
2020

Global Market Outlook

The Only Way
Out Is Through

STATE STREET GLOBAL
ADVISORS

03 Our Macroeconomic Outlook

05 Our Equity Market Outlook

05 Our Fixed Income Market Outlook

06 Investment Considerations

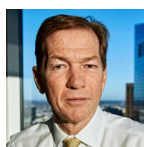
06 Seeking Growth and Income in
Emerging Markets

07 Managing Volatility

08 Currency

08 Climate Risk

09 Closing Thoughts



Richard Lacaille
Global Chief
Investment Officer

In our 2019 mid-year outlook, we cautioned investors to look beyond the noise and avoid getting caught up in temporary swings in sentiment.

We stand by that guidance today. Trade tensions, Brexit, late-cycle market dynamics, upcoming US elections, and much more demand our attention as investors. Now is the time to put these forces into context with the fundamentals that will drive market performance over the next year.

Our Macroeconomic Outlook

We believe that the global economic recovery will continue in 2020, although it may have to sidestep substantial risks to sustain momentum. Those risks notwithstanding, renewed monetary policy support and resilience in consumer spending and services should help to propel the cycle forward. We expect world real gross domestic product (GDP) growth to improve modestly in 2020 (see Table). This view rests on an assumption of easing trade tensions; we are closely monitoring developments.

Real GDP Growth	2018 (%)	2019 (% , projected)	2020 (% , projected)
World	3 . 6	3 . 2	3 . 4
Advanced Economies	2 . 2	1 . 7	1 . 7
US	2 . 9	2 . 3	1 . 9
Eurozone	1 . 8	1 . 1	1 . 3
Japan	0 . 8	0 . 9	0 . 3
UK	1 . 4	1 . 2	1 . 4
Australia	2 . 8	1 . 9	2 . 5
Canada	1 . 8	1 . 4	1 . 7
Developing Economies	4 . 5	4 . 2	4 . 6
China	6 . 6	6 . 1	5 . 8

Source for 2018 data: National databases.

Source for 2019 and 2020 projections: State Street Global Advisors Economics, as of September 16, 2019. Actual performance may differ from these projections.

This 2020 outlook somewhat resembles our 2018 and 2019 outlooks; in each of these years, the global economy managed to expand despite late-cycle worries. As this long cycle matures and risks to the recovery gather, this call becomes more difficult to make. This year, even as some areas of the global economy weaken, we believe that pillars of strength remain to see it through. The only way out of this challenging investment landscape is to move through it, relying on pockets of resiliency and opportunity as we go.

As investors make their way forward and seek to capitalize on these opportunities, many forces — including geopolitical tensions and lingering policy uncertainty — will present difficulties. As the differences between the more resilient areas of the economy and those that are less so become clear, investors' ability to achieve their desired outcomes will depend on the quality of their decision making; in the absence of a uniformly rising tide, choosing where to invest will matter.

In light of our overall growth forecast, we continue to favor select risk assets. Our emphasis on the selection of risk assets is deliberate; although we believe global GDP growth will come in close to long-term averages, there are considerable regional and sector disparities.

We believe US economic outperformance will continue, although the outperformance gap between the US and other regions may start to shrink. Europe continues to lag due to cyclical and structural problems, but a catalyst could trigger improvement, especially in the second half of 2020. Emerging markets (EM) will be critical contributors to global growth; that said, we expect economic performance in emerging markets to be highly variable. At the sector level, relative strength in services will partly offset relative weakness in manufacturing. Consumer spending will partly offset a slowdown in business investment.

We recognize that there are significant risks to our base case outlook. Capital preservation will be a high priority in 2020; we're building hedges to address a wide range of geopolitical and policy risks. But the risks to our outlook are not confined to the downside. Upside risks include the possibility that slowing growth could motivate fiscal stimulus in major economies. With that in mind, we're watching five major areas of uncertainty in the year ahead:

- **Geopolitics** What will be the outcome with respect to Brexit, trade tensions, Iran, US impeachment proceedings and more?
- **Economic resilience** Can consumers sustain strong spending without resolution of trade tensions and a turnaround in manufacturing?
- **Policy** Will the policy response extend beyond monetary intervention to include fiscal stimulus?
- **Structural reform** Will the pace of reform pick up in emerging markets and in Europe?
- **Elections** How will the outcome of 2020 elections in the US and elsewhere affect trade, policy and more?

