CIO View

Investment Traffic Lights

November 5, 2024 Marketing material



Our monthly market analysis and positioning



Björn JeschGlobal Chief
Investment Officer

IN A NUTSHELL-

- In October, both equity as well as bond investors suffered losses for the first time in months.
- While economic growth remains satisfactory overall, progress in disinflation is faltering somewhat, and many asset classes remain relatively highly valued.
- Investors will first have to digest the implications of the U.S. election before contemplating a potential yearend rally.

1 / Market overview

1.1 The resurging Trump-trade wasn't the only thing moving markets in October

Though on some days it certainly didn't feel like it, the unbearably vacuous U.S. election campaign did not dominate all headlines in October. Developments in the Middle East also kept the world in suspense, investors awaited further details of the Chinese stimulus package, Japan's prime minister made a bad bet, Europe suffered some rather mixed economic figures and UK chancellor shocked investors with her inaugural budget. Meanwhile, in the markets, the quarterly reporting season began, providing investors with plenty of numbers to chew on. One thing at a time. Although the U.S. election campaign produced nothing meaningful, it still dictated the mood on the U.S. financial markets. The "Trump trade" was back as the former president regained significant ground in the polls. Furthermore, some economic data surprised on the upside. This caused U.S. interest rates to rise, the dollar to strengthen and, for some reason, outperformance by U.S. stock markets of those in the rest of the world. As our ClO for the Americas speculated: "The last few days price in the best of all worlds. After the election, the hard decisions await."

China's stimuli packages failed to meet expectations - maybe one of the reasons for the weak oil price

In China those in power would love investors to price in the best of all possible worlds. The initial euphoria over the stimulus package announced at the end of September evaporated during the course of the month, as little of substance followed. Another blow was industry profits, weaker than at any time since the Covid slump of 2020. In Japan, Shigeru Ishiba, the newly elected leader of the ruling Liberal democratic (LDP) party miscalculated by calling for snap elections in which his party lost its parliamentary majority for the first time since 2009. The fact that the stock markets performed relatively well despite the political uncertainty can probably only be explained by the simultaneous weakening of the yen, which favors Japanese exports. In Europe, economic data was mixed. The once proud core countries performed rather weakly, while Europe's periphery, led by Spain, did much better.

Finally, there is the region that currently has bigger concerns than economic growth, the Middle East. Here, the conflict threatened to escalate, particularly between Israel and Iran. When fears eased a little, the oil market quickly calmed down again and the price of Brent fell almost to USD 70/barrel at the end of the month, about the same as its low point in the past year.

1.2 Gold reaches new record highs – despite rising real interest rates

A weak final trading day in October caused almost all global equity and bond markets to slip into negative territory for the month. Only Japan remained in the green. Emerging markets took the biggest hit, down 4.3%. For the S&P 500, it was the first negative month in six months. For global bonds, it was the worst month since September 2022 – with 10-year Treasuries losing almost 4%. Euro high-yield bonds were one of the few segments to achieve a positive return.

Two curiosities and a déjà-vu in the UK

Two curiosities in other markets were more interesting. The first relates to the weak oil price. While inflation expectations, and thus ultimately interest rates, are usually closely aligned with the oil price, both data series rose again in the month despite weak commodity prices – which in turn can probably only be explained by the "Trump trade," which reflects a certain degree of concern about rising inflation rates. The price of gold is the basis for the second curiosity. It continued to rise unabated to new record highs, even though the dollar index rose by almost 4% and even though U.S. real interest rates (10year) rose by almost half a percentage point. That certainly is the dark side of the Trump trade: the fear of debt-induced currency devaluation. On an annualized basis, gold and silver are now up by 33 and 35%, respectively. Also worth mentioning was the jump in yields on British government bonds. 10-years rose to 4.45% after the budget, with its ample new borrowing, had some minor echoes of Liz Truss's catastrophic mini-budget two years ago. Other than during the brief Truss panic, British 10-year yields traded at the end of October at their highest premium (over 200 basis points (bps)) over German government bonds since the early 1990s.

