

UBS House View

Monthly Letter | 7 December 2023 | Chief Investment Office GWM, Investment Research

Plan for 2024

Now is a good time for investors to get in balance, manage liquidity, and build a strategy for achieving their financial goals.

Buy quality

We expect positive overall returns for equities and bonds in the year ahead. But within both asset classes, we are focused on quality.

Pick leaders from disruption

Disruptive trends in tech and other industries should create compelling long-term investment opportunities.


Asset allocation

Fixed income remains our preferred asset class. Within equities, our preferences include the US tech sector.



Mark Haefele

Chief Investment Officer
Global Wealth Management

 **Follow me on LinkedIn**
[linkedin.com/in/markhaefele](https://www.linkedin.com/in/markhaefele)



Our views, live with Q&A

The next CIO global monthly livestream will take place on 12 December. [Join here.](#)

New Year's portfolio resolutions

A remarkable year is drawing to a close. A record-breaking pace of interest rate hikes helped push bond yields to 16-year highs. The US economy confounded expectations for a recession and grew at a 5% annualized pace in the third quarter. Transformative innovations in generative AI powered a stock market rally. Wars impacting two energy-producing regions also captured market attention.

The dawn of a new year is a time to reflect and to make plans for the year ahead. In this letter, we present 10 New Year's resolutions aimed at helping your portfolio navigate what we are calling "a new world":

1. Spend more time with family and friends – best wishes for the year ahead
2. Take up yoga – get in balance, and stay disciplined yet agile
3. Go for quality over quantity – buy quality in both bonds and stocks
4. Embrace change – pick leaders from disruption
5. Prepare for a rainy day – hedge market risks
6. Don't put all your eggs in one basket – diversify with alternative credit
7. Try to see things from both sides – trade the range in currencies and commodities
8. Think about the long term – capture growth with private markets
9. Build a plan – a strategy for achieving your goals is key
10. Seize the moment – manage liquidity

We enter the new year with a preference for quality bonds, which we think still offer attractive yields and the potential for capital appreciation as growth decelerates. Lower bond yields in 2024 should also provide a supportive backdrop for equities.

In equities, we see particular opportunity in quality stocks across all sectors, including the US technology sector, which should be well placed to grow earnings despite a weaker economic environment.

Longer term, we expect disruptive trends in technology and other industries to create compelling investment opportunities in both public and private markets.

This report has been prepared by UBS AG.
Please see important disclaimers and disclosures at the end of the document.



New Year's resolutions

The economic consequences of the pandemic are still being felt today.

1. Spend more time with family and friends – best wishes for the year ahead

The economic consequences of the COVID-19 pandemic have been far-reaching. Never before in human history have governments forcibly and almost simultaneously shut down their economies and then shocked them back to life. The results are still being felt today: the return of inflation, labor market stress, and a surge in interest rates, bond yields, and government debt.

We believe the result is a new world, one in which many are rediscovering the importance of spending time with family and friends. We can see evidence of this in consumers' willingness to prioritize holiday spending and in the recovery in air travel over major holidays. On the Sunday after Thanksgiving, the Transportation Security Administration screened more than 2.9 million passengers at US airports, setting a new record for the most in a single day.

In the year ahead, how the US consumer fares will be important, because continued spending—on things like seeing loved ones—is part of achieving a “soft-ish” landing for the economy.

Investors should build balance, strength, and flexibility in their portfolios.

