

Our monthly market analysis and positioning



Björn Jesch
Global Chief
Investment Officer

IN A NUTSHELL

- A very strong June, especially for equities, brings a good second quarter and even better first half-year to a celebratory end.
- However, the strong markets cannot really be reconciled with the political and economic news flow.
- With many of our price targets for June 2024 already reached, we do not believe the positive market momentum can continue.

1 / Market overview

An eventful first half-year turns out surprisingly well for investors

Few investors can complain about the month of June – only, perhaps, those who would like to see a stronger correlation between the markets' trajectory and underlying fundamentals. Stocks rose significantly, bonds fell a little, commodities rose overall and, on top of all that, the market's nervousness continued to ease. For the first time since the outbreak of Covid, both the volatility index for the S&P 500 (the Vix) and the Euro Stoxx 50 (SX5E Vol) averaged below 15 for the month. Meanwhile the nervousness indicator for U.S. Treasuries, the Move Index, fell back to its February level, i.e. before the U.S. banking turmoil began (but remains well above the levels seen from 2011 to 2021). This rounds off an already very satisfying first half of the financial year for investors, as can be seen in one figure in particular: The Nasdaq 100 gained 38.75% in the first six months, the most in its 40-year history. This was, among other things, because one of its members was the first company ever to achieve a market value of over three trillion dollars – on the last trading day of the half-year. In general, technology stocks were the big market driver in the second quarter, with artificial intelligence but so much the theme of the day that many investors may already be fed up with the entire subject. But stock markets in June were no longer driven exclusively by the big tech stocks but also by cyclical sectors such as consumer discretionary, industrials and energy.

While markets partied, the political and economic news flow was not celebratory at all. It is true that the most attention-grabbing event of the past month, the revolt by Yevgeny Prigozhin's Wagner group, is still difficult to classify even in political-military terms, let alone in terms of an "adequate" market reaction. But there was plenty of other that would normally be considered negative for risk assets. Revised figures showed that Germany and Europe fell into a technical recession as their economic growth was negative in the fourth quarter of 2022 and first quarter of 2023. And figures from China remain meager; the post-Covid end of lockdown euphoria seems to be reaching the consumer only in dribs and drabs. In Europe and the U.S., (core) inflation figures remain high enough and labor markets sufficiently tight to keep all major central banks stressing that they will not let up in their fight against inflation. The market is now pricing in no interest rate cuts for the current year (at least, for the U.S. and the Eurozone), and the yield curve between two- and ten-year U.S. Treasuries, at minus 1.09 pts, is as deep in negative territory as it was last in the early 1980s.

It is hard to interpret what this figure implies for the economy, but it is a reminder that the capital markets find themselves in unfamiliar territory after Covid and many years of ultra-loose monetary policy. One of the most important questions being pondered on both sides of the Atlantic, and not only by central bankers, is whether a significant deterioration in the labor market is needed to push inflation down further. Or could consumer restraint sufficiently relieve the upward pressure on prices, as U.S. Treasury Secretary Janet Yellen imagines, while the remarkable stability of the labor market acts as a fortunate economic stabilizer? We see things differently and assume that the U.S. will slide into a recession, which in turn will lift the unemployment rate.

2 / Outlook and changes

Continued mixed signals from the macroeconomic side are feeding some investors' hopes of a soft U.S. landing. The start of a possible U.S. recession keeps receding, making investors less fearful of "higher-for-longer" Fed fund rates. But we believe that markets have been discounting the risks and seeing the positive side of economic data and that a recalibration of expectations might happen over the next couple of months.

2.1 Fixed Income

Government Bonds

Inflation is gradually moving in the right direction but our short-term outlook on rates is more bearish. There is not much fresh major data in coming weeks, but another interest rate hike is feasible in July given the very hawkish tone of the Fed's June meeting. We therefore expect markets to continue to price in a more hawkish Fed. Consequently, our short-term position on the 2-year part of the US-Treasuries curve moves to underperform while we keep a neutral stance elsewhere. In Europe the ECB raised all key interest rates by 25 bps in June as expected and will continue to pursue a restrictive monetary policy. Another rate hike is expected in July. The more hawkish language from both the Fed and the ECB has led to a rise in 2-year Bund yields above 3%. We maintain a neutral stance for the time being on 2-year, 10-year, and 30-year Bunds. Our outlook on the 10-year Italian BTP-Bund spread remains at outperform, just as the spread on Spain's 10-year bonds, – as recent market activity seems to favor spread products. Support from the European Union, Eurozone and ECB has strengthened the resilience of government bond spreads in general.