2 / Outlook and changes

Regardless of how the U.S. elections ultimately turn out and it could take days, if not weeks, before the exact result and repercussions for the Congress are known — nothing could be more difficult than predicting the immediate market reaction after the first projections of the result. The 2020 election was very close and then, as now, the market mostly assumed that a Trump victory would boost the stock market more. Biden won, and yet the S&P 500 initially rose. In addition, no one knows what probability of victory the market has really priced in. Finally, the details of the election result, in terms of seats and political control — in other words, whether a candidate can govern with his party or not — will determine to what degree anything significant will change for the economy and the markets.

2.1 Fixed Income

After the better-than-expected economic data in the U.S., coupled with a slight uptick in inflation, market expectations regarding Fed interest rate cuts have clearly moved towards fewer cuts, which had been our expectation. In the space of six weeks three interest rate moves by mid-2025 have been priced out of the consensus view. In the run-up to the U.S. election, however, there is another influence on bond yields, especially at the long end of the yield curve: concern about the U.S. debt mountain and the budget deficit. The recent rise in yields in the UK has also shown that bond investors are concerned about the size and growth in government debt.

Government Bonds

We made a few tactical changes in October because some yield developments seemed exaggerated to us, especially in the U.S. We believe that 2-year Treasury yields do not sufficiently reflect the Fed's plans to cut interest rates and have set our signal to +1, i.e. buy. At the beginning of November, we also took this step on 10-year debt.

Corporate Bonds

We remain strategically positive on corporate bonds, as the economic environment and the major central banks' intended path of interest rate cuts remain positive for this investment segment. But risk premiums have already narrowed so much against government bond yields that we see little room for maneuver. We have therefore downgraded investment-grade European corporate bonds to neutral from a tactical perspective.

Emerging Markets

For similar reasons we have also downgraded emerging market government bonds, albeit from neutral to minus 1. In addition to the narrow risk premiums, there is the more immediate risk from the U.S. election, which could weigh on emerging market economies in a variety of ways, such as trade sanctions and dollar strength.

Currencies

The currency market could be one of the asset classes most affected by the U.S. election. This is where possible punitive import tariffs and other trade sanctions, as well as the size of the future increase in the U.S. debt mountain, come into play. For now, we expect the dollar to appreciate further on the back of the better-than-expected performance of the U.S. economy.

2.2 Equities

Once we have finally put the U.S. election behind us, equity investors will be able to focus again in the coming months on what they prefer: an economy that is performing well — or the prospect of more generous central banks because it is not. The quarterly figures do not show a clear trend; rather, there are strong differences between sectors, but also within sectors. On the surface, only the Chinese market looks favorable in terms of valuations at present, but in our view those low valuations are warranted, as shareholder interests don't seem to be the priority of companies and the government. However, before we get to the regions (in which we have made no tactical changes), we want to talk about a tactical change in sectors: We have upgraded the utilities sector to overweight, driven primarily by the U.S. market, where rapidly expanding Al infrastructure is driving up demand for electricity.

U.S. Market

The U.S. remains the most expensively valued stock market, thanks in part to tech stocks, which continue to benefit from Al speculation as well as actual Al investments. We expect a period of disillusionment after the U.S. election, during which investors may have to downgrade some of the hopes they had pinned on the election.

European Market

Europe's valuation discount to the U.S., as measured by the price-earnings ratio, remains at a record level. While this does not help on timing any market entry, it is one reason why Europe remains our only overweight region. Europe's economy is continuing to recover, albeit in small steps and at different speeds.

German Market

German companies have achieved mixed results in the current reporting season. 2025 earnings expectations have recently been revised down, which has not been the case in the rest of Europe. This has not prevented the market from outperforming the Stoxx 600 over the past three months, but we will only believe in a sustainable recovery when the global goods industry really gets back on its feet.

Japan

Japanese companies continue to struggle with a sharply fluctuating currency, which is also unwelcome for stock investors. Together with the weak global market for manufactured goods, this currently prevents us from raising the market to overweight, even though we like it very much from a structural point of view.

2.3 Alternatives

Alternative investments are also being strongly influenced by the U.S. election, as well as by the question of how sustainable the recent rise in yields on government bonds on both sides of the Atlantic will prove to be. In October, for example, real 10-year U.S. yields rose by almost half a percentage point, which in theory should be bad news for alternative investments. But so far precious metals have reacted surprisingly little.

