# CIO Memo

June 12, 2024

Authors: Stefanie Holtze-Jen Chief Investment Officer APAC

Swati Bashyam Investment Officer APAC

# Japan: data points to a hold by the BoJ

# Key takeaways

- The economy is likely to rebound in Q2 with real wage growth translating into higher consumer spending.
- The Bank of Japan (BoJ) is likely to keep rates steady but announce balance sheet reduction plans.
- Topix earnings are expected by consensus to rise 7% YoY over the next 12 months. Valuation remains attractive with Topix 12m Fwd P/E at 15.2x. We continue to prefer banking, IT and consumer discretionary sectors given strong fundamentals and the consumption story.

# 1. What happened?

Japan's Q1 GDP (final reading) contracted -0.5% QoQ with consumption, which contributes around 50% of GDP, declining by -0.7% on weak domestic demand. Investment and exports declined -0.7% and -0.4%, respectively, with a safety test scandal at a leading automobile manufacturer hitting production and exports. Q1 annualised GDP shrank -1.8%, vs -2.0% in the preliminary estimate, due to an upward revision of business capex, which increased by 6.8% annualised.

However, the economy is likely to bounce back in Q2 as the recent historic wage hikes following the Shunto spring negotiations in March translate into higher real wages and consumption. Real wage growth has been negative over the past two years with inflation eating into nominal wage increments. Real wages fell -0.7% YoY in April but the trend is improving as confirmed by last week's data on cash earnings and household spending. Cash earnings rose 2.1% YoY in April surpassing estimates of 1.7% with base pay rising by 2.3% YoY, the fastest in nearly three decades. Household spending rose 0.5% YoY in April after falling for 14 straight months driven by higher spending on education, clothing and transport. Furthermore, the implementation of the announced fixed tax reduction of JPY40k (USD 250) per person from June is expected to further boost real incomes.

Meanwhile, inflation and industrial production number have softened indicating the recovery of the economy is still nascent. Tokyo CPI (excl. fresh food) for May came in at 1.9% YoY, slightly below the BoJ's 2% target while core CPI (excl. fresh food and energy) eased to 1.2% YoY vs 1.4% in April. Industrial output declined by -0.1% MoM in April vs, expected 0.9% growth.

However, stronger PMIs and industrial profits reflect continued corporate momentum. The manufacturing PMI turned expansionary in May for the first time in a year while services PMI remained healthy at 53.8.

# 2. How did markets react?

Topix and Nikkei have remained broadly flat over the past week. 10-year JGB yields moved sideways and stood at 1.02% as of yesterday's close. USD/JPY is down -0.6% during the week.

# 3. What does it mean for investors?

The Japanese economy is gradually progressing along a reflationary path. The transmission of wage hikes into higher consumer spending is expected to trigger a virtuous cycle of growth.

JPY depreciation through the year (-11.3% YTD) has helped boost tourism and exports but has also hit consumers hard as Japan remains a big importer of food and fuel and a weaker JPY results in higher living costs. Additionally, the JPY continues to remain under pressure from rising USD strength on the back of market repricing following stronger-thanexpected U.S. macro data and the delay in rate cuts by the Fed. So, while JPY weakness is increasing expectations that the BoJ could hike rates further, the Japanese economy still remains at an early stage of the growth cycle.

As a result, we expect the Bank of Japan (BoJ) to follow a cautious approach on future rate hikes following the March hike, which was the first in 17 years. We believe the BoJ will likely maintain interest rates at its upcoming meeting on Friday and hike rates at its September or October meeting. However, the BoJ will likely announce on Friday a reduction of JGB purchases from their current level of JPY 6trn (USD 38bn) per month as indicated previously and widely expected by the markets.

Meanwhile, rising foreign investor interest has driven the Tokyo Stock Exchange's prime index market cap close to the JPY 1 quadrillion (USD 6.4trn) mark, a rise of more than 40% in two years since the introduction of the stock market reforms. The recent government investigation into an industry-wide automobile safety test scandal is further testimony to the government's commitment towards improving corporate governance. The government's attempts to limit the economic impact of the scandal are also reassuring.

Economic growth is likely to recover in Q2 on the back of an improvement in consumption. Topix earnings over the next 12 months are expected to grow by 7% YoY backed by capital efficiency gains. Valuation remains attractive with a Topix 1yr forward price/earnings (PE) ratio of 15.2x, a -3% discount over 5-year average PE levels. We reiterate our preference for the banking, IT and consumer discretionary sectors driven by strong fundamentals and the consumption story.

