Investment Traffic Lights

Our tactical and strategic view

Market Overview

For most, August marks the last month of summer holidays. This year, however, it has been a busy month, and not just for traders in emerging market currencies. U.S. president Donald Trump, too, has hardly been idle. His 375 tweets keep the rest of the world on edge, creating plenty of movement in financial markets. For example, Trump announced via Twitter that the U.S. would double tariffs on steel and aluminum imports from Turkey. That contributed to the rapid fall in value of the Turkish lira in global exchange markets. Compared to the dollar, the lira is down 25% for the month of August. Only the Argentinian lira was even weaker, losing almost 26%. The Brazilian real and the South African Rand both lost almost 10%.

Given these currency turbulences, it is hardly surprising that emerging markets have been the key topic of market conversation in recent weeks. Will there be contagion, with the countries already impacted dragging down other emerging markets with them? Or has there just been a collection of country specific crises that all happened to unfold at more or less the same time?

Well, in the case of Turkey, most of the problems are home grown in our opinion. Could it nevertheless prove contagious? That's a key question we consider in our outlook below. It is worth noting, though, that the Turkish crisis began to boil over when markets had good reasons to doubt the independence of Turkey's central bank, as well as its ability to counteract accelerating inflation and capital flight.

Questioning central bank independence, is no longer a topic limited to selected emerging markets. Donald Trump's unusual comments on the Fed chairman Jerome Powell raised plenty of market eye brows. President Trump appears disappointed that the Fed appears to be maintaining its tight monetary stance. This contributed to dollar weakness – a welcome development from the perspective of President Trump and many companies in the S&P 500. The U.S. blue-chip index broke two records on August 21. It reached a new height, making the current bull market the longest in the indices history – 3452 days and counting. This continues the trend of U.S. equity outperformance we have seen since the start of May. Global equities markets (MSCI AC World) are up almost 10% overall, but excluding U.S. companies from the calculation they would have lost 3% during that period. This dichotomy continued in August. The S&P 500 rose 3.3%, while the Euro Stoxx 50 and Dax declined 3.7% and 3.4% respectively. After their July weakness, technology stocks again became a source of S&P strength. The gains for two of the biggest, Apple and Amazon alone amounted to almost 300 billion dollars for the month.

In bond markets too, the picture was pretty mixed. Emerging market local currency bonds, as well as those with low credit worthiness (below investment grade) had it tough, as nervous investors preferred to put their money in issues of U.S. and European borrowers, perceived to be less risky. Except, that is, for Italian sovereign bonds. Markets remain concerned that the new Italian government will lack fiscal discipline, pushing 10-year Italian government bond yields above 3% for most of the month. By contrast, yields of German bunds and U.S. Treasuries barely moved, and even declined slightly compared to the start of the month. This probably has more to do with investors searching out safe havens, rather than any underlying macro-economic concerns. Most economic indicators remain solid, especially in developed markets, or at least did not disappoint during the month of August.

Outlook and changes

As in previous months, we remain cautiously optimistic. The U.S. has experienced another strong earnings season. Macroeconomic data in much of the rest of the world remains encouraging, suggesting solid fundamentals for most asset classes. Politics looks set to remain a drag, to be sure. Two key events to watch are the budget preparation in Italy and ongoing global trade tensions. On trade, Trump has made it pretty clear that he intends to widen the range of U.S. tariffs on imports from China. The next extension would probably involve goods worth 200 billion dollars in total. This looks set to include far more consumer goods, resulting in more immediate upward pressure on U.S. consumer prices. Europeans too could soon find themselves in the U.S. administration's crosshairs. According to Trump, the European Union is "almost as bad" as China when it comes to trade, "just smaller."[1]

Partly as a result of global trade tensions, emerging market countries look set to remain an area of focus for many global investors. As a group, these countries appear to be in much more solid shape than 10 or 20 years ago, even as a few individual ones suffer from mostly self-inflicted problems. That said, rising U.S. interest rates and shrinking central bank balance sheets in developed markets are also having an impact. Whatever the reason, moreover, the mere fact that several emerging market trouble spots have popped up at more or less the same time risks causing ripple effects. If this were to involve an undifferentiated sell-off, it could result in interesting investment opportunities among the more solid emerging markets.

