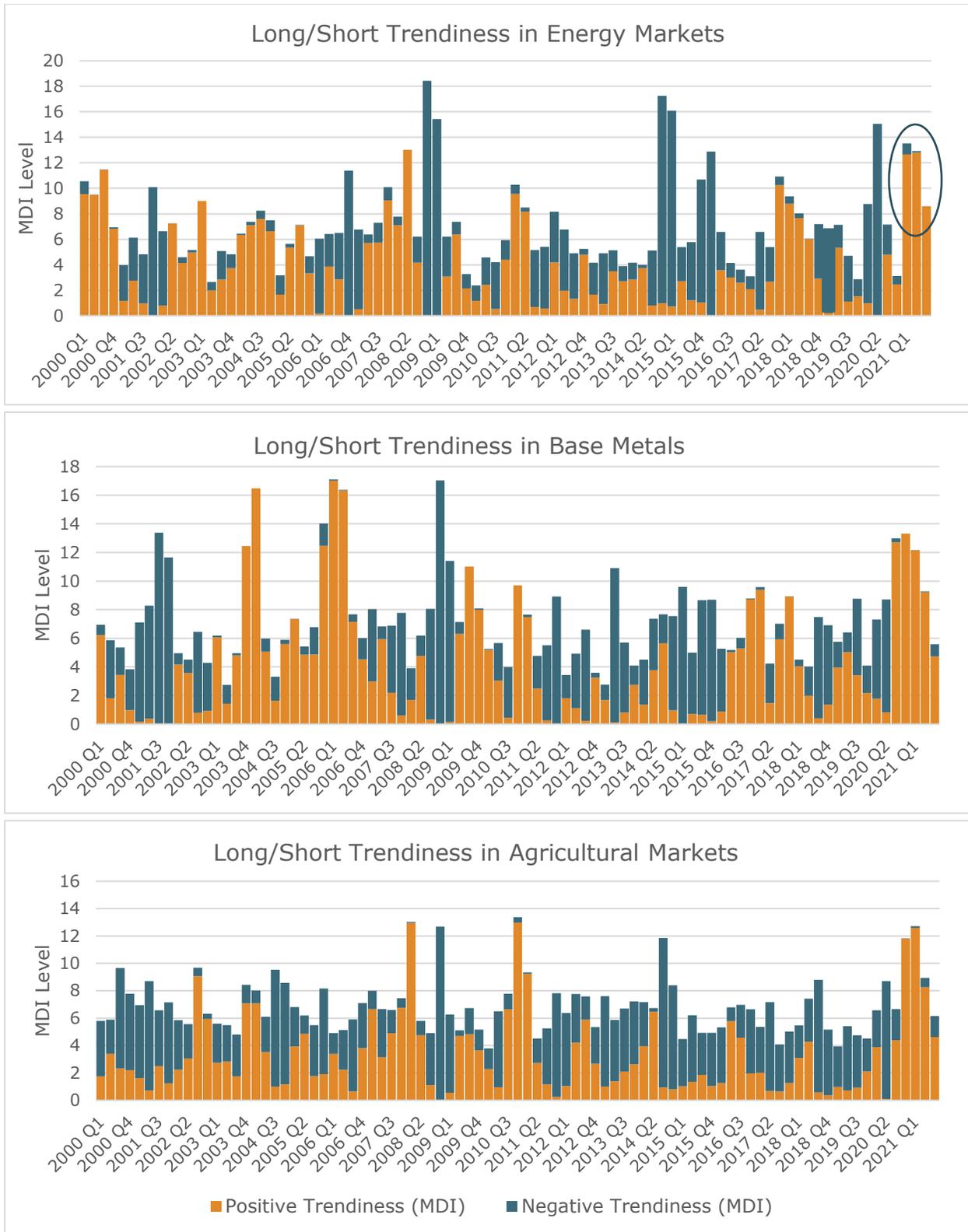


Figure 2: Trendiness in markets decomposed into long and short direction averaged quarterly from Q1 2000 to Q3 2021. In this case, the Market Divergence Index (MDI) is used to measure trends over a 100-day window. See also Greyserman and Kaminski (2014) for calculation details. Past performance is not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

