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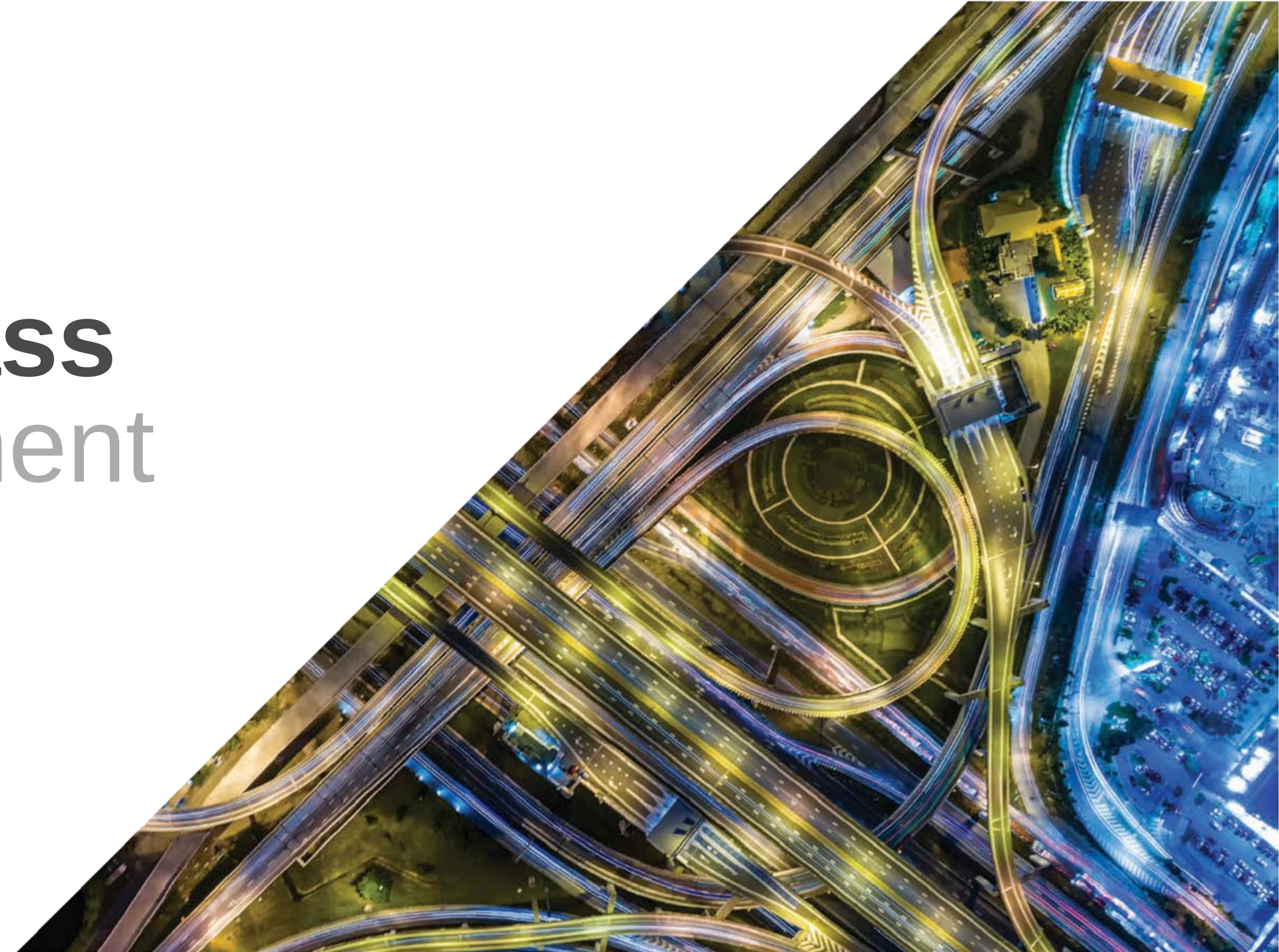
Market Compass

Investment Guide

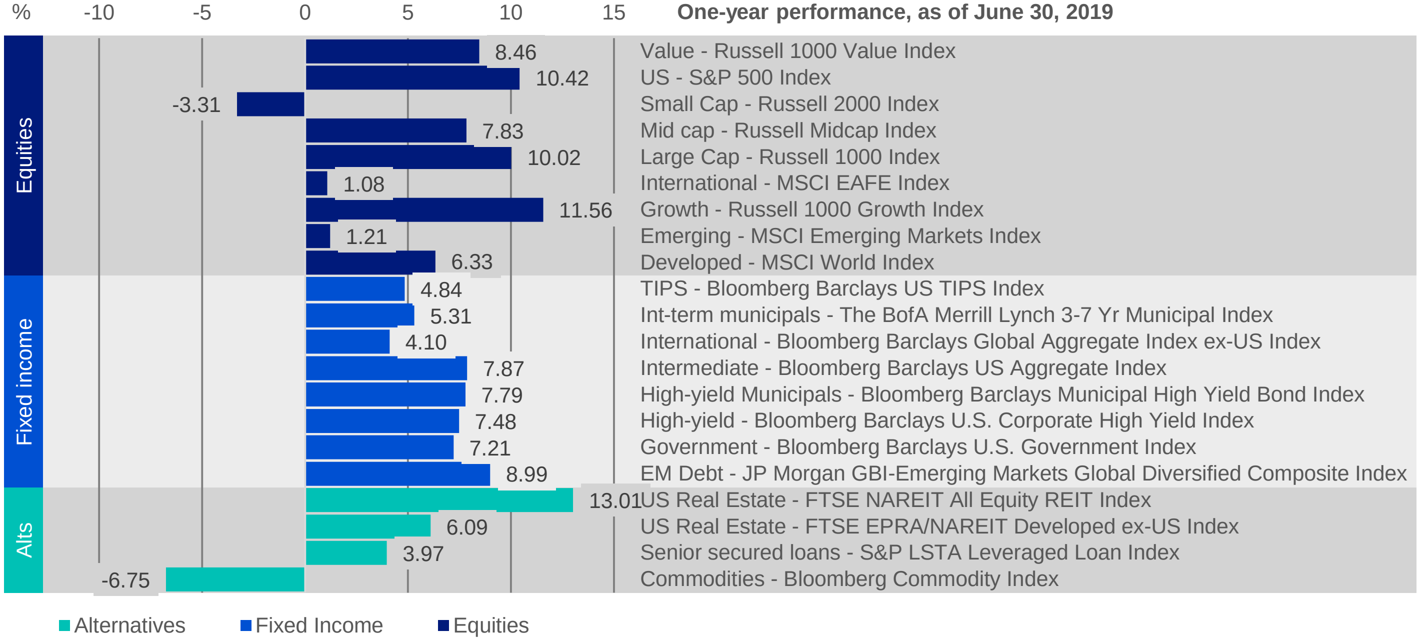
3Q 19



Your guide to understanding and investing in the market

Economic and market overview

Asset class returns



EM = emerging markets; Int-term = Intermediate term

Key takeaways

Most major asset classes posted positive returns for the one-year period. This time period experienced significant volatility for stocks, with a sell-off in the fourth quarter and a sell-off again in the second quarter. However, the Fed's turn to a more dovish stance supported risk assets and enabled most to deliver strong returns for the rolling 12-month period.

1 Index is computed using the net return, which withholds applicable taxes for nonresident investors.
Sources: Lipper, Inc. and StyleADVISOR, for the period June 30, 2018 through June 30, 2019. Past performance is not a guarantee of future results. An investment cannot be made directly in an index. The index performance shown is not meant to be a proxy for any Invesco product. The Russell indexes are trademarks/service marks of the Frank Russell Co. Russell® is a trademark of the Frank Russell Co.

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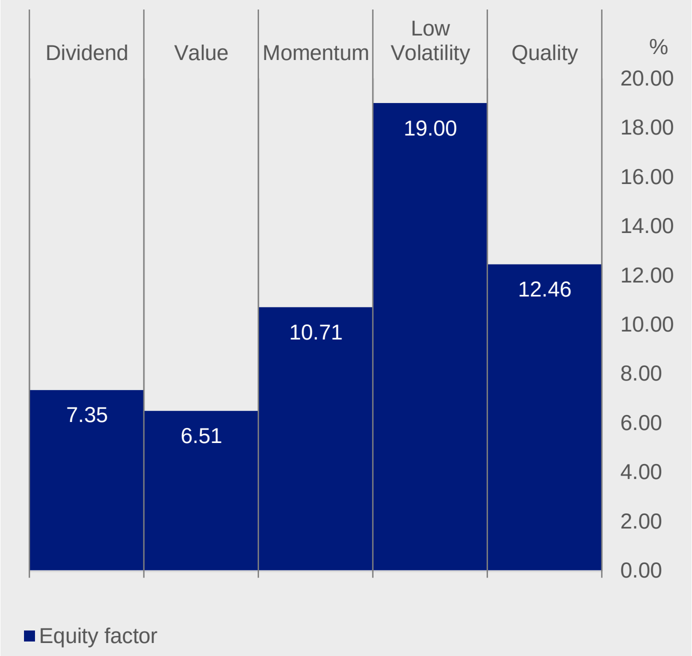
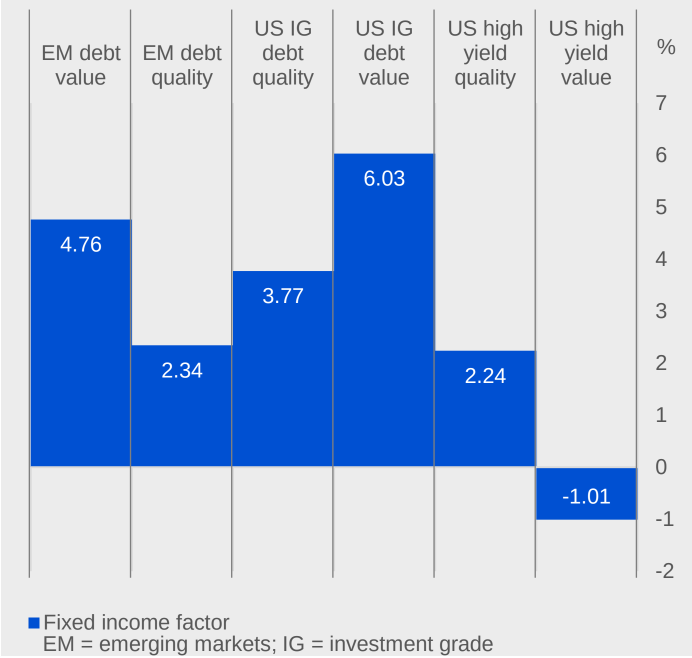
US Factor returns



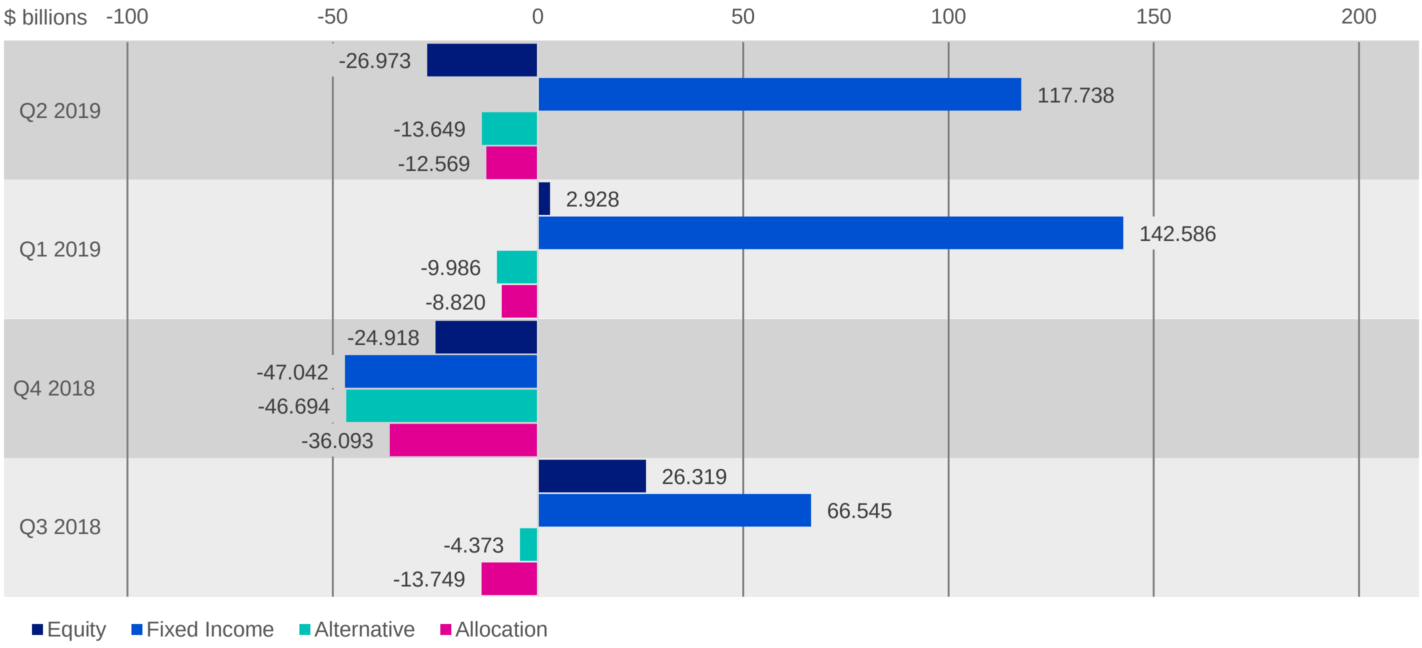


Key takeaways

In terms of equity factors, low volatility was the best performer over the period, with much outperformance achieved in the last quarter of 2018 and the second quarter of 2019, when sharp stock sell-offs favored stocks with lower volatility. In terms of fixed income, investment grade value was the best-performing factor, reflecting some level of risk-taking within higher credit quality.

