With value now in its twelfth year of underperformance, value investors could be forgiven for singing the blues. Value has been down for so long, and growth has outperformed by so much, it looks like investing has always worked this way: buy companies that grow faster, even if they are more expensive, and outperform. Almost every day, newspapers publish reports of value managers either giving up by changing their stripes and buying supposedly cheap growth companies, or being given up on by their clients.

Is value dead? We think not. The empirical evidence for the past 120 years shows that value tends to outperform over the very long term and that, in the nearer term, regimes in which value and growth alternate dominance tend to last 7 to 15 years. Despite the current growth regime being 12 years old, we believe the resumption of value outperformance over growth is not imminent. This month’s letter presents the signals we are watching to help identify the eventual turning point.

Value has underperformed growth by 38% in the U.S. since late 2006, using the Russell 1000 Value and Growth indices (Display 1). Our work shows that this is the result of two forces: 1) sector composition, or the tendency of disruptive sectors (e.g. tech) to be over-represented in growth indices, and of traditional sectors (e.g. energy,

*Note: The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. Past performance is no guarantee of future results. See Disclosure section for index definitions.*
financials) to be over-represented in value indices, and 2) the underperformance of the “pure” value style within sectors.\(^1\)

Sector composition has played a large role in value’s underperformance. Russell’s index methodology forces most stocks in either a value or growth “bucket,” though some are neither. The result is that the Russell 1000 Value Index has 32% larger exposures than the Growth Index to the two worst performing sectors of the last 12 years, Financials and Energy, and 36% smaller exposures to the two best performing sectors, Tech and Consumer Discretionary! (Display 2)

Historically, over very long periods of time (50 to 100 years), value outperforms growth modestly (0.5% annualized, using standard value and growth indices such as Russell 1000),\(^2\) in large part because of the higher dividends paid by value stocks. But over shorter periods of time, regimes in which value or growth have dominated have tended to last 7 to 15 years.\(^3\) The current growth regime has lasted nearly 12 years, and has been about as large in magnitude (+60%) as the Nifty Fifty boom in the early 1970s and the Tech-Media-Telecom (TMT) Bubble in the late 1990s, when growth outperformed value by +45% and +66%, respectively.\(^4\) Could we be close to an inflection point? Based on our analysis, presented below, we are probably three-quarters of the way there but have more to go before a value regime regains dominance.

### Display 2: Growth Index Most Exposed to Best Performing Sectors; Value to Worst

<table>
<thead>
<tr>
<th>Sector</th>
<th>Performance Since 2006 (Annualized, %)(^{\dagger})</th>
<th>Weight in Growth Index (%)</th>
<th>Weight in Value Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>14</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>12</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Energy</td>
<td>4</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Financial Services</td>
<td>3</td>
<td>11</td>
<td>31</td>
</tr>
</tbody>
</table>

\(^{\dagger}\) Performance from August 8, 2006 (value vs. growth cycle high) to May 31, 2018.

Source: MSIM Global Multi-Asset Team Analysis; Bloomberg.

The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. Past performance is no guarantee of future results. See Disclosure section for index definitions.

Historically, an inflection point and shift back into a value-dominant regime has been characterized by extreme valuations, investor euphoria, over-investment on the part of growth companies, and a bottoming of the economic cycle, none of which are flashing red today (though some do flash orange):

1) **Extreme valuations:** At historical inflection points, value stocks became so cheap and growth so expensive that it has paid to bet that value companies would eventually heal (as they restructured, or committed to self-help, etc.) and growth companies would eventually disappoint (with high returns ultimately competed away).