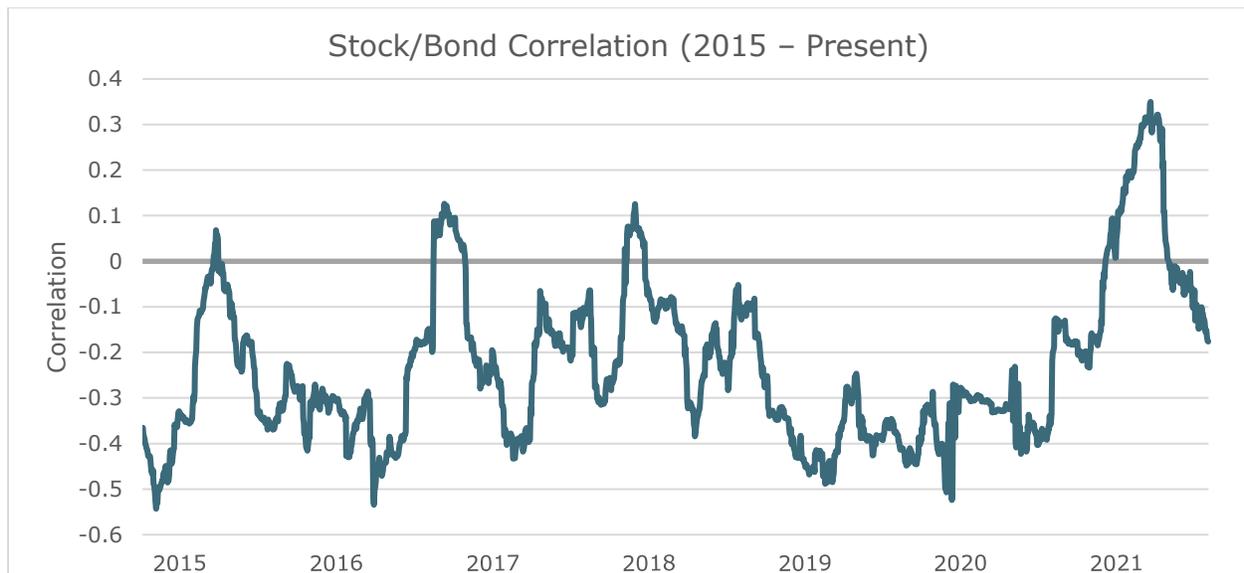


Figure 3: 100-day rolling correlation between stocks and bonds from January 1, 2015 to October 31, 2021. The S&P 500 and the JP Morgan Bond Index are used as a proxy for stock and bond returns. Past performance is not necessarily indicative of future results. Source: Bloomberg, AlphaSimplex.

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.

