Searching for Alpha Consistency in Emerging Market Equities

Gaurav Mallik
Chief Portfolio Strategist

Adhi Mallik, CFA
Investment Product Manager

STATE STREET GLOBAL ADVISORS

In Brief

- Despite recent headwinds related to country-specific economies and trade wars, emerging markets continue to be a source of alpha for investors.
- The success of emerging markets in the past has been based on themes. The major theme for growth going forward is firmly based on the rise of the middle class and rising consumption in these markets.
- Index replication is challenging due to liquidity constraints and high trading costs, making skillful delivery of index exposure hard to find.
- Investors looking to capitalize on the active opportunities available in emerging markets should consider active managers with a proven track record of selecting stocks from a broad universe.
- Investors that are seeking a more representative exposure to China should consider allocating to managers with a more unified approach to the region.

Currency woes in Turkey. Political and economic stresses in South Africa. The potential for globally-disruptive trade wars. These and other recent developments have caused investor sentiment to sour on emerging markets. Many institutional investors understandably are considering their overall allocation to emerging markets with a heightened sense of urgency in light of these events. As investors consider their options, we are encouraging a measured response to recent volatility. Decreasing allocations to emerging markets — or choosing not to invest in the region at all — may not lead to favorable investment outcomes over the long-term. In fact, what may be productive is to review the overall emerging market equity allocation and determine what is driving the risk and return of the portfolio. As we will address in further detail, adopting a beta exposure is not a simple decision due to the associated trading costs and liquidity constraints, nor can all active managers be treated equally as the number of products beating the index continues to drop.

Abandoning emerging markets now would mean ignoring a strong track record of growth. In fact, since early 2005 emerging economies have been the sole driver of Gross Domestic Product (GDP) growth globally. In every quarter over the past twelve years, emerging markets have made a contribution to overall global growth in excess of 50%, averaging 63% in the seven years since the global financial crisis. And recent troubles in select countries — like domestically generated credit and housing bubbles, debt overhang, low level of foreign currency reserves, or reliance on hot money flows — should not color investor sentiment for emerging markets as a whole. It is important to look at a spectrum of metrics instead of relying on any one measure; strong economic fundamentals coupled with important demographic and consumption shifts are poised to continue propelling growth in emerging markets.

State Street's research indicates that emerging markets will provide higher risk-adjusted returns over the next ten years and beyond (See Figure 1).

Figure 1: Over the Next 10 Years, Emerging Markets are Likely to Provide Higher Risk-adjusted Returns Compared to Developed Markets

Expected return and volatility in equities over the next 10-plus years — emerging markets versus developed markets

	Emerging-market Equities	**Developed-market Equities**
Expected Return (%)	9.2	6.3
Expected Volatility (%)	21.2	14.4
Expected Return/Vol	0.42	0.39

Source: State Street Global Advisors as of June 30, 2018.

The growth of emerging markets over the past several decades can be traced to broad themes that have evolved substantially over time:

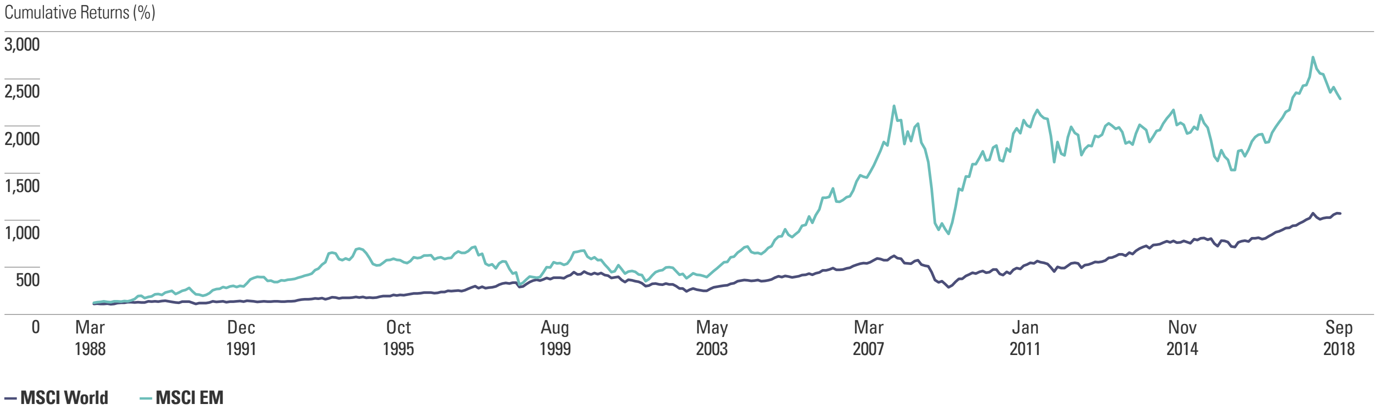
Emerging-markets Growth Theme	**Start date**	**End date**	**Annualized Return (%)**	**Cumulative Return (%)**
Developed-markets offshoring	January 29, 1988	July 31, 1997	21.65	554.15
Rebound after Russian default	August 31, 1998	March 31, 2000	57.79	113.86
Commodities	March 31, 2003	October 31, 2007	44.61	459.18
Debt	February 27, 2009	March 31, 2011	51.70	146.67
Earnings Growth (as measured by earnings per share)	February 29, 2016	December 29, 2017	29.71	64.64