Sources: Bloomberg L.P and Invesco Indexing June 30, 2018 through June 30, 2019 for equity factors and July 25, 2018 – June 30, 2019 for fixed income factors. Note: Factor indexes serve as a proxy for individual factor returns and may exhibit dispersion from Invesco factor strategies or those from other sources, including Quality (S&P 500 Quality Index), Volatility (S&P 500 Low Volatility Index), Momentum (S&P 500 Momentum Index), Value (S&P 500 Enhanced Value Index), Dividend (S&P 500 Low Volatility High Dividend). EM debt value (Invesco Emerging Markets Debt Value Index), EM debt quality (Invesco Emerging Markets Debt Defensive Index), US IG debt quality (Invesco Investment Grade Defensive Index), US high yield quality (Invesco High Yield Defensive Index), US IG debt value (Invesco Investment Grade Value Index), US high yield value (Invesco High Yield Value Index). Factor investing is an investment strategy in which securities are chosen based on certain characteristics and attributes. Please see the terms and definitions on slide 47 for factor and index definitions.

Industry fund flows



Key takeaways

Not surprisingly, during the fourth quarter, there was an exodus out of all major fund categories as a result of the severe market sell-off. However, investors regained some confidence in the first quarter as the market rebounded, but remained somewhat risk- averse, sending the vast majority of flows to fixed income in the first half of 2019.

Source: Strategic Insight, as of June 30, 2019. Data shown includes open-end mutual funds and exchange-traded funds (excluding fund of funds) aggregated and grouped by Morningstar categories organized into larger asset classes. Asset allocation/diversification does not guarantee a profit or eliminate the risk of loss.

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Current state of the US economy

Factors	Current state	Commentary
GDP	Positive	First quarter GDP growth was relatively strong. However, GDP growth in the second quarter was more modest.
Unemployment	Neutral	Unemployment has remained very low and job creation has been strong.
Inflation	Neutral	Inflation has remained relatively low. However, a tight labor market suggests we could see more pressure on wage growth in the future.
Disposable income	Positive	Disposable personal income rose in April and May.
Housing	Positive	Some housing metrics are improving, as lower mortgage rates have taken some pressure off the housing market.
Earnings	Negative	Earnings growth was negative for the first quarter.

Positive Neutral Negative

Sources: GDP: US Bureau of Economic Analysis; Unemployment, Inflation and Disposable income: US Bureau of Labor Statistics; Housing: Freddie Mac; and Earnings: FactSet Research Systems, as of June 30, 2019.
The opinions expressed by the author do not necessarily reflect those of Invesco Distributors, Inc. and are subject to change at any time based on market or other conditions. There is no guarantee any referenced forecasts/outlooks will come to pass.

Leading indicators of the US economy

Leading indicators	Outlook	Commentary
Stock market	↑	The stock market continued its strong positive performance in the second quarter. Although stocks experienced a sell-off in May as the US-China trade negotiations unraveled, they finished the quarter higher on expectations of Fed dovishness.
Manufacturing activity	↓	Manufacturing PMI has remained in expansion territory but has weakened. Additionally, the New Orders sub-index decreased materially from May to June, suggesting future weakness for the manufacturing sector.
Services activity	↔	The ISM Non-Manufacturing Index has remained at relatively high levels. The services side of the economy has continued to show strength.
Interest rate spread	↔	The interest rate spread (the difference between the 10-year US Treasury yield and the Fed funds rate) finished in negative territory for the second quarter. The spread between the 2-year US Treasury yield and the 10-year US Treasury yield widened slightly to 25 basis points by the end of the second quarter.
Housing starts	↓	Housing dynamics vary by region but, in general, housing has recently shown some signs of weakness.
Consumer confidence	↑	Consumer confidence rose in July after a drop in June. (That June drop followed three consecutive months of increases.

↑ Positive ↔ Neutral ↓ Negative

Sources: Stock market (represented by the S&P 500 Index): Bloomberg L.P.; Manufacturing activity: ISM Manufacturing Survey;
Services activity: ISM Non-Manufacturing Survey; Yield curve: FactSet Research Systems; Housing starts: US Census Bureau; and Consumer expectations: The Conference Board, as of June 30, 2019. Past performance is not a guarantee of future results. The opinions expressed by the author do not necessarily reflect those of Invesco Distributors, Inc. and are subject to change at any time based on market or other conditions. There is no guarantee any referenced forecasts/outlooks will come to pass. An investment cannot be made directly in an index.

Disruption

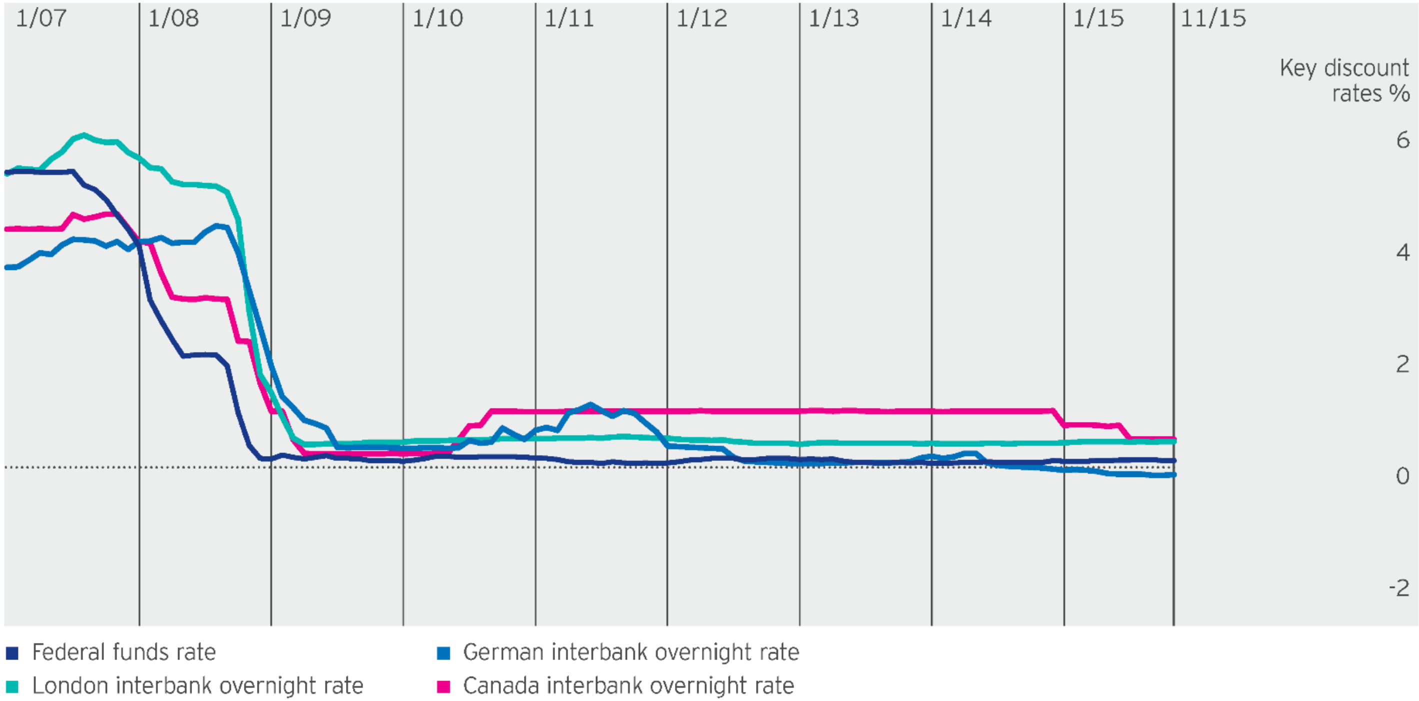
Here we explore:

– Monetary response to crisis

– Behavioral finance response

– Geopolitics

The response to the GFC was easy money — ultra low rates



Key takeaways

In the face of the Global Financial Crisis (GFC), many developed countries were unable or unwilling to implement major fiscal stimulus. Instead, major developed countries relied largely on monetary policy to combat the crisis. This resulted in extraordinarily low key interest rates.

Source: Federal Reserve Bank of St. Louis, Economic Research Division, as of Nov. 1, 2015. Most recent data available.

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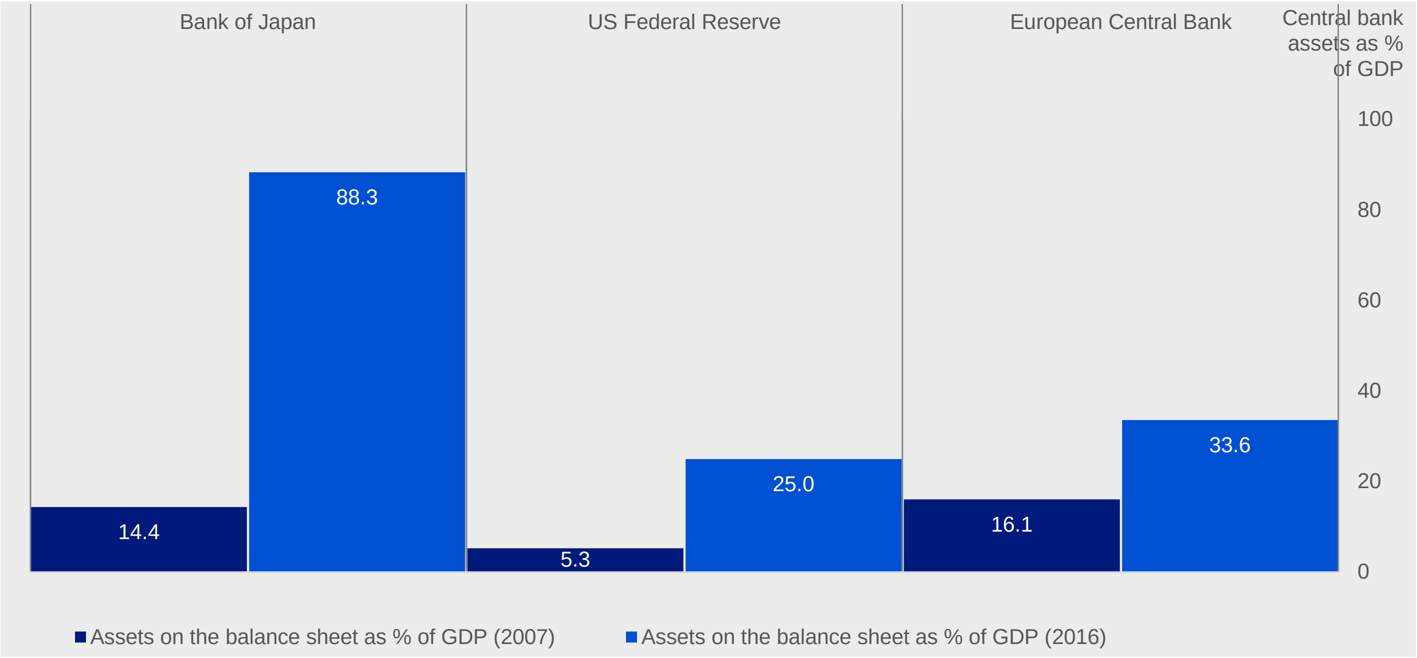
The response to the GFC was easy money — central bank balance sheet expansion



Key takeaways

For some countries, extremely low key rates were not enough to combat the crisis. As a result, some central banks also embarked on large-scale asset purchases, an experimental monetary policy tool that dramatically increased the size of their balance sheets and helped lower longer-term rates.

Source: Federal Reserve Bank of St. Louis, Economic Research Division, as of Dec. 31, 2016. Most recent data available.

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Behavioral biases exacerbated the negative impacts of the GFC

Behavioral response to the GFC
Stock ownership fell
Home ownership fell
Allocations to cash rose
People became more risk-averse
So wealth inequality grew

Monetary policy response to the GFC
Stocks rose
Home prices rose
Rates fell
Risk takers were rewarded
So wealth inequality grew

Key takeaways

Unfortunately, the very understandable human response to the Global Financial Crisis (GFC) only exacerbated the negative impact of the crisis, as the policy response rewarded financial decisions that most Americans eschewed.

Source: Invesco, as of June 30, 2019

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Disruption is all around us

Monetary policy

– Normalization on hold
– Need for stimulus in face of global slowdown and trade wars
– Need for "dry powder" without cutting off current economic expansion

Changing world order

– De-globalization/shifting alliances
– Destabilized institutions

Innovation–driven disruption

– Artificial intelligence
– Retail revolution

Key takeaways

Investors need to be prepared for greater change driven by three key forces:

– Monetary policy
– Geopolitics
– Innovation

Source: Invesco, as of June 30, 2019

Innovation-driven disruption

Technology	Impact
Artificial intelligence — driverless cars	Industry disruption
Blockchain	Higher growth and productivity
Cloud computing	Structural unemployment

Key takeaways

We are in the midst of a fourth industrial revolution. Sectors and firms that are being disrupted by novel technologies or by new entrants are likely to see lower market shares, rising credit risk and spreads as well as surging equity risk premia; conversely, firms that are disrupting or are using innovation to their advantage are likely to see higher market shares, lower credit risk and spreads and lower equity risk premia.