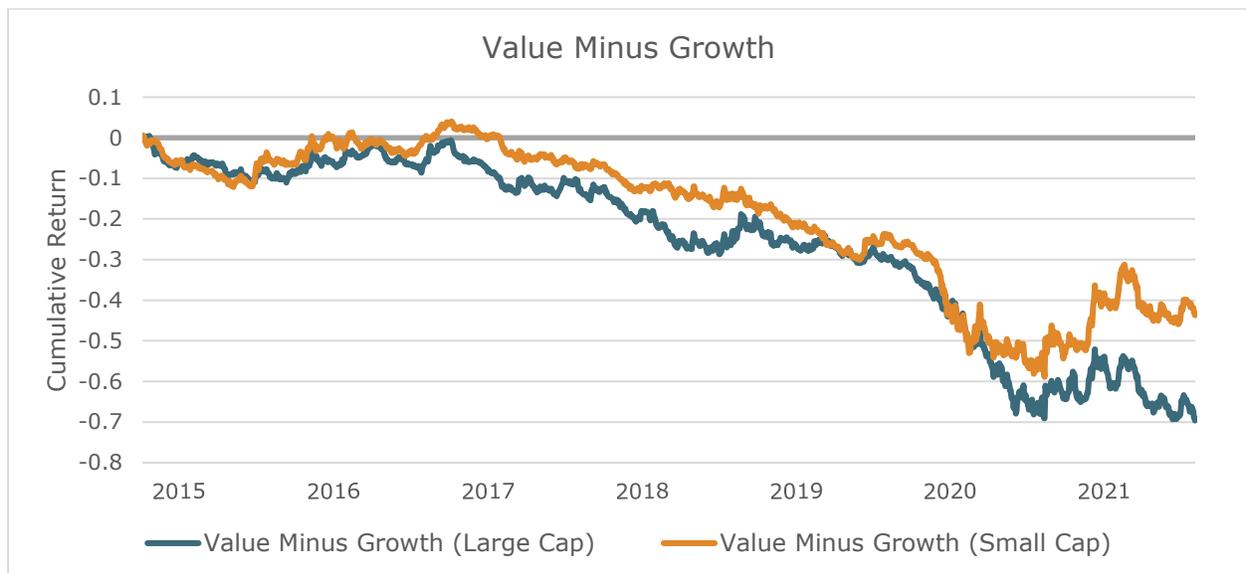


Figure 4: Value minus growth cumulative returns from 2015 to October 2021. The difference between value and growth is defined by the difference between the Dow Jones US Value and Growth Total Stock Market indices for both large cap and small cap stocks. Past performance is not necessarily indicative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

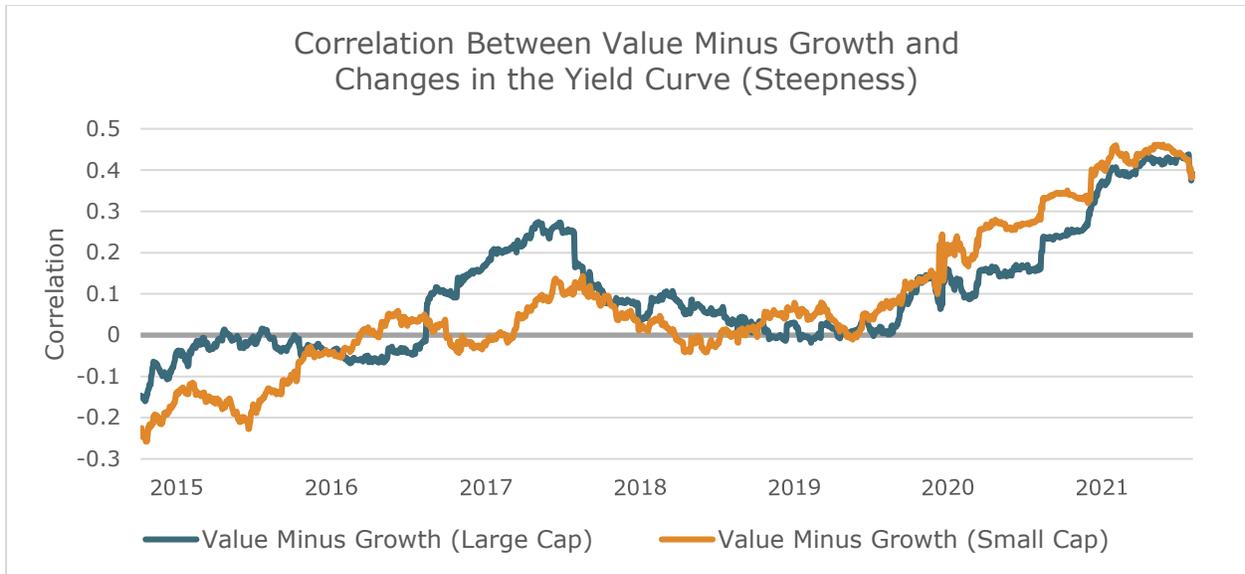


Figure 5: Realized 250-day correlation between value minus growth and changes in the slope of the yield curve. Value minus growth is defined as the difference between the returns for the Dow Jones Value and Growth indices from 2015 to October 2021. The slope of the yield curve is proxied by the difference 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.

