CIO Insights
MEMO

January 10, 2019

CIO Insights Memo

Markus Müller – Global Head Chief Investment Office, Daniel Kunz – Senior Strategist Europe

Germany: Technical recession not inconceivable

What has happened?

Financial markets have begun the New Year on a stronger footing, but European macro data continues to disappoint. Purchasing Manager Indices in most European countries as well as the Eurozone's economic sentiment indicator have remained on a downward trajectory. Especially, the German industrial production print – released earlier this week – has stoked fears that Europe's biggest economy is on the brink of a technical recession. Indeed, the 1.9% monthly contraction in November was not only much worse than consensus expectations of a 0.3% expansion, but means that industrial production has probably declined in the last quarter of 2018. In fact, if industrial output is unchanged in December – which is not unlikely given the holiday season – the fourth quarter reading might reveal a similar industrial production drop as in the previous quarter (of around -1.7%). Two consecutive quarters with negative industrial production growth could translate into two negative quarters of GDP growth which would mean a technical recession. Admittedly, the importance of industrial production for the German economy has decreased significantly over the past few decades and problems with the auto sector have also impacted recent output levels. The industrial sector accounts for less than one third of the German GDP. This also means that a drop in industrial output does not inevitably lead to a recession. However, the industrial sector tends to be very sensitive to business cycle swings and, as a result, bigger changes in its output have been a good forecaster of economic turning points.

What would a German recession mean?

A negative fourth quarter GDP reading would mean that Germany has entered a technical recession. A technical recession is defined simply as two consecutive quarters with GDP contraction, and there was a -0.2% drop in GDP in the third quarter. The psychological effect that any recession headlines would have on risky assets, but also consumer and business sentiment should not be underestimated. After all, Germany is not only Europe's biggest economy, but also has been one of the most reliable European growth engines in recent years.

However, a technical recession would not change the fact that Germany's economy remains in robust shape. While the requirements for a technical recession might have been met, the definition of an economic recession in a broader sense doesn't really seem applicable. The most widely accepted definition for an economic recession comes from the U.S. National Bureau of economic Research (NBER): "A recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales." German real income, employment and wholesale & retail sales all remain in good shape. The disappointing industrial production is mostly caused by temporary supply-side

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

January 11, 2019

CIO Insights Memo
Markus Müller – Global Head Chief Investment Office, Daniel Kunz – Senior Strategist Europe

Germany: Technical recession not inconceivable

issues, namely, the production shortfalls in the automotive industry related to emission test delays and also drought-related problems, for example in the chemical industry. Capacity utilization is still high in historical terms, suggesting an economy that is still prospering.

Market reaction

Financial markets have shown little interest in the threat of a technical recession in Germany. The German DAX index has rallied by 3.2% year-to-date. 10Y German government bund yields have barely moved. We see two reasons for this divergence between financial markets and macro data. First of all, a lot of bad news has been priced in after the December sell-off. Secondly, bad European and German macro news has been pushed into the background by more market-friendly headlines in the U.S. (labor market report, Fed comments) and Asia (Chinese RRR cuts).

Our view

Taking all leading and coincidence indicators into account, we think it is still likely that German growth was positive in Q4 and therefore a technical recession will be avoided. Private and public consumption still have the potential to offset the industrial downturn. For example, German retail sales were encouraging in the first two months of Q4 (0.1% and 1.4% mom growth).

However, the risks of a technical recession have increased in recent months and can definitely not be neglected. The title of our annual outlook publication is "Beyond the peaks" and we may well be past peak GDP growth and a slowdown was to be expected. Robust consumption growth amidst a strong labor market will help guard against a technical recession in Germany or Europe more broadly, but fears around it could weigh on financial markets as well as on European business and consumer sentiment. This in combination with lingering global uncertainties could reinforce the growth deceleration. We expect Eurozone growth to slow to 1.6% in 2019 from 1.9% in 2018. With regard to the investment outlook, we would like to reiterate some of our 2019 outlook themes: expect slower macro and corporate earnings growth, be vigilant on volatility and prefer U.S. over European equities.

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

Glossary

Purchasing manager indices (PMI) provide an indicator of the economic health of the manufacturing sector and are based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. The composite PMI includes both manufacturing and services sectors. They can be published by public sector or private agencies (e.g. Caixin, Nikkei).