**Are we there yet?** Almost, but valuations not yet extreme. Value stocks do trade more cheaply than growth stocks at 14.1x forward earnings versus 19.9x for growth, a 29% discount (or 4.9% versus 3.8% free cash flow yield for value versus growth, respectively). However, this does not look extreme in a historical context, as value stocks have on average traded at a 22% discount to growth stocks. In 2000, value stocks got to an extreme 60% discount!\(^5\) (Display 3)

---

\(^1\) Interestingly, sector/industry composition seems to have been a more powerful driver of value’s underperformance than a “pure” value / growth style. Since 2006, on an equal weight and sector neutral basis, the “pure” value style has actually outperformed growth by 5% (compared to Russell 1000 Value underperforming by 38% since 2006), though volatility-adjusted “pure” value has underperformed growth by 13% since year-end 2016, more in-line with Russell 1000 Value’s recent 20% underperformance.

The Global Multi-Asset Team (GMA)-constructed “pure” value and growth style baskets, which include the top half of value (or growth) stocks in the S&P 500 Index (i.e. 50% cheapest stocks for value and 50% “growth-iest” stocks for growth). We define value and growth similarly to Russell (which uses P/B, historical sales growth, and EPS estimates), though we use more factors. We also equal weight stocks rather than use capitalization weights, and the value and growth baskets have an equal number of stocks from each sector to neutralize sector effects.

Source: MSIM Global Multi-Asset Team Analysis; Russell; Standard & Poor’s.

\(^2\) Some studies such as Fama-French and Dimson-Marsh show value outperforming growth by 2.5% since 1926 but that is partly definitional: value is defined as the cheapest 30% of stocks while growth is defined as stocks with sales and earnings growth.

\(^3\) Within 7 to 15 year regimes of growth or value dominance, there are shorter 1 to 5 year mini cycles driven by the economic cycle and interest rates.

\(^4\) MSIM Global Multi-Asset Team Analysis; Russell 1000 Growth Index vs. Russell 1000 Value index, relative return for TMT Bubble; Bernstein Research Growth vs. Non-Growth Universe for Nifty Fifty.

\(^5\) MSIM Global Multi-Asset Team Analysis; Russell; Bernstein Research; Bloomberg Finance LP. Bernstein Research Growth vs. Non-Growth Universe prior to 1995; Russell 1000 for 1995 and thereafter.
Part of the reason that relative valuations do not look extreme for growth stocks is that their profitability has been far superior in this cycle compared to prior cycles. Simultaneously, the profitability of some value companies appears to be structurally impaired. This is in part because so many growth companies in the technology and e-commerce space have disrupted the business models of value companies. In the most obvious examples, online retailers like Amazon have challenged the strategies of traditional retailers like Walmart; similarly in online media, Facebook and Google has challenged the strategies of traditional media. Growth company earnings are actually growing at the expense of the value companies’ earnings. To be fair, it is likely that incumbents and traditional players in many industries will attempt to fight back for market share and that new competitors (or politicians and regulators) will be attracted by the returns on capital achieved by the disruptors and will eventually cause the supranormal returns on capital achieved by the growth companies to come back down to earth.

2) Economic cycle bottoms: In many cases historically, the inflection point in relative value versus growth performance has occurred about half way through a recession, when earnings for almost all companies are very depressed, such that any improvement in economic activity leads to an improvement in earnings for almost all companies. In such a scenario, when earnings growth is plentiful, why pay a premium for it? It is much more sensible to buy earnings growth cheaply by buying value stocks. On the other hand, when earnings growth is scarce—as is typical late in the cycle when most companies’ earnings have already recovered from recession lows—it is reasonable to pay a premium for earnings growth, particularly if such growth appears unrelated to the economic cycle (i.e. represents a structural trend).

We note that 2000 was an exception to this historical pattern. Growth stocks underperformed going into the 2001 recession (i.e. earlier than “normal”) for two reasons: first because of excessive overvaluation, and second because tech and internet earnings growth turned out to have been more cyclical / less structural than was perceived by the market. Beginning in mid-2000, slowing economic activity caused growth company earnings to disappoint and exposed the excesses of overinvestment (discussed below). Meanwhile, value companies, though more traditionally cyclical, already had severely depressed earnings expectations, after being beaten down in the prior 2-3 years.