Source: State Street Global Advisors.

Offshoring from developed markets spurred the initial wave growth in these markets in the late 1980s and early 1990s. Most recently earnings growth fueled by growing consumer consumption has been the most prominent theme in emerging markets. Although a few emerging economies are currently teetering close to a recession, earnings growth has remained strong and consistent across the category as a whole; equity returns in emerging markets have also been consistently strong compared with the equity market as a whole in recent decades (see Figure 2). We believe investors should expect this theme to continue in the future.

Figure 2: Equity Returns in Emerging Markets Have Been Consistently Strong Compared with the Market as a Whole in Recent Decades

Cumulative index returns for the MSCI Emerging Markets and MSCI World indices



Source: FactSet; as of June 30, 2018. Returns reported in USD.

THE EVOLUTION OF THE EMERGING-MARKET OPPORTUNITY SET

To understand the dynamics currently playing out in emerging markets, it's important to consider the historical economic performance of the countries that constitute the overall marketplace. Over the years, opportunities in emerging markets have shifted dramatically as a direct result of the performance of underlying country economies. The MSCI Emerging Market index can be used as a proxy to illustrate the major changes in the emerging-markets opportunity set since the inception of the index in 1988 (See Figure 3).

Country Trends

At the index's inception nearly 30 years ago, Malaysia firmly ranked at the top of index with the highest level of market capitalization in seven out of the nine subsequent years leading up to the Asian Financial Crisis. During the onset of the Asian Financial Crisis, however, Malaysia observed a vast devaluation in the ringgit that led to currency controls and a ban on foreigners' trading in its securities. These currency and capital controls abruptly ended Malaysia's reign atop

Figure 3: In Recent Years, Asian Equities, Led by China, Have Come to Dominate the MSCI Emerging Markets Index by Weighted Representation

MSCI Emerging Markets Index — Shift in weighted representation by country

1988		1997		2007		2017	
Inception of the MSCI Emerging Markets Index; Malaysia firmly leads in company representation.		Asian Financial Crisis of 1997, Malaysia goes from the top to the bottom of company representation; Latin American countries emerge as leaders.		China leads the index in representation for the first time.		China is firmly established as the leader in representation. The top five countries — all Asian — make up the largest percentage of the index since the Asian Financial crisis.	
10 Countries		**27 Countries**		**24 Countries**		**24 Countries**	
Largest Country Weights (%)		**Largest Country Weights (%)**		**Largest Country Weights (%)**		**Largest Country Weights (%)**	
Malaysia	29.5	Brazil	16.6	China	15.9	China	29.7
Brazil	25.5	Mexico	13.2	Korea	14.3	Korea	15.4
Mexico	10.0	South Africa	10.3	Brazil	13.4	Taiwan	11.3
Thailand	9.9	Taiwan	9.3	Russia	10.1	India	8.8
Chile	7.8	India	6.5	Taiwan	9.9	South Africa	7.1
Top 5 Total	**82.7**	**Top 5 Total**	**55.9**	**Top 5 Total**	**63.6**	**Top 5 Total**	**72.3**

Source: MSCI, FactSet, State Street Global Advisors. As of December 31, 2017.

the emerging markets landscape. Malaysia's equity markets observed a loss of 69% in 1997; it was removed from the index in 1998.