Real Estate

Over the coming months and years, the 2024 presidential election is likely to affect U.S. real estate in three main areas: economic growth, changes in inflation, and tax policies on property types and regions. Rent controls or home-buying

incentives from a Harris administration could be a headwind. Easing of building regulations by a Trump administration could be a tailwind for the sector, although one that could be partially offset by stricter immigration policy. Any overall impacts from the election on the apartment sector are likely to be small.

Infrastructure

We believe the imminent U.S. presidential election could potentially create uncertainty and have a long-lasting impact on infrastructure investors and citizens. Stable, "pure-play" infrastructure companies that own physical economic assets may prove to be winners over the long term.

Gold

We expect the gold price to gradually climb from here. Some of the risk premium will be priced out of the gold market post U.S. election but policy risk thereafter could replace it, maintaining the interest in investing in gold.

Silver

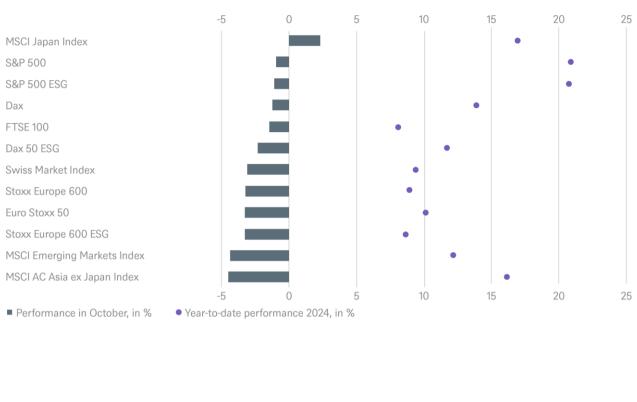
We are not surprised to see silver performing well given a number of supportive factors, including increasing global money supply, accelerating inflation, and rising gold prices. Other bullish fundamentals include its industrial uses, such as for solar panel manufacturing, and a multi-year structural supply deficit. According to the Silver Institute, 2024 will be the fourth consecutive year of supply-demand deficit, with the deficit widening in 2024, and the sixth consecutive year with the market balance in deficit when investment from exchange-traded products (ETPs) is included. We expect these deficits could last into 2025 and beyond and would not be surprised to see silver make a run towards an all-time high in the not-too-distant future.

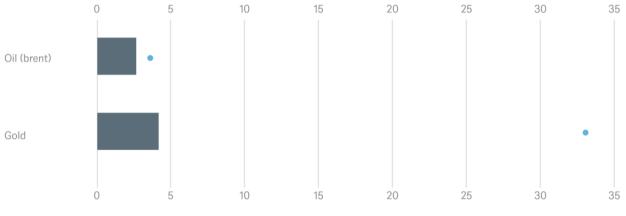
Oil

Just when one thought that supply side concerns were moderating and attention turning once again to demand for crude, it has become evident that the oil market will have to deal with geopolitical risks more than it wants to. Our main scenario, that weakness in demand growth into year-end will keep the oil price contained for the time being, has been tested again recently as OPEC+ decided at the beginning of November to postpone its production increase planned for December by one month. It's also not yet clear, after the U.S. warning to Iran on November 3rd not to attack Israel again, whether Israel-Iran tensions have peaked.

2 / Past performance of major financial assets







■ Performance in October, in % • Year-to-date performance 2024, in %

4 / Tactical and strategic signals The following exhibit depicts our short-term and long-term positioning.

4.1 Fixed income

Rates	1 to 3 months	through Sep 2025
U.S. Treasuries (2-year)	•	•
U.S. Treasuries (10-year)	•	•
U.S. Treasuries (30-year)	•	•
German Bunds (2-year)	•	•
German Bunds (10-year)	•	•
German Bunds (30-year)	•	•
UK Gilts (10-year)	•	•
Japanese government bonds (2-year)	•	•
Japanese government bonds (10-year)	•	•

Spreads	1 to 3 months	through Sep 2025
Italy (10-year) ¹	•	•
U.S. investment grade	•	•
U.S. high yield	•	•
Euro investment grade ¹	•	•
Euro high yield ¹	•	•
Asia credit	•	•
Emerging-market sovereigns	•	•