Positive outcomes in many of these areas would likely benefit Europe and emerging markets, which have suffered from years of underperformance, even more than they would benefit the US — which has less room for improvement. As 2020 unfolds and uncertainty in each of these areas moves toward (or away from) resolution, we will issue additional commentary on the implications for investors.

As important as it will be to track these critical areas of uncertainty, we also believe it's critical for investors to consider world-changing forces that pose substantial portfolio risk, which a one-year outlook may not capture. Climate change is one of these forces. As we look to 2020 and beyond, we believe that regulatory pressure and carbon pricing initiatives are likely to accelerate, impacting asset valuations and capital allocations. This, in turn, will motivate investors to consider and take steps to manage the climate risk embedded in their portfolios and evaluate the investment opportunities that a changing climate-risk landscape will provide.

Our Equity Market Outlook

2019 has been another strong year for equities, but the equity rally has not been supported by strong earnings growth.

In the coming year, we believe continued central bank support will warrant an overweight to equities. This generally positive outlook is tempered, however, by increasingly stretched valuations as fundamentals disconnect from returns. This disconnect, combined with persistent trade risk and the prospect of recurrent bouts of volatility, will lead us to maintain a defensive posture in our equity allocations.

Robust domestic demand and fiscal supports lead us to favor North American equities, where we believe there is a lower probability of earnings disappointment. Compared with historical trends, European equity valuations are more attractive than those in North America and in emerging markets, but we are relatively neutral on European equities due to persistent political and structural uncertainty. Fiscal policy movement and greater political clarity on Brexit and on the future of structural reform would go a long way toward catalyzing European equity markets.

In the short term, we're underweight emerging market and Asia Pacific equities. Over the longer term, we recognize that there is value in EM equities. There, again, we await catalysts to realize that value. Key catalysts would include a pickup in flows as the EM benchmark expands; abatement of US-China trade tensions; increasing allocation to EM by global funds; or improving fundamentals and GDP growth due to structural reform.

Our Fixed Income Market Outlook

As 2019 comes to a close, fixed income investors are settling on the view that low — even negative — interest rates may be a structural condition for the foreseeable future. Rates outside of Europe and Japan offer a premium, but we have seen a decided reduction in the level of that premium. Given generally slowing economic conditions, we expect that trend will continue.

Although we believe that the structural trend is toward lower rates, the news and economic cycle will introduce volatility to the trend, creating opportunities to trade this range. Continued, stimulative central bank activity in the form of either policy rate moves or quantitative easing — such as the European Central Bank's (ECB) Corporate Sector Purchase Programme — should reap benefits, including keeping GDP growth near its potential. The result should be a favorable backdrop for corporate issuers, who should see fairly stable ratings. Corporate bond holders across the spectrum (investment grade through high yield) will see additional benefit through improved market technicals: Issuance is trending lower and ECB purchases will drive prices up.

But the possibility of a less favorable economic outcome remains a risk. Therefore, in 2020 we favor more defensive positioning in our overweight to credit: shifting away from cyclical areas such as autos and retail, and favoring staples such as telecommunications. Similarly, we think it will be wise to be judicious with allocations to lower-grade credit, e.g., favoring BB and B-rated issuers over CCC.

Investment Considerations

The 2020 outlook raises a series of key questions for investors:

- In a variable and increasingly diverging economic and market landscape, what opportunities do emerging markets hold?
- How can we manage volatility while continuing to participate in market upsides?
- How can we manage our exposure to currency risk?
- What about the exogenous risks, such as climate? What should we be thinking about now?

Seeking Growth and Income in Emerging Markets

As EM debt and equity indices expand, emerging market equities and debt are already an increasing part of investors' portfolios. We expect investors to continue treating EM investment as part of their core allocations. At the same time, we believe that emerging markets equities and debt hold long-term growth and income potential for investors, and that EM investment deserves particular consideration in 2020.