Aside from the risk of such temporary setbacks, the global economic environment continues to justify our cautiously constructive market outlook. For equities, we have not changed our target investment allocations, meaning that emerging markets remain our favorite. Given their recent strength, we remain tactically cautious on U.S. equities. Excluding technology stocks, the median price earnings ratio is close to historic highs. During the last 3 decades, U.S. equities were only more expensive once on that

[1]In a Bloomberg interview on Thursday, August 30, the U.S. president spoke of the European Union as if it's likely to be his next target. "Almost as bad as China, just smaller," he declared." https://www.bloomberg.com/news/articles/2018-08-31/trump-makes-clear-eu-won-t-escape-his-ire-over-trade-for-long

measure – during the dotcom bubble of the 1990s. This is why we would not be surprised by a pull-back, especially as it is becoming increasingly hard for the U.S. to deliver positive surprises. Already, the tailwind thanks to fiscal stimulus, mostly via tax cuts earlier on this year, appears to be fading.

Among key bond segments, we have mostly taken neutral positions. The world's leading central banks continue to move monetary policies towards more normal terrain, albeit at a varying pace. The Fed remains the key one to watch. Comments by the Fed chairman have invited a wide range of interpretations, but in our view, two things are reasonably clear. First, Powell looks set to stick to – and defend – his mandate. And second, the Fed continues to view the U.S. economy as sufficiently strong to justify further rate hikes. However, and that might have been a surprise to some, the Fed's commentary at the Jackson Hole conference of central banks suggests that it may be less certain than previously thought as to how high rates will need to go. Of course, that uncertainty could cut both ways, which is why we do not necessarily see the changing stance as a dovish sign. Be that as it may, though, there is no denying the potential tensions between solid economic growth figures on the one hand and escalating trade conflicts on the other. No wonder that the Fed looks set to be cautious. Against this backdrop, we expect U.S. sovereigns to continue to move sideways. We remain neutral for all maturities of U.S. treasuries. For German sovereigns too, we have moved back to neutral for all maturities, after briefly taking a negative stance on 10-year bunds.

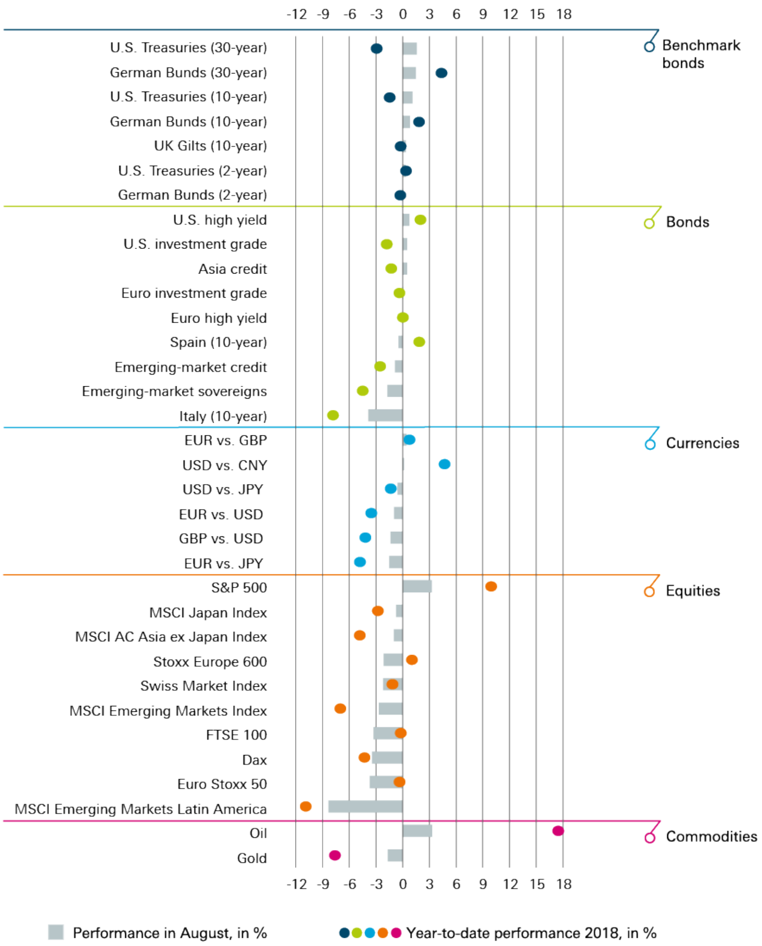
Among emerging market bonds, we focus on countries which have already been punished too much by markets. For hard currency emerging market bonds, we have returned to a positive stance, but remain tactically agile. We remain vigilant, not least as traditional rescue mechanisms, such as rescues by the International Monetary Fund, are either off the table (as in the case of Turkey) or being doubted - and tested - by financial markets (see Argentina).