Source: Invesco, as June 30, 2019

Monetary policy in flux

US

– Moved to a more dovish stance
– Balance sheet normalization ending

Bank of Canada, Bank of England

– On pause

Bank of Japan (BoJ), European Central Bank (ECB)

– Low key rates
– ECB stimulating again after end of QE
– BoJ is still expanding its balance sheet

Key takeaways

Monetary policy has the potential to create some disruption for several reasons:

– Uncertainty about new ECB leadership in the fall of 2019
– The Fed has prematurely ended balance sheet normalization and the rate hike cycle, raising questions about how they might respond to the next crisis.
– Central banks have become increasingly politicized.

Source: Invesco, as of June 30, 2019

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A changing world order

Vulnerability

- European Union
- The United Nations
- The North Atlantic Treaty Organization (NATO)
- World Trade Organization (WTO)

Instability

- Brexit
- North Korea
- Middle East

Key threats

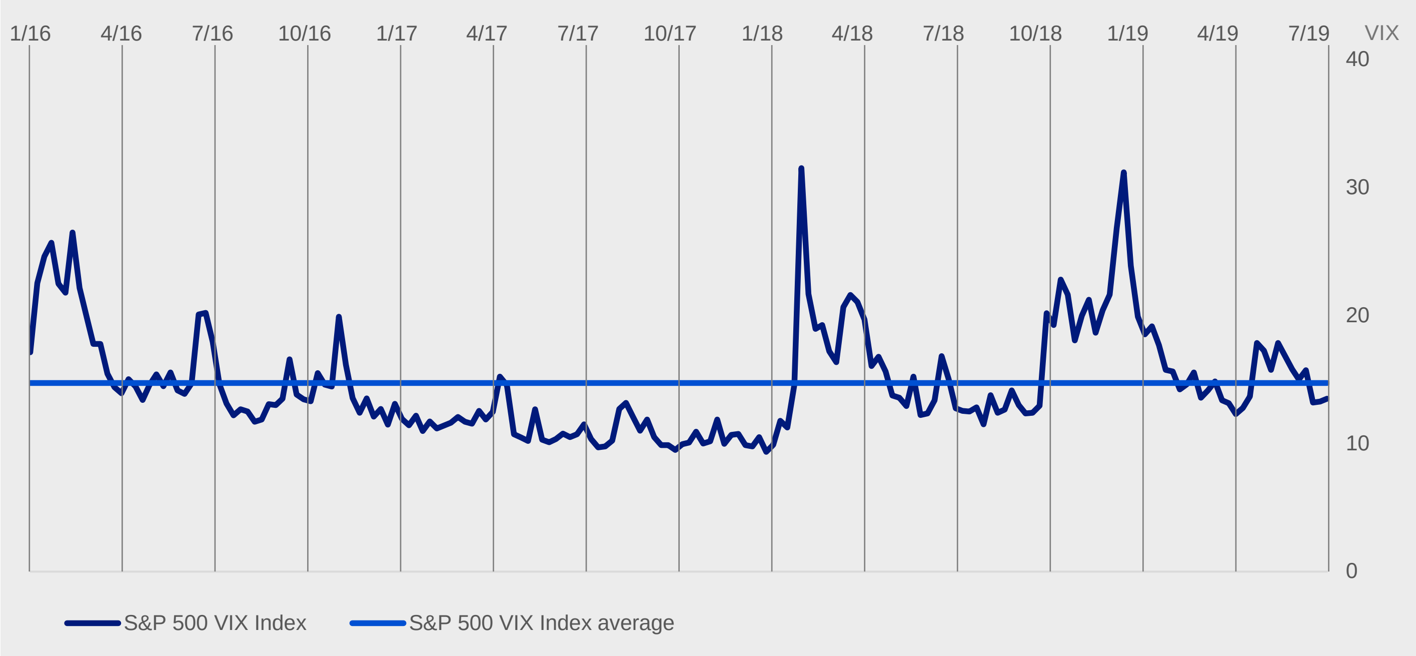
- Populism
- Nationalism
- De-globalization

Key takeaways

There is instability and uncertainty in many parts of the world, and we remain at risk for great geopolitical disruption going forward.

Source: Invesco, as of June 30, 2019. There is no guarantee any referenced forecasts/outlooks will come to pass.

Volatility rising episodically



Key takeaways

- Volatility rose dramatically in 2018 as the stock market sold off in February and again in the fourth quarter, driven by concerns over Fed tightening and trade wars.
- We expect this environment of higher volatility to continue episodically, given geopolitical risks, especially with regard to trade, and the potential for monetary policy errors.

Source: Federal Reserve Economic Data, Chicago Board Options Exchange (CBOE) Volatility Index, as of June 30, 2019. Volatility is measured by the CBOE Volatility Index (VIX). An investment cannot be made directly in an index.

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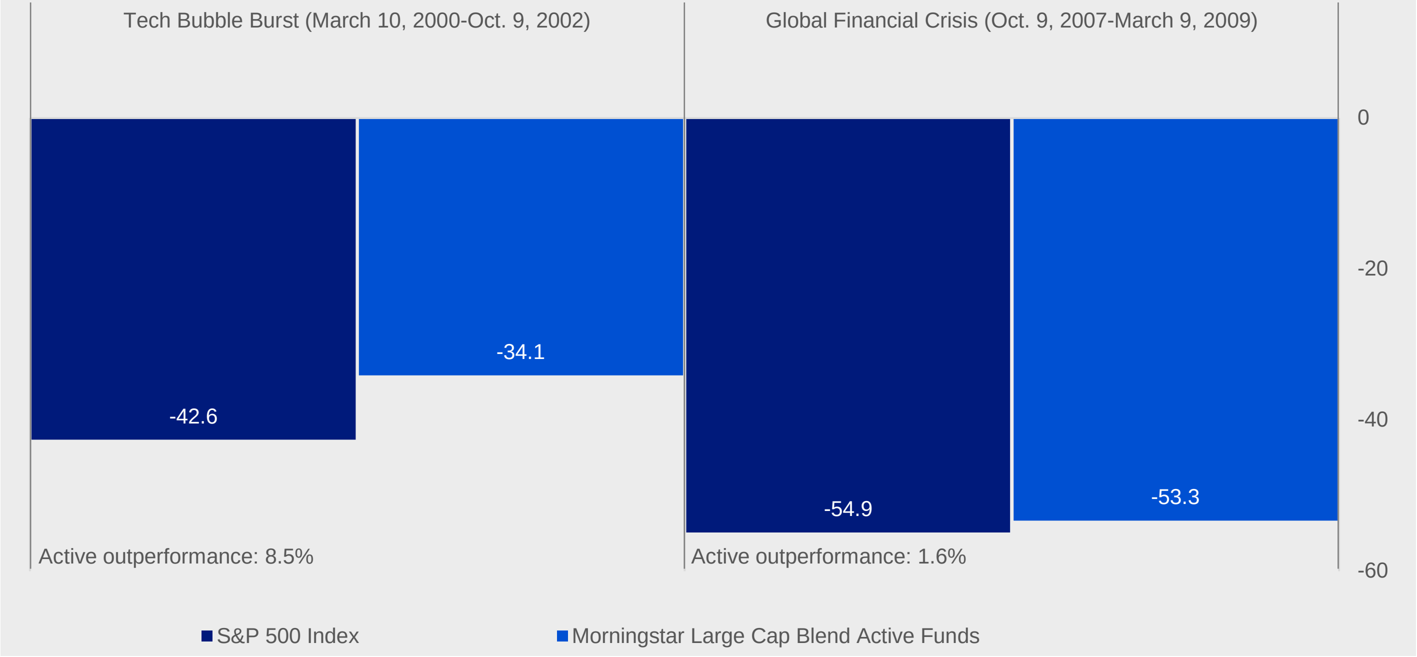
Potential for downside volatility



Key takeaways

Investors who are concerned about a stock market downturn can consider exposure to actively managed strategies.

1 This represents a sub-set of the Morningstar Large-Cap Blend fund universe, with all index funds extracted.
Source: Morningstar, as of June 30, 2019. Past performance is not a guarantee of future results. An investment cannot be made directly in an index.

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Volatility is likely to increase; investors may need to participate but manage risk

Conclusion

– Confusion about the direction of monetary policy – and the potential for a monetary policy error -- is likely to push volatility higher.

– Geopolitical risk could also exacerbate volatility.

Potential solutions

– Actively managed strategies

– The low volatility factor

– Exposure to alternatives

– Balanced risk funds

Source: Invesco, as of June 30, 2019

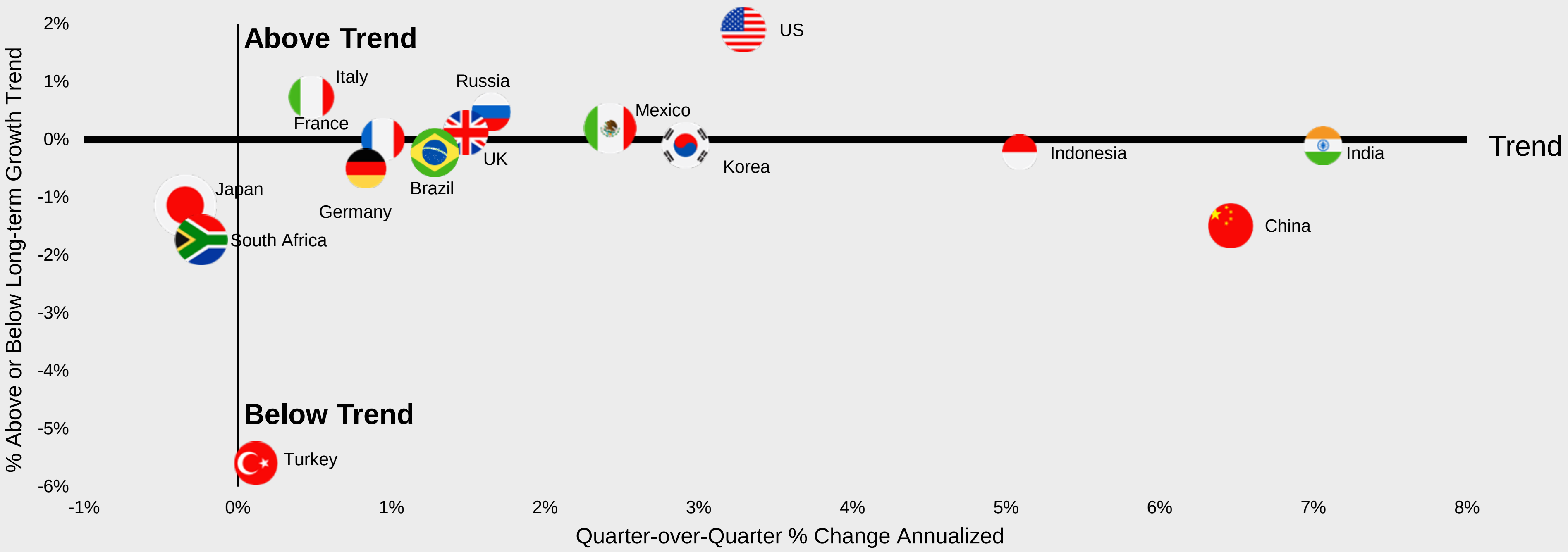
Divergence

Here we explore:

- Differences in major economies
- Differences in valuations

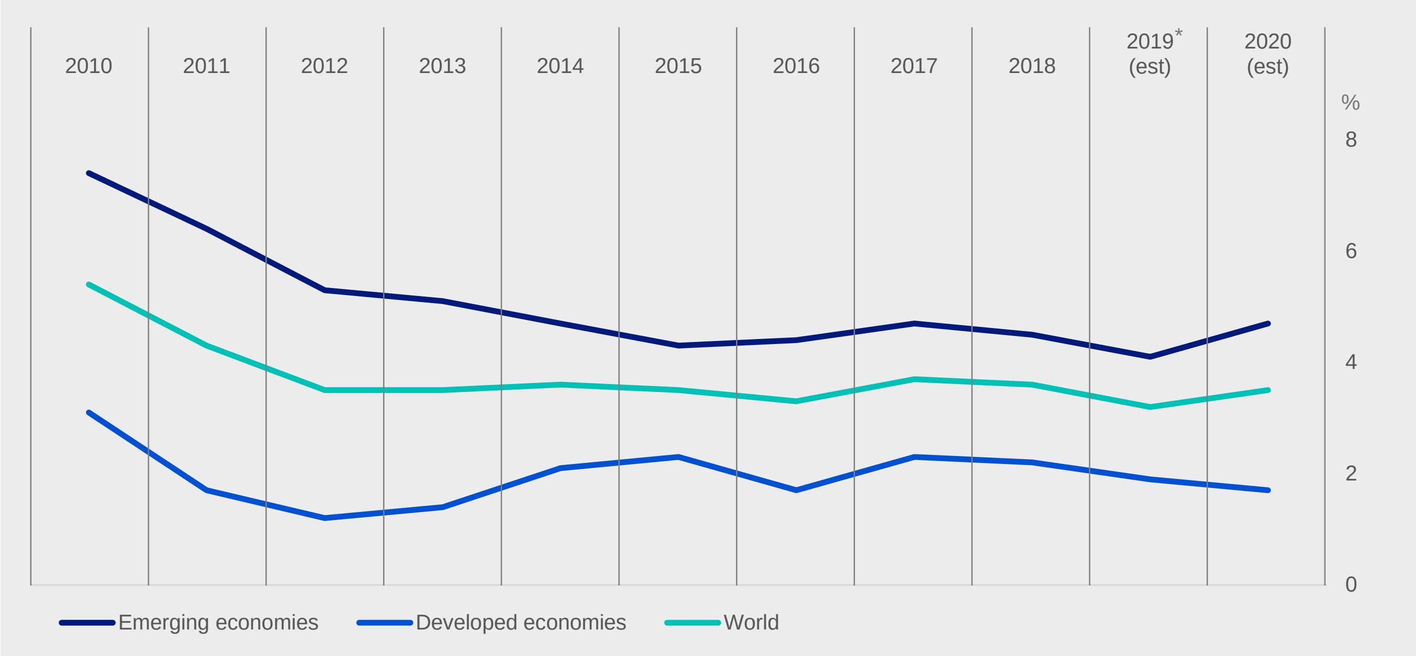
Growth: Differences between countries relative to trend

2018 Average Real GDP Growth vs. Trend: Selected Countries



Sources: Haver Analytics and Bloomberg, L.P., as of Sept. 30, 2018. Most current data available. **Past performance does not guarantee future results.**

Divergence and global growth

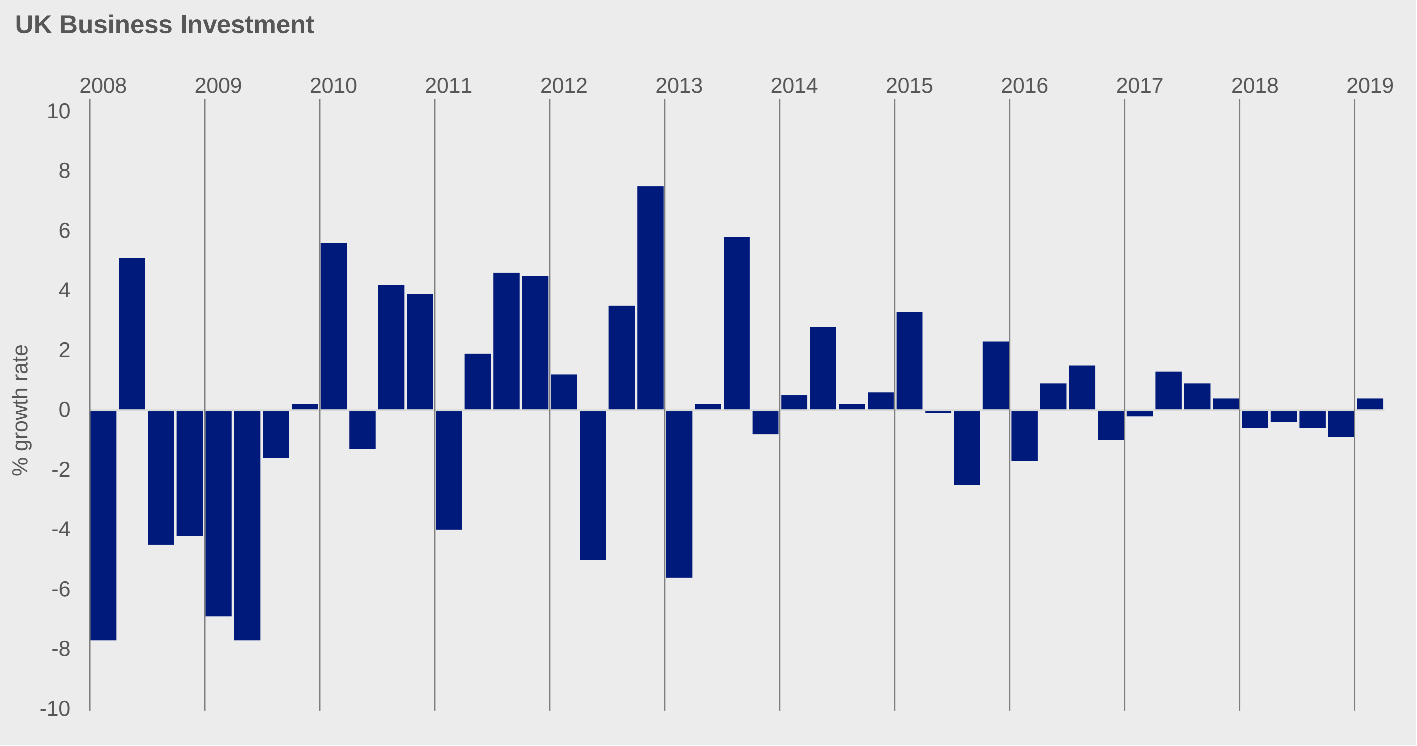


Key takeaways

- While global growth is strong, some countries have far higher growth rates than other countries.
- Upside risks for some countries have increased while downside risks have increased for others.
- Some economies have experienced lengthy expansions while others are just beginning economic expansions.

*Forecast through year-end
Source: IMF, April 2019. There is no guarantee any referenced forecasts/outlooks will come to pass.

A deeper dive into the UK



Key takeaways

Economic policy uncertainty has typically had a strong negative correlation to business investment, so it’s not surprising to see a significant drop in business investment in the wake of the Brexit referendum.

Source: UK Office for National Statistics, as of June 30, 2019.

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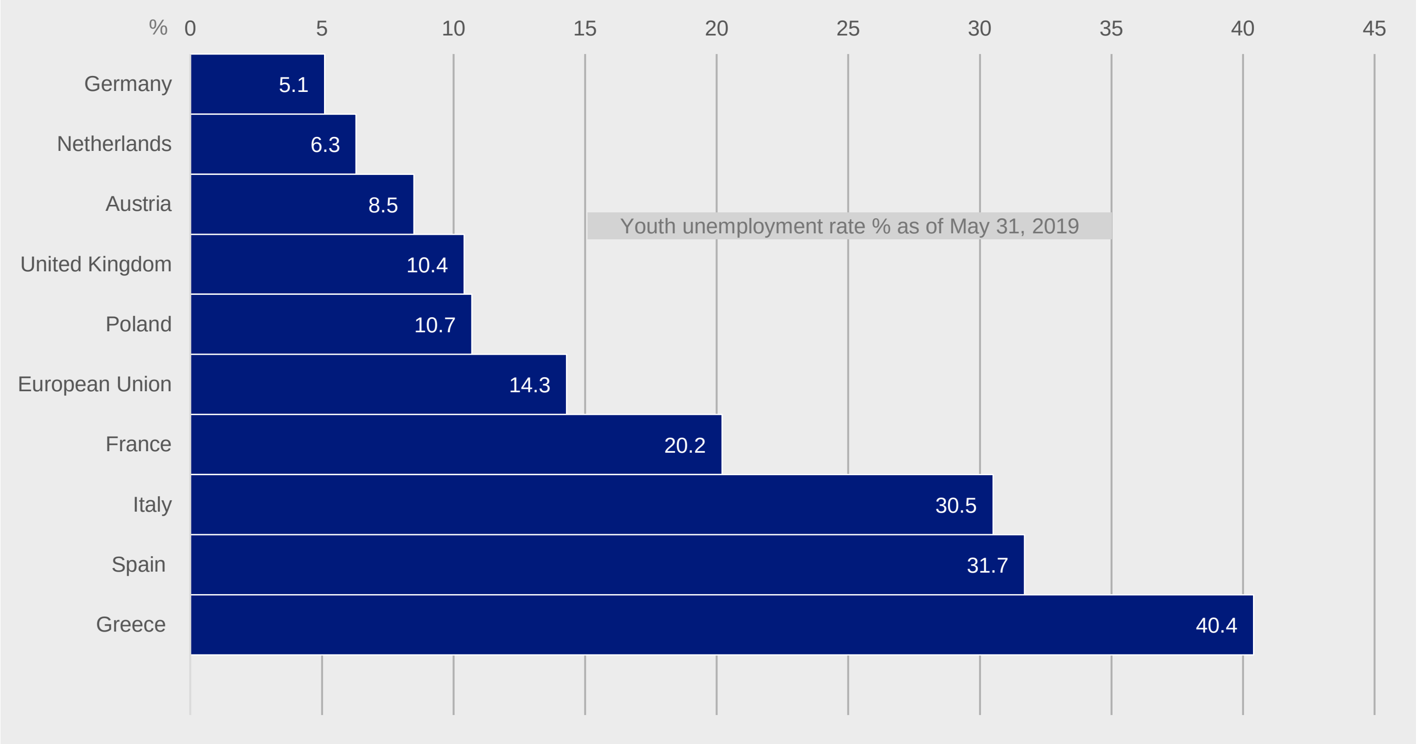
A deeper dive into Europe



Key takeaways

Although unemployment in the European Union has reached 6.3% — which is close to pre-recession lows — and youth unemployment in the EU is at 14.3%, there are dramatic differences in economic conditions of the member countries.

For example, youth unemployment in Germany is 5.1% while youth unemployment in Greece is 40.4%. Such economic differences have helped to aggravate political differences as the EU navigates through political changes and challenges.

Source: Statista, as of May 31, 2019. Most recent data available.

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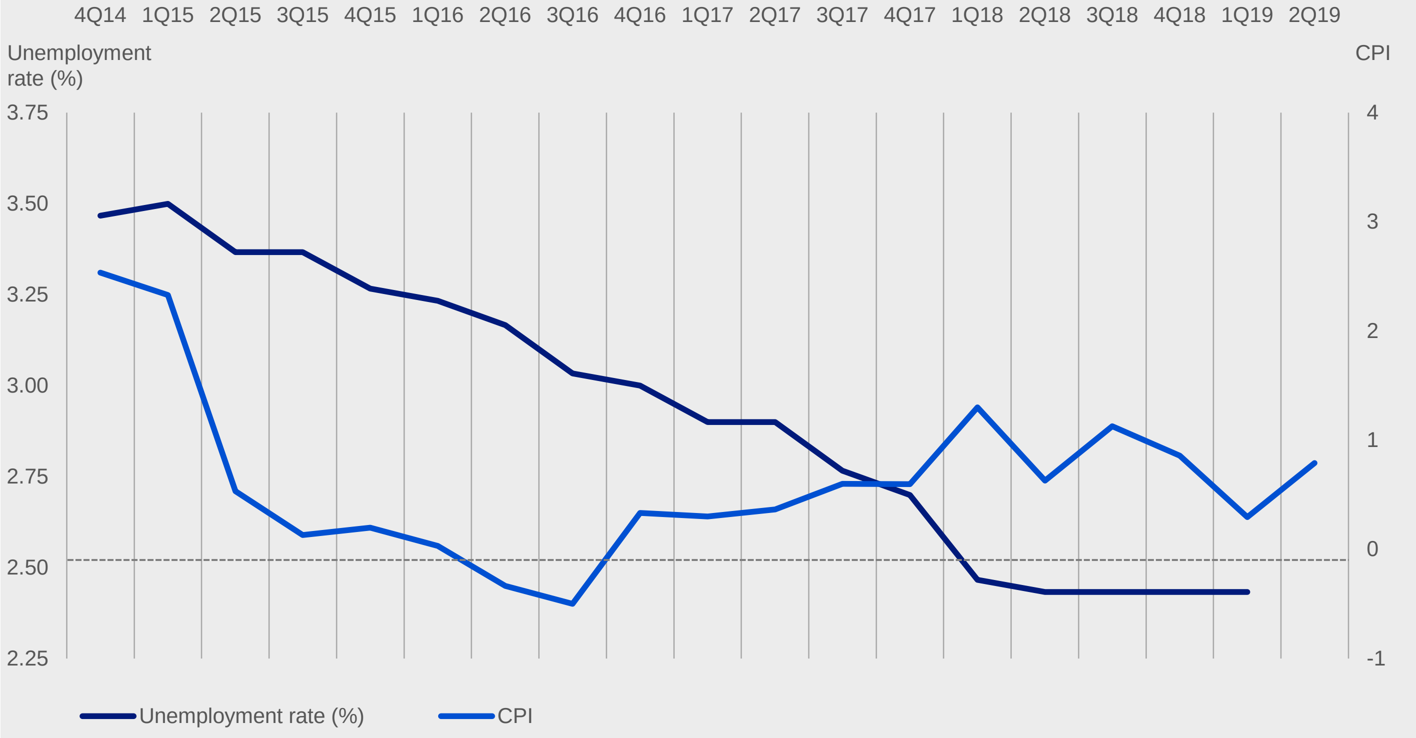
A deeper dive into Japan



Key takeaways

Despite lackluster economic growth, Japan has experienced improvement in already-low unemployment over the past several years. Inflation is far from the Bank of Japan's (BOJ) target, which gives the BOJ flexibility to continue its ultra-accommodative policies.