Are we there yet? No, still late cycle. We are still in the late stage of the economic cycle, when growth tends to outperform. Though earnings are growing at a high pace at present (+26.5% S&P 500 first quarter y/y 2018 earnings per share growth), much of this can be attributed to a big rebound from the 2015-16 China- and commodity-led global growth slowdown, the nearly 15% dollar depreciation over the prior year, and the U.S. corporate tax cut. Underlying earnings growth, as proxied by 2019 expectations, is probably closer to 6-7% (consensus is at +9%). So earnings growth is no longer as plentiful as it was early in the cycle (e.g. 2010 +49%). It is becoming more scarce, investors are happy to pay a premium for it, and the broad decline in market earnings which has historically preceded value’s resumption of leadership is probably another 18 to 24 months away.

3) Excessive investment: Another signal of an inflection point is self-undermining behavior by growth companies, such as overinvestment, which damages free cash flow and returns on capital. For example, in 1999-2001, operating cash flow for companies in the tech hardware and equipment sector barely grew from $38 billion to $45 billion, but capital spending nearly doubled from $22 billion to $36 billion. The result was a 60% collapse in free cash flow.

Are we there yet? No, investment is increasing but is not yet excessive. There is some evidence that growth companies in the tech and e-commerce space are beginning to ramp up capital spending, but it has not yet reached excessive levels. Historically, overinvestment has been associated with capital spending growth in excess of 40% over a full year and so far, according to Michael Goldstein of Empirical Research, despite the one-quarter pick up in year-over-year capex growth in the first quarter of 2018 of +50%, capex for tech and e-commerce stocks grew at +30% in the past full year (note semiconductor companies are actually showing excessive capex with close to +60% growth over the past year). As the cycle extends, it is likely
that managements will lose their self-discipline, as usually occurs, but this could be yet another one or two years away.

4) **Investor euphoria** is usually accompanied by massive inflows into growth funds (and massive outflows from value funds) and huge capital raises by entrepreneurs and growth companies (initial public offerings, or IPOs).

**Are we there yet? Still waiting for capitulation.** Short-term signals show some indication of investor optimism around growth and revulsion around value, but we are not near prior growth cycle extremes. Over the past 18 months, value funds have seen $50 billion of outflows while growth and tech funds have received $21 billion of inflows. On a relative basis, and adjusted for AUM, that marks the worst set of outflows from value and best inflows into growth/tech since late 2008. But as a comparison, in the last months of the 2000 tech bubble, growth funds were receiving $20bn per month! Regarding capital raises, most early-stage companies are remaining private longer than in previous cycles because of a radical shift in how start-ups are raising money (and in how investors are allocating capital). As a result, there were only 108 U.S. IPOs in 2017, which is small in comparison with peaks during prior growth cycles: we saw 677 in 1996, 393 in 1986, and 173 in 2004. However Q1 2018 data clearly points to a significant uptick in activity with the most active first quarter for global IPOs since 2007 with 287 IPOs amounting to $43 billion. In private markets, over 200 growth companies have each raised capital at valuations north of $1bn since 2009 (earning themselves the moniker of Unicorns) for a total market cap of over $800bn. Paying for eyeballs is back in full force in Silicon Valley, but this time, it is through private fundraising rather than through IPOs in public markets.

Is it possible, as some have speculated that value no longer works as an investment strategy? We consider two arguments:

First, some have argued that the internet represents such significant innovation (similar to the printing press during the Age of Enlightenment, and steam during the Industrial Revolution), that technology will continue to disrupt existing business models for decades to come, and that, as a result, growth stocks will continue to persistently outperform value stocks.

This is a difficult argument to refute, so we limit ourselves to four points: 1) the statement sounds surprisingly like the most dangerous statement in investing, “it’s different this time,” in that historically even when an innovation or a wave of innovations occur and radically impact industries and the whole economy, the stock market outperformance of these

---

9 MSIM Global Multi-Asset Team Analysis; CB Insights, unicorns defined as private companies valued at $1+ billion. Data retrieved June 22, 2018.

