CIO | VIEW
CIO Flash
March 11, 2020

DWS

Marketing Material

ADJUSTING OUR STRATEGIC CIO VIEW FORECASTS

The global spread of the coronavirus forces us to revise our forecasts. We remain cautiously optimistic that the virus can be contained within the first half of the year.

IN A NUTSHELL

_ The rapid spread of the new coronavirus and the oil-price war have prompted us to revise the 12-month forecasts formulated in mid-February.
_ In particular, we reduced the growth-rate forecasts for the United States and Europe and adjusted the yield and equity-index targets downward.
_ We remain cautiously optimistic, provided the epidemic peaks in the first half of the year. In the short term, we continue to expect volatile markets.

The spread of the coronavirus (Covid-19) outside China has accelerated significantly since our regular quarterly strategy meeting on February 20. In addition, Russia and Saudi Arabia have brought about a collapse in oil prices through an open price war. Neither of these was in line with our base scenario, which is why we held an extraordinary strategy meeting to revise both our economic forecasts and our price targets for the individual asset classes.

In essence, we have reduced the gross-domestic-product (GDP) growth forecasts for the United States and the Eurozone, adjusted the yield levels downward and revised corporate earnings estimates. However, as we remain cautiously optimistic that the virus should remain a temporary shock that is unlikely to affect the economy and markets in March 2021, we have cut our equity index targets less sharply than one might expect. We now see the price of oil in twelve months' time at 45 dollars per barrel. Before we comment on these changes in detail, we would like to briefly explain what events have made the changes necessary since February 20.

THE VIRUS GOES GLOBAL

With the rapid spread of the virus outside of China, concerns about a slowdown in growth have shifted from Asia, especially China, to Europe and the United States. For these regions, various institutes are already revising their growth forecasts for the current year downward. A decline in growth could in turn have negative feedback effects on Asia's economies. More and more listed companies are also lowering their sales and profit forecasts for 2020. For some time now, it has no longer been possible to assume that the dip in growth would be limited to Asia and the first quarter. Indeed, we no longer expect a return to business as usual until well into the second quarter.

The containment of the virus and the significant decline in new infections remain decisive for the further course of the world economy and financial markets. Since the beginning of March, new infections outside China have exceeded those in China. Almost a third of all cases (out of 114,600 on March 10) have now been reported outside China. New infections are still increasing in absolute terms in many countries. The highest increase was in Italy, where almost 10,000 people were infected and almost 500 people died, in recent days prompting the government to put the entire country under de facto quarantine. On the other hand, in South Korea, which was also heavily affected (7,500 cases), new infections are clearly declining. In China, the number of new infections has slowed to a trickle.

With the duration and spread of the virus, and in particular measures taken by governments, companies and individuals, the extent of the economic losses increases. At least as problematic is the increasing probability that revenue pressures could translate into higher rates of corporate defaults. Developments in the credit and high-yield bond markets must therefore be monitored closely. Risk premiums shot up worldwide on Monday, especially in the high-yield segment. Central banks appear keenly aware of this problem. If necessary, they would probably stand ready with further liquidity injections and bridging loans.

There are currently only scattered data points regarding the economic consequences of the epidemic due to the time lag in its spread. China's purchasing managers' indices for February slumped to record lows, and in some segments (car or mobile phone sales, restaurant visits) business activity fell by more than half in February. There are still no aggregated figures for Europe and the United States, which cover the period since the erratic outbreak. Individual airlines in Europe have halved their capacity.

Capital markets have experienced sharp mood swings since our regular strategic meeting (CIO Day). The major Western

All opinions and claims are based upon data on 3/10/20 and may not come to pass. DWS does not promote any particular outcome in the upcoming elections. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Source: DWS Investment GmbH

stock markets have fallen by double-digit percentages, most of them ending in a bear market with losses of over 20% from their highs. The implied volatility (CBOE Volatility Index (Vix)) on both the S&P 500 and the Euro Stoxx 50 was at levels not seen since the financial crisis of 2008, in some cases exceeding 60 points. Since our last regular CIO Day, the oil price has fallen by a further third, while gold has continued to rise. The euro rose significantly against the dollar, rising from 1.08 to, at times, 1.15 euros per dollar. However, the most dramatic movements were in bond markets; for the first time in history all U.S. government-bond maturities yielded less than 1.0%. The ten-year yield fell briefly to 0.32%, while the yield for comparable German Bunds fell to -0.91%. Throughout the industrialized world, inflation expectations are moving in a sharp downward direction again.