Among corporate bonds, we have moved to neutral for euro bonds in both the investment grade and the high-yield segments. The current flood of new issuance and the looming end of net purchases by the European Central Bank leads as to wait for now. For U.S. investment grade bonds, we remain tactically negative.

As for currencies, we have reacted to the sudden movements we saw in August but are now back to neutral for the euro/dollar. For the last three months, the currency pair has traded within a narrow range, reflecting the balance of arguments in favor of each. This also means that one traditional driver of oil and gold markets is currently on hold. We are positioned neutral for both commodities.

Past performance of major financial assets

Total return of major financial assets year-to-date and past month



Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 8/30/18

Equities*

	1 to 3 months (relative to the MSCI AC World)	until June 2019
Regions		
United States	🟡	➔
Europe	🟡	↗
Eurozone	🟡	↗
Germany	🟡	↗
Switzerland	🟡	➔
United Kingdom (UK)	🟡	↗
Emerging markets	🟡	↗
Asia ex Japan	🟢	↗
Japan	🟡	↗
Latin America	🟡	➔
Sectors		
Consumer staples	🟡	
Healthcare	🟡	
Telecommunications	🔴	
Utilities	🔴	
Consumer discretionary	🟡	
Energy	🟡	
Financials	🟢	
Industrials	🟡	
Information technology	🟢	

Materials	🟡	
Real estate	🟡	
Style		
United States small caps **	🔴	
Europe small caps ***	🟢	

** Relative to the Russell 2000 Index

*** Relative to the Stoxx Europe 600

Fixed Income*

	1 to 3 months	until June 2019
Rates		
U.S. Treasuries (2-year)	🟡	↗
U.S. Treasuries (10-year)	🟡	↗
U.S. Treasuries (30-year)	🟡	↗
UK Gilts (10-year)	🟡	↗
Italy (10-year)[1]	🟡	↘
Spain (10-year)[1]	🟡	↘
German Bunds (2-year)	🟡	↗
German Bunds (10-year)	🟡	↗
German Bunds (30-year)	🟡	↗
Japanese government bonds (2-year)	🟡	→
Japanese government bonds (10-year)	🟡	→
Corporates		
U.S. investment grade	🔴	↘
U.S. high yield	🟡	↗
Euro investment grade[1]	🟡	↘
Euro high yield[1]	🟡	↘
Asia credit	🟡	→
Emerging-market credit	🟡	→
Securitized / specialties		
Covered bonds[1]	🔴	↗
U.S. municipal bonds	🟡	→
U.S. mortgage-backed securities	🟡	↗
Currencies		
EUR vs. USD	🟡	→
USD vs. JPY	🟡	→
EUR vs. GBP	🟡	→
GBP vs. USD	🟡	→
USD vs. CNY	🟡	↘
Emerging markets		
Emerging-market sovereigns	🟢	→

Alternatives*

	1 to 3 months	until March 2019
Infrastructure	🟡	↗
Commodities	🟡	↗
Real estate (listed)	🟡	↗
Real estate (non-listed) APAC	🟢	↗
Real estate (non-listed) Europe	🟢	↗
Real estate (non-listed) United States	🟡	→
Hedge funds	🟢	↗

Comments regarding our tactical and strategic view

Tactical view:

- The focus of our tactical view for fixed income is on trends in bond prices, not yields.

Strategic view:

- The focus of our strategic view for sovereign bonds is on yields, not trends in bond prices.
- For corporates and securitized/specialties bonds, the arrows depict the respective option-adjusted spread.
- For bonds not denominated in euros, the illustration depicts the spread in comparison with U.S. Treasuries. For bonds denominated in euros, the illustration depicts the spread in comparison with German Bunds.
- For emerging-market sovereign bonds, the illustration depicts the spread in comparison with U.S. Treasuries.
- Both spread and yield trends influence the bond value. Investors who aim to profit only from spread trends should hedge against changing interest rates.