DISCLOSURES

There is no assurance that a portfolio will achieve its investment objective. Portfolios are subject to market risk, which is the possibility that the market values of securities owned by the portfolio will decline and that the value of portfolio shares may therefore be less than what you paid for them. Accordingly, you can lose money investing in this portfolio. Please be aware that this portfolio may be subject to certain additional risks. In general, equity securities’ values fluctuate in response to activities specific to a company. Investments in foreign markets entail special risks such as currency, political, economic, and market risks. The risks of investing in emerging market countries are greater than risks associated with investments in foreign developed countries. Fixed-income securities are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest-rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In the current rising interest-rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. Longer-term securities may be more sensitive to interest rate changes. In a declining interest-rate environment, the portfolio may generate less income. Mortgage- and asset-backed securities (MBS and ABS) are sensitive to early prepayment risk and a higher risk of default and may be hard to value and difficult to sell (liquidity risk). They are also subject to credit, market and interest rate risks. Certain U.S. government securities purchased by the Portfolio, such as those issued by Fannie Mae and Freddie Mac, are not backed by the full faith and credit of the United States. It is possible that these issuers will not have the funds to meet their payment obligations in the future. The issuer or governmental authority that controls the repayment of sovereign debt may not be willing or able to repay the principal and/or pay interest when due in accordance with the terms of such obligations. Investments in foreign markets entail special risks such as currency, political, economic, and market risks. The risks of investing in emerging market countries are greater than risks associated with investments in foreign developed countries. Real estate investment trusts are subject to risks similar to those associated with the direct ownership of real estate and they are sensitive to such factors as management skills and changes in tax laws. Restricted and illiquid securities may be more difficult to sell and value than publicly traded securities (liquidity risk). Derivative instruments can be illiquid, may disproportionately increase losses and may have a potentially large negative impact on the Portfolio’s performance. Trading in, and investment exposure to, the commodities markets may involve substantial risks and subject the Portfolio to greater volatility. Nondiversified portfolios often invest in a more limited number of issuers. As such, changes in the financial condition or market value of a single issuer may cause greater volatility. By investing in investment company securities, the portfolio is subject to the underlying risks of that investment company’s portfolio securities. In addition to the Portfolio’s fees and expenses, the Portfolio generally would bear its share of the investment company’s fees and expenses. Subsidiary and Tax Risk The Portfolio may seek to gain exposure to the commodity markets through investments in the Subsidiary or commodity index-linked structured notes. The Subsidiary is not registered under the 1940 Act and is not subject to all the investor protections of the 1940 Act. Historically, the Internal Revenue Service (“IRS”) has issued private letter rulings in which the IRS specifically concluded that income and gains from investments in commodity index-linked structured notes or a wholly-owned foreign subsidiary that invests in commodity-linked instruments are “qualifying income” for purposes of compliance with Subchapter M of the Internal Revenue Code of 1986, as amended (the “Code”). The Portfolio has not received such a private letter ruling, and is not able to rely on private letter rulings issued to other taxpayers. If the Portfolio failed to qualify as a regulated investment company, it would be subject to federal and state income tax on all of its taxable income at regular corporate tax rates with no deduction for any distributions paid to shareholders, which would significantly adversely affect the returns to, and could cause substantial losses for, Portfolio shareholders.
DEFINITIONS

The Russell 1000® Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values. The Russell 1000® Index is an index of approximately 1,000 of the largest U.S. companies based on a combination of market capitalization and current index membership.

The Russell 1000® Value Index is an index that measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The S&P 500 Total Return Index is an index that consists of 500 stocks chosen for market size, liquidity and industry group representation. The S&P Index is a market value weighted index with each stock’s weight proportionate to its market value. The S&P Index is one of the most widely used benchmarks of U.S. equity performance. The performance of the S&P Index does not account for any management fees, incentive compensation, commissions or other expenses that would be incurred pursuing such strategy. Total return provides investors with a price-plus-gross cash dividend return. Gross cash dividends are applied on the ex-date of the dividend.