Many Asian central banks reacted to the virus as early as February with interest-rate cuts and other measures. The US Federal Reserve (Fed) followed suit at the beginning of March with a surprise rate cut of 50 basis points. The market has already priced in even further U.S. rate cuts for March 18. The European Central Bank (ECB) has so far kept a low profile, but we expect it to take extensive measures.

CHANGES TO OUR FORECASTS

Due to these changes in the overall market environment, we have made the following adjustments to our forecasts. However, we emphasize that the coronavirus can still develop a dynamic in both Europe and the United States, which may require further adjustments in the coming weeks. Especially at a time of full employment, American companies might well put the health of their employees first, even if it proves costly in terms of short-term profits. As a result, the drag on U.S. growth and business sentiment might be stronger than some may be expecting. However, our core scenario is essentially based on the assumption that the number of new infections in both the United States and Europe will have passed their peak in the second quarter. Nor have we penciled in a second major wave of contagion in Asia due to the widespread resumption of work in China or new infections from outside the country. We believe a negative domino effect in these regions as a result of the precautionary measures is unlikely to reach a major scale. In March 2021, our forecast horizon, the virus should play only a minor role from an economic perspective.

Economic growth: We have significantly lowered our growth forecasts for the next twelve months. We now expect 1.0 instead of 1.6% for the United States in 2020 and 0.0 instead of 0.6% for the Eurozone. Japan and China remain unchanged. We are leaving the 2021 GDP growth rates unchanged for the time being.

Central banks: We expect two further interest-rate cuts by the Fed in the next two months. In the event of a significant deterioration in the situation, a resumption of bond purchases would also be conceivable. The ECB is likely to cut the deposit rate by 10 basis points to -0.6% in the near future. In addition, we expect special measures to bridge liquidity bottlenecks among small and medium-sized businesses, as well as a temporary increase in the bond purchase programme with a focus on corporate bonds.

Bonds and foreign exchange: It is not easy to divide the recent yield slide into a temporary and a structural component. Even with the expected manageable development of the virus, we assume that the recent drop in government-bond yields contains a sustainable element. Not at least because the central banks will find it difficult to reverse their current interest-rate cuts. We now see 10-year U.S. government bonds yielding 0.9%, and stick to forecast for German sovereign-bond yields at -0.5%. Even though we have adjusted the risk premiums for U.S., Eurozone and emerging-market bonds upwards, we expect them to narrow from their current levels. As tense as the situation here will remain for the time being due to the price war between Russia and Saudi Arabia, we expect the oil price to recover to 40 dollars per barrel (previous forecast was 54) of West Texas Intermediate (WTI) within twelve months. With regard to currencies, the largely parallel reduction in bond yields and growth prospects suggests little movement. On the other hand, the perception of which currency is a safe haven or a financing currency could still change in the coming months. We leave the euro-dollar exchange rate at 1.15 and the dollar-yen forecast at 105.

Equities: Given a lackluster earnings outlook, investors should not get up their hopes too much for the rest of 2020. In the first half of the year, profits are likely to decline sharply. We do not believe that the recovery in the second half of the year will be sufficient to compensate for this decline, so we now expect profit declines of 5-10% for the coming twelve months for the individual regions. We have also reduced our 2021 earnings guidance. We now expect the S&P 500 to reach 3,200 points by the end of March 2021 (previously: 3,500), the Euro Stoxx 50 to reach 3,500 (out of 3,880) and the Dax to reach 13,000 (14,300). Since we do not expect any earnings growth, the double-digit return potential (in percent) results from an expansion of the valuation multiples. We expect this, as in our base scenario the virus will play virtually no further role for investors in March 2021.