Emerging markets equities Our current tactical underweight to emerging markets equities reflects a trend of disappointing earnings growth, along with concerns connected to trade tensions and other structural issues. EM earnings improved slightly in the second half of 2019, and consensus next-12-month earnings-per-share growth estimates show some signs of improvement, particularly in trade-related sectors that have been hit hard in recent months (although further escalation in trade tensions does remain a risk).

EM equity valuations are modestly attractive relative to developed markets (DM), but uncertainty persists, particularly with respect to earnings, trade tensions, capital flows and potential structural reforms. Catalysts that might allow investors to realize value in EM equities include:

- A pickup in capital flows as EM benchmarks expand
- An abatement in US/China trade tensions
- Greater allocation to EM by global funds
- Structural reforms (e.g., pension reform in Brazil; corporate tax reform in India; land/public sector reform in South Africa; and energy reform in Mexico) showing through in improving economic fundamentals and GDP growth

As we await those catalysts, it's important to note that currently EM equity returns are relatively widely dispersed; this suggests an opportunity for careful stock selection. Although beta investors with an index-only investment in EM equities might need to see a substantial turnaround in earnings growth to realize their objectives, we believe those seeking to access the EM equity growth story today would benefit from actively managed strategies seeking:

- Companies capitalizing on structural growth opportunities that can grow sustainably regardless of the push-pull of the economic cycle
- Companies of genuine value that show signs of a turnaround, uncovered using robust and nuanced quality metrics and high-frequency earnings analysis

Emerging markets debt We believe EM debt will continue to present attractive opportunities for both income and total returns in the year to come. More dovish US Federal Reserve and ECB policies are likely to provide flexibility for EM policy makers on both the monetary and fiscal fronts, given the improvements made over recent years on their fiscal and current account balances.

Bond valuations now favor EM versus DM debt. Real yields on DM government bonds are currently negative, while EM real yields are positive and attractive.¹ EM inflation has been trending down consistently over recent years, justifying a lower inflation risk premium. Furthermore, EM currencies are relatively undervalued, creating what could be seen as a reasonably good entry point for investors.

Chinese bonds, particularly government bonds and policy bank bonds, will merit particular consideration because their continued addition to the bond benchmarks, including EM benchmarks in 2020, is likely to result in substantial investor focus and a related increase in flows. Chinese bonds offer both yield and diversification benefits. Chinese bond yields tend to fall between the lower yields of developed markets and the higher yields common in emerging markets, and returns on Chinese bonds have historically displayed relatively low correlation to those in developed markets.

Managing Volatility

Cross-asset volatility has been relatively low since the financial crisis but has recently spiked. Although equity volatility is currently normalizing to historical levels, we believe that the major drivers of volatility — including geopolitical uncertainty, mounting trade risks and a widening gap between fundamentals and returns — are likely to endure in 2020. These risks could materialize as dramatic spikes in volatility, with markets repricing assets rapidly based on changes in sentiment.

Equities are vulnerable as share prices disconnect from earnings, and are placed further at risk by the potential for further escalation in trade tensions. (Note, however, that earnings outlooks were already muted before trade risks re-emerged; hence we believe that equity markets have likely priced in the trade conflict.) Implied volatility in stock prices, as measured by the VIX and VSTOXX indices, has spiked recently compared with 2018 lows.

With all of this in mind, in 2020 investors will be challenged to take full advantage of market upsides while adopting or maintaining defensive positioning. In addition to considering tactical hedges such as gold (which is experiencing strong momentum at the time of publication), building appropriate and cost-effective defenses will require careful weighing of hedging options.

Managed volatility and defensive equity strategies may offer substantial benefits in this environment. Both strategies allow investors to remain fully invested in the equity market and continue to benefit from potential upside. Managed volatility strategies seek to achieve outperformance by focusing on risk; they aim to avoid high-beta stocks that, over time, can lag market performance. Defensive equity strategies are actively managed with a dual risk and return mandate, which can help protect against drawdowns while continuing to participate substantially in market upsides. Managed volatility and defensive strategies can each work well in periods of market distress and in markets with many ups and downs; they each tend to work less well in high-beta rally conditions.