2. Take up yoga – get in balance, and stay disciplined yet agile

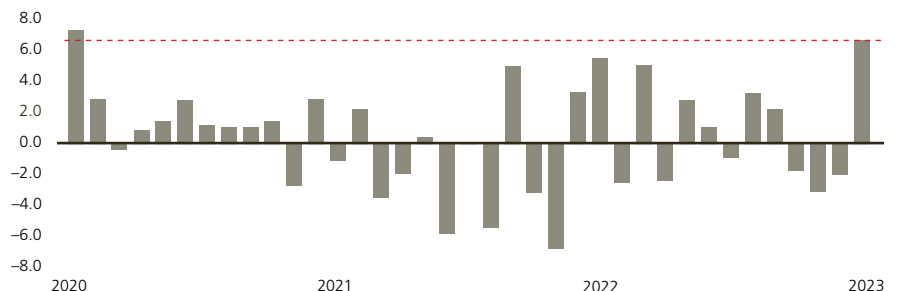
Yoga is a mind and body practice that can improve balance, strength, and flexibility—attributes that are also important for investors seeking to build resilient portfolios for the long term. The concept of a balanced portfolio is rooted in the principle of diversification—spreading investments across a variety of assets to earn returns and manage risks. In November, a 60/40 portfolio (comprising 60% stocks and 40% bonds, based on the MSCI All Country World Index in local currency and the Bloomberg Global Aggregate bond index) delivered the best monthly performance in three years, returning 6.9%. Stocks and bonds rallied in tandem as slowing inflation raised hopes of central bank rate cuts in 2024.

There is never a bad time to invest in a balanced portfolio. But given our positive outlook for equities, bonds, and alternatives over the next year, as well as the potential for equities and bonds to diversify each other in our key risk scenarios, we believe now is a good time for investors to get in balance.

Figure 1

The 60/40 portfolio had its best month in three years in November

60/40 portfolio, monthly total return, in %. Indices used: MSCI ACWI in local currency, Bloomberg Global Aggregate bond index



Source: Bloomberg, UBS, as of December 2023

We recommend focusing on quality in bonds and stocks in 2024.

Finding the right balance is just the start, however. Discipline is also key to successful investing for the long term: With the right “core” strategy, the adage “time in the market, not timing the market” has held true over time. But markets evolve and investors’ needs change. Investors should therefore regularly review their plans for strategic allocations, tactical allocations, and “satellite” investment ideas.

3. Go for quality over quantity – buy quality in both bonds and stocks

Once the excesses of the holiday season are over, many of us view the new year as a time to focus less on quantity and more on quality.

That theme of quality runs through our investment views in both fixed income and equities.

Buy quality bonds

November was the best month for US bonds in nearly 40 years: Total returns for the Bloomberg US Aggregate index were 4.5% in November, the best month since May 1985.

After such a strong run, we do note that in the short term, the market may be overestimating the likely pace of Federal Reserve rate cuts. The latest market pricing suggests almost five 25-basis-point reductions by December 2024, with a more-than-50% chance that the first cut comes as early as March. Our base case is that the Fed will deliver three cuts next year, with the timing data dependent, but most likely starting around the middle of the year.

But over the balance of 2024, we think quality bonds have further to rally. Recent data show that the tightness in the US labor market is beginning to ease and inflation is continuing to recede. Although inflation will likely remain above the Fed’s 2% target through most, or all, of the year ahead, we believe policymakers will be sufficiently confident about inflation to begin cutting rates by midyear. Our year-end 2024 forecast for the 10-year US Treasury yield is 3.5%, compared with 4.1% as of 6 December, implying a total return of 9%.

We continue to recommend high-quality bonds—including high grade (government) and investment grade—of a 1–10-year duration, particularly the five-year segment. In addition, in a downside scenario of a sharper economic slowdown or potential financial instability, the capital upside would likely be substantial.