Additionally, it would be difficult for the BOJ to tighten monetary policy significantly because of the impact on debt servicing costs.

Source: Organization for Economic Cooperation and Development as of June 30, 2019.

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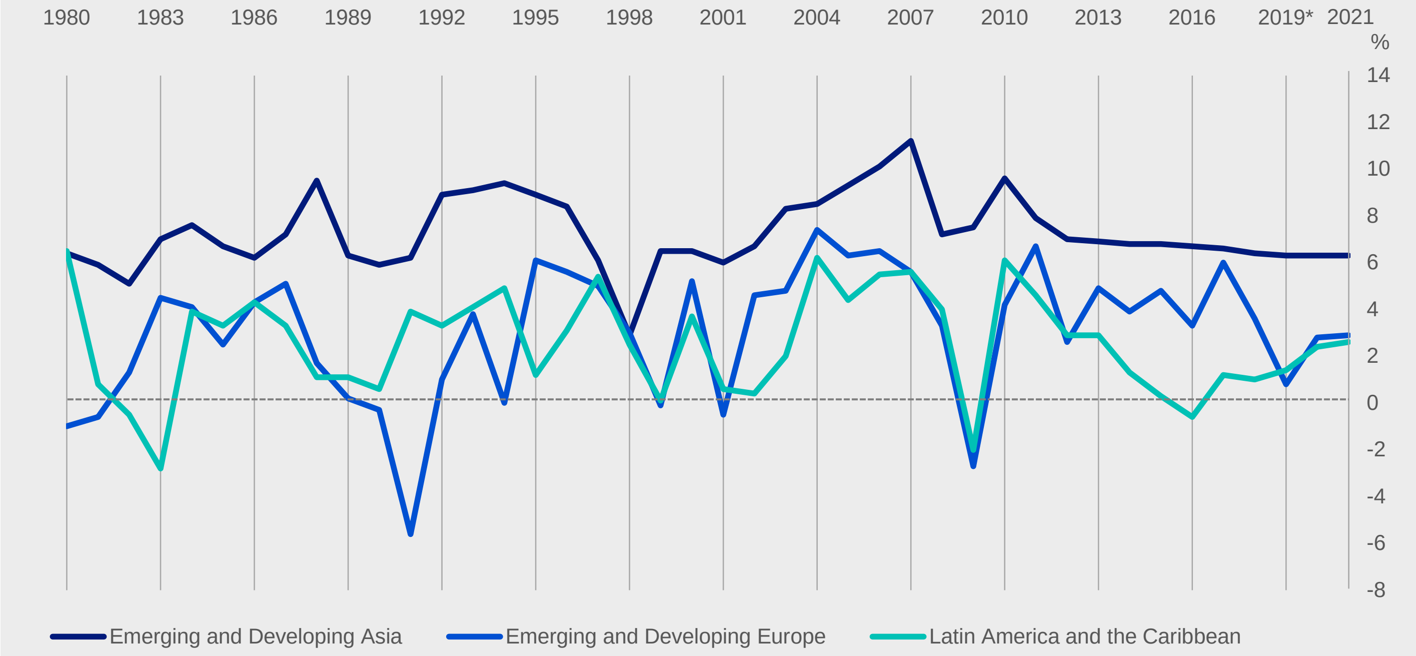
A deeper dive into emerging markets (EM)



Key takeaways

The Fed's pivot to a more dovish monetary policy stance could provide a tailwind for emerging markets in general. However, emerging markets are not homogenous. For example, there are significant differences in growth levels with Asian emerging markets exhibiting higher growth. India's economy is expected to grow 7.3% this year while Brazil's economy is expected to grow 2.1%.

*Forecast through year-end
Sources: IMF as of June 30, 2019.
There is no guarantee any referenced forecasts/outlooks will come to pass.

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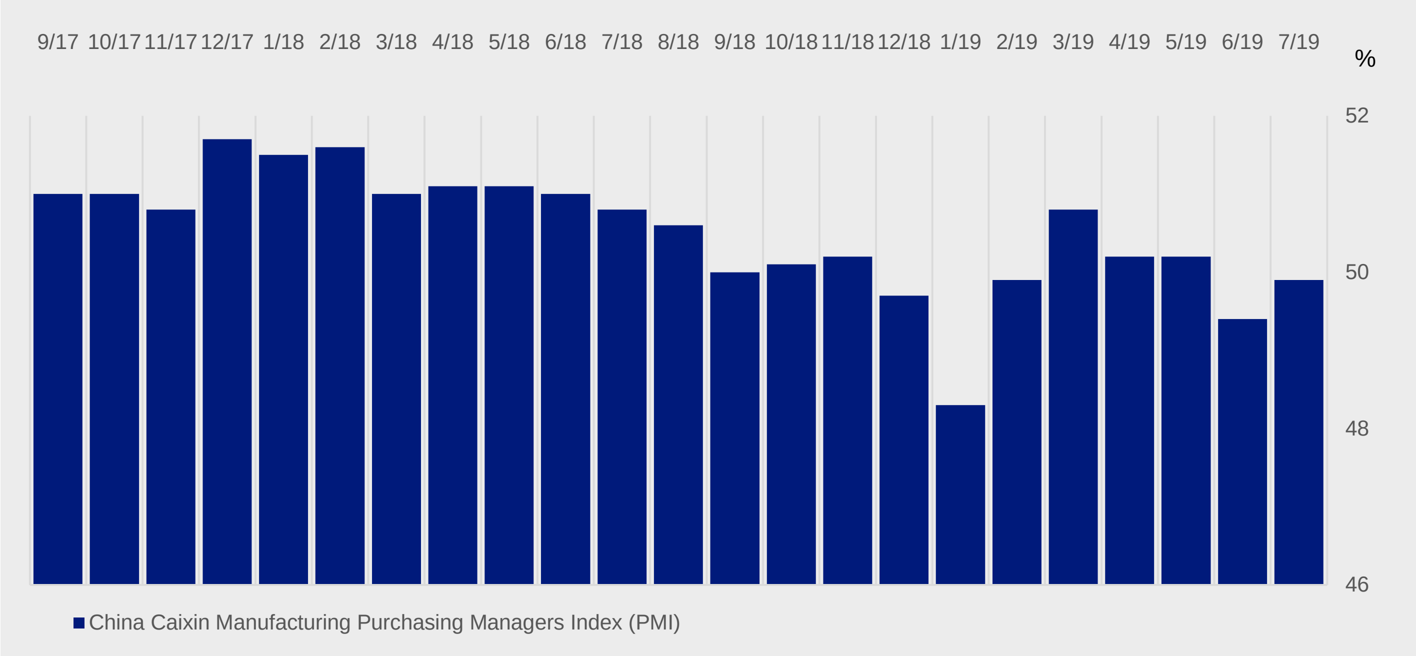
A deeper dive into China



Key takeaways

After months of significant fiscal and monetary stimulus, China has shown signs of improvement. GDP growth for the first quarter was better than expected, and we expect China will meet its GDP growth target of 6.0% – 6.5% for 2019.

Source: Organization for Economic Cooperation and Development as of June 30, 2019.

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A deeper dive into the US – Not all risks are to the upside

Upside risks
Business deregulation
Household tax reform
Corporate tax reform
Repatriation tax cut
Infrastructure spending

Downside risks
Tariffs
Immigration policy
Rising debt

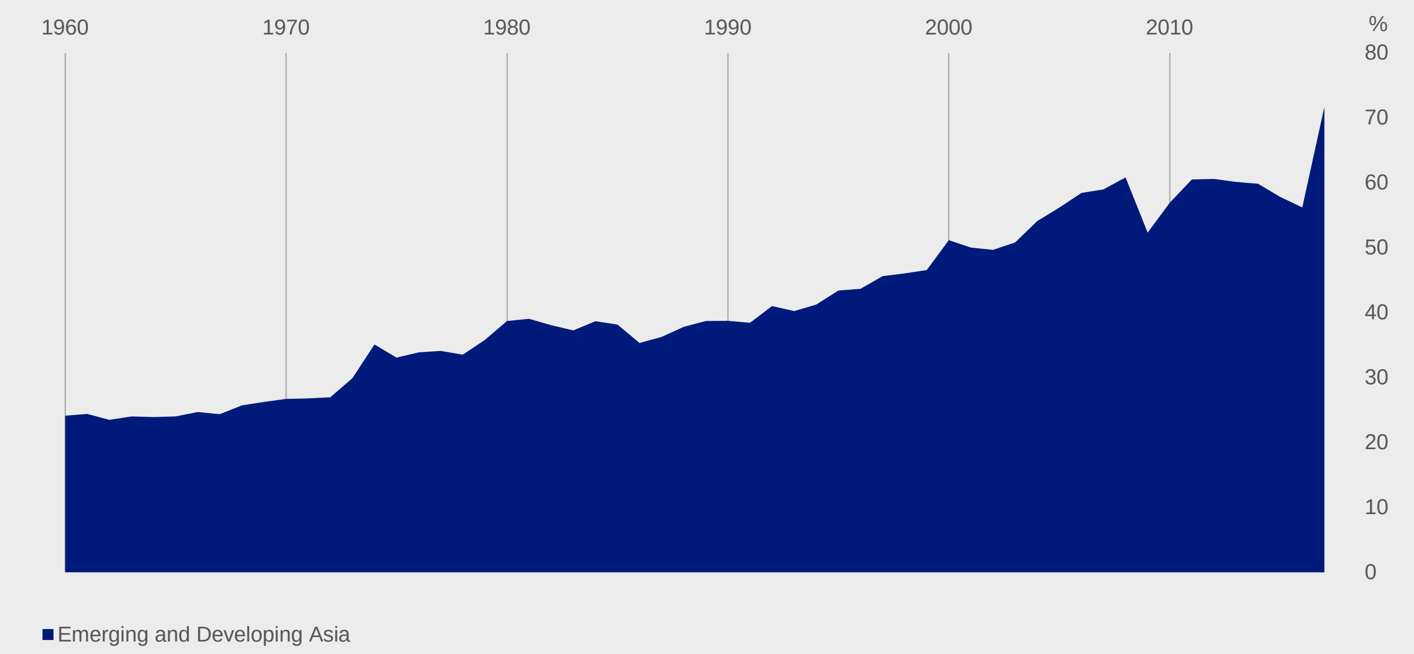
Key takeaways

– There are a variety of components of the administration's agenda that are pro-growth and offer upside potential for the US economy.

– However, some items on the agenda have the potential to create significant downside risk for the US economy.

Source: Invesco, as of June 30, 2019

The dangers of protectionism: International trade is an increasingly important part of global GDP



Key takeaways

World trade as a percentage of GDP has grown dramatically in the last century, and so a trade war today could be far more damaging than a trade war just a few decades ago. Trade wars can impact the economy in a variety of ways:

– Economic policy uncertainty can cause companies to postpone or scale back business investment.

– Tariffs often get passed on to the consumer in higher prices, which lowers real wages and hurts consumers' purchasing power. Tariffs can also create demand destruction.

– Input costs for companies rise; some companies choose to shift production.

Source: World Bank, as of Dec. 31, 2017. Most recent data available.