Key

The tactical view (one to three months):

- ●
  Positive view
- ●
  Neutral view
- ●
  Negative view

- ◉
  A **circled traffic light** indicates that there is a commentary on the topic.
- The traffic lights' history is shown in the small graphs.

The strategic view up to June 2019

Equity indices, exchange rates and alternative investments:

The arrows signal whether we expect to see an upward trend ↗ , a sideways trend → or a downward trend ↘ .

The **arrows' colors** illustrate the return opportunities for long-only investors.

- ↗ Positive return potential for long-only investors
- → Limited return opportunity as well as downside risk
- ↘ Negative return potential for long-only investors

Fixed Income:

For sovereign bonds, ↗ denotes rising yields, → unchanged yields and ↘ falling yields.For corporates, securitized/ specialties and emerging-market bonds, the arrows depict the option-adjusted spread over U.S. Treasuries: ↗ depicts a rising spread, → a sideways trend and ↘ a falling spread.

The **arrows' colors** illustrate the return opportunities for long-only investors.

- ↘ Positive return potential for long-only investors
- → Limited return opportunity as well as downside risk
- ↗ Negative return potential for long-only investors

Footnotes:

* as of 8/31/18

1 Spread over German Bunds in basis points

2 These traffic-light indicators are only meaningful for existing private-equity portfolios

Appendix: performance

	08/13 - 08/14	08/14 - 08/15	08/15 - 08/16	08/16 - 08/17	08/17 - 08/18
U.S. Treasuries (30-year)	14.4%	4.6%	16.7%	-5.4%	-2.8%
German Bunds (30-year)	17.8%	5.4%	18.6%	-7.7%	3.2%
U.S. Treasuries (10-year)	6.4%	3.4%	7.0%	-1.4%	-3.1%
German Bunds (10-year)	10.2%	2.3%	8.0%	-2.0%	1.2%
UK Gilts (10-year)	5.4%	5.4%	12.3%	-1.0%	-1.1%
U.S. Treasuries (2-year)	0.8%	0.8%	1.1%	0.5%	-0.1%
German Bunds (2-year)	0.6%	0.1%	0.3%	-0.5%	-0.7%
U.S. high yield	10.6%	-2.9%	9.1%	8.6%	3.4%
U.S. investment grade	9.1%	-0.4%	9.1%	1.9%	-1.0%
Asia credit	11.7%	2.1%	10.2%	2.4%	-0.9%
Euro investment grade	8.2%	0.4%	6.7%	0.6%	0.0%
Euro high yield	10.7%	2.0%	6.8%	6.4%	1.2%
Spain (10-year)	24.1%	2.4%	10.9%	-0.2%	2.4%
Emerging-market credit	11.9%	-1.4%	11.3%	5.6%	-1.6%
Emerging-market sovereigns	14.6%	-1.1%	14.2%	5.0%	-3.4%
Italy (10-year)	19.8%	4.7%	9.0%	-3.3%	-6.6%
EUR vs. GBP	-7.2%	-7.7%	16.2%	8.5%	-2.8%
USD vs. CNY	0.4%	3.8%	4.8%	-1.3%	3.7%
USD vs. JPY	6.0%	16.5%	-14.7%	6.3%	1.0%
EUR vs. USD	-0.7%	-14.6%	-0.5%	6.7%	-2.6%
GBP vs. USD	7.1%	-7.5%	-14.4%	-1.6%	0.2%
EUR vs. JPY	5.3%	-0.6%	-15.1%	13.5%	-1.6%
S&P 500	22.7%	-1.6%	10.1%	13.9%	17.4%
MSCI Japan Index	14.2%	19.6%	-13.8%	18.7%	7.8%
MSCI AC Asia ex Japan Index	18.4%	-18.0%	10.1%	22.0%	0.5%
Stoxx Europe 600	15.0%	6.1%	-5.3%	8.8%	2.2%
Swiss Market Index	11.8%	1.9%	-7.1%	8.8%	0.5%
MSCI Emerging Markets Index	17.0%	-24.7%	9.2%	21.7%	-2.9%