Buy quality stocks

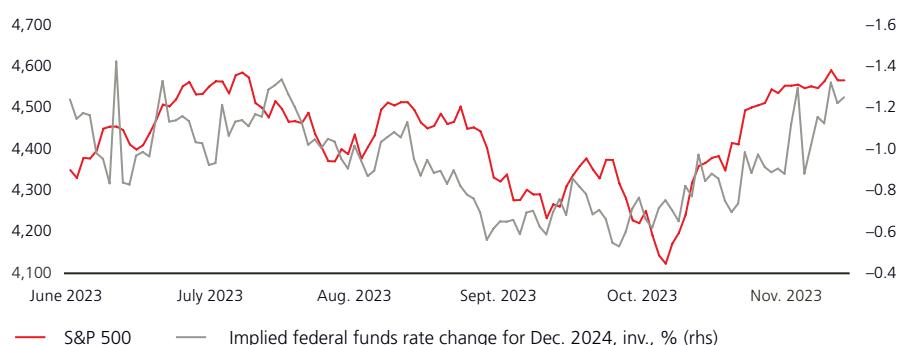
November was also a good month for equities, with a 9% return for the S&P 500, the best monthly return of the year. In our base case, we see the S&P 500 rising to 4,700 by December next year, implying a total return of 5% at the index level.

We recommend investors focus on quality in equities. In a year of slowing economic growth and potential refinancing challenges, we believe companies with strong returns on invested capital, resilient operating margins, and low debt on their balance sheets will be best positioned. Quality stocks have historically outperformed during periods of economic slowdown or contraction.

Figure 2

Stocks have rallied as markets have priced in more aggressive cuts

S&P 500 (lhs) and implied federal funds rate change for Dec. 2024 based on futures, inv., % (rhs)



Source: Bloomberg, UBS, as of December 2023

The quality tilt also speaks in favor of a focus on US technology companies. Technology offers the highest ROIC of the 11 US equity sectors: 20% over the last 12 months (compared with just 3–4% for utilities or real estate). Tech sector balance sheets are also the strongest, with a net-debt-to-EBITDA ratio of just 0.5x. With business models that combine subscription-based revenue streams with a presence in high-growth segments including artificial intelligence, we think tech companies look poised to deliver healthy earnings growth next year.

The sector is also not as expensive as many perceive: The forward price-to-earnings ratio of the S&P 500 technology sector has fallen from 28x in July to 26x today. While this is still close to a 30% premium versus its 10-year historical average, we believe this is reasonable considering the sector now has a more recurring revenue profile.

4. Embrace change – pick leaders from disruption

A new year is often seen as a time to embrace change, and with disruptive technologies having a significant impact across sectors, we think this theme of change is also key for investors looking for portfolio growth.

We expect some of the highest returns in equity markets over the next decade will come from companies that can harness new technologies to expand their markets, dislodge incumbents, or cut costs. For investors, identifying these “leaders from disruption” may be key to boosting long-term portfolio potential.

For example, we expect global AI demand to increase from USD 28 billion in 2022 to USD 300 billion in 2027, based on Bloomberg Intelligence data—a compound annual growth rate of 61%. In that time, we think the infrastructure segment will grow by 38% and the applications and models segment by 139%. We see upside risk to our estimates given improving visibility on infrastructure spending and broadening AI demand for applications.

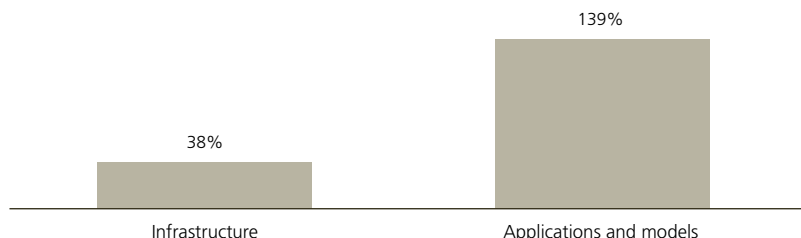
Stocks have already rallied hard in anticipation of higher AI demand, yet we think companies across the AI value chain—from cloud to semis, software, and internet—have further to run, both in 2024 and over the longer term. For example, recent guidance from leading memory companies suggests chip prices should rebound by mid-to-high

Disruptive technologies like AI create compelling long-term growth opportunities.