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, 1 even if the nominal performance of the investment is positive. Investments come with risk. 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. Your capital may be at risk.



# Glossary

The Bank of Japan (BoJ) is the central bank of Japan.

The consumer price index (CPI) measures the price of a basket of products and services that is based on the typical consumption of a private household.

Earnings per share (EPS) is a financial ratio, which divides net earnings available to common shareholders by the average outstanding shares over a certain period of time.

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.

JGB stands for Japanese government bonds.

JPY is the currency code for the Japanese yen, the Japanese currency.

Nikkei 225, or the Nikkei Stock Average, more commonly called the Nikkei or the Nikkei index, is a stock market index for the Tokyo Stock Exchange.

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, Jibun Bank).

The price-to-earnings (P/E) ratio measures a company's current share price relative to its per-share earnings.

Shunto wage negotiations refers to the annual wage negotiations between enterprise unions and the employers in Japan. Beginning in February or March each spring, thousands of unions conduct wage negotiations with employers simultaneously.

Tokyo Stock Price Index, commonly known as TOPIX, along with the Nikkei 225, is an important stock market index for the Tokyo Stock Exchange in Japan, tracking all domestic companies of the exchange's Prime market division.

USD is the currency code for the U.S. Dollar.

YoY refers to year-on-year which compares data in a given month from the immediately preceding year.

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, 2 even if the nominal performance of the investment is positive. Investments come with risk. 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. Your capital may be at risk.

# **Historical Performance**

Performance	11.6.2019 – 11.6.2020	11.6.2020 - 11.6.2021	11.6.2021 – 11.6.2022	11.6.2022 – 11.6.2023	11.6.2023 - 11.6.2024
Торіх	1.8%	23.0%	-0.6%	14.5%	24.8%
Nikkei 225	6.0%	28.8%	-3.9%	16.0%	21.3%
JSD/JPY	-1.5%	2.6%	22.5%	3.8%	12.7%
JGB	-0.9%	0.2%	-1.7%	2.2%	-4.0%
Fopix Banks	-13.9%	18.7%	9.1%	31.6%	62.2%
Fopix IT	14.3%	38.2%	0.5%	19.0%	29.5%
Fopix Cons. Disc.	3.0%	34.3%	2.9%	11.3%	22.7%

Source: LSEG Datastream, Deutsche Bank AG. Data as of June 11, 2024,

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, 3 even if the nominal performance of the investment is positive. Investments come with risk. 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. Your capital may be at risk.



## 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 Aktiengesellschaft, 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, but is intended solely for information purposes. The information does not replace advice tailored to the individual circumstances of the investor.

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 particular investor. Investments are subject to 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. To the extent permissible under applicable laws and regulations, we are making no representation as to the profitability of any financial instrument or economic measure. 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 as of the date of this document. 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.

Unless otherwise indicated in this document, all statements of opinion reflect the current assessment of Deutsche Bank, which may change at any time. 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, estimates, opinions and hypothetical models or analyses which – although, From the Bank's current point of view are based on adequate information – may not prove valid or turnout in the future to be accurate or correct and may be different from conclusions expressed by other departments within Deutsche Bank. Although the information contained in this document has been derived from sources that Deutsche Bank considers trustworthy and reliable, Deutsche Bank does not guarantee 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.

To the extent permissible under applicable laws and regulations, this document is for discussion purposes only and is not intended to create any legally binding obligations on Deutsche Bank and Deutsche Bank is not acting as your financial advisor or in a fiduciary capacity unless otherwise expressly agreed by Deutsche Bank in writing. Before making an investment decision, investors need to consider, with or without the assistance of a financial professional, whether any investments and strategies described or provided by Deutsche Bank, are appropriate, in light of the investor's particular investment needs, objectives, financial circumstances, the possible risks and benefits of such investment decision. When making an investment decision, potential investors should not rely on this document but only on what is contained in the final offering documentation relating to the investment. 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 which the investor may have made or may make in the 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.