Investment Grade Credit

We are upgrading our rating for U.S. Investment Grade (U.S. IG) bonds to outperform. With the debt ceiling concerns and the June Fed meeting behind us, we anticipate a gradual upward trajectory in the market over the next few weeks. We continue to see positive inflows into this asset class, and primary issuance is expected to slow down, not least because the blackout season is starting with quarterly results coming out. Overall yield levels seem attractive when viewed on a year-to-date and one-year basis. Spread levels appear less attractive but investors seem hesitant to sell given the overall yield levels, which should provide support.

We maintain a positive outlook on Euro Investment Grade (EUR IG) bonds and remain overweight. The credit markets have performed encouragingly in recent weeks, with spreads tightening at a decent pace. Although new issuance has been more mixed than in recent weeks, we have seen strong inflows from both institutional and retail investors. Corporate Hybrid bonds continue to offer investors attractive opportunities.

High Yield Credit

We maintain a neutral stance on U.S. High Yield (U.S. HY) bonds. Spreads tightened both before and after the Federal Open Market Committee (FOMC) decision. We currently hold a neutral stance on Euro High Yield bonds (EUR HY). Market sentiment remains constructive overall, and the favorable fundamentals of the high yield market have contributed to the tighter spreads. But we maintain a neutral position as the supporting factors that have driven the market may be losing steam due to increased primary issuance. With spreads tightening there is an increased risk of a correction in the near term.

Emerging Markets

EM Sovereigns: Within the index some sovereign bonds are trading at relatively tight spreads. But we see some potential for further spread tightening in some HY names.

Asian credit spreads have tightened since China cut both its one-year medium-term lending facility loans and seven-day reverse repo rate by 10bps. Investors are eagerly waiting to see if further easing or policy support will follow. The primary market has been relatively slow as investors seek more guidance from the FOMC. High quality IGs and HYs in Asia continue to experience decent demand. We maintain our overweight position for Asia Credit, as well as for the broader EM Credit asset class. The rationale behind our stance is that EM credit spreads have started to break out of the trading range observed in the past two months. Spreads for HY issuers have compressed against those of their IG counterparts. This can be attributed to the agreed-upon U.S. debt ceiling extension, ongoing disinflationary trends, expectations that major central banks are getting closer to peak interest rates and optimism about policy reforms in some key EM countries.

Euro vs. Dollar

We move back to neutral on the Euro vs. the Dollar (EUR/USD). The ECB delivered hawkish comments at the late June meeting in Sintra as expected, which should help the Euro. Economic performance is better in the U.S. than in the Eurozone, but the market put more weight on the Fed's June pause in rate hikes. On the British pound vs. the dollar (GBP/USD) we remain GBP long (+1), given the better than expected incoming data on growth and the still hawkish BoE.

2.2 Equities

The bull market thesis for equities is supported by a rise in equity markets of almost 15% year-to-date. Equities offer investors the chance to participate in innovation and potentially benefit from better inflation compensation than many other asset classes. Higher prices are mostly a result of increased price-to-earnings (PE) ratios. Market participants seem more at ease, worrying less about inflation, recession and the Russian war. Instead, they are focusing more on Artificial Intelligence (AI), and we share the market's euphoria about the significant efficiency gains AI will eventually bring. AI looks poised to become the next growth driver for the technology sector. However, in the second half of the year we expect some angst to return to the equity markets, making the current complacent valuations unsustainable. Core inflation remains sticky, the U.S. and EU economy are entering a soft patch, China's post-pandemic recovery is taking time, and the market's perception of AI winners and losers is likely to shift over time. It is still early days for AI.