Conclusion: The virus, and the prevention measures to contain it, will remain a key source of uncertainty in the coming weeks. For now, Covid 19 will continue to have a considerable influence on global growth and market sentiment, especially in the case of Europe and the United States. In our base scenario, we assume that the overall trend of infection rates will be similar to that in Hubei or South Korea. The fact that the learning curve regarding the virus is progressing and that work is being done on medical solutions also provides some hope. The virus thus should

All opinions and claims are based upon data on 3/10/20 and may not come to pass. DWS does not promote any particular outcome in the upcoming elections. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Source: DWS Investment GmbH

remain a temporary supply and demand shock from an economic perspective. In twelve months, a corresponding number of economic indicators should then approach their pre-crisis levels. More sustainable, we think, should be the even lower yield levels and fiscal-stimulus programs. Unfortunately, we would once again expect fiscal packages to be geared primarily towards promoting consumption, rather than, say, productivity-boosting investments. A wasted opportunity, in our view.

Even if we maintain our overall strategic and constructive assessment, especially for equities, we expect markets to remain volatile in the short term, which could also bring new lows. In addition to a more unfavorable course of the epidemic, another major risk is that the virus will be taken by investors as an opportunity to reassess the structural imbalances that have built up since the financial crisis, partly as a result of the extremely loose monetary policy.

Macro forecasts

GDP growth (in %, year-on-year)	2020F	2021F
U.S.	**1.0**	**1.7**
Eurozone	**0.0**	**1.2**
Germany	**0.0**	**1.3**
Japan	**-0.8**	**1.1**
China	**5.0**	**6.3**
Global	**2.5**	**3.4**
Benchmark rates (in %)	**Current level**	**March 2021F**
United States (federal funds rate)	1.00-1.25	**0.50-0.75**
Eurozone (refi rate)	-0.50	**-0.60**
United Kingdom (repo rate)	0.75	**0.25**
Japan (overnight call rate)	0.00	**0.00**

Asset-class forecasts	Current level	Forecast Mar-21
Capital market yields (sovereign bonds)		
United States (2-year)	0.50%	**0.50%**
United States (10-year)	0.66%	**0.90%**
United States (30-year)	1.12%	**1.30%**
Germany (2-year)	-0.96%	**-0.80%**
Germany (10-year)	-0.79%	**-0.50%**
Germany (30-year)	-0.47%	**-0.10%**
Italy (10-year)	211.9 bp	**140 bp**
Spain (10-year)	113.4 bp	**70 bp**
United Kingdom (10-year)	0.24%	**0.60%**
Japan (2-year)	-0.24%	**-0.20%**
Japan (10-year)	-0.05%	**-0.10%**

Asset-class forecasts	Current level	Forecast Mar-21
Spreads (corporate & EM bonds) in bps		
EUR IG Corp	168	**120**
EUR HY	560	**500**
US IG Corp	162	**135**
US HY	642	**600**
Asia Credit	311	**265**
EM Credit	407	**370**
EM Sovereign	461	**370**
Currencies		
EUR vs USD	1.13	**1.15**
USD vs JPY	104	**105**
EUR vs JPY	118	**121**
EUR vs GBP	0.88	**0.89**
GBP vs USD	1.29	**1.29**
USD vs CNY	7.0	**7.0**
Commodities in U.S. dollars		
Gold	1,654	**1,730**
Crude Oil (WTI)	31	**40**
Equity markets (index value in points)		
United States (S&P 500)	2,788	**3,200**
Germany (DAX)	10,475	**13,000**
Eurozone (Eurostoxx 50)	2,910	**3,500**
Europe (Stoxx600)	336	**400**
Japan (MSCI Japan)	917	**1,000**
Switzerland (SMI)	9,196	**10,150**
United Kingdom (FTSE 100)	5,960	**6,800**
Emerging Markets (MSCI EM)	948	**1,100**
Asia ex Japan (MSCI AC Asia ex Japan)	616	**700**
Australia (MSCI Australia)	1,150	**1,210**

DWS forecasts and current value are as of March 10, 2020 / Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect. No assurance can be given that any forecast or target will be achieved. Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 3/10/20

All opinions and claims are based upon data on 3/10/20 and may not come to pass. DWS does not promote any particular outcome in the upcoming elections. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Source: DWS Investment GmbH

APPENDIX: PERFORMANCE OVER THE PAST 5 YEARS (12-MONTH PERIODS)