Deutsche Bank AG is a stock corporation ("Aktiengesellschaft") incorporated under the laws of the Federal Republic of Germany with its head office in Frankfurt am Main. It is registered with the district court ("Amtsgericht") in Frankfurt am Main under number HRB 30 000and licensed to carry out banking business and to provide financial services. Supervisory authorities are the European Central Bank ("ECB"), Sonnemannstrasse 22, 60314 Frankfurt am Main, Germany (www.ecb.europa.eu) and the German Federal Financial Supervisory Authority ("Bundesanstalt für Finanzdienstleistungsaufsicht" or "BaFin"), Grauheindorfer Strasse 108, 53117 Bonn and Marie-Curie-Strasse24-28, 60439 Frankfurt am Main(www.bafin.de), and by the German Central Bank ("Deutsche Bundesbank"), Wilhelm-Epstein-Strasse 14, 60431 Frankfurt am Main (www.bundesbank.de).

This document has neither been submitted to nor reviewed or approved by any of the above or below mentioned supervisory authorities.

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, 4 even if the nominal performance of the investment is positive. Investments come with risk. 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. Your capital may be at risk.



## For Residents of the United Arab Emirates

This document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. By receiving this document, the person or entity to whom it has been issued understands, acknowledges and agrees that this document has not been approved by the UAE Central Bank, the UAE Securities and Commodities Authority, the UAE Ministry of Economy or any other authorities in the UAE. No marketing of any financial products or services has been or will be made from within the United Arab Emirates and no subscription to any funds, securities, products or financial services may or will be consummated within the United Arab Emirates. This does not constitute a public offer of securities in the United Arab Emirates in accordance with the Commercial Companies Law, Federal Law No. 2 of 2015 (as amended from time to time) or otherwise. This document may only be distributed to "Professional Investors", as defined in the UAE Securities and Commodities Authority's Rulebook on Financial Activities and Reconciliation Mechanism (as amended from time to time).

## For Residents 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.

## For Residents of the Kingdom of Saudi Arabia

This document may not be distributed in the Kingdom except to such persons as are permitted under the Investment Fund Regulations issued by the Capital Market Authority. The Capital Market Authority does not take any responsibility for the contents of this document, does not make any representation as to its accuracy or completeness, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective subscribers of the securities should conduct their own due diligence on the accuracy of any information relating to securities. If you do not understand the contents of this document, you should consult an authorised financial adviser.

## For Residents of Qatar

This document has not been filed with, reviewed or approved by the Qatar Central Bank, the Qatar Financial Markets Authority, the Qatar Financial Centre Regulatory Authority or any other relevant Qatari governmental body or securities exchange or under any laws of the State of Qatar. This document does not constitute a public offering and is addressed only to the party to whom it has been delivered. No transaction will be concluded in Qatar and any inquiries or applications should be received, and allotments made, outside Qatar.

## 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.

## For Residents of South Africa

This document does not constitute or form a part of any offer, solicitation or promotion in South Africa. This document has not been filed with, reviewed or approved by the South African Reserve Bank, the Financial Sector Conduct Authority or any other relevant South African governmental body or securities exchange or under any laws of the Republic of South Africa.

## For Residents 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 ("BaFin"). Deutsche Bank AG, Brussels Branch, is also supervised in Belgium by the Financial Services and Markets Authority ("FSMA", <u>www.fsma.be</u>). The branch has its registered address at Marnixlaan 13-15, B-1000 Brussels and is registered under number VAT BE 0418.371.094, RPM/RPR Brussels. Further details are available on request or can be found at www.deutschebank.be.

## For Residents of the United Kingdom

This document is a financial promotion as defined in Section 21 of the Financial Services and Markets Act 2000 and is approved by and communicated to you by DB UK Bank Limited. DB UK Bank Limited is a member of the Deutsche Bank group and is registered.at Company House in England & Wales with company number 315841 with its registered Office: 21 Moorfields, London, United Kingdom, EC2Y 9DB. DB UK Bank Limited is authorised by the Prudential Regulation Authority and is regulated by the Financial Conduct Authority and the Prudential Regulation Authority. DB UK Bank Limited's Financial Services Registration Number is 140848.

Deutsche Bank Aktiengesellschaft is incorporated in the Federal Republic of Germany and its members' liability is limited.

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, 5 even if the nominal performance of the investment is positive. Investments come with risk. 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. Your capital may be at risk.



#### For Residents of Hong Kong

This material is intended for: Professional Investors in Hong Kong. Furthermore, this material is provided to addressee only, further distribution of this material is strictly prohibited. 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.

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 any). 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 ("SFC"), nor has a copy of this document been registered by the Registrar of Companies in Hong Kong, unless specified otherwise. The investments contained herein may or may not be authorised by the SFC. The investments may not be offered or sold in Hong Kong, by means of any document, other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("SFO") and any rules made under the SFO, or (ii) 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)(the "C(WUMP)O") or which do not constitute an offer to the public within the meaning of the C(WUMP)O. 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 of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to investments which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO.