Next a Latin-American led narrative emerged, with Brazil and Mexico making up nearly a third of the weight in the index by 1998. At that time, China made up less than 1% of the overall index. Since then, Asia has emerged as the dominant force among emerging markets — and China is the undisputed leader in the region, with twice the weight in the MSCI Emerging Markets Index compared to the nearest runner-up, Korea.

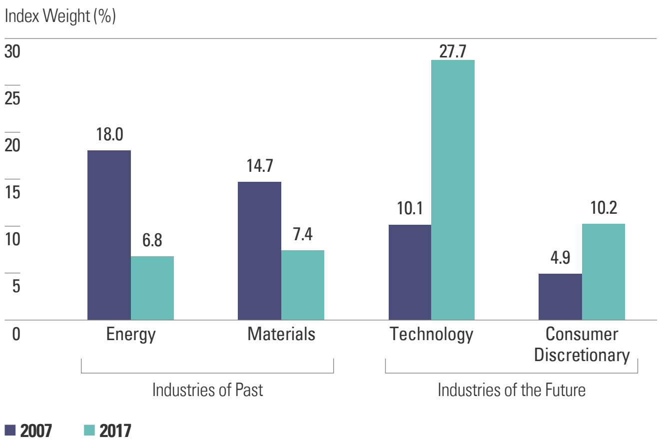
Sector Trends

At the sector level, the opportunity set in emerging-markets sectors has meaningfully expanded in recent years. Historically, emerging markets have been known for their commodity-driven industries, reflected in the heavy energy- and materials-sector weights in the index in 2007. In recent years, however, the information technology and consumer discretionary have come to the fore in emerging markets, as evidenced by sector weighting in the MSCI Emerging Markets Index. (See Figure 4).

A large part of the evolution has been driven by demographic change. Over the past 10 years, the rising consumer class in emerging countries underpinned the shift from the energy and materials sector to the technology and consumer discretionary sectors. Deepening bifurcation in population growth trends between developed and emerging markets promises to accelerate that trend. As the working-age population in less-developed countries increasingly outstrips that of developed markets, consumer-driven growth will increasingly shift to emerging markets.

Figure 4: Commodities Have Given Way to the Technology and Consumer Discretionary Sectors in Emerging Markets

Evolution in sectors in MSCI Emerging Markets Index, by sector weight



Source: FactSet, State Street Global Advisors.

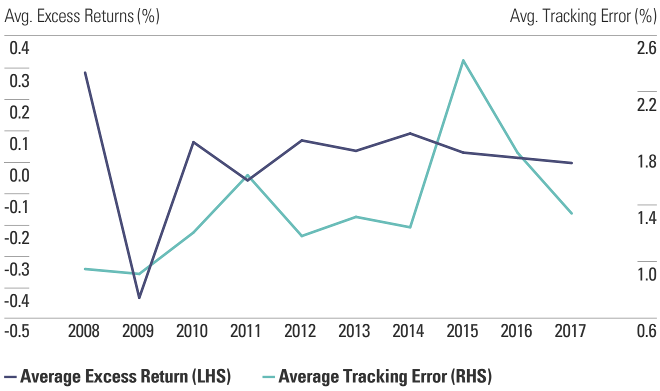
HOW CAN INVESTORS CAPITALIZE ON THE EMERGING-MARKETS OPPORTUNITY?

Index Replication

For investors considering an index exposure to emerging markets should evaluate the significant challenges related to trading costs and liquidity in these markets to ensure that the exposure is skillfully delivered. For example, our analysis show that over the past 10 years index investors in emerging markets have realized negative excess returns on average (gross of fees), while incurring alarmingly high tracking error in the range of 1% or more. (Figure 5). When considering index exposure, investors should evaluate the manager's breadth in trading, liquidity, and transaction cost management to ensure cost effective index exposure.