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

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.

The DAX is a blue-chip stock-market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange; other DAX indices include a wider range of firms.

Bunds are longer-term bonds issued by the German government.

The Federal Reserve is the central bank of the United States. Its Federal Open Market Committee (FOMC) meets to determine interest rate policy.

Reserve requirement ratios (RRR) determine the proportion of banks' deposit liabilities that must be held as reserves.

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

Important information

General

This document may not be distributed in Canada or Japan. This document is intended for retail or professional clients only.

This document is being circulated in good faith by Deutsche Bank AG, its branches (as permitted in any relevant jurisdiction), affiliated companies and its officers and employees (collectively, "Deutsche Bank"). This material is for your information only and is not intended as an offer, or recommendation or solicitation of an offer to buy or sell any investment, security, financial instrument or other specific product, to conclude a transaction, or to provide any investment service or investment advice, or to provide any research, investment research or investment recommendation, in any jurisdiction. All materials in this communication are meant to be reviewed in their entirety.

If a court of competent jurisdiction deems any provision of this disclaimer unenforceable, the remaining provisions will remain in full force and effect. This document has been prepared as a general market commentary without consideration of the investment needs, objectives or financial circumstances of any investor. Investments are subject to generic market risks which derive from the instrument or are specific to the instrument or attached to the particular issuer. Should such risks materialise, investors may incur losses, including (without limitation) a total loss of the invested capital. The value of investments can fall as well as rise and you may not recover the amount originally invested at any point in time. This document does not identify all the risks (direct or indirect) or other considerations which may be material to an investor when making an investment decision.

This document and all information included herein are provided "as is", "as available" and no representation or warranty of any kind, express, implied or statutory, is made by Deutsche Bank regarding any statement or information contained herein or in conjunction with this document. All opinions, market prices, estimates, forward looking statements, hypothetical statements, forecast returns or other opinions leading to financial conclusions contained herein reflect Deutsche Bank's subjective judgment on the date of this report. Without limitation, Deutsche Bank does not warrant the accuracy, adequacy, completeness, reliability, timeliness or availability of this communication or any information in this document and expressly disclaims liability for errors or omissions herein. 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.

Deutsche Bank does not assume any obligation to either update the information contained in this document or inform investors about available updated information. The information contained in this document is subject to change without notice and based on a number of assumptions which may not prove valid, and may be different from conclusions expressed by other departments within Deutsche Bank. Although the information contained in this document has been diligently compiled by Deutsche Bank and derived from sources that Deutsche Bank considers trustworthy and reliable, Deutsche Bank does not guarantee or cannot make any guarantee about the completeness, fairness, or accuracy of the information and it should not be relied upon as such. This document may provide, for your convenience, references to websites and other external sources. Deutsche Bank takes no responsibility for their content and their content does not form any part of this document. Accessing such external sources is at your own risk.

Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether any investments and strategies described or provided by Deutsche Bank, are appropriate, in light of their particular investment needs, objectives, financial circumstances and instrument specifics. When making an investment decision, potential investors should not rely on this document but only on what is contained in the final offering documents relating to the investment.

Important information

As a global financial services provider, Deutsche Bank from time to time faces actual and potential conflicts of interest. Deutsche Bank's policy is to take all appropriate steps to maintain and operate effective organisational and administrative arrangements to identify and manage such conflicts. Senior management within Deutsche Bank are responsible for ensuring that Deutsche Bank's systems, controls and procedures are adequate to identify and manage conflicts of interest.

Deutsche Bank does not give tax or legal advice, including in this document and nothing in this document should be interpreted as Deutsche Bank providing any person with any investment advice. Investors should seek advice from their own tax experts, lawyers and investment advisers in considering investments and strategies described by Deutsche Bank. Unless notified to the contrary in a particular case, investment instruments are not insured by any governmental entity, not subject to deposit protection schemes and not guaranteed, including by Deutsche Bank.

This document may not be reproduced or circulated without Deutsche Bank's express written authorisation. Deutsche Bank expressly prohibits the distribution and transfer of this material to third parties. Deutsche Bank accepts no liability whatsoever arising from the use or distribution of this material or for any action taken or decision made in respect of investments mentioned in this document the investor may have entered into or may enter in future.