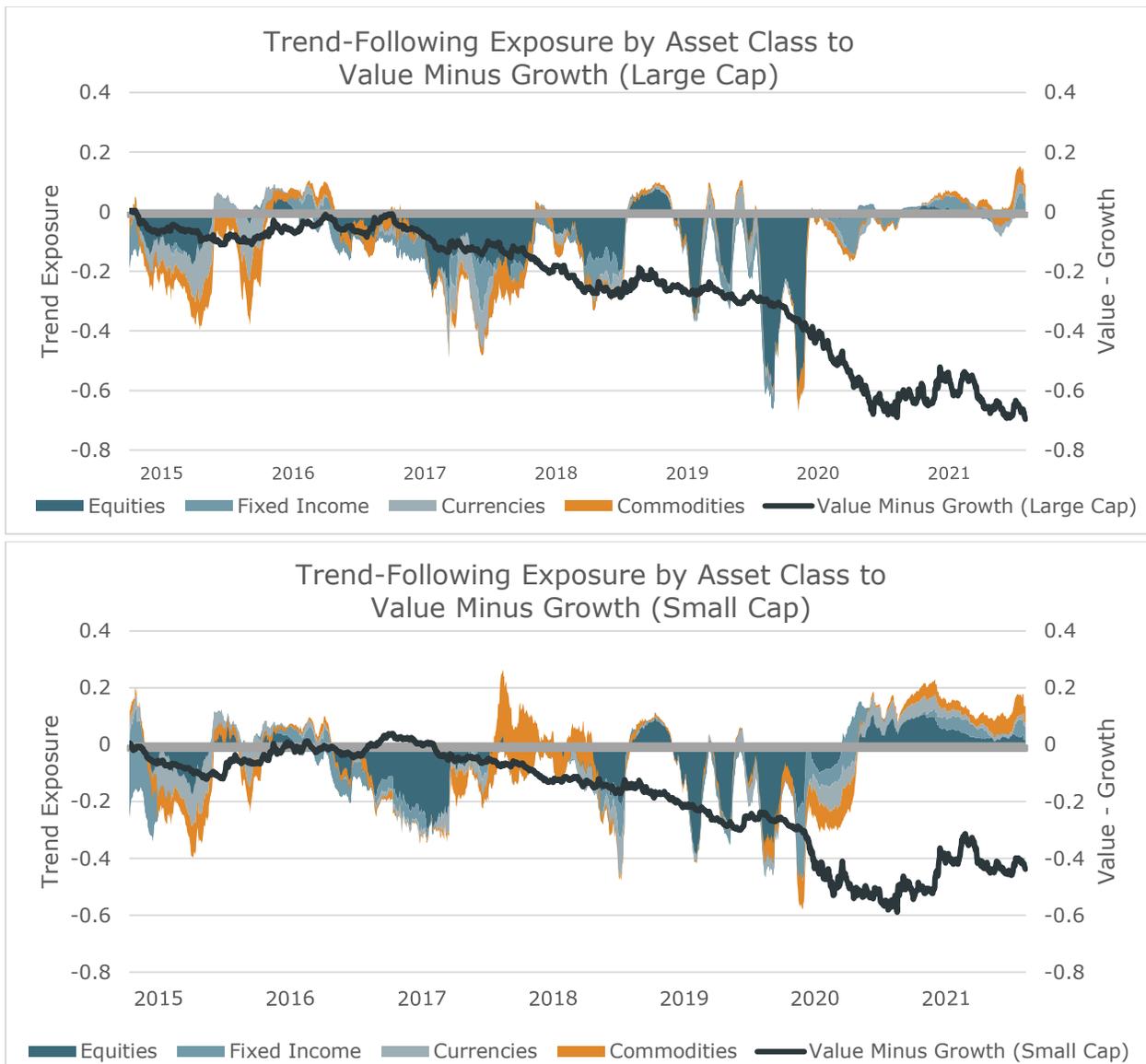


Figure 6: Estimated trend-following beta (trend exposure) to value minus growth decomposed by asset class contribution using a 250-day window. For each day, the trend exposure is estimated as a position weighted average beta of each market to value minus growth (RHS) and the corresponding beta is plotted 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

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 data and 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 10/31/2021 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: November 2021. Copyright © 2021 by AlphaSimplex Group, LLC. All Rights Reserved.