Figure 5: Index Investors in Emerging Markets Have Realized Negative Excess Returns on Average, While Incurring Tracking Error of Nearly 1% or More

eVestment global emerging-markets passive universe: average excess return versus average tracking error



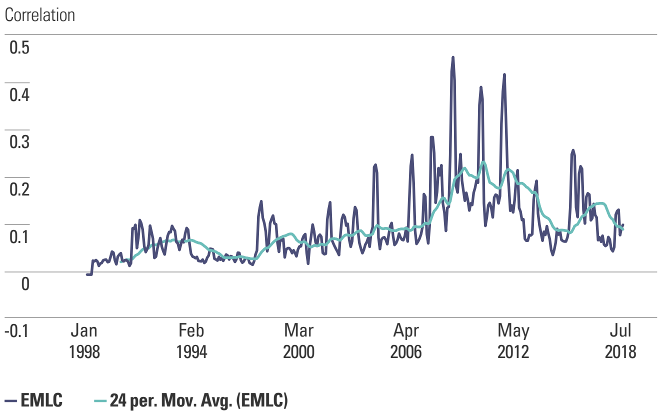
Source: eVestment, State Street Global Advisors. As of June 30, 2018. The eVestment global emerging markets passive universe was used to create the chart. Managers with inadequate information for the past ten years were excluded. Managers with factor tilts and ESG based focus were also excluded. We believe that investors should instead explore active management for their allocations to emerging markets.

Opportunities for Alpha Generation

At the same time, there are abundant opportunities to capture alpha in emerging markets, but the most effective way capitalize on them can be nuanced. Consider, for example, average pair-wise correlation among the constituents of the MSCI Emerging Markets Index (Figure 6) since inception of the index. We ran the pair-wise correlation between every pair of stocks in the index (1,289,360 calculations). Average pair-wise correlation is a mathematical average of the return correlations across every pair of stocks in the index. Averaging the correlations provides an indicator of how much the constituents of the index move in tandem with each other. The higher the correlation the more difficult it is to generate alpha by selecting individual securities. Our analysis shows that pair-wise correlations have been trending lower since 2009, presenting active managers with greater opportunity to capture alpha than in the past.

Figure 6: Lower Pair-wise Correlation Among Individual Stocks in Emerging-markets Equities is Presenting Active Managers with Greater Opportunity to Capture Alpha

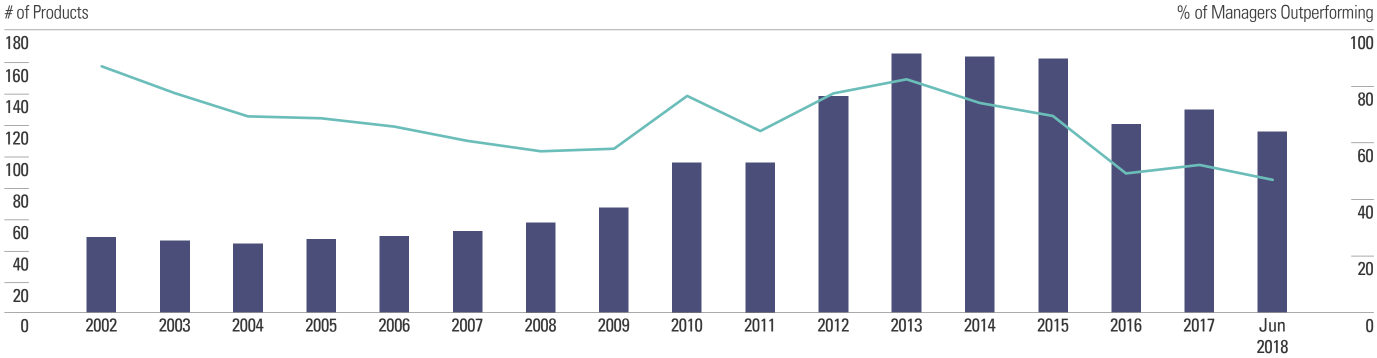
Average pair-wise correlation in the MSCI Emerging Markets index



Source: FactSet, State Street Global Advisors. As of August 31, 2018.

Figure 7: Percent of Active Managers Beating the MSCI EM Index is at All-time Lows Since 2002

% of Active EM Managers beating MSCI EM Index — all time lows



Source: eVestment, State Street Global Advisors. As of June 30, 2018. Strategies under eVestment Global Emerging Markets Large Cap Core and Global Emerging Markets Large Cap universes were used to do this analysis. Only managers that report gross of fees returns were used in this analysis.