All opinions and claims are based upon data on 9/3/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. **Past performance is not indicative of future returns.** Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. DWS Investment GmbH

CRC 060486 (09/2018)

FTSE 100	6.3%	-8.4%	8.5%	9.6%	0.0%
DAX	16.9%	8.3%	3.2%	13.8%	2.6%
Euro Stoxx 50	16.6%	3.1%	-7.5%	13.2%	-0.8%
MSCI Emerging Markets Latin America	20.2%	-43.8%	16.7%	19.6%	-14.2%
Oil	7.2%	-29.8%	-15.8%	-2.9%	37.9%
Gold	-7.7%	-11.8%	15.3%	1.0%	-9.1%

Past performance is not indicative of future returns.

Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 9/3/18

Glossary

Blue-chip index

Blue-chip index is a term commonly used for an index that covers the leading companies of a country or region.

Bull market

A **bull market** is a financial market where prices are rising - usually used in the context of equities markets.

Capital flight

Capital flight describes measures taken by citizens and corporations to get their money out of the country, fearing, for example, currency devaluation or confiscation.

Dax

The **Dax** is a blue-chip stock-market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.

Emerging markets (EM)

Emerging markets (EM) are economies not yet fully developed in terms of, amongst others, market efficiency and liquidity.

Euro Stoxx 50

The **Euro Stoxx 50** is an index that tracks the performance of blue-chip stocks in the Eurozone.

European Central Bank (ECB)

The **European Central Bank (ECB)** is the central bank for the Eurozone.

European Union (EU)

The **European Union (EU)** is a political and economic union of 28 member states located primarily in Europe.

Fiscal policy

Fiscal policy describes government spending policies that influence macroeconomic conditions. Through fiscal policy, the government attempts to improve unemployment rates, control inflation, stabilize business cycles and influence interest rates in an effort to control the economy.

High Yield (HY)

High-yield bonds are issued by below-investment-grade-rated issuers and usually offer a relatively high yield.

Inflation

Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

International Monetary Fund (IMF)

The **International Monetary Fund (IMF)**, created in 1945 and headquartered in Washington, D.C., is an organization of 188 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world.

Investment grade (IG)

Investment grade (IG) refers to a credit rating from a rating agency that indicates that a bond has a relatively low risk of default.

MSCI AC World Index

The **MSCI AC World Index** captures large- and mid-cap companies across 23 developed- and 24 emerging-market countries.

MSCI AC World Index

The **MSCI AC World Index** captures large- and mid-cap companies across 23 developed- and 24 emerging-market countries.

Russell 2000

The **Russell 2000** is an index that captures the 2,000 smallest stocks of the Russell-3000 index, which again comprises 3,000 small- and mid-cap U.S. listed stocks.

S&P 500

The **S&P 500** is an index that includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

Sovereign bonds

Sovereign bonds are bonds issued by governments.

Stoxx Europe 600

The **Stoxx Europe 600** is an index representing the performance of 600 listed companies across 18 European countries.

Treasuries

Treasuries are fixed-interest U.S. government debt securities with different maturities: Treasury bills (1 year maximum), Treasury notes (2 to 10 years), Treasury bonds (20 to 30 years) and Treasury Inflation Protected Securities (TIPS) (5, 10 and 30 years).

U.S. Federal Reserve Board (the Fed)

The **U.S. Federal Reserve Board**, often referred to as "**the Fed**", is the central bank of the United States.

Yield

Yield is the income return on an investment referring to the interest or dividends received from a security and is usually expressed annually as a percentage based on the investment's cost, its current market value or its face value.

Risk warning

Investments are subject to investment risk, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time.

Investments in Foreign Countries – Such investments may be in countries that prove to be politically or economically unstable. Furthermore, in the case of investments in foreign securities or other assets, any fluctuations in currency exchange rates will affect the value of the investments and any restrictions imposed to prevent capital flight may make it difficult or impossible to exchange or repatriate foreign currency.