	02/15 - 02/16	02/16 - 02/17	02/17 - 02/18	02/18 - 02/19	02/19 - 02/20
U.S. Treasuries (30-year)	4.1%	-4.9%	0.3%	4.0%	31.6%
U.S. Treasuries (10-year)	4.7%	-2.9%	-1.3%	4.5%	15.1%
UK Gilts (10-year)	6.0%	3.9%	-1.9%	3.7%	7.9%
U.S. Treasuries (2-year)	1.0%	0.3%	-0.1%	2.3%	4.7%
German Bunds (10-year)	3.4%	0.6%	-3.0%	5.0%	5.7%
German Bunds (2-year)	0.3%	0.0%	-1.2%	-0.5%	-0.3%
German Bunds (30-year)	4.2%	-0.6%	-4.0%	9.4%	16.8%
Japanese government bonds (2-year)	0.5%	-0.2%	-0.3%	-0.1%	-0.1%
Japanese government bonds (10-year)	4.0%	-1.0%	0.3%	1.2%	1.2%
EM Sovereigns	1.5%	12.1%	3.3%	2.4%	9.9%
EM Credit	0.3%	13.0%	4.1%	3.4%	11.2%
U.S. high yield	-8.3%	21.8%	4.2%	4.3%	6.1%
U.S. investment grade	-1.2%	5.7%	2.1%	2.7%	15.3%
Euro high yield	-4.5%	14.1%	3.9%	0.9%	4.0%
Asia credit	2.8%	6.6%	2.0%	3.5%	10.8%
Euro investment grade	-1.2%	4.3%	1.5%	0.8%	5.2%
Spain (10-year)	0.5%	2.5%	3.6%	4.3%	8.0%
Italy (10-year)	2.2%	-2.5%	4.0%	-1.9%	14.5%
MSCI AC Asia ex Japan Index	-20.4%	26.5%	31.9%	-8.2%	0.1%
MSCI Emerging Market Index	-23.4%	29.5%	30.5%	-9.9%	-1.9%
MSCI Emerging Markets (EM) Latin America	-30.2%	47.5%	21.1%	-5.2%	-11.9%
S&P 500	-6.2%	25.0%	17.1%	4.7%	8.2%
MSCI Japan Index	-9.9%	20.3%	21.8%	-10.3%	1.1%
Swiss Market Index	-9.7%	12.1%	7.7%	9.1%	8.2%
Dax	-16.7%	24.6%	5.1%	-7.4%	3.3%
FTSE 100	-8.8%	24.2%	3.4%	2.1%	-2.7%
Stoxx Europe 600	-12.0%	14.8%	5.9%	1.7%	4.5%
Euro Stoxx 50	-16.1%	16.1%	6.2%	-1.4%	3.7%

Past performance is not indicative of future returns.
Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 3/10/20

All opinions and claims are based upon data on 3/10/20 and may not come to pass. DWS does not promote any particular outcome in the upcoming elections. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Source: DWS Investment GmbH

GLOSSARY

One basis point equals 1/100 of a percentage point.

Technically, a bear market refers to a situation where the index's value falls at least 20% from a recent high.

The CBOE Volatility Index (Vix) is a trademarked ticker symbol for the Chicago Board Options Exchange Market Volatility Index. It is a popular measure of the volatility of the S&P 500 as implied in the short term option prices on the index.

A central bank manages a state's currency, money supply and interest rates.

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

Default is the failure to meet the legal obligations of a loan, for example when a corporation or government fails to pay a bond which has reached maturity. A national or sovereign default is the failure or refusal of a government to repay its national debt.

The deposit rate is the rate banks receive when they make overnight deposits with the ECB.

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

The euro (EUR) is the common currency of states participating in the Economic and Monetary Union and is the second most held reserve currency in the world after the dollar.

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

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

The Eurozone is formed of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

The financial crisis refers to the period of market turmoil that started in 2007 and worsened sharply in 2008 with the collapse of Lehman Brothers.

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.

The 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.

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

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

The ISM Purchasing Manager Index, published by the Institute for Supply Management, measures economic activity by assessing the sentiment among purchasing managers. It is an important indicator of the economic health.

Monetary policy focuses on controlling the supply of money with the ulterior motive of price stability, reducing unemployment, boosting growth, etc. (depending on the central bank's mandate).