Target volatility trigger strategies (TVTs) may also offer useful and cost-effective downside protection in 2020. TVTs typically overlay an equity exposure. They seek to limit portfolio volatility by forecasting future equity volatility and then dynamically adjusting the equity exposure to target a pre-set volatility level. TVTs tend to work especially well in trending markets, particularly those that are experiencing a strong downward trend; they may work less well in extremely choppy markets, or in markets afflicted with a major exogenous shock (such as a natural disaster).

Currency

In the coming year, diverging economic prospects will lead more investors to look beyond their home borders in the search for opportunity and diversification. Managing exposure to currency risk will play a crucial role in investors' ability to take full advantage of investment opportunities abroad.

Geopolitical risk will be a key currency driver in 2020; in particular, ongoing Brexit uncertainty continues to generate currency risk for European investors. Currency volatility is currently relatively tame, but investors should take care not to be lulled into complacency by low volatility; stretched currency valuations signal the potential for big moves ahead. The US dollar is expensive but awaiting a catalyst for reversion. A key potential catalyst would be progress toward resolution of trade tensions — or at least greater certainty regarding trade matters.

Investors should carefully consider the currency return impact when evaluating their asset allocations. Currency overlays to hedge exposures may be helpful — but a mixed bag of currency valuations means that the decision of whether to hedge, or not to hedge, could vary greatly from investor to investor. For most investors, decreased hedges on the British pound sterling and on the Scandinavian currencies (e.g., the Swedish krona and the Norwegian krone) and increased hedges on the US Dollar and Swiss Franc could make sense in the coming year.

Climate Risk

A one-year outlook runs the risk of failing to capture critical long-term risks that every investor should consider. We believe climate change is one of these. In fact, we see climate change as one of the greatest risks in investment portfolios today.

These risks are not confined to obvious polluters; they are embedded in virtually all market segments and industries. At the highest level, climate change poses a systemic risk to financial markets, as they attempt to digest climate's impact on economic growth, on society and on the world's overall energy mix. At a country level, petro-states are under pressure to reinvent themselves in time. For individual corporations — from drilling companies, to diesel-engine manufacturers, to transportation firms, to banks — climate change and climate-related regulation will impact business models and supply chains, sometimes in unexpected and unpredictable ways.

For investors, the challenge of digesting vast amounts of potentially stranded fossil-fuel assets is becoming an increasingly urgent concern as regulatory pressure mounts. A growing wave of carbon pricing initiatives will impact asset valuations over the next few years. At the same time, declining renewable energy costs will continue changing the energy sourcing mix, generating substantial risk for firms that are heavily dependent on fossil fuels — and creating opportunities for companies with the flexibility to adapt and the insight to capitalize on the change.

The Sustainable Climate Strategies developed by State Street Global Advisors can help investors position their fixed income and equity portfolios today for the long-term investment trends created by the transition to a low-carbon world. These investment approaches use a mitigation plus adaptation methodology to allocate capital away from assets at risk and toward companies that will benefit from the change in energy mix and are more resilient to the physical risks posed by climate change. The strategies are directly aligned with the most ambitious goals stemming from the landmark 2015 Paris Agreement — including limiting climate change to the two-degree Celsius warming scenario over post-industrial levels.

Closing Thoughts

- The global economic expansion is likely to continue into 2020.
- Positive geopolitical and policy developments would likely benefit Europe and emerging markets more than North America.
- The prospect of dramatic spikes in volatility will lead investors to consider cost-effective hedging options.
- Climate change poses a substantial portfolio risk that a one-year outlook may not capture.

Glossary

VIX Created by the Chicago Board Options Exchange (CBOE), the Volatility Index, or VIX, is a real-time market index that represents the market's expectation of 30-day forward-looking volatility. Derived from the price inputs of the S&P 500 index options, it provides a measure of market risk and investors' sentiments. It is also known by other names like "Fear Gauge" or "Fear Index." Investors, research analysts and portfolio managers look to VIX values as a way to measure market risk, fear and stress before they take investment decisions.