The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including, without limitation, 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, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Deutsche Bank to any registration or licensing requirement within such jurisdiction not currently met. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

Past performance is no guarantee of future results; nothing contained herein shall constitute any representation, warranty or prediction as to future performance. Further information is available upon investor's request.

Kingdom of Bahrain

For Residents of the Kingdom of Bahrain: This document does not constitute an offer for sale of, or participation in, securities, derivatives or funds marketed in Bahrain within the meaning of Bahrain Monetary Agency Regulations. All applications for investment should be received and any allotments should be made, in each case from outside of Bahrain. This document has been prepared for private information purposes of intended investors only who will be institutions. No invitation shall be made to the public in the Kingdom of Bahrain and this document will not be issued, passed to, or made available to the public generally. The Central Bank (CBB) has not reviewed, nor has it approved, this document or the marketing of such securities, derivatives or funds in the Kingdom of Bahrain. Accordingly, the securities, derivatives or funds may not be offered or sold in Bahrain or to residents thereof except as permitted by Bahrain law. The CBB is not responsible for performance of the securities, derivatives or funds.

State of Kuwait

This document has been sent to you at your own request. This presentation is not for general circulation to the public in Kuwait. The Interests have not been licensed for offering in Kuwait by the Kuwait Capital Markets Authority or any other relevant Kuwaiti government agency. The offering of the Interests in Kuwait on the basis a private placement or public offering is, therefore, restricted in accordance with Decree Law No. 31 of 1990 and the implementing regulations thereto (as amended) and Law No. 7 of 2010 and the bylaws thereto (as amended). No private or public offering of the Interests is being made in Kuwait, and no agreement relating to the sale of the Interests will be concluded in Kuwait. No marketing or solicitation or inducement activities are being used to offer or market the Interests in Kuwait.

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

CIO Insights Memo

Important information

United Arab Emirates

Deutsche Bank AG in the Dubai International Financial Centre (registered no. 00045) is regulated by the Dubai Financial Services Authority. Deutsche Bank AG -DIFC Branch may only undertake the financial services activities that fall within the scope of its existing DFSA license. Principal place of business in the DIFC: Dubai International Financial Centre, The Gate Village, Building 5, PO Box 504902, Dubai, U.A.E. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available to Professional Clients, as defined by the Dubai Financial Services Authority.

State of Qatar

Deutsche Bank AG in the Qatar Financial Centre (registered no. 00032) is regulated by the Qatar Financial Centre Regulatory Authority. Deutsche Bank AG -QFC Branch may only undertake the financial services activities that fall within the scope of its existing QFCRA license. Principal place of business in the QFC: Qatar Financial Centre, Tower, West Bay, Level 5, PO Box 14928, Doha, Qatar. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available to Business Customers, as defined by the Qatar Financial Centre Regulatory Authority.

Kingdom of Belgium

This document has been distributed in Belgium by Deutsche Bank AG acting though its Brussels Branch. Deutsche Bank AG is a stock corporation (“Aktiengesellschaft”) incorporated under the laws of the Federal Republic of Germany and licensed to carry on banking business and to provide financial services subject to the supervision and control of the European Central Bank (“ECB”) and the German Federal Financial Supervisory Authority (“Bundesanstalt für Finanzdienstleistungsaufsicht” or “BaFin”). Deutsche Bank AG, Brussels Branch has its registered address at Marnixlaan 13-15, B-1000 Brussels, registered at the RPM Brussels, under the number VAT BE 0418.371.094. Further details are available on request or can be found at www.deutschebank.be.

Kingdom of Saudi Arabia

Deutsche Securities Saudi Arabia Company (registered no. 07073-37) is regulated by the Capital Market Authority. Deutsche Securities Saudi Arabia may only undertake the financial services activities that fall within the scope of its existing CMA license. Principal place of business in Saudi Arabia: King Fahad Road, Al Olaya District, P.O. Box 301809, Faisaliah Tower, 17th Floor, 11372 Riyadh, Saudi Arabia.