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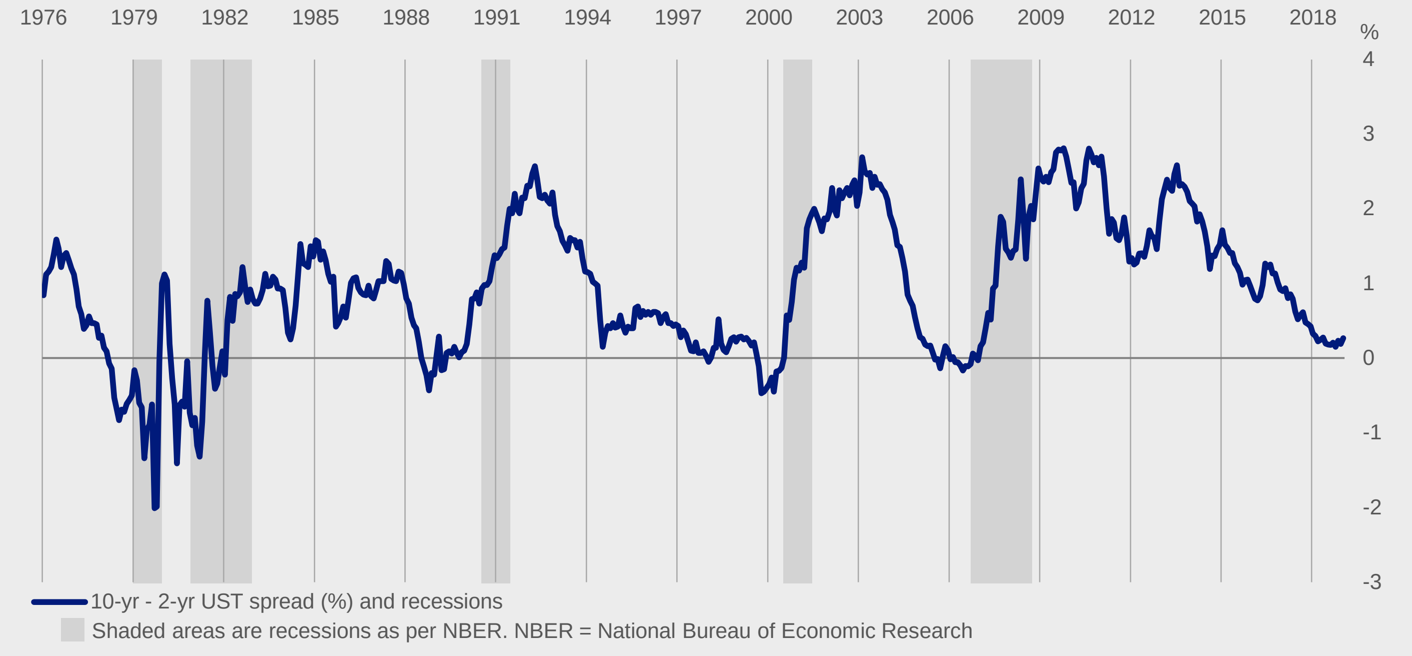
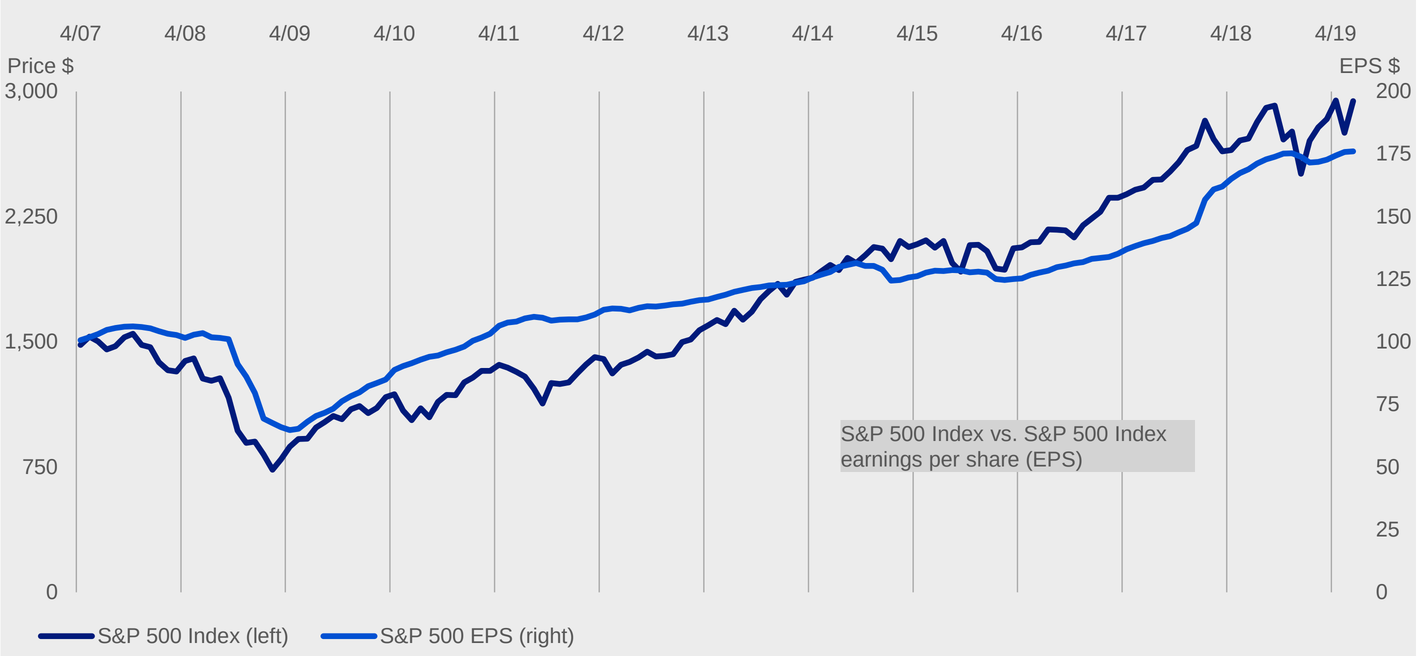
A deeper dive into the US –
US yield curve inversion and recessions



Yield curve inversion	Recession start	Difference (months)
8/78	1/80	17
9/80	7/81	10
12/88	7/90	19
5/98	3/01	34
12/05	12/07	24
Average		21

Note: Numbers below zero reflect an inverted yield curve.
Source: FactSet Research Systems, as of June 30, 2019.

Valuations are stretched for US stocks



Key takeaways

- We had warned that valuations had become extended over the last several years as a result of 'animal spirits', creating vulnerability for stocks.
- As a result of the stock market rally in the first quarter, stock valuations have risen again after falling during the fourth quarter sell-off.
- Earnings growth has been weakening, creating an additional headwind for US equities.
- Investors need to be selective with US equities.

Source: FactSet Research Systems, as of June 30, 2019. An investment cannot be made directly in an index.

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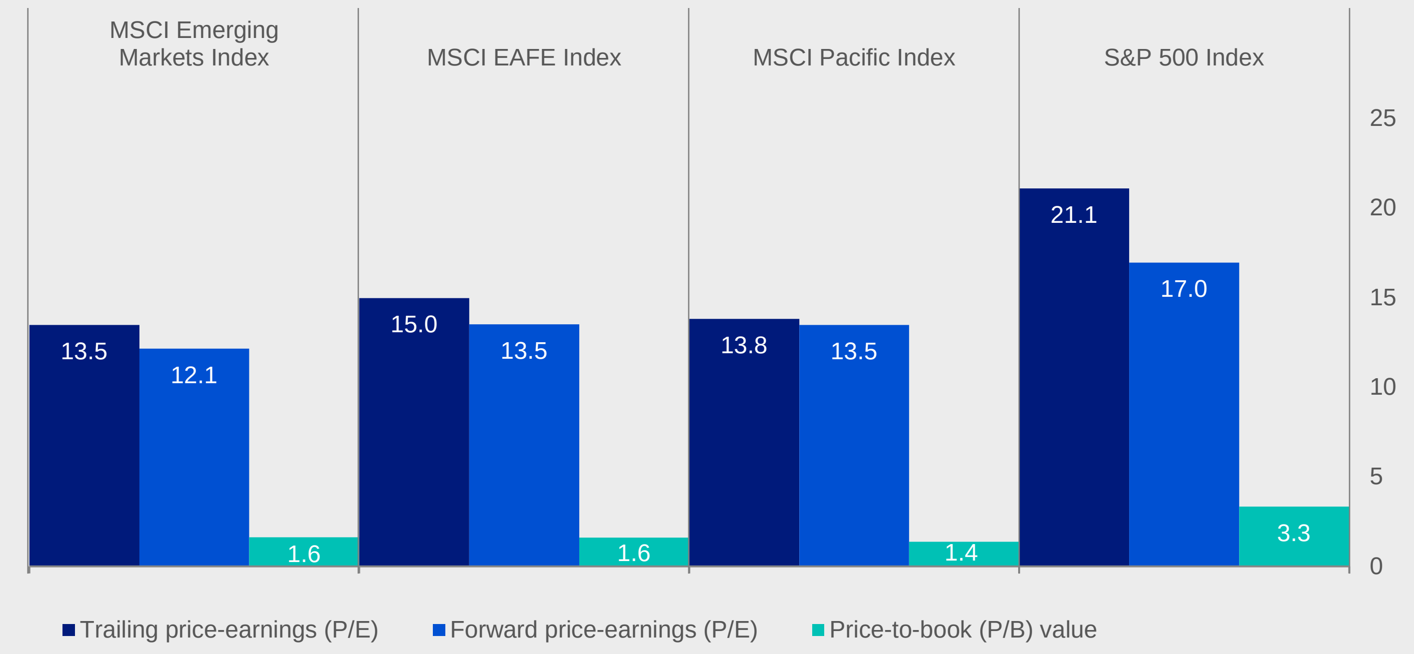
Valuations have varied across regions



Key takeaways

- Some regions outside the US currently have more attractive valuations than the US.
- Historically, lower valuation stocks have fallen less than the overall stock market during downward periods.
- Investors might consider ensuring they are well diversified internationally, with exposure to areas of the globe with lower valuations.

Sources: MSCI and Standard & Poor's, as of June 30, 2019. Past performance is not a guarantee of future results. An investment cannot be made directly in an index.

Economies are experiencing greater differences

Conclusion	Potential solutions
– After a synchronized growth environment in 2017, economies have shown greater divergence in growth, and we expect that to continue. – There are also substantial differences in valuations in different markets. – In this environment, investors may benefit from greater diversification. – Selectivity in investing is becoming increasingly important.	– The low valuation factor – International investments, including emerging markets – Diversified multi-asset solutions

Source: Invesco, as of June 30, 2019. Asset allocation/diversification does not guarantee a profit or eliminate the risk of loss.

Demographics and debt

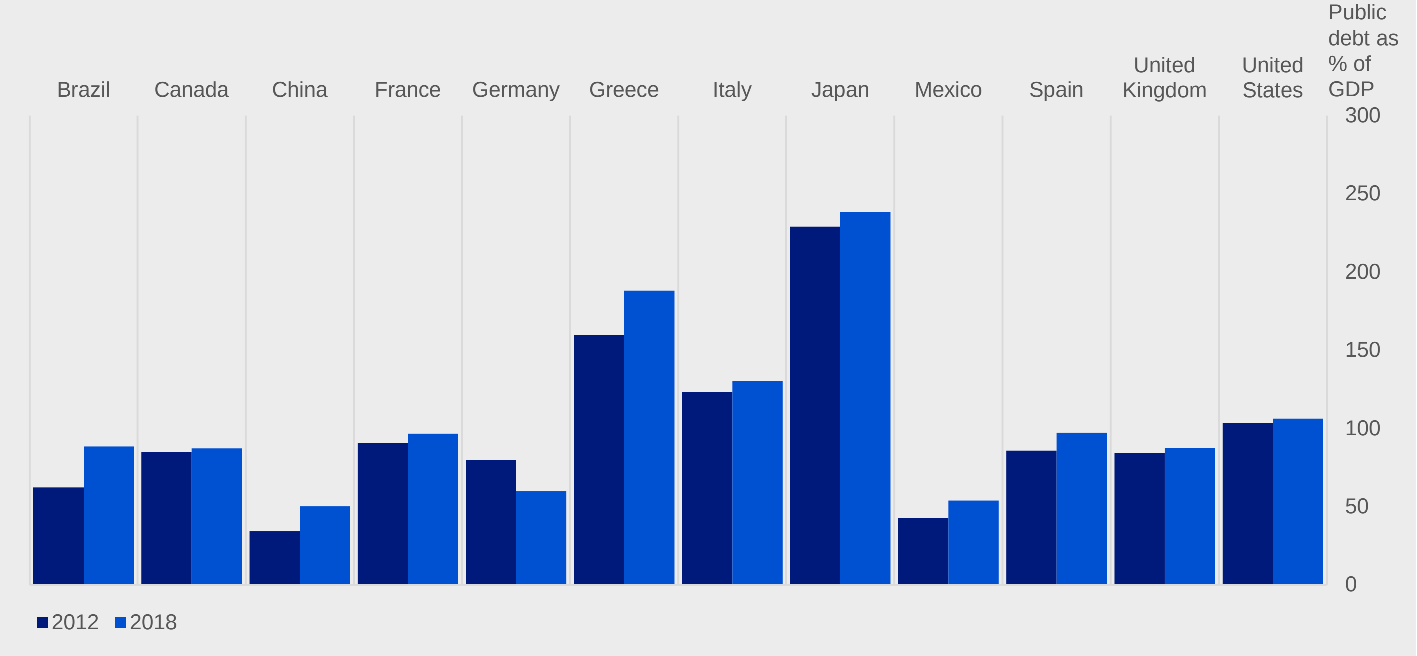
Here we explore:

– High debt levels

– Low savings levels

– Lower for longer interest rates

Leverage has increased in the past decade, encouraged by extremely low interest rates



Key takeaways

– Usually countries de-lever during economic expansions.

– However, this economic expansion has been unique in that most countries, both developing and developed, have increased their debt levels. Ultra-low rates have encouraged this behavior.

– This is a reminder of the growing problem of high government debt levels, which many countries are facing.

Source: Central Intelligence Agency (CIA) World Factbook. Data is based on a 2017 estimate and as of Dec. 31, 2018. Most recent data available.