Foreign Exchange/Currency – Such transactions involve multiple risks, including currency risk and settlement risk. Economic or financial instability, lack of timely or reliable financial information or unfavorable political or legal developments may substantially and permanently alter the conditions, terms, marketability or price of a foreign currency. Profits and losses in transactions in foreign exchange will also be affected by fluctuations in currency where there is a need to convert the product's denomination(s) to another currency. Time zone differences may cause several hours to elapse between a payment being made in one currency and an offsetting payment in another currency. Relevant movements in currencies during the settlement period may seriously erode potential profits or significantly increase any losses.

High Yield Fixed Income Securities – Investing in high yield bonds, which tend to be more volatile than investment grade fixed income securities, is speculative. These bonds are affected by interest rate changes and the creditworthiness of the issuers, and investing in high yield bonds poses additional credit risk, as well as greater risk of default.

Hedge Funds – An investment in hedge funds is speculative and involves a high degree of risk, and is suitable only for "Qualified Purchasers" as defined by the US Investment Company Act of 1940 and "Accredited Investors" as defined in Regulation D of the 1933 Securities Act. No assurance can be given that a hedge fund's investment objective will be achieved, or that investors will receive a return of all or part of their investment.

Commodities – The risk of loss in trading commodities can be substantial. The price of commodities (e.g., raw industrial materials such as gold, copper and aluminium) may be subject to substantial fluctuations over short periods of time and may be affected by unpredicted international monetary and political policies. Additionally, valuations of commodities may be susceptible to such adverse global economic, political or regulatory developments. Prospective investors must independently assess the appropriateness of an investment in commodities in light of their own financial condition and objectives. Not all affiliates

All opinions and claims are based upon data on 9/3/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. **Past performance is not indicative of future returns.** Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. DWS Investment GmbH

CRC 060486 (09/2018)

or subsidiaries of Deutsche Bank Group offer commodities or commodities-related products and services.

Investment in private equity funds is speculative and involves significant risks including illiquidity, heightened potential for loss and lack of transparency. The environment for private equity investments is increasingly volatile and competitive, and an investor should only invest in the fund if the investor can withstand a total loss. In light of the fact that there are restrictions on withdrawals, transfers and redemptions, and the Funds are not registered under the securities laws of any jurisdictions, an investment in the funds will be illiquid. Investors should be prepared to bear the financial risks of their investments for an indefinite period of time.

Investment in real estate may be or become nonperforming after acquisition for a wide variety of reasons. Nonperforming real estate investment may require substantial workout negotiations and/ or restructuring.

Environmental liabilities may pose a risk such that the owner or operator of real property may become liable for the costs of removal or remediation of certain hazardous substances released on, about, under, or in its property. Additionally, to the extent real estate investments are made in foreign countries, such countries may prove to be politically or economically unstable. Finally, exposure to fluctuations in currency exchange rates may affect the value of a real estate investment.

Structured solutions are not suitable for all investors due to potential illiquidity, optionality, time to redemption, and the payoff profile of the strategy. We or our affiliates or persons associated with us or such affiliates may: maintain a long or short position in securities referred to herein, or in related futures or options, purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation. Calculations of returns on the instruments may be linked to a referenced index or interest rate. In such cases, the investments may not be suitable for persons unfamiliar with such index or interest rates, or unwilling or unable to bear the risks associated with the transaction. Products denominated in a currency, other than the investor's home currency, will be subject to changes in exchange rates, which may have an adverse effect on the value, price or income return of the products. These products may not be readily realizable investments and are not traded on any regulated market.

Important Information – EMEA

The following document is intended as marketing communication.

DWS is the brand name under which DWS Group GmbH & Co. KGaA and its subsidiaries operate their business activities. Clients will be provided DWS products or services by one or more legal entities that will be identified to clients pursuant to the contracts, agreements, offering materials or other documentation relevant to such products or services.

The information contained in this document does not constitute investment advice.

All opinions and claims are based upon data on 9/3/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. **Past performance is not indicative of future returns.** Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. DWS Investment GmbH

CRC 060486 (09/2018)

All statements of opinion reflect the current assessment of DWS Investment GmbH and are subject to change without notice.

Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical performance analysis, therefore actual results may vary, perhaps materially, from the results contained here.

Past performance, [actual or simulated], is not a reliable indication of future performance.

The information contained in this document does not constitute a financial analysis but qualifies as marketing communication. This marketing communication is neither subject to all legal provisions ensuring the impartiality of financial analysis nor to any prohibition on trading prior to the publication of financial analyses.