Importance of Consistency

Not all active strategies are built the same. Because emerging markets are nuanced and constantly changing, experience tends to pay off. Since 2002, the percentage of active managers beating the MSCI EM index has declined steadily, reaching a low point as of June 30, 2018 (See Figure 7). Investors should consider managers with a long track record of outperformance per unit of active risk or tracking error. One way to assess that track record is by measuring rolling Information Ratio since a fund's inception.

ADDITIONAL CONSIDERATIONS: "TOPPING UP CHINA EXPOSURE"

China A-Share Inclusion in MSCI EM Index

Chinese equity markets currently rank as the second biggest in terms of market capitalization but only make up a fraction of the major emerging market indices. On May 31, 2018 MSCI started including 226 China A-shares in the MSCI Emerging Markets index. The immediate impact of the two-phase inclusion will broaden and diversify the index across sectors and industries mainly because a majority of these companies service the local Chinese economy in areas such as consumer discretionary, consumer staples, and health care. The full inclusion of all China A shares in the index is slated to take three to seven years. Over that time, investors should expect to see the index allocation to China to rise from 30.5% to nearly 42% as of August 2018.

In the meantime, investors that seek a more representative allocation to China in their emerging markets portfolio should consider allocating a unified China equity strategy that is able to take advantage of the full breadth of the Chinese equities.

CONCLUSION

Emerging markets continue to offer equity investors an attractive combination of return potential and risk diversification compared to developed markets. They also provide access to the fastest growing sectors in emerging-markets economies — sectors that are poised to benefit from the increasingly prominent consumption theme.

Investors considering an indexed approach to emerging markets should take transaction costs and liquidity into considerations as they lead to high tracking error and meaningfully negative excess returns (gross of fees). For investors seeking alpha there are plenty of opportunities at the individual stock level to outperform the index. But only active managers with a proven track record of outperformance throughout the vagaries of this region are positioned to do well.

Finally, the addition of China A shares to the MSCI indices is presenting new opportunities for emerging-markets investors. Those interested in expanding their China exposure may wish to consider allocating to managers that employ a unified China equity strategy.

STATE STREET GLOBAL ADVISORS — EMERGING MARKET EQUITY CAPABILITIES

We began money management in EM equities in 1991 and today oversee $70bn in assets across a number of disciplines — Active Quantitative, Active Fundamental, Traditional & Smart Beta. These Strategies include:

Strategy	Investment Universe	Strategy Inception
Active Quantitative Equity		
Emerging Market Asia	MSCI Emerging Markets Asia Index	May 1993
Emerging Market Enhanced	MSCI Emerging Markets Index	July 2007
Emerging Market Small Cap	MSCI Emerging Markets Small Cap Index	October 2007
Emerging Markets Active	MSCI Emerging Markets Index	April 2000
Emerging Markets Defensive	MSCI Emerging Markets Index	March 2016
Fundamental Growth/Core		
China	MSCI China/MSCI China Capped 10%	July 2002
Emerging Markets Equity Select	MSCI Emerging Markets Index	Jan 2015
Fundamental Value		
Asia Pacific Value Spotlight	Asia Pacific stocks with Market Cap greater than US$2bn	June 2012
Global Value Spotlight	MSCI All Countries. The strategy has no limit on its ability to invest in EM and has been as high as 29%	December 2012
International Value Spotlight	MSCI All Countries. The strategy has no limit on its ability to invest in EM and has been as high as 27%	January 2012
Cap-Weighted Beta		
MSCI Emerging Markets	MSCI Emerging Markets Index	Jan 1996
MSCI Emerging Market Small Cap	MSCI Emerging Markets Small Cap Index	April 2008
FSTE Greater China	FTSE Greater China HKD Index	September 2013
China A ESG	MSCI China A Index	July 2018
SPDR S&P China ETF	S&P China BMI Index	April 2007
Smart Beta		
EM Minimum Volatility	MSCI Emerging Markets Index	January 2013
RAFI Fundamental Emerging Markets	RAFI Global Equity Index	July 2017
EM Liquidity Tier	MSCI Emerging Markets Index	March 2017
SPDR S&P Emerging Markets Dividend	S&P Emerging BMI Index	February 2011
MSCI EM Value Weighted	MSCI Emerging Markets Index	June 2008

OUR TRADING DESK

We have 6 dedicated Emerging Markets equity traders located in Boston, London and Hong Kong. The team is highly focused on market events, controlling exposure, monitoring country risk, security inventories and liquidity. In 2017, we traded nearly ~$20B in EM equities across 115,000 tickets with an aggregated cost of approximately 10bps. We ensure a wide breadth of counterparties with 55% of our panel made up of non-US domiciled brokers.