United Kingdom

In the United Kingdom (“UK”), this publication is considered a financial promotion and is approved by DB UK Bank Limited on behalf of all entities trading as Deutsche Bank Wealth Management in the UK. Deutsche Bank Wealth Management is a trading name of DB UK Bank Limited. Registered in England & Wales (No. 00315841). Registered Office: 23 Great Winchester Street, London EC2P 2AX. DB UK Bank Limited is authorised and regulated by the Financial Conduct Authority and its Financial Services Registration Number is 140848. Deutsche Bank reserves the right to distribute this publication through any of its UK subsidiaries, and in any such case, this publication is considered a financial promotion and is approved by such subsidiary where it is authorised by the appropriate UK regulator (if such subsidiary is not so authorised, then this publication is approved by another UK member of the Deutsche Bank Wealth Management group that has the requisite authorisation to provide such approval).

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

Important information

Hong Kong

This document and its contents are provided for information only. Nothing in this document is intended to be an offer of any investment or a solicitation or recommendation to buy or to sell an investment and should not be interpreted or construed as an offer, solicitation or recommendation.

To the extent that this document makes reference to any specific investment opportunity, its contents have not been reviewed. The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the investments contained herein. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. This document has not been approved by the Securities and Futures Commission in Hong Kong nor has a copy of this document been registered by the Registrar of Companies in Hong Kong and, accordingly, (a) the investments (except for investments which are a "structured product", as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the "SFO")) may not be offered or sold in Hong Kong by means of this document or any other document other than to "professional investors" within the meaning of the SFO and any rules made thereunder, or in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("CO") or which do not constitute an offer to the public within the meaning of the CO and (b) no person shall issue or possess for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the investments which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the investments which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the SFO and any rules made thereunder.

Singapore

The contents of this document have not been reviewed by the Monetary Authority of Singapore ("MAS"). The investments mentioned herein are not allowed to be made to the public or any members of the public in Singapore other than (i) to an institutional investor under Section 274 or 304 of the Securities and Futures Act (Cap 289) ("SFA"), as the case may be (as any such Section of the SFA may be amended, supplemented and/or replaced from time to time), (ii) to a relevant person (which includes an Accredited Investor) pursuant to Section 275 or 305 and in accordance with other conditions specified in Section 275 or 305 respectively of the SFA, as the case may be (as any such Section of the SFA may be amended, supplemented and/or replaced from time to time), (iii) to an institutional investor, an accredited investor, expert investor or overseas investor (each as defined under the Financial Advisers Regulations) ("FAR") (as any such definition may be amended, supplemented and/or replaced from time to time) or (iv) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA or the FAR (as the same may be amended, supplemented and/or replaced from time to time).

United States

In the United States, brokerage services are offered through Deutsche Bank Securities Inc., a broker-dealer and registered investment adviser, which conducts securities activities in the United States. Deutsche Bank Securities Inc. is a member of FINRA, NYSE and SIPC. Banking and lending services are offered through Deutsche Bank Trust Company Americas, member FDIC, and other members of the Deutsche Bank Group. In respect of the United States, see earlier statements made in this document. Deutsche Bank makes no representations or warranties that the information contained herein is appropriate or available for use in countries outside of the United States, or that services discussed in this document are available or appropriate for sale or use in all jurisdictions, or by all counterparties. Unless registered, licensed as otherwise may be permissible in accordance with applicable law, none of Deutsche Bank or its affiliates is offering any services in the United States or that are designed to attract US persons (as such term is defined under Regulation S of the United States Securities Act of 1933, as amended).

This United States-specific disclaimer will be governed by and construed in accordance with the laws of the State of Delaware, without regard to any conflicts of law provisions that would mandate the application of the law of another jurisdiction.