Additional Notes

This material has been provided for information purposes only to investment service providers or other Professional Clients, Qualified or Institutional Investors and, when required by local regulation, only at their written request. This material must not be used with Retail Investors.

In the E.U. (outside of the UK and France): Provided by Natixis Investment Managers S.A. or one of its branch offices listed below. Natixis Investment Managers S.A. is a Luxembourg management company that is authorized by the Commission de Surveillance du Secteur Financier and is incorporated under Luxembourg laws and registered under n. B 115843. Registered office of Natixis Investment Managers S.A.: 2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg. **Italy:** Natixis Investment Managers S.A., Succursale Italiana (Bank of Italy Register of Italian Asset Management Companies no 23458.3). Registered office: Via San Clemente 1, 20122 Milan, Italy. **Germany:** Natixis Investment Managers S.A., Zweigniederlassung Deutschland (Registration number: HRB 88541). Registered office: Senckenberganlage 21, 60325 Frankfurt am Main. **Netherlands:** Natixis Investment Managers, Nederlands (Registration number 50774670). Registered office: Stadsplateau 7, 3521AZ Utrecht, the Netherlands. **Sweden:** Natixis Investment Managers, Nordics Filial (Registration number 516405-9601 - Swedish Companies Registration Office). Registered office: Kungsgatan 48 5tr, Stockholm 111 35, Sweden. **Spain:** Natixis Investment Managers, Succursal en España. Serrano nº90, 6th Floor, 28006, Madrid, Spain. **Belgium:** Natixis Investment Managers S.A., Belgian Branch, Gare Maritime, Rue Picard 7, Bte 100, 1000 Bruxelles, Belgium.

In France: Provided by Natixis Investment Managers International – a portfolio management company authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009, and a public limited company (société anonyme) registered in the Paris Trade and Companies Register under no. 329 450 738. Registered office: 43 avenue Pierre Mendès France, 75013 Paris.

In Switzerland: Provided for information purposes only by Natixis Investment Managers, Switzerland Sàrl, Rue du Vieux Collège 10, 1204 Geneva, Switzerland or its representative office in Zurich, Schweizergasse 6, 8001 Zürich.

In the British Isles: Provided by Natixis Investment Managers UK Limited which is authorised and regulated by the UK Financial Conduct Authority (register no. 190258) - registered office: Natixis Investment Managers UK Limited, One Carter Lane, London, EC4V 5ER. When permitted, the distribution of this material is intended to be made to persons as described as follows: **in the United Kingdom:** this material is intended to be communicated to and/or directed at investment professionals and professional investors only; **in Ireland:** this material is intended to be communicated to and/or directed at professional investors only; **in Guernsey:** this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Guernsey Financial Services Commission; **in Jersey:** this material is intended to be communicated to and/or directed at professional investors only; **in the Isle of Man:** this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Isle of Man Financial Services Authority or insurers authorised under section 8 of the Insurance Act 2008.

In the DIFC: Provided in and from the DIFC financial district by Natixis Investment Managers Middle East (DIFC Branch) which is regulated by the DFSA. Related financial products or services are only available to persons who have sufficient financial experience and understanding to participate in financial markets within the DIFC, and qualify as Professional Clients or Market Counterparties as defined by the DFSA. No other Person should act upon this material. Registered office: Unit L10-02, Level 10 ,ICD Brookfield Place, DIFC, PO Box 506752, Dubai, United Arab Emirates

In Japan: Provided by Natixis Investment Managers Japan Co., Ltd. Registration No.: Director-General of the Kanto Local Financial Bureau (kinsho) No.425. Content of Business: The Company conducts investment management business, investment advisory and agency business and Type II Financial Instruments Business as a Financial Instruments Business Operator.

In Taiwan: Provided by Natixis Investment Managers Securities Investment Consulting (Taipei) Co., Ltd., a Securities Investment Consulting Enterprise regulated by the Financial Supervisory Commission of the R.O.C. Registered address: 34F., No. 68, Sec. 5, Zhongxiao East Road, Xinyi Dist., Taipei City 11065, Taiwan (R.O.C.), license number 2020 FSC SICE No. 025. Tel. +886 2 8789 2788.