#### For Residents of Singapore

This material is intended for: Accredited Investors / Institutional Investors in Singapore. Furthermore, this material is provided to addressee only, further distribution of this material is strictly prohibited.

## For Residents of the United States of America

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, 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 of the United States, or its Act of 1933, as amended). This United States, specific disclaimer will be governed by and construed in accordance with the laws of the State

#### For Residents of Germany

This information is advertising. The texts do not meet all legal requirements to ensure the impartiality of investment and investment strategy recommendations or financial analyses. There is no prohibition for the compiler or for the company responsible for the compilation to trade with the respective financial instruments before or after the publication of these documents.

General information on financial instruments is contained in the brochures "Basic Information on Securities and Other Investments", "Basic Information on Financial Derivatives", "Basic Information on Forward Transactions" and the information sheet "Risks in Forward Transactions", which the customer can request from the Bank free of charge.

Past performance or simulated performance is not a reliable indicator of future performance.

#### For Residents of 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.

### For Residents of 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. Its registered office is located at Piazza del Calendario 3 – 20126 Milan (Italy) and is registered with the Chamber of Commerce of Milan, VAT and fiscal code number 001340740156, part of the interbank fund of deposits protection, enrolled in the Bank Register and the head of Deutsche Bank Banking Group, enrolled in the register of the Banking Groups pursuant to Legislative Decree September 1st , 1993 n. 385 and subject to the direction and coordination activity of Deutsche Bank AG, Frankfurt am Main (Germany).

## For Residents of Luxembourg

This report is distributed in Luxembourg by Deutsche Bank Luxembourg S.A., a bank incorporated under the laws of the Grand Duchy of Luxembourg in the form of a public limited company (Société Anonyme), subject to the supervision and control of the European Central Bank ("ECB") and Commission de Surveillance du Secteur Financier ("CSSF"). Its registered office is located at 2, boulevard Konrad Adenauer, 1115 Luxembourg, Grand Duchy of Luxembourg and is registered with Luxembourg Registre de Commerce et des Sociétés ("RCS") under number B 9.164.

#### For Residents of Spain

Deutsche Bank, Sociedad Anónima Española Unipersonal 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 Unipersonal 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. Registered in the Mercantile Registry of Madrid, Volume 28100, Book 0, Folio 1, Section 8, Sheet M506294, Registration 2. NIF: A08000614. This information has been distributed by Deutsche Bank, Sociedad Anónima Española Unipersonal.

#### For Residents of 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.

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, 6 even if the nominal performance of the investment is positive. Investments come with risk. 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. Your capital may be at risk.



#### For Residents of Austria

This document is distributed by Deutsche Bank AG Vienna Branch, registered in the commercial register of the Vienna Commercial Court under number FN 140266z.Deutsche Bank AG's Vienna branch is also supervised by the Austrian Financial Market Authority (FMA), Otto-Wagner-Platz 5, 1090 Vienna. This document has neither been submitted to nor approved by the aforementioned supervisory authorities.

#### For Residents of 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.

#### For Residents of France

Deutsche Bank AG is an authorised credit institution, subject to the overall supervision of the European Central Bank and BaFin, the German Federal Financial Supervisory Authority. Its various branches are locally supervised, for certain activities, by the competent banking authorities, such as the Prudential Control and Resolution Authority (Autorité de Controle Prudentiel de Résolution, "ACPR") and the Financial Markets Authority (Autorité des Marchés Financiers, "AMF") in France.

Any reproduction, representation, distribution or redistribution, in whole or in part, of the contents of this document in any medium or by any process whatsoever, as well as any sale, resale, retransmission or making available to third parties in any manner whatsoever, is prohibited. This document may not be reproduced or distributed without our written permission.

© 2024 Deutsche Bank AG. All rights reserved.

055143 061224

In Europe, Middle East and Africa as well as in Asia Pacific this material is considered marketing material, but this is not the case in the U.S. No assurance can be given that any forecast or target can be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models which may prove to be incorrect. Past performance is not indicative of future returns. Performance refers to a nominal value based on price gains/losses and does not take into account inflation. Inflation will have a negative impact on the purchasing power of this nominal monetary value. Depending on the current level of inflation, this may lead to a real loss in value, the amount originally invested at any point in time. Your capital may be at risk.