This document and the information contained herein may only be distributed and published in jurisdictions in which such distribution and publication is permissible in accordance with applicable law in those jurisdictions. Direct or indirect distribution of this document is prohibited in the USA as well as to or for the account of US persons and persons residing in the USA.

Important Information – UK

Issued in the UK by Deutsche Asset Management (UK) Limited. Deutsche Asset Management (UK) Limited is authorised and regulated by the Financial Conduct Authority.

DWS is the brand name of DWS Group GmbH & Co. KGaA. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. DWS, through DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively "DWS") are communicating this document in good faith and on the following basis.

This document is a financial promotion and is for general information purposes only and consequently may not be complete or accurate for your specific purposes. It is not intended to be an offer or solicitation, advice or recommendation, or the basis for any contract to purchase or sell any security, or other instrument, or for DWS to enter into or arrange any type of transaction as a consequence of any information contained herein. It has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor.

This document does not identify all the risks (direct and indirect) or other considerations which might be material to you when entering into a transaction. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS, are suitability and appropriate, in light of their particular investment needs, objectives and

All opinions and claims are based upon data on 9/3/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. **Past performance is not indicative of future returns.** Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. DWS Investment GmbH

CRC 060486 (09/2018)

financial circumstances. We assume no responsibility to advise the recipients of this document with regard to changes in our views.

Past performance is no guarantee of future results.

The products mentioned in this document may be subject to investment risk including market fluctuations, regulatory change, counterparty risk, possible delays in repayment and loss of income and principal invested. Additionally, investments denominated in an alternative currency will be subject to currency risk, changes in exchange rates which may have an adverse effect on the value, price or income of the investment. The value of an investment can fall as well as rise and you might not get back the amount originally invested at any point in time.

We have gathered the information contained in this document from sources we believe to be reliable; but we do not guarantee the accuracy, completeness or fairness of such information and it should not be relied on as such. DWS has no obligation to update, modify or amend this document or to otherwise notify the recipient in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

DWS does not give taxation or legal advice. Prospective investors should seek advice from their own taxation agents and lawyers regarding the tax consequences on the purchase, ownership, disposal, redemption or transfer of the investments and strategies suggested by DWS. The relevant tax laws or regulations of the tax authorities may change at any time. DWS is not responsible for and has no obligation with respect to any tax implications on the investment suggested.

No assurance can be given that any investment described herein would yield favorable investment results or that the investment objectives will be achieved. In general, the securities and financial instruments presented herein are not insured by the Federal Deposit Insurance Corporation ("FDIC"), and are not guaranteed by or obligations of DWS or its affiliates. We or our affiliates or persons associated with us may act upon or use material in this report prior to publication. DWS may engage in transactions in a manner inconsistent with the views discussed herein. Opinions expressed herein may differ from the opinions expressed by departments or other divisions or affiliates of DWS.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author's judgment as of the date of this material. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking

All opinions and claims are based upon data on 9/3/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. **Past performance is not indicative of future returns.** Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time.
DWS Investment GmbH

CRC 060486 (09/2018)

statements or to any other financial information contained in this document.

DWS conducts its business according to the principle that it must manage conflicts of interest fairly, both between itself and its clients and between one client and another.

As a global financial services provider, DWS faces actual and potential Conflicts of Interest periodically. DWS's policy is to take all reasonable steps to maintain and operate effective organisational and administrative arrangements to identify and manage relevant conflicts. Senior management within the firm are responsible for ensuring that the firm's systems, controls and procedures are adequate to identify and manage Conflicts of Interest.

DWS is a trading name of Deutsche Asset Management (UK) Limited. Registered in England & Wales No 5233891. Registered Office: Winchester House, 1 Great Winchester Street, London EC2N 2DB. Deutsche Asset Management (UK) Limited is authorised and regulated by the Financial Conduct Authority. Financial Services Registration Number 429806

This document may not be distributed in Canada, Japan, the United States of America, or to any U.S. person

Publisher: DWS Investment GmbH, Mainzer Landstraße 11-17, 60329 Frankfurt am Main, Germany

All opinions and claims are based upon data on 9/3/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. **Past performance is not indicative of future returns.** Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. DWS Investment GmbH

CRC 060486 (09/2018)