U.S. Market

Driven by seven mega-large-cap growth stocks, the S&P 500 has already surged beyond our previous June 2024 target of 4,200. But we remain confident about our twelve months target and, given our cautious near-term market outlook, we are therefore lowering U.S. equities to underperform, relative to global equities. The current PE-ratio of above 20 times does not align with our base case scenario of mid-single digit EPS growth in 2024, especially given the expected increase in U.S. 10-year yields to beyond 4%.

European Market

While Europe retains its status as our preferred region, it has yet to prove its ability to outperform the U.S. during periods of market weakness. Europe sceptics would need to argue against Europe's superior earnings momentum. In addition, the gap between growth and value stocks has almost reached the peak levels last seen in 2021, despite the adverse effects of rising interest rates, as AI has favored growth stocks, which are more prominent in U.S. markets. Normalization in that extreme valuation differential could prove beneficial for European equities.

Emerging Markets

Taking account of macroeconomic, microeconomic and geopolitical factors, we are now adjusting our rating for Emerging Markets and Asia ex Japan equities to neutral. The long slow Chinese post-pandemic recovery has contributed to this shift. Beyond this, earnings revisions have been more negative in EM than in other regions. Despite some high-level diplomatic initiatives, the near-term outlook for US-Chinese relations show only modest signs of improvement. Consequently, investors are redirecting their focus away from Chinese equities towards Japan's Nikkei as an alternative way to obtain exposure to the region's enduring Asian growth narrative.

This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. Source: DWS Investment GmbH.

2.3 Alternatives

Gold

Gold's lackluster performance, despite a weaker dollar and stagnant or declining real rates, is an indication that a further downturn may be looming in the near term. However, our outlook remains optimistic regarding the medium-term fundamentals.

Base and Precious Metals

Regarding base metals, the landscape is a blend of positive and negative signals. Recent developments have revealed more signs of physical tightness in copper and aluminum, while zinc and nickel rallies remain fleeting due to supply concerns and apprehensions surrounding the sluggish recovery of the Chinese property market. As for precious metals, they are managing to hold their ground. However, the presence of stronger growth and labor market data, coupled with forward rates pricing below the Fed's median target, continue to pose risks to the downside.

Oil

The global crude oil market is currently grappling with conflicting signals influencing its fundamentals. As a result, we believe that crude prices will continue range-bound trading for the time being. Nonetheless, towards the second half of the summer, we anticipate a potential improvement in prices, as the expected declines in releases from the U.S. Strategic Petroleum Reserve (SPR) releases and the implementation of OPEC's cut agreements.