Securitized / specialties	1 to 3 months	through Sep 2025
Covered bonds ¹	•	•
U.S. municipal bonds	•	•
U.S. mortgage-backed securities	•	•

Currencies	1 to 3 months	through Sep 2025
EUR vs. USD	•	•
USD vs. JPY	•	•
EUR vs. JPY	•	•
EUR vs. GBP	•	•
GBP vs. USD	•	•
USD vs. CNY	•	•

4.2 Equities

	•	
United States ³	_	•
Europe ⁴	•	•
Eurozone ⁵	•	•
Germany ⁶	•	•
Switzerland ⁷	•	•
United Kingdom (UK) ⁸	•	•
Emerging markets ⁹	•	•
Asia ex Japan ¹⁰	•	•
Japan ¹¹	•	•

Sectors	1 to 3 months ²
Consumer staples ¹²	•
Healthcare ¹³	•
Communication services ¹⁴	•
Utilities ¹⁵	•
Consumer discretionary ¹⁶	•
Energy ¹⁷	•
Financials ¹⁸	•
Industrials ¹⁹	•
Information technology ²⁰	•
Materials ²¹	•

Style	1 to 3 months
U.S. small caps ²²	•
European small caps ²³	•

4.3 Alternatives

Alternatives	1 to 3 months	through Sep 2025
Commodities ²⁴	•	•
Oil (brent)	•	•
Gold	•	•
Carbon		•
Infrastructure (listed)	•	•
Infrastructure (non-listed)		•
Real estate (listed)	•	•
Real estate (non-listed) APAC ²⁵		•
Real estate (non-listed) Europe ²⁵		•
Real estate (non-listed) United States ²⁵		•

¹Spread over German Bunds. ² Relative to the MSCI AC World Index (only for the tactical signals), ³ S&P 500, ⁴ Stoxx Europe 600, ⁵ Euro Stoxx 50, ⁶ Dax, ⁷ Swiss Market Index, ⁸ FTSE 100, ⁹ MSCI Emerging Markets Index, ¹⁰ MSCI AC Acia ex Japan Index, ¹¹ MSCI Japan Index, ¹² MSCI AC World Consumer Staples Index, ¹³ MSCI AC World Health Care Index, ¹⁴ MSCI AC World Communication Services Index, ¹⁵ MSCI AC World Utilities Index, ¹⁶ MSCI AC World Financials Index, ¹⁹ MSCI AC World Industrials Index, ²⁰ MSCI AC World Information Technology Index, ²¹ MSCI AC World Materials Index, ²² Russell 2000 Index relative to the S&P 500, ²³ Stoxx Europe Small 200 relative to the Stoxx Europe 600, ²⁴ Relative to the Bloomberg Commodity Index, ²⁵ Long-term investments.

Tactical view (1 to 3 months)

The focus of our tactical view for fixed income is on trends in bond prices.

- Positive view
- Neutral view
- Negative view

Strategic view through September 2025

- The focus of our strategic view for sovereign bonds is on bond prices.
- For corporates, securitized/specialties and emerging-market bonds in U.S. dollars, the signals depict the option-adjusted spread over U.S. Treasuries. For bonds denominated in euros, the illustration depicts the spread in comparison with German Bunds. Both spread and sovereign-bond-yield trends influence the bond value. For investors seeking to profit only from spread trends, a hedge against changing interest rates may be a consideration.
- The colors illustrate the return opportunities for long-only investors.
 - Positive return potential for long-only investors
 - Limited return opportunity as well as downside risk
 - Negative return potential for long-only investors

Glossary

Artificial intelligence is the theory and development of computer systems able to perform tasks normally requiring human intelligence

The Bloomberg Commodity Index (BCOM) traces 23 commodities and reflects commodity futures price movements.

Brent crude is a grade of crude oil dominant in the European market.

The Dax is a blue-chip stock-market index consisting of the 40 major German companies trading on the Frankfurt Stock Exchange.

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

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

Federal Reserve Bank is a regional bank of the Federal Reserve System, the central banking system of the United States. There are twelve in total.

The FTSE 100 is an index that tracks the performance of the 100 major companies trading on the London Stock Exchange.

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.