About State Street Global Advisors

For four decades, State Street Global Advisors has served the world's governments, institutions and financial advisors. With a rigorous, risk-aware approach built on research, analysis and market-tested experience, we build from a breadth of active and index strategies to create cost-effective solutions. As stewards, we help portfolio companies see that what is fair for people and sustainable for the planet can deliver long-term performance. And, as pioneers in index, ETF, and ESG investing, we are always inventing new ways to invest. As a result, we have become the world's third largest asset manager with US $2.72 trillion* under our care.

*AUM reflects approximately $32.9 billion (as of June 30, 2018), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.

ssga.com

State Street Global Advisors Worldwide Entities

Australia: State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services Licence (AFSL Number 238276). Registered office: Level 17, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240 7600. F: +612 9240 7611. **Belgium:** State Street Global Advisors Belgium, Chaussée de La Hulpe 120, 1000 Brussels, Belgium. T: 32 2 663 2036. F: 32 2 672 2077. SSGA Belgium is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorized and regulated by the Financial Conduct Authority in the United Kingdom. **Canada:** State Street Global Advisors, Ltd., 770 Sherbrooke Street West, Suite 1200 Montreal, Quebec, H3A 1G1, T: +514 282 2400 and 30 Adelaide Street East Suite 500, Toronto, Ontario M5C 3G6. T: +647 775 5900. **Dubai:** State Street Bank and Trust Company (Representative Office), Boulevard Plaza 1, 17th Floor, Office 1703 Near Dubai Mall & Burj Khalifa, P.O Box 26838, Dubai, United Arab Emirates. T: +971 (0)4 4372800. F: +971 (0)4 4372818. **France:** State Street Global Advisors Ireland Limited, Paris branch is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorized and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Ireland Limited, Paris Branch, is registered in France with company number RCS Nanterre 832 734 602 and whose office is at Immeuble Défense Plaza, 23-25 rue Delarivière-Lefoullon, 92064 Paris La Défense Cedex, France. T: (+33) 1 44 45 40 00. F: (+33) 1 44 45 41 92. **Germany:** State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. Authorized and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"). Registered with the Register of Commerce Munich HRB 121381. T: +49 (0)89 55878 400. F: +49 (0)89 55878 440. **Hong Kong:** State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103 0288. F: +852 2103 0200. **Ireland:** State Street Global Advisors Ireland Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered number 145221. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300. **Italy:** State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Limited, a company registered in the UK, authorized and regulated by the Financial Conduct Authority (FCA), with a capital of GBP 62,350,000, and whose registered office is at 20 Churchill Place, London E14 5HJ. State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 06353340968 - R.E.A. 1887090 and VAT number 06353340968 and whose office is at Via dei Bossi, 4 - 20121 Milano, Italy. T: 39 02 32066 100. F: 39 02 32066 155. **Japan:** State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan, T: +81-3-4530-7380 Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345) , Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers' Association. **Netherlands:** State Street Global Advisors Netherlands, Apollo Building, 7th floor Herikerbergweg 29 1101 CN Amsterdam, Netherlands. T: 31 20 7181701. SSGA Netherlands is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorized and regulated by the Financial Conduct Authority in the United Kingdom. **Singapore:** State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826 7555. F: +65 6826 7501. **Switzerland:** State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Authorized and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16. **United Kingdom:** State Street Global Advisors Limited. Authorized and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 5776591 81. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350. **United States:** One Iron Street, Boston MA 02210. T: +1 617 786 3000.

Important Information:

The views expressed in this material are the views of Gaurav Mallik and Adhi Mallik through the period July 18, 2018 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

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 SSGA's express written consent.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Foreign investments involve greater risks than US investments, including political and economic risks and the risk of currency fluctuations, all of which may be magnified in emerging markets.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates raise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investing involves risk including the risk of loss of principal.

STATE STREET GLOBAL ADVISORS

ID14436-2265111.2.1.GBL.INST 1218 Exp. Date: 10/31/2019