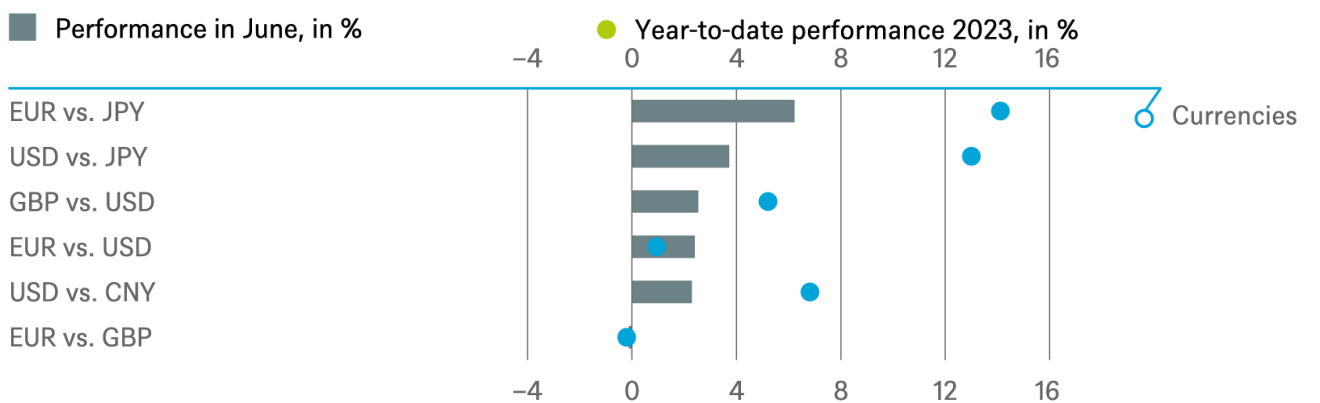
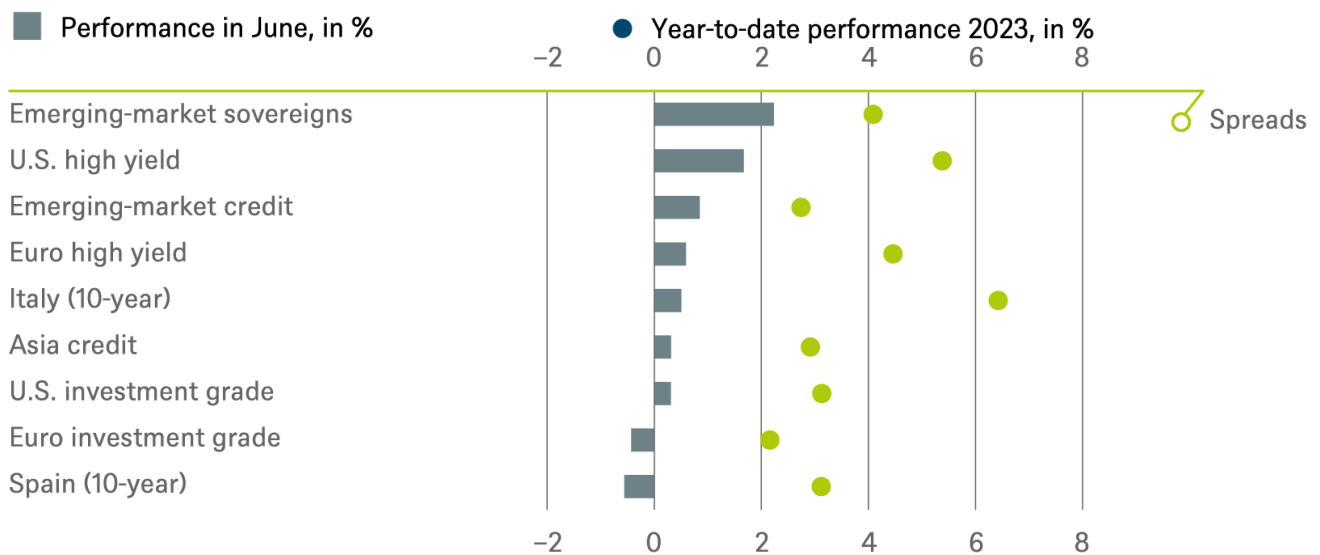
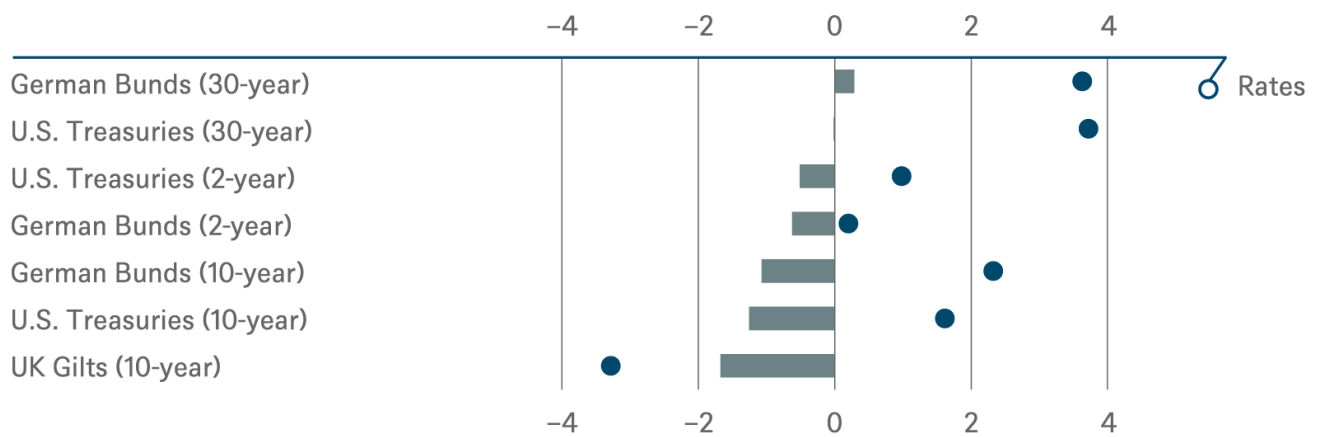
2.4 DWS High Conviction