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

The MSCI AC World Communication Services Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Communications Services sector.

The MSCI AC World Consumer Discretionary Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Consumer Discretionary sector.

The MSCI AC World Consumer Staples Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Consumer Staples sector.

The MSCI AC World Energy Index captures large- and mid-cap securities across 23 developed-markets classified in the Energy sector.

The MSCI AC World Financials Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Financials sector.

The MSCI AC World Health Care Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Health Care sector.

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

The MSCI AC World Industrials Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Industrials sector.

The MSCI AC World Information Technology Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Information Technology sector.

The MSCI AC World Materials Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Materials sector.

The MSCI AC World Utilities Index captures large- and mid-cap securities across 23 developed- and 26 emerging-markets classified in the Utilities sector.

The MSCI AC Asia ex Japan Index captures large- and mid-cap representation across 2 of 3 developed-market countries (excluding Japan) and 8 emerging-market countries in Asia.

The MSCI Emerging Markets Index captures large- and mid-cap representation across 23 emerging-market countries.

The MSCI Japan Index is designed to measure the performance of the large- and mid-cap segments of the Japanese market.

OPEC+ is an informal alliance of OPEC members and other oil-producing countries, led by Russia, aiming to coordinate their production strategies.

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

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

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

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

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

The Stoxx Europe Small 200 is an index representing the performance of 200 small capitalization companies across 17 European countries.

The Swiss Market Index (SMI) is Switzerland's most important equity index, consisting of the 20 largest and most liquid large- and mid-cap stocks.

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

The yield premium will increase or decrease depending on the perceived creditworthiness and relative demand for a bond. The yield premium is the mark up relative to a risk-free asset with the same maturity.

Important information - EMEA, APAC & LATAM

DWS is the brand name of DWS Group GmbH & Co. KGaA and its subsidiaries under which they do business. The DWS legal entities offering products or services are specified in the relevant documentation. 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 for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as investment advice.

This document is intended to be a marketing communication, not a financial analysis. Accordingly, it may not comply with legal obligations requiring the impartiality of financial analysis or prohibiting trading prior to the publication of a financial analysis.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements. Past performance is no guarantee of future results.

The information contained in this document is obtained from sources believed to be reliable. DWS does not guarantee the accuracy, completeness or fairness of such information. All third party data is copyrighted by and proprietary to the provider. 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.

Investments are subject to various risks. Detailed information on risks is contained in the relevant offering documents.

No liability for any error or omission is accepted by DWS. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid.

DWS does not give taxation or legal advice.

This document may not be reproduced or circulated without DWS's written authority.

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 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.

For institutional / professional investors in Taiwan:

This document is distributed to professional investors only and not others. Investing involves risk. The value of an investment and the income from it will fluctuate and investors may not get back the principal invested. Past performance is not indicative of future performance. This is a marketing communication. It is for informational purposes only. This document does not constitute investment advice or a recommendation to buy, sell or hold any security and shall not be deemed an offer to sell or a solicitation of an offer to buy any security. The views and opinions expressed herein, which are subject to change without notice, are those of the issuer or its affiliated companies at the time of publication. Certain data used are derived from various sources believed to be reliable, but the accuracy or completeness of the data is not guaranteed and no liability is assumed for any direct or consequential losses arising from their use. The duplication, publication, extraction or transmission of the contents, irrespective of the form, is not permitted.

© 2024 DWS Investment GmbH

Issued in the UK by DWS Investments UK Limited which is authorised and regulated in the UK by the Financial Conduct Authority. © 2024 DWS Investments UK Limited

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

© 2024 DWS Investments Hong Kong Limited

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

© 2024 DWS Investments Singapore Limited

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

© 2024 DWS Investments Australia Limited

as of 11/1/24; 082325_45 (11/2024)

Important information – North America

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries, such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas Inc. and RREEF America L.L.C., which offer advisory services.

DWS does not intend to promote a particular outcome to the U.S. election (or other countries' elections) due to take place. Readers should, of course, vote in the election as they personally see fit.