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

Important information

Germany

This document has been created by Deutsche Bank Wealth Management, acting through Deutsche Bank AG and has neither been presented to nor approved by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht). For certain of the investments referred to in this document, prospectuses have been approved by competent authorities and published. Investors are required to base their investment decision on such approved prospectuses including possible supplements. Further, this document does not constitute financial analysis within the meaning of the German Securities Trading Act (Wertpapierhandelsgesetz) and, thus, does not have to comply with the statutory requirements for financial analysis. Deutsche Bank AG is a stock corporation ("Aktiengesellschaft") incorporated under the laws of the Federal Republic of Germany with principal office in Frankfurt am Main. It is registered with the district court ("Amtsgericht") in Frankfurt am Main under No HRB 30 000 and licensed to carry on banking business and to provide financial services. Supervisory authorities: The European Central Bank ("ECB"), Sonnemannstrasse 22, 60314 Frankfurt am Main, Germany and the German Federal Financial Supervisory Authority ("Bundesanstalt für Finanzdienstleistungsaufsicht" or "BaFin"), Graurheindorfer Strasse 108, 53117 Bonn and Marie-Curie-Strasse 24-28, 60439 Frankfurt am Main, Germany.

India

The investments mentioned in this document are not being offered to the Indian public for sale or subscription. This document is not registered and/or approved by the Securities and Exchange Board of India, the Reserve Bank of India or any other governmental/ regulatory authority in India. This document is not and should not be deemed to be a "prospectus" as defined under the provisions of the Companies Act, 2013 (18 of 2013) and the same shall not be filed with any regulatory authority in India. Pursuant to the Foreign Exchange Management Act, 1999 and the regulations issued there under, any investor resident in India may be required to obtain prior special permission of the Reserve Bank of India before making investments outside of India including any investments mentioned in this document.

Italy

This report is distributed in Italy by Deutsche Bank S.p.A., a bank incorporated and registered under Italian law subject to the supervision and control of Banca d'Italia and CONSOB.

Luxembourg

This report is distributed in Luxembourg by Deutsche Bank Luxembourg S.A., a bank incorporated and registered under Luxembourg law subject to the supervision and control of the Commission de Surveillance du Secteur Financier.

Spain

Deutsche Bank, Sociedad Anónima Española is a credit institution regulated by the Bank of Spain and the CNMV, and registered in their respective Official Registries under the Code 019. Deutsche Bank, Sociedad Anónima Española may only undertake the financial services and banking activities that fall within the scope of its existing license. The principal place of business in Spain is located in Paseo de la Castellana number 18, 28046 - Madrid. This information has been distributed by Deutsche Bank, Sociedad Anónima Española.

Portugal

Deutsche Bank AG, Portugal Branch is a credit institution regulated by the Bank of Portugal and the Portuguese Securities Commission ("CMVM"), registered with numbers 43 and 349, respectively and with commercial registry number 980459079. Deutsche Bank AG, Portugal Branch may only undertake the financial services and banking activities that fall within the scope of its existing license. The registered address is Rua Castilho, 20, 1250-069 Lisbon, Portugal. This information has been distributed by Deutsche Bank AG, Portugal Branch.

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com

Important information

Austria

This document is distributed by Deutsche Bank Österreich AG, with its registered office in Vienna, Republic of Austria, registered with the companies' register of the Vienna Commercial Court under FN 276838s. It is supervised by the Austrian Financial Market Authority (Finanzmarktaufsicht or FMA), Otto-Wagner Platz 5, 1090 Vienna, and (as entity in the Deutsche Bank AG group) by the European Central Bank ("ECB"), Sonnemannstrasse 22, 60314 Frankfurt am Main, Germany. This document has neither been presented to nor been approved by any of the before-mentioned supervisory authorities. For certain of the investments referred to in this document, prospectuses may have been published. In such case, investment decisions should be made exclusively on the basis of the published prospectus including possible supplements. Only these documents are binding. This document constitutes marketing material, which has been provided exclusively for informational and advertising purposes, and is not the result of any financial analysis or research.

The Netherlands

This document is distributed by Deutsche Bank AG, Amsterdam Branch, with registered address at De entree 195 (1101 HE) in Amsterdam, the Netherlands, and registered in the Netherlands trade register under number 33304583 and in the register within the meaning of Section 1:107 of the Netherlands Financial Supervision Act (Wet op het financieel toezicht). This register can be consulted through www.dnb.nl.

028033 011019

In Europe and Emerging Markets this publication is to be considered Marketing Material. Past performance is not indicative of future performance. All opinions and claims are based upon data at the time of publication 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. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.
CIO Office, Deutsche Bank Wealth Management, Deutsche Bank AG - Email: WM.CIO-Office@db.com