A unique feature amid the current macro weakness is the resilient labor market. We therefore believe that consumer spending will remain robust over coming months and upgrade consumer discretionary to outperform. High-end and middle-class consumers still want to spend on luxury goods, sports fashion, new cars, and convenient online shopping. The valuation premium of the consumer staples sector has retreated by 20% points year-to-date, sufficient to close our previous underweight and move to neutral.

Other than that, we remain bullish on European equities, as already mentioned above, as well as on the Global Communication sector which combines defensive qualities with pricing power as a result of years of consolidation and gives exposure to the tech/AI sector at reasonable prices.

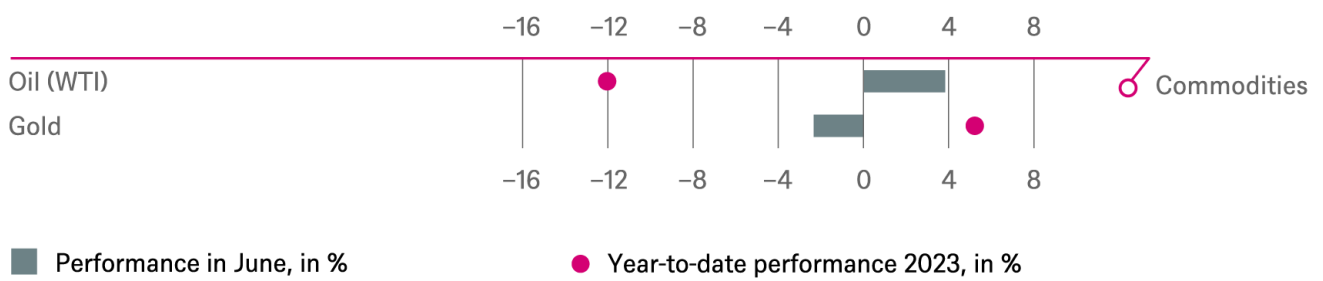
3 / Past performance of major financial assets

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



■ Performance in June, in % ● Year-to-date performance 2023, in %

This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. Source: DWS Investment GmbH.



Past performance is not indicative of future returns.
 Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 6/30/23

This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. Source: DWS Investment GmbH.

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	until June 2024
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)	●	●

Secritized / specialities	1 to 3 months	until June 2024
Covered bonds ¹	●	●
U.S. municipal bonds	●	●
U.S. mortgage-backed securities	●	●

4.2 Equities

Regions	1 to 3 months ²	until June 2024
United States ³	●	●
Europe ⁴	●	●
Eurozone ⁵	●	●
Germany ⁶	●	●
Switzerland ⁷	●	●
United Kingdom (UK) ⁸	●	●
Emerging markets ⁹	●	●
Asia ex Japan ¹⁰	●	●
Japan ¹¹	●	●

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

Spreads	1 to 3 months	until June 2024
Spain (10-year) ¹	●	●
Italy (10-year) ¹	●	●
U.S. investment grade	●	●
U.S. high yield	●	●
Euro investment grade ¹	●	●
Euro high yield ¹	●	●
Asia credit	●	●
Emerging-market credit	●	●
Emerging-market sovereigns	●	●

Currencies	1 to 3 months	until June 2024
EUR vs. USD	●	●
USD vs. JPY	●	●
EUR vs. JPY	●	●
EUR vs. GBP	●	●
GBP vs. USD	●	●
USD vs. CNY	●	●

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	●

This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Alternative investments may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Alternatives are not suitable for all clients. Source: DWS Investment GmbH.