In Singapore: Provided by Natixis Investment Managers Singapore Limited (company registration no. 199801044D) to distributors and qualified investors for information purpose only.

In Hong Kong: Provided by Natixis Investment Managers Hong Kong Limited to professional investors for information purpose only.

In Australia: Provided by Natixis Investment Managers Australia Pty Limited (ABN 60 088 786 289) (AFSL No. 246830) and is intended for the general information of financial advisers and wholesale clients only.

In New Zealand: This document is intended for the general information of New Zealand wholesale investors only and does not constitute financial advice. This is not a regulated offer for the purposes of the Financial Markets Conduct Act 2013 (FMCA) and is only available to New Zealand investors who have certified that they meet the requirements in the FMCA for wholesale investors. Natixis Investment Managers Australia Pty Limited is not a registered financial service provider in New Zealand.

In Latin America: Provided by Natixis Investment Managers S.A.

In Uruguay: Provided by Natixis Investment Managers Uruguay S.A., a duly registered investment advisor, authorised and supervised by the Central Bank of Uruguay. Office: San Lucar 1491, Montevideo, Uruguay, CP 11500. The sale or offer of any units of a fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627.

In Colombia: Provided by Natixis Investment Managers S.A. Oficina de Representación (Colombia) to professional clients for informational purposes only as permitted under Decree 2555 of 2010. Any products, services or investments referred to herein are rendered exclusively outside of Colombia. This material does not constitute a public offering in Colombia and is addressed to less than 100 specifically identified investors.

In Mexico: Provided by Natixis IM Mexico, S. de R.L. de C.V., which is not a regulated financial entity, securities intermediary, or an investment manager in terms of the Mexican Securities Market Law (Ley del Mercado de Valores) and is not registered with the Comisión Nacional Bancaria y de Valores (CNBV) or any other Mexican authority. Any products, services or investments referred to herein that require authorization or license are rendered exclusively outside of Mexico. While shares of certain ETFs may be listed in the Sistema Internacional de Cotizaciones (SIC), such listing does not represent a public offering of securities in Mexico, and therefore the accuracy of this information has not been confirmed by the CNBV. Natixis Investment Managers is an entity organized under the laws of France and is not authorized by or registered with the CNBV or any other Mexican authority. Any reference contained herein to "Investment Managers" is made to Natixis Investment Managers and/or any of its investment management subsidiaries, which are also not authorized by or registered with the CNBV or any other Mexican authority.

In Brazil: Provided to a specific identified investment professional for information purposes only by Natixis Investment Managers S.A. This communication cannot be distributed other than to the identified addressee. Further, this communication should not be construed as a public offer of any securities or any related financial instruments. Natixis Investment Managers S.A. is a Luxembourg management company that is authorized by the Commission de Surveillance du Secteur Financier and is incorporated under Luxembourg laws and registered under n. B115843. Registered office of Natixis Investment Managers S.A. :2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg.

The above referenced entities are business development units of Natixis Investment Managers, the holding company of a diverse line-up of specialised investment management and distribution entities worldwide. The investment management subsidiaries of Natixis Investment Managers conduct any regulated activities only in and from the jurisdictions in which they are licensed or authorized. Their services and the products they manage are not available to all investors in all jurisdictions. It is the responsibility of each investment service provider to ensure that the offering or sale of fund shares or third party investment services to its clients complies with the relevant national law.

The provision of this material and/or reference to specific securities, sectors, or markets within this material does not constitute investment advice, or a recommendation or an offer to buy or to sell any security, or an offer of any regulated financial activity. Investors should consider the investment objectives, risks and expenses of any investment carefully before investing. The analyses, opinions, and certain of the investment themes and processes referenced herein represent the views of the portfolio manager(s) as of the date indicated. These, as well as the portfolio holdings and characteristics shown, are subject to change. There can be no assurance that developments will transpire as may be forecasted in this material. The analyses and opinions expressed by external third parties are independent and does not necessarily reflect those of Natixis Investment