The Organization for Economic Co-operation and Development (OECD) started in 1948 as the Organization for European Economic Co-operation (OEEC) and changed its name in 1960, now representing 34 countries with democratic governments and market economies.

The Purchasing Managers Index (PMI) is an indicator of the economic health of the manufacturing sector in a specific country or region.

The risk premium is the expected return on an investment minus the return that would be earned on a risk-free investment.

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

A safe-haven investment is an investment that is expected to retain or even increase its value in times of market turbulence.

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

Valuation attempts to quantify the attractiveness of an asset, for example through looking at a firm's stock price in relation to its earnings.

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

West Texas Intermediate (WTI) is a grade of crude oil used as a benchmark in oil pricing.

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.

All opinions and claims are based upon data on 3/10/20 and may not come to pass. DWS does not promote any particular outcome in the upcoming elections. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Source: DWS Investment GmbH

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 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.

DWS Investment GmbH 2020

IMPORTANT INFORMATION: UK

Issued in the UK by DWS Investments UK Limited. DWS Investments UK Limited is authorised and regulated by the Financial Conduct Authority (Registration number 429806).

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 suitable and appropriate, in light of their particular investment needs, objectives and financial circumstances. We assume no responsibility to advise the recipients of this document with regard to changes in our views.

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 any investments and strategies suggested by DWS. The relevant tax laws or regulations of the tax authorities may change at any time.

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 judgement as of the date of this document. Forward looking statements involve significant elements of subjective judgements and analysis 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 statements or to any other financial information contained in this document.

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

© DWS 2020

IMPORTANT INFORMATION – APAC

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 Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively “DWS Group”) are communicating this document in good faith and on the following basis.

This document has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. 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 Group, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, this document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as giving investment advice.

DWS Group does not give tax or legal advice. Investors should seek advice from their own tax experts and lawyers, in considering investments and strategies suggested by DWS Group. Investments with DWS Group are not guaranteed, unless specified.

All opinions and claims are based upon data on 3/10/20 and may not come to pass. DWS does not promote any particular outcome in the upcoming elections. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Source: DWS Investment GmbH

Investments are subject to various risks, 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. Furthermore, substantial fluctuations of the value of the investment are possible even over short periods of time. The terms of any investment will be exclusively subject to the detailed provisions, including risk considerations, contained in the offering documents. When making an investment decision, you should rely on the final documentation relating to the transaction and not the summary contained herein. Past performance is no guarantee of current or future performance. Nothing contained herein shall constitute any representation or warranty as to future performance.

Although the information herein has been obtained from sources believed to be reliable, DWS Group does not guarantee its accuracy, completeness or fairness. No liability for any error or omission is accepted by DWS Group. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. All third party data (such as MSCI, S&P, Dow Jones, FTSE, Bank of America Merrill Lynch, Factset & Bloomberg) are copyrighted by and proprietary to the provider. DWS Group or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.

The document was not produced, reviewed or edited by any research department within DWS Group and is not investment research. Therefore, laws and regulations relating to investment research do not apply to it. Any opinions expressed herein may differ from the opinions expressed by other DWS Group departments including research departments. This document may contain 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 Group as to the reasonableness or completeness of such forward looking statements or to any other financial information contained herein.

This document may not be reproduced or circulated without DWS Group's written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including the United States.

This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, including the United States, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject DWS Group to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

Unless notified to the contrary in a particular case, investment instruments are not insured by the Federal Deposit Insurance Corporation ("FDIC") or any other governmental entity, and are not guaranteed by or obligations of DWS Group.

In Hong Kong, this document is issued by DWS Investments Hong Kong Limited and the content of this document has not been reviewed by the Securities and Futures Commission.
© 2020 DWS Investments Hong Kong Limited

In Singapore, this document is issued by DWS Investments Singapore Limited and the content of this document has not been reviewed by the Monetary Authority of Singapore.
© 2020 DWS Investments Singapore Limited

In Australia, this document is issued by DWS Investments Australia Limited (ABN: 52 074 599 401) (AFSL 499640) and the content of this document has not been reviewed by the Australian Securities Investment Commission.

© 2020 DWS Investments Australia Limited
Publisher: DWS Investment GmbH, Mainzer Landstraße 11-17, 60329 Frankfurt am Main, Germany