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, 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 and is not intended to constitute an offer, recommendation or solicitation to conclude a transaction 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 and should not be treated as giving investment advice. DWS, including its subsidiaries and affiliates, does not provide legal, tax or accounting advice. This communication was prepared solely in connection with the promotion or marketing, to the extent permitted by applicable law, of the transaction or matter addressed herein, and was not intended or written to be used, and cannot be relied upon, by any taxpayer for the purposes of avoiding any U.S. federal tax penalties. The recipient of this communication should seek advice from an independent tax advisor regarding any tax matters addressed herein based on its particular circumstances. Investments with DWS are not guaranteed, unless specified. Although information in this document has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness, and it should not be relied upon as such. All opinions and estimates herein, including forecast returns, reflect our judgment on the date of this report, are subject to change without notice and involve a number of assumptions which may not prove valid.

Investments are subject to various risks, including market fluctuations, regulatory change, counterparty risk, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you may not recover the amount originally invested at any point in time. Further-more, substantial fluctuations of the value of the investment are possible even over short periods of time. Further, investment in international markets can be affected by a host of factors, including political or social conditions, diplomatic relations, limitations or removal of funds or assets or imposition of (or change in) exchange control or tax regulations in such markets. Additionally, investments denominated in an alternative currency will be subject to currency risk, changes in exchange rates which may have an adverse effect on the value, price or income of the investment. 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. The terms of an investment may 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 investment and not the summary contained in this document.

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

No assurance can be given that any investment described herein would yield favorable investment results or that the investment objectives will be achieved. Any securities or financial instruments presented herein are not insured by the Federal Deposit Insurance Corporation ("FDIC") unless specifically noted, and are not guaranteed by or obligations of DWS or its affiliates. We or our affiliates or persons associated with us may act upon or use material in this report prior to publication. DB may engage in transactions in a manner inconsistent with the views discussed herein. Opinions expressed herein may differ from the opinions expressed by departments or other divisions or affiliates of DWS. This document may not be reproduced or circulated without our written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries. 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 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.

DWS does not intend to promote a particular outcome to the U.S. election due to take place in November. Readers should, of course, vote in the election as they personally see fit.

Past performance is no guarantee of future results; nothing contained herein shall constitute any representation or warranty as to future performance. Further information is available upon investor's request. All third party data (such as MSCI, S&P & Bloomberg) are copyrighted by and proprietary to the provider.

Companies involved in artificial intelligence and big data face intense competition, may have limited product lines, markets, financial resources and personnel. Artificial intelligence and big data companies are also subject to risks of new technologies and are heavily dependent on patents and intellectual property rights and the products of these companies may face obsolescence due to rapid technological developments. Any mentions of specific properties or securities are for illustrative purposes only and should not be considered a recommendation.

Cryptocurrencies and blockchain (the technology that supports crypto) have distinct risks that can include: the physical custody of cryptocurrency (theft, loss or destruction of key(s) to access the blockchain), lack of regulation, cybersecurity incidents, new and untested technology and its reliance on the Internet.

For Investors in Canada: No securities commission or similar authority in Canada has reviewed or in any way passed upon this document or the merits of the securities described herein and any representation to the contrary is an offence. This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS Group. Without limitation, this document does not constitute an offer, an invitation to offer or a recommendation to enter into any transaction. When making an investment decision, you should rely solely on the final documentation relating to the transaction you are considering, and not the information contained herein. DWS Group is not acting as your financial adviser or in any other fiduciary capacity with respect to any transaction presented to you. Any transaction(s) or products(s) mentioned herein may not be appropriate for all investors and before entering into any transaction you should take steps to ensure that you fully understand such transaction(s) and have made an independent assessment of the appropriateness of the transaction(s) in the light of your own objectives and circumstances, including the possible risks and benefits of entering into such transaction. You should also consider seeking advice from your own advisers in making this assessment. If you decide to enter into a transaction with DWS Group you do so in reliance on your own judgment. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Any projections are based on a number of assumptions as to market conditions and there can be no guarantee that any projected results will be achieved. Past performance is not a guarantee of future results. The distribution of this document and availability of these products and services in certain jurisdictions may be restricted by law. You may not distribute this document, in whole or in part, without our express written permission.

For investors in Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

© 2024 DWS Investment GmbH, Mainzer Landstraße 11-17, 60329 Frankfurt am Main, Germany. All rights reserved.

as of 11/1/24; 082326_45 (11/2024)