Figure 3

AI demand is growing fast

Expected AI demand growth (CAGR) from 2022 to 2027, by segment



Source: Bloomberg Intelligence, UBS, as of December 2023

teen percentages in 4Q23, and we expect the broad global semiconductor industry to deliver around 50% profit growth next year. Alongside semis, we continue to like software, given its bias to quality and broadening AI demand.

Beyond tech, we see opportunities in companies driving disruptive innovation in energy (e.g., the green transition) and healthcare.

5. Prepare for a rainy day – hedge market risks

As the old saying goes, the time to repair the roof is when the sun is shining. New Year reflections are often a good time to think about where your portfolio could do with more insulation.

The market rally in recent weeks has coincided with the price of protecting portfolios against future equity market sell-offs becoming more affordable. In November, the cost of hedging against a market decline of around 10% retreated to its lowest level since at least 2013, and the VIX index of implied US stock volatility, a measure of option pricing, fell to its lowest closing level since February 2020. Low implied volatility generally improves the terms of structured investments with capital preservation features.

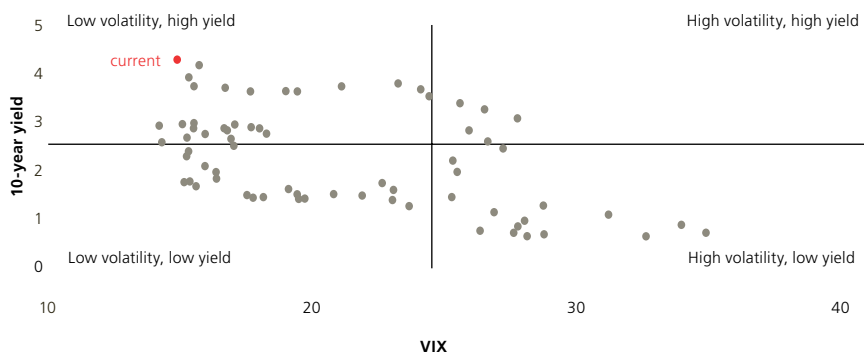
Capital preservation strategies can also help investors gain exposure to Japanese equities, where, following the strong year-to-date rally, options can provide “cheap” exposure to further potential gains thanks to favorable earnings, regulatory, and seasonal trends.

Now is a good time to consider ways to insulate portfolios.

Figure 4

Capital preservation strategies benefit from high yields and low equity volatility

Six-month trailing average VIX vs. 10-year bond yield, and current level



Source: Bloomberg, UBS, as of December 2023

Investors can also consider other ways to protect their portfolios against specific risks. For example, Brent crude prices recently fell below USD 75/bbl. We think the decline is overdone and expect tight market supply and demand fundamentals to support a recovery toward a USD 90/bbl to USD 100/bbl range in 2024. But long oil positions also have the potential to act as a hedge against escalations in the Russia-Ukraine or Israel-Hamas wars, which would likely drive crude prices even higher. Risk-tolerant investors can consider adding exposure to oil via longer-dated Brent crude contracts, or selling the risk of prices falling.

Gold also has value as a portfolio hedge, in our view, and we expect it to rise toward USD 2,250/oz by the end of 2024. However, with gold prices reaching a record high of USD 2,135/oz in early December, we advise investors not to chase the rally and add exposure. Instead, we recommend using options or buying dips below USD 2,000/oz.

6. Don't put all your eggs in one basket – diversify with alternative credit

The strength of the US economy in 2023 has defied expectations, with GDP growth in the third quarter running at just over 5% annualized. This has helped support riskier areas of the US credit market, keeping a lid on spreads and default rates. Since we published our *Year Ahead* outlook on 16 November, US high yield spreads have tightened by 23 basis points (and by 63 basis points in total since the end of October, based on the ICE BofA US HY index).

We expect a less benign environment in the year ahead as growth slows and lending conditions remain tight. Still-high interest rates could put pressure on the ability of weaker companies to refinance. CCC-rated bond issuance is down 57% year-over-year in the US, according to Pitchbook LCD data. US high yield interest coverage ratios have fallen back below 5x for the first time in a year. High yield spreads are consistent with a default rate of 2–3%, rather than the 4% we expect in 2024.