IMPORTANT DISCLOSURES

The views and opinions are those of the author as of the date of publication and are subject to change at any time due to market or economic conditions and may not necessarily come to pass. Furthermore, the views will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date of publication. The views expressed do not reflect the opinions of all portfolio managers at Morgan Stanley Investment Management (MSIM) or the views of the firm as a whole, and may not be reflected in all the strategies and products that the Firm offers.

Forecasts and/or estimates provided herein are subject to change and may not actually come to pass. Information regarding expected market returns and market outlooks is based on the research, analysis and opinions of the authors. These conclusions are speculative in nature, may not come to pass and are not intended to predict the future performance of any specific Morgan Stanley Investment Management product.

Certain information herein is based on data obtained from third party sources believed to be reliable. However, we have not verified this information, and we make no representations whatsoever as to its accuracy or completeness. This material is a general communication, which is not impartial and all information provided has been prepared solely for information purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The information herein has not been based on a consideration of any individual investor circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

Charts and graphs provided herein are for illustrative purposes only. Past performance is no guarantee of future results.

This communication is not a product of Morgan Stanley’s Research Department and should not be regarded as a research recommendation. The information contained herein has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

The indexes are unmanaged and do not include any expenses, fees or sales charges. It is not possible to invest directly in an index. Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market. Prior to investing, investors should carefully review the strategy’s relevant offering document. There are important differences in how the strategy is carried out in each of the investment vehicles.

DISTRIBUTION

This communication is only intended for and will be only distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.


Hong Kong: This document has been issued by Morgan Stanley Asia Limited for use in Hong Kong and shall only be made available to “professional investors” as defined under the Securities and Futures Ordinance of Hong Kong (Cap 571). The content of this document has not been reviewed nor approved by any regulatory authority including the Securities and Futures Commission in Hong Kong. Accordingly, save where an exemption is available under the relevant law, this document shall not be issued, circulated, distributed, directed at, or made available to, the public in Hong Kong.

Singapore: This document should not be considered to be the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor under section 304 of the Securities and Futures Act, Chapter 289 of Singapore (“SFA”); (ii) to a “relevant person” (which includes an accredited investor) pursuant to section 305 of the SFA, and such distribution is in accordance with the conditions specified in section 305 of the SFA; or (ii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Australia: This publication is disseminated in Australia by Morgan Stanley Investment Management (Australia) Pty Limited ACN: 122040037, AFSL No. 314182, which accept responsibility for its contents. This publication, and any access to it, is intended only for “wholesale clients” within the meaning of the Australian Corporations Act.

U.S.: A separately managed account may not be suitable for all investors. Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing. A minimum asset level is required. For important information about the investment manager, please refer to Form ADV Part 2.
Please consider the investment objectives, risks, charges and expenses of the funds carefully before investing. The prospectuses contain this and other information about the funds. To obtain a prospectus please download one at morganstanley.com/im or call 1-800-548-7786. Please read the prospectus carefully before investing.

Morgan Stanley Distribution, Inc. serves as the distributor for Morgan Stanley funds.

NOT FDIC INSURED | OFFER NO BANK GUARANTEE | MAY LOSE VALUE | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY | NOT A DEPOSIT

IMPORTANT INFORMATION

EMEA: This communication has been issued by Morgan Stanley Investment Management Limited ("MSIM"). Authorised and regulated by the Financial Conduct Authority. Registered in England No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA.

The information contained in this communication is not a research recommendation or ‘investment research’ and is classified as a ‘Marketing Communication’ in accordance with the applicable European or Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

MSIM has not authorised financial intermediaries to use and to distribute this document, unless such use and distribution is made in accordance with applicable law and regulation. Additionally, financial intermediaries are required to satisfy themselves that the information in this document is suitable for any person to whom they provide this document in view of that person’s circumstances and purpose. MSIM shall not be liable for, and accepts no liability for, the use or misuse of this document by any such financial intermediary.

This document may be translated into other languages. Where such a translation is made this English version remains definitive. If there are any discrepancies between the English version and any version of this document in another language, the English version shall prevail.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without MSIM’s express written consent.