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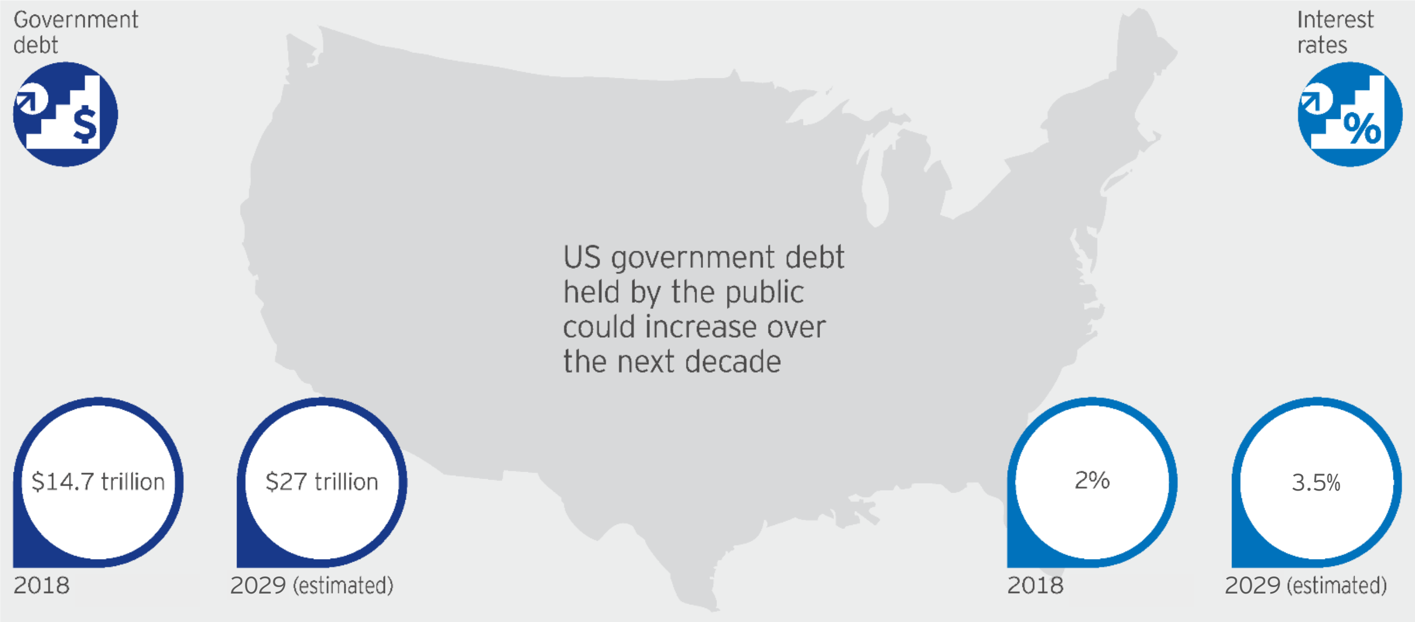
Debt sustainability could become a bigger issue



Key takeaways

– US government debt held by the public is projected to grow to $27 trillion in the next decade.

– With the interest on servicing the debt projected to be a growing percentage of federal spending, the Federal Open Market Committee is incentivized to keep rates lower.

– Rising debt is not exclusive to the US, which suggests interest rates could remain relatively low in other countries as well, in order for them to service their debt without dramatically impacting their budgets.

Source: Congressional Budget Office, as of March 1, 2019. Most recent data available. There is no guarantee any referenced forecasts/outlooks will come to pass.

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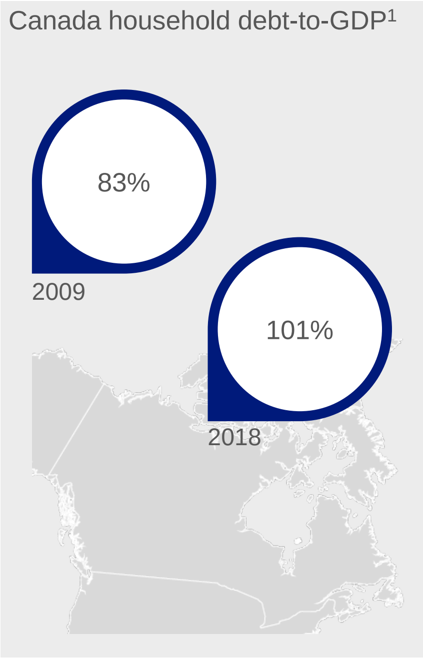
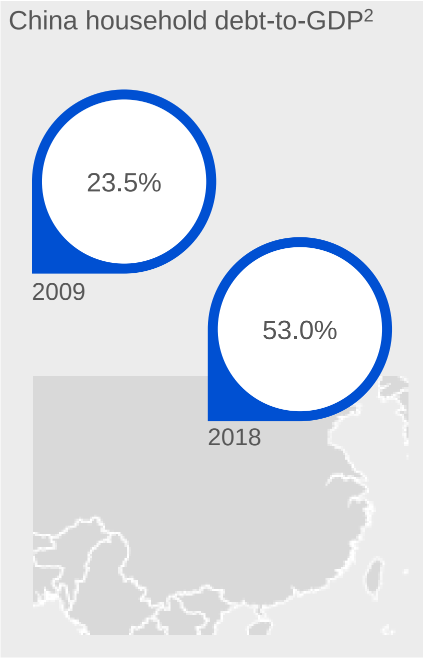
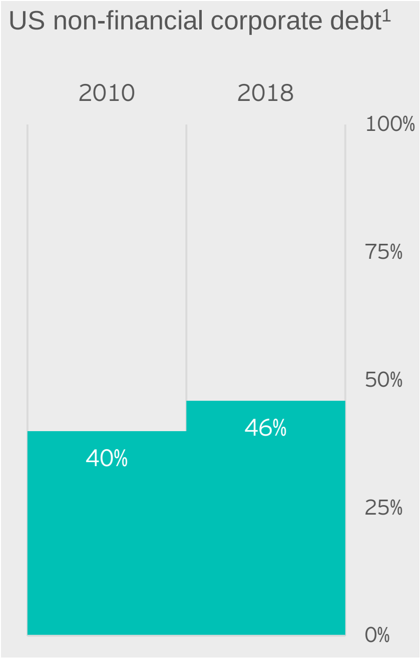
Overall debt burdens have grown







Key takeaways

- Both public and private debt burdens are growing, so it will likely become more difficult to service debt obligations if and when rates rise.
- This buildup also suggests the potential for debt crises in the future, especially for countries that have experienced a major credit expansion.
- This suggests the monetary policy environment will need to remain relatively accommodative for longer.

Source: 1Canada household debt to GDP and US non-financial corporate debt: Federal Reserve Bank of St. Louis, as of Jan. 1, 2018 and Dec. 31, 2018, as of March 31, 2019; 2 China household debt to GDP: CEIC data, as of Dec. 31, 2018. Most recent data available for all.

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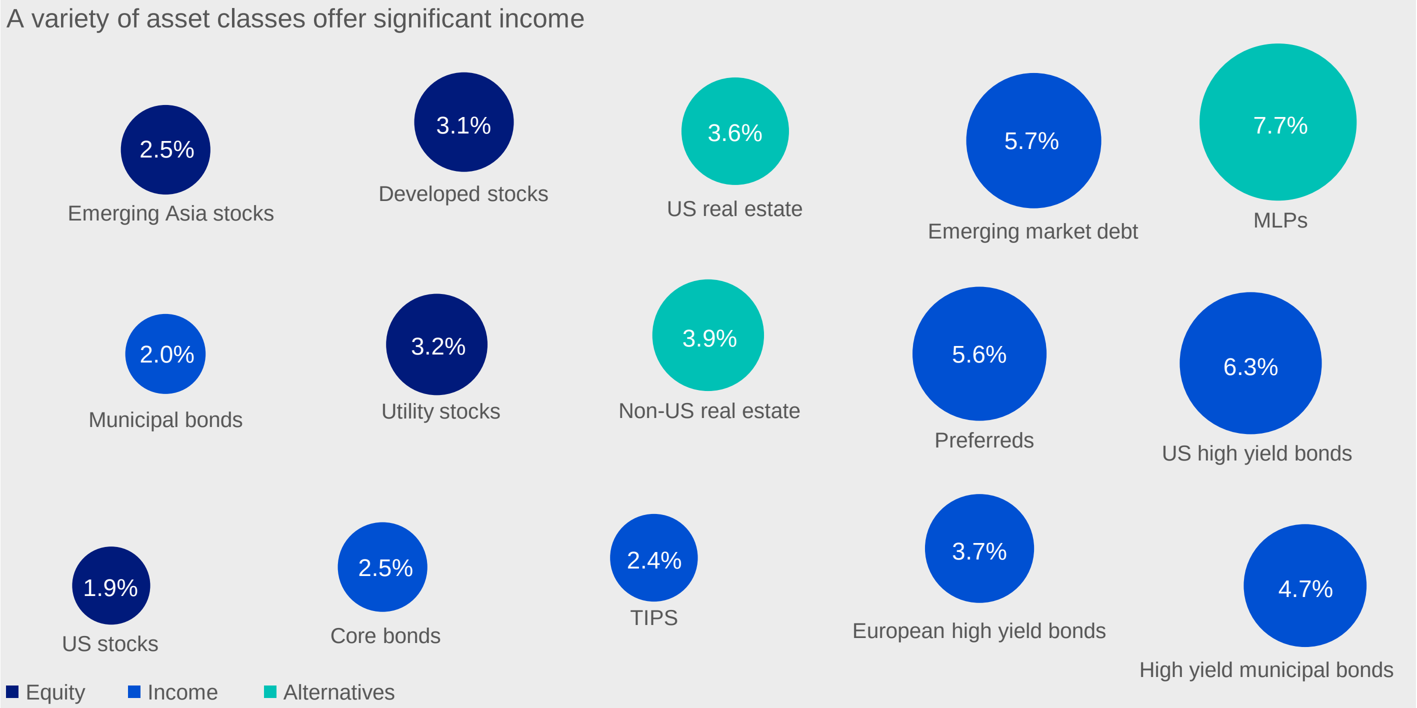
Low rates likely to persist, so the hunt for diversified sources of income continues



Key takeaways

- Traditional sources of income have been unable to deliver adequate yields in recent years given the environment of financial repression.
- The Fed's abrupt change in monetary policy stance means rates will remain relatively low for the time being.
- But with populations aging, the need for income is greater than ever.
- Dividends and other less traditional sources of income may help. The current yield on the S&P 500 Index is 1.9%, which is higher than many major sovereign debt yields.

Source: FactSet Research Systems, as of June 30, 2019. Yields presented are current yields. Past performance is not a guarantee of future results. An investment cannot be made directly in an index. Dividends are not guaranteed. Please see slides 44 and 45 for risks associated with these asset classes.

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The need for retirement savings continues

By participation

In 2017, participation by all civilian workers, full and part-time was 54%.[1]

By household

21% of Americans have no retirement savings and an additional 10% have less than $5,000 in savings. A third of Baby Boomers currently in, or approaching, retirement age have between nothing and $25,000 set aside.[2]

By readiness

The percent of households headed by someone aged 55 and over that had no retirement savings decreased from about 52 percent in 2013 to about 48 percent in 2016.[3]

Key takeaways

In general, people have not saved nearly enough for retirement, which could create significant problems as the population ages.

Sources: 1 Bureau of Labor Statistics, January, 2018, most recent data available. 2 2018 Northwestern Mutual 2018 Planning & Progress Study. Please see slide 48 for additional information about this study. 3 Most Households Approaching Retirement Have Low Savings, an Update GAO-19-442R, March 26, 2019.

The need for college savings continues

Average student loan debt:

$28,650

Average monthly student loan payment:

$222

Total student loan debt:

$1.56 trillion

Number student loan borrowers:

44.7 million

Number of borrowers who owe $100,000 or more:

2.7 million

Key takeaways

- Investors may need to increase their savings rate and their exposure to assets with growth potential in order to meet all investment goals, including college savings.
- Without college savings, young people can suffer with high student loan debt that could last a lifetime.

Source: Federal Reserve.gov, as of June 14, 2017. Most recent data available.

Low rates, and the hunt for income and capital continue

Conclusion	Potential solutions
– Yields are hard to find, but a high-quality fixed income portfolio diversified across credit, securitized and government sectors may help. – Dividends can also be an important source of income. – Investors may need to consider saving more and taking advantage of savings vehicles available to them.	– Diversified fixed income – Dividend strategies – Maximize savings to meet all investment goals

Source: Invesco, as of June 30, 2019. Asset allocation/diversification does not guarantee a profit or eliminate the risk of loss.

Solutions to consider

Key points and potential solutions

	Key points	Solutions to consider
Disruption	Volatility is likely to increase. Investors may need to participate but mitigate risk.	– Actively managed strategies – The low volatility factor – Exposure to alternatives – Balanced risk funds
Divergence	Economies are experiencing differences in growth.	– The low valuation factor – International investments – Diversified multi-asset solutions
Demographics and debt	Relatively low rates globally will likely persist. The hunt for adequate income and capital continues.	– Diversified fixed income – Dividend strategies – Maximize savings in order to meet all investment goals

Source: Invesco, as of June 30, 2019

Important information

Invesco does not provide tax advice. Tax information contained herein is general in nature and is not meant to be and cannot be used by any taxpayer for the purpose of avoiding tax penalties that may be imposed on the taxpayer under US federal tax laws. Federal and state tax laws are complex and constantly changing. Investors should always consult their own legal or tax advisor for information concerning their individual situation. Investors should consider their current and anticipated investment horizon and income tax bracket when making an investment decision.

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About risk

Prices of equity securities change in response to many factors, including the historical and prospective earnings of the issuer, the value of its assets, general economic conditions, interest rates, investor perceptions and market liquidity.

Common stocks do not assure dividend payments. Dividends are paid only when declared by an issuer's board of directors and the amount of any dividend may vary over time.

The risks of investing in securities of foreign issuers located in developing or emerging countries may be more negatively affected by fluctuations in foreign currencies, political and economic instability, and foreign taxation issues than in more developed countries. Foreign investments may be affected by changes in a foreign country's exchange rates, political and social instability, changes in economic or taxation policies, difficulties when enforcing obligations, decreased liquidity, and increased volatility. Foreign companies may be subject to less regulation resulting in less publicly available information about the companies.