A more challenging macro environment may create opportunities for credit arbitrage and distressed debt managers.

While this speaks in favor of our quality focus within bonds, a more challenging macro environment should also create opportunities for credit arbitrage and distressed debt managers. Dispersion is already slightly above average. This may present opportunities for discerning credit arbitrage managers to make single-name credit choices based on fundamental analysis.

Meanwhile, distressed debt managers may be able to identify opportunities amid the almost USD 1 trillion of market value in global high yield debt and convertible bonds that will approach maturity in 2025 and 2026. Some firms that issued these securities in the former low-interest-rate world may struggle to refinance, or even fall into financial distress.

7. Try to see things from both sides – trade the range in currencies and commodities

In a polarized world, many people will be looking to try and “see things from both sides” more often in the new year. In investing, we think that approach will be most important in the currency markets.

On the one hand, we see the US dollar as overvalued; yet on the other hand, a rate premium and resilient US growth speak in its favor. Since we published our *Year Ahead* report, the Dollar Index—which measures the value of the greenback against six other major currencies—has fallen by 0.2% (and by 2.4% since the start of November) as investors have focused on the potential for Fed rate cuts next year. Our view is that the market is expecting too many rate cuts in the short term from the Fed. We maintain our view that the US dollar is likely to stay stable in the first months of the year due to robust

US economic growth and high US interest rates relative to the rest of the world. But as the year progresses, USD weakness may emerge, which makes selling USD upside for a yield pickup an attractive strategy, in our view.

The Australian dollar is our preferred currency.

The Australian dollar is our preferred currency, as the Reserve Bank of Australia should be one of the last major central banks to cut interest rates. Favorable fiscal and external account positions add to the currency's attractions.

8. Think about the long term – capture growth with private markets

It can be easy to get wrapped up in the day-to-day. But the New Year is a point when many of us get some time and space to think about the bigger picture.

Our *Year Ahead* publication looks ahead to some of the significant investments in healthcare, digitalization, and energy needed from the private sector over the coming decade. Private market managers will likely have a key role to play, with their ability to provide equity or debt capital to companies at different lifecycle stages. The asset class offers attractive return potential and direct access to the real economy, in exchange for lower liquidity.

Gaining exposure to fast-growing and innovative businesses through listed equities is becoming harder due to the shrinking supply of new listed firms. More companies are choosing to stay private, delay listings, or avoid them altogether, a trend we do not expect to reverse in the decade ahead. Similar dynamics apply in the debt markets, where traditional lenders' market share is declining in favor of private debt, particularly in funding small and midsize businesses. Investors should be aware of the drawbacks involved when investing in private markets, including illiquidity risks.

9. Build a plan – a strategy for achieving your goals is key

A clear plan linking strategies with goals and values can help investors stay focused on the bigger picture.

Navigating a noisier world, in which data are more abundant but not necessarily more informative, can be daunting. But building a clear plan that links strategies with goals and values can help investors cut through the noise and stay focused on the bigger picture. It can also help investors clarify why they are investing, and therefore boost the chances of achieving their financial goals.

The Liquidity. Longevity. Legacy.* approach is designed to help investors explore and pursue their wealth goals over different time frames. It involves segmenting wealth into three strategies. First, the Liquidity strategy helps ensure investors have enough liquid assets to meet their short-term spending needs and is typically invested in cash or cash-like securities. It can offer investors peace of mind during periods of market volatility, and a disciplined process of drawing on, and later refilling, the strategy during bear markets can help generate outperformance over time.

Second, the Longevity strategy focuses on assets that can provide income over the course of an investor's lifetime. Amid heightened uncertainty in our new world, we believe this strategy is best invested in a well-diversified global portfolio, balancing return requirements with risk management, and complemented with tactical ideas. Third, the Legacy strategy considers needs that go beyond an investor's own lifetime, such as maximizing the value of assets for inheritance or philanthropy.