VSTOXX Officially Euro Stoxx 50 Volatility Index, is the "European VIX" — the most watched European volatility index. It measures implied volatility of near term EuroStoxx 50 options, which are traded on the Eurex exchange. Euro Stoxx 50 is the most widely followed European equity index, which includes 50 blue chip stocks traded in the Eurozone, such as Volkswagen, Siemens (Germany), Societe Generale (France), ING (Netherlands), or Telefonica (Spain). The index has very liquid futures and options markets.

Endnotes

- 1 According to Bloomberg data, as of September 30, 2019, the Government Bond Index EM (GBI-EM) real yield estimate was 2.10%; US Treasury and euro-area government-bond real yield estimates trailed at -0.14% and -0.87%, respectively. GBI-EM Real Yield is an estimate based on JP Morgan GBI-EM Global Diversified Index weightings as of September 30, 2019 (excluding Argentina, Uruguay and Dominican Republic which account for 1.3% of the index) and an estimate of real yield yields using approximations of the average maturity for each country.

About the Global Market Outlook

As investment challenges grow more complex, State Street's Global Market Outlook was created to alert investors to portfolio risks and opportunities in the coming year, based on the research of our investment teams. Research around near-term and longer-term market issues is at the heart of who we are as investors. It drives the kinds of outcome-oriented portfolios we create for clients, drawing on the full range of our beta and alpha solutions as well as our asset allocation expertise.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 27 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US \$2.95 trillion* under our care.

* AUM reflects approximately \$43.96 billion USD (as of September 30, 2019), 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

Abu Dhabi: State Street Global Advisors Limited, Middle East Branch, 42801, 28, Al Khatem Tower, Abu Dhabi Global Market Square, Al Maryah Island, Abu Dhabi, United Arab Emirates. Regulated by ADGM Financial Services Regulatory Authority. T: +971 2 245 9000.

Australia: State Street Global Advisors, Australia Services Limited (ABN 16 108 671 441) (AFSL Number 274900) ("SSGA, ASL"). 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 Ireland Limited. State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221,

authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Canada:** State Street Global Advisors, Ltd., 1981 McGill College Avenue, Suite 500, Montreal, Quebec, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street East Suite 800, Toronto, Ontario M5C 3G6. T: +647 775 5900. **Dubai:** State Street Global Advisors Limited, DIFC Branch, Central Park Towers, Suite 15-38 (15th floor), P.O. Box 26838, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. Regulated by the Dubai Financial Services Authority (DFSA). 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, authorised 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, Briener Strasse 59, D-80333 Munich. Authorised 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 Ireland Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised 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, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 10495250960 - R.E.A. 2535585 and VAT number 10495250960 and whose office is at Via Ferrante Aporti, 10 - 20125 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 Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **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. Authorised 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. Authorised 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:** State Street Global Advisors, One Iron Street, Boston, MA 02210-1641. T: +1 617 786 3000.

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 Ireland Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised 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, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 10495250960 - R.E.A. 2535585 and VAT number 10495250960 and whose office is at Via Ferrante Aporti, 10 - 20125 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 Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **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. Authorised 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. Authorised 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:** State Street Global Advisors, One Iron Street, Boston, MA 02210-1641. T: +1 617 786 3000.

Important Risk Disclosures

The information provided does not constitute investment advice as such term is defined under the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell any investment. It does not take into account any investor's or potential investor's particular investment objectives, strategies, tax status, risk appetite or investment horizon. If you require investment advice you should consult your tax and financial or other professional advisor. All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information.

The views expressed in this material are the views of State Street Global Advisors through the period September 30, 2019 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 trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

Investing involves risk including the risk of loss of principal.

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 the index performance results referred to are provided exclusively for comparison purposes only. It should not be assumed that they represent the performance of any particular investment.

Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise, 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 in high yield fixed income securities, otherwise known as "junk bonds", is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

Increase in real interest rates can cause the price of inflation-protected debt securities to decrease. Interest payments on inflation-protected debt securities can be unpredictable.

There are risks associated with investing in Real Assets and the Real Assets sector, including real estate, precious metals and natural resources. Investments can be significantly affected by events relating to these industries.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations. Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

© 2019 State Street Corporation.
All Rights Reserved.
102949-2825166.2.1.GBL.RTL
1119 Exp. Date: 11/30/2020