Fixed income products are subject to risk, including credit risk of the issuer and the effects of changing interest rates. Market prices of fixed income securities with intermediate lives generally fluctuate more in response to changes in interest rates than do market prices of municipal securities with shorter lives, but generally fluctuate less than market prices of municipal securities with longer lives.

Although bonds generally present less short-term risk and volatility than stocks, the bond market is volatile and investing in bond funds involves interest rate risk; as interest rates rise, bond prices usually fall, and vice versa. Bond funds also entail issuer and counterparty credit risk, and the risk of default. Additionally, bond funds generally involve greater inflation risk than stocks. Although less volatile than stocks, bonds are subject to credit and default risks as well as interest rate risk; as interest rates rise, bond values fall and vice versa. Stocks fluctuate in response to activities specific to the company, as well as general market and economic conditions.

High yield (junk) bonds involve a higher risk of default and price movement due to changes in the issuer's credit quality, while foreign bonds, including those of emerging markets, may fluctuate more due to increased political concerns, taxation issues, and movements in foreign exchange rates.

Most senior secured loans are made to corporations with below investment-grade credit ratings and are subject to significant credit, valuation and liquidity risk. The value of the collateral securing a loan may not be sufficient to cover the amount owed, may be found invalid or may be used to pay other outstanding obligations of the borrower under applicable law. There is also the risk that the collateral may be difficult to liquidate, or that a majority of the collateral may be illiquid.

Municipal securities are subject to the risk that litigation, legislation, or other political events, local business or economic conditions or the bankruptcy of the issuer could have a significant effect on an issuer's ability to make payments of principal and/ or interest.

Commodities may subject an investor to greater volatility than traditional securities such as stocks and bonds.

Investments in real estate related instruments may be affected by economic, legal, or environmental factors that affect property values, rents or occupancies of real estate.

Real estate companies, including REITs or similar structures, tend to be small and mid-cap companies and their shares may be more volatile and less liquid.

Alternatives are investments that do not fall into the three classic assets types of stocks, bonds and cash. Alternatives fall into non-traditional asset types such as commodities, currencies, real estate and any securities that aren't traded on the open market. Alternatives also include investments that incorporate non-traditional features such as long/short investing. Alternative products typically hold more non-traditional investments and employ more complex trading strategies, including hedging and leveraging through derivatives, short selling and opportunistic strategies that change with market conditions. Investors considering alternatives should be aware of their unique characteristics and additional risks from the strategies they use. Like all investments, performance will fluctuate. You can lose money. Alternative investments can be less liquid and more volatile than stocks and bonds, and often lack longer term track records.

Derivatives may be more volatile and less liquid than traditional investments and are subject to market, interest rate, credit, leverage, counterparty and management risks. An investment in a derivative could lose more than the cash amount invested.

Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and vice versa.

Counterparty risk is the risk that the other party to the contract will not fulfill its contractual obligations, which may cause losses or additional costs.

Leverage created from borrowing or certain types of transactions or instruments may impair liquidity, cause positions to be liquidated at an unfavorable time, lose more than the amount invested, or increase volatility.

Short sales may cause an investor to repurchase a security at a higher price, causing a loss. As there is no limit on how much the price of the security can increase, exposure to potential loss is unlimited.

While US Treasuries are backed by the full faith and credit of the US Government, they are subject to interest rate and inflation risk.

Factor investing is an investment strategy in which securities are chosen based on certain characteristics and attributes that may explain differences in returns. There can be no assurance that performance will be enhanced or risk will be reduced for funds that seek to provide exposure to certain factors. Exposure to such investment factors may detract from performance in some market environments, perhaps for extended periods. Factor investing may underperform cap-weighted benchmarks and increase portfolio risk.

Return expectations across asset classes have broadly declined, serving as a critical warning that meeting investment goals will be challenging. Investors must recognize they will need to save more in order to reach their longer-term funding objectives.

Index definitions

Expectations Index is a sub-index that measures overall consumer sentiments toward the short-term (6-month) future economic situation and is used to derive (approx. 60%) the Consumer Confidence Index, a widely used economic indicator. The sub-index is compiled from data gathered from a survey of 5,000 households on questions regarding expected business and employment conditions as well as expected income in the near-term.

Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging them; the goods are weighted according to their importance. Changes in CPI are used to assess price changes associated with the cost of living.

ISM Manufacturing Index is based on surveys of more than 300 manufacturing firms by the Institute of Supply Management (ISM). The ISM Manufacturing Index monitors employment, production, inventories, new orders and supplier deliveries. A composite diffusion index monitors conditions in national manufacturing and is based on the data from these surveys.

ISM Non-Manufacturing Index is an index based on surveys of more than 400 non-manufacturing firms' purchasing and supply executives, within 60 sectors across the nation, by the Institute of Supply Management (ISM). The ISM Non-Manufacturing Index tracks economic data, like the ISM Non-Manufacturing Business Activity Index. A composite diffusion index is created based on the data from these surveys, that monitors economic conditions of the nation.

China Caixin Manufacturing Purchasing Managers Index (PMI) is a composite indicator designed to provide an overall view of activity in the manufacturing sector and acts as a leading indicator for the whole economy. When the PMI is below 50.0 this indicates that the manufacturing economy is declining and a value above 50.0 indicates an expansion of the manufacturing economy.

Bloomberg Barclays Corporate Bond Index is an unmanaged index considered representative of publicly issued US corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements. To qualify, bonds must be SEC-registered.

Bloomberg Barclays Global Aggregate ex-US Index is an unmanaged index considered representative of bonds of foreign countries.

Bloomberg Barclays Municipal Custom High Yield Composite Index is generally representative of bonds that are noninvestment grade, unrated or rated below Ba1.

Bloomberg Barclays Municipal High Yield Bond Index measures the noninvestment- grade and nonrated US dollar-denominated, fixed-rate, tax exempt bond market within the 50 United States and four other qualifying regions (Washington D.C., Puerto Rico, Guam and the Virgin Islands).

Bloomberg Barclays US Aggregate Index is an unmanaged index considered representative of the US investment-grade, fixed-rate bond market.

Bloomberg Barclays US Corporate High Yield Index is an unmanaged index that covers the US dollar-denominated, non investment grade, fixed-rate, taxable corporate bond market.

Bloomberg Barclays US Government Index is a market-value-weighted index of US government and government agency securities (other than mortgage securities) with maturities of one year or more.

Bloomberg Barclays US TIPS Index is an unmanaged index that measures the performance of the US Treasury Inflation-Protected Securities (TIPS) market.

Bloomberg Commodity Index is a broadly diversified index that allows investors to track commodity futures through a single, simple measure.

Chicago Board Options Exchange (CBOE) Volatility Index (VIX) shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 Index options. This volatility is meant to be forward looking and is a widely used measure of market risk, often referred to as the "investor fear gauge."

FTSE EPRA/NAREIT Developed ex-US Index is designed to track the performance of listed real estate companies and REITs.

FTSE NAREIT All Equity REITs Index is an unmanaged index considered representative of US REITs.

JPMorgan GBI-Emerging Markets Diversified Composite Index is a comprehensive global local emerging markets index, and consists of liquid, fixed-rate, domestic currency government bonds.

MSCI EAFE Index is an unmanaged index considered representative of stocks of Europe, Australasia and the Far East.

MSCI Emerging Markets Index is an unmanaged index considered representative of stocks of developing countries.

MSCI World Index is an unmanaged index considered representative of stocks of developed countries.

Russell 1000 Index is an unmanaged index considered representative of large-cap stocks.

Russell 1000 Growth Index is an unmanaged index considered representative of large-cap growth stocks.

Russell 1000 Value Index is an unmanaged index considered representative of large-cap value stocks.

Russell 2000 Index is an unmanaged index considered representative of small-cap stocks.

Russell Midcap Index is an unmanaged index considered representative of mid-cap stocks.

S&P 500 Index is an unmanaged index considered representative of the US stock market.

S&P/LSTA Leveraged Loan Index is a weekly total return index that tracks the current outstanding balance and spread over Libor for fully funded term loans.

The BofA Merrill Lynch 3–7 Year Municipal Index tracks the performance of US dollar-denominated, investment grade, tax-exempt debt that is publicly issued by US states and has a remaining term to final maturity between three and seven years.

The BofA Merrill Lynch 3-Month US Treasury Bill Index represents an unmanaged market index of US Treasury securities maturing in 90 days that assumes reinvestment of all income.

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Unmanaged index returns do not reflect fees, expenses, or sales charges. An investment cannot be made directly in an index.

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Factor index definitions

S&P 500 Quality Index tracks the performance of stocks in the S&P 500® Index that have the highest quality score, which is calculated based on three fundamental measures, return on equity, accruals ratio and financial leverage ratio.

S&P 500 Low Volatility Index is compiled, maintained and calculated by Standard & Poor's and consists of the 100 stocks from the S&P 500® Index with the lowest realized volatility over the past 12 months.

S&P 500 Momentum Index tracks the performance of stocks in the S&P 500® Index that have the highest value and momentum score.

S&P 500 Enhanced Value Index tracks the performance of the stocks in the S&P 500 Index that have the highest value score.

S&P 500 Low Volatility High Dividend Index is composed of 50 securities traded on the S&P 500 Index that historically have provided high dividend yields and low volatility.

Invesco Emerging Markets Debt Value Index is designed to provide exposure to higher value, emerging markets debt securities. Higher value bonds are characterized as those with higher yields that may provide greater returns in certain markets. In addition, the Index seeks to incorporate securities with relatively higher-quality characteristics, including higher credit ratings and shorter maturities. All eligible bonds are assigned a quality adjusted value (QAV) score, which is calculated based on a combination of value and quality factors or characteristics. The QAV score is calculated as a weighted-average combination of the Value Score (90%) and the Quality Score (10%).

Invesco Emerging Markets Debt Defensive Index is designed to provide exposure to emerging markets debt securities with relatively-higher quality characteristics, including relatively higher credit ratings and shorter maturities as compared to the overall market for emerging market sovereign and agency debt.

Invesco Investment Grade Defensive Index is designed to provide exposure to U.S. investment grade bonds with relatively-higher quality characteristics, including relatively higher credit ratings and shorter maturities as compared to the overall market for U.S. investment grade bonds.

Invesco High Yield Defensive Index is designed to provide exposure to U.S. corporate bonds having the highest quality scores within an eligible universe of U.S. high yield bonds (commonly known as "junk bonds") and bonds with the lowest credit rating considered investment grade including bonds with at least two years but no more than 10 years until final maturity.

Invesco High Yield Value Index is designed to provide exposure to higher value, U.S. high yield bonds (commonly known as "junk bonds") and bonds with the lowest credit rating considered investment grade.

Invesco Investment Grade Value Index is designed to provide exposure to higher value, U.S. investment grade bonds. Higher value bonds are characterized as those with higher yields that may provide great returns in certain markets

Factor definitions

Value applies to investments trading at discounts to similar securities, based on measures like book value, earnings or cash flow.

Size represents the potential higher-than-benchmark returns associated with relatively smaller stocks within the universe being considered

Momentum identifies investments with positive momentum (recent strong returns) or negative momentum (recent weak returns) to calibrate portfolio exposure to either.

Low volatility describes investments that have demonstrated the lowest volatility compared with securities in the same asset class.

Quality characterizes companies with strong measures of financial health, including a strong balance sheet and stable earnings growth.

Dividend growth reflects stocks that have paid higher yields and generated higher total.

Other definitions

10-year Treasury, US government obligations may be (i) supported by the full faith and credit of the US Treasury, (ii) supported by the right of the issuer to borrow from the US Treasury, (iii) supported by the discretionary authority of the US government to purchase the agency's obligations, or (iv) supported only by the credit of the instrumentality.

There is a risk that the US government may choose not to provide financial support to US government-sponsored agencies or instrumentalities if it is not legally obligated to do so. In that case, if the issuer were to default, a portfolio holding securities of such issuer might not be able to recover its investment from the US government.

Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability. 12-month forward EPS is based on projections for 12 months into the future.

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

Price-book ratio (P/B) is a financial ratio used to compare a company's current market price to its book value.

Price-earnings ratio (P/E) is the ratio for valuing a company that measures its current share price relative to its per-share earnings.

Trailing price/earnings (P/E) ratio is the sum of a company's price-to-earnings, calculated by taking the current stock price and dividing it by the trailing earnings per share for the past 12 months. This measure differs from forward P/E, which uses earnings estimates for the next four quarters.

Forward price/earnings (P/E) ratio is one measure of the price-earnings ratio that uses forecasted earnings (usually for the next 12 months or the next full fiscal year), rather than current earnings, for the calculation.

About the 2018 Northwestern Mutual Planning & Progress Study

The 2018 Planning & Progress Study was conducted by Harris Poll on behalf of Northwestern Mutual and included 2,003 American adults aged 18 or older in the general population (and an oversample of 601 interviews with U.S. Millennials age 18-34 which have been combined with the general population of those 18-34 when featuring this age group separately from the general population) who participated in an online survey between March 7 and March 19, 2018. Results were weighted to Census targets for education, age/gender, race/ethnicity, region and household income. Propensity score weighting was also used to adjust for respondents' propensity to be online. No estimates of theoretical sampling error can be calculated; a full methodology is available.