4.3 Alternatives

Alternatives	1 to 3 months ²	until June 2024
Commodities ²⁴	●	●
Oil (WTI)	●	●
Gold	●	●
Infrastructure	●	●
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. ²Relative to the MSCI AC World Index (only for the tactical signals), ³S&P 500, ⁴Stoxx Europe 600, ⁵Euro Stoxx 50, ⁶Dax, ⁷Swiss Market Index, ⁸FTSE 100, ⁹MSCI Emerging Markets Index, ¹⁰MSCI AC Asia ex Japan Index, ¹¹MSCI Japan Index, ¹²MSCI AC World Consumer Staples Index, ¹³MSCI AC World Health Care Index, ¹⁴MSCI AC World Communication Services Index, ¹⁵MSCI AC World Utilities Index, ¹⁶MSCI AC World Consumer Discretionary Index, ¹⁷MSCI AC World Energy Index, ¹⁸MSCI AC World Financials Index, ¹⁹MSCI AC World Industrials Index, ²⁰MSCI AC World Information Technology Index, ²¹MSCI AC World Materials Index, ²²Russell 2000 Index relative to the S&P 500, ²³Stoxx Europe Small 200 relative to the Stoxx Europe 600, ²⁴Relative to the Bloomberg Commodity Index, ²⁵Long-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 until June 2024

- 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 **Bank of England (BoE)** is the central bank of the United Kingdom.

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

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

Bunds is a commonly used term for bonds issued by the German federal government with a maturity of 10 years.

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

Consumer discretionary is a sector of the economy that sells non-essential goods and services.

Consumer staples is a sector of the economy selling essential products.

Corporate hybrids are securities that combine the elements of the two broader groups of securities, debt and equity.

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

Earnings per share (EPS) is calculated as a company's net income minus dividends of preferred stock, all divided by the total number of shares outstanding.

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.

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

The **European Union (EU)** is a political and economic union of 27 member states located primarily in Europe.

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

The **Federal Open Market Committee (FOMC)** is the committee that oversees the open-market operations (purchases and sales of securities that are intended to steer interest rates and market liquidity) of the U.S. Federal Reserve.

The **federal funds rate** is the interest rate, set by the Fed, at which banks lend money to each other, usually on an overnight basis

The **FTSE 250** is a weighted index of the 101st to the 350th largest companies (by capitalization) listed on the London Stock Exchange.

Growth stocks are stocks from companies that are expected to grow significantly above market average for a certain period of time.

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 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 [Nasdaq-100](#) is an equity index which contains the 100 biggest common stocks listed on the Nasdaq Stock Market.

The [Organization of the Petroleum Exporting Countries \(OPEC\)](#) is an international organization with the mandate to “coordinate and unify the petroleum policies” of its meanwhile 12 members.

The [pound sterling \(GBP\)](#), or simply the pound, is the official currency of the United Kingdom and its territories.

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

A [recession](#) is, technically, when an economy contracts for two successive quarters but is often used in a looser way to indicate declining output.

[Reverse repo operation](#) describes the purchase of securities with the agreement to sell them at a higher price at a specific future date.

The [Russell 3000 Index](#) is a market-capitalization-weighted index tracking the performance of the U.S. equity market's 3000 largest companies.

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

[Sovereign bonds](#) are bonds issued by governments.

The [spread](#) is the difference between the quoted rates of return on two different investments, usually of different credit quality.

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.

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

[Value stocks](#) are stocks from companies that are trading at prices close to their book value and that are therefore cheaper than the market average on that metric.

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

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.

© 2023 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.

© 2023 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.

© 2023 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.

© 2023 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.

© 2023 DWS Investments Australia Limited

as of 7/3/23; 082325_28 (07/2023)

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.

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.

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.

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 [document – may need to identify] 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.

© 2023 DWS Investment GmbH, Mainzer Landstraße 11-17, 60329 Frankfurt am Main, Germany.
All rights reserved.

as of 7/3/23; 082326_28 (07/2023)