* Timeframes may vary. Strategies are subject to individual client goals, objectives and suitability. This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved.

The opportunity to invest cash at high rates may be fleeting.

10. Seize the moment – manage liquidity

We often regret missed opportunities, and the New Year is a good time to resolve to not put things off. Time is running out to invest cash at higher rates. Markets are already starting to focus on the potential for central bank rate cuts in 2024. The 48-basis-point decline in the 2-year US Treasury yield since the start of November underlines how fast rate expectations can change.

We think investors should “seize the moment”—before central banks start lowering rates—to manage their liquidity, ensure they are not holding too much cash, and seek to lock in yields for the year and years ahead. If bonds and equities rally further, investors could be left on the sidelines holding lower-yielding cash.

Building a liquidity strategy to cover two to five years of expected portfolio withdrawals, across a range of instruments, can help investors meet liabilities and maximize growth opportunities for the rest of their wealth. Fixed-term deposits enable investors to lock in high yields on cash and cover potential expenses and liabilities up to 12 months out. Investors can also make use of bond ladders to lock in still-attractive yields over the next 12–36 months. For cash intended for use in 3–5 years' time, investors concerned about limiting losses but also participating in equity gains can consider structured strategies with capital preservation features.

Whatever your aspirations for the coming year, I hope these resolutions can help you build a robust portfolio for 2024 and beyond. We wish you a happy holiday season and a prosperous year ahead.



Mark Haefele
Chief Investment Officer
Global Wealth Management

Global forecasts

Economy

Real GDP y/y, in %

	2022	2023E	2024E
US	1.9	2.4	1.2
Canada	3.4	1.1	0.2
Japan	1.0	1.8	0.7
Eurozone	3.4	0.5	0.6
UK	4.3	0.6	0.6
Switzerland	2.7	0.7	1.2
Australia	3.7	1.9	1.6
China	3.0	5.2	4.4
India	7.2	6.7	6.2
EM	4.1	4.4	3.9
World	3.4	3.2	2.6

Inflation (average CPI), y/y, in %

	2022	2023E	2024E
US	8.0	4.1	2.7
Canada	6.8	3.9	2.5
Japan	2.5	3.3	2.3
Eurozone	8.4	5.4	2.4
UK	9.0	7.4	2.8
Switzerland	2.8	2.1	1.6
Australia	6.6	5.7	3.6
China	2.0	0.4	1.2
India	6.7	5.5	4.8
EM	9.5	7.6	8.7
World	8.4	6.2	6.0

Source: Bloomberg, UBS, as of 6 December 2023. Latest forecasts available in the *Global forecasts* publication, published weekly.

Asset classes

	Spot	Jun-24	Dec-24
Equities			
S&P 500	4,549	4,500	4,700
Eurostoxx 50	4,483	4,600	4,700
FTSE 100	7,515	7,860	8,160
SMI	11,002	11,300	11,640
MSCI Asia ex-Japan	612	665	685
MSCI China	55	65	67
Topix	2,387	2,485	2,555
MSCI EM	975	1,050	1,080
MSCI AC World	835	845	880
Currencies			
EURUSD	1.08	1.10	1.12
GBPUSD	1.26	1.25	1.27
USDCHF	0.87	0.88	0.87
USDCAD	1.36	1.34	1.32
AUDUSD	0.65	0.69	0.72
EURCHF	0.94	0.97	0.97
NZDUSD	0.61	0.61	0.62
USDJPY	147	143	140
USDCNY	7.16	7.20	7.00

	Spot	Jun-24	Dec-24
2-year yields, in %			
USD 2y Treas.	4.59	3.75	3.25
EUR 2y Bund	2.61	2.50	2.00
GBP 2y Gilts	4.48	4.00	3.50
CHF 2y Eidg.	1.10	0.75	0.70
JPY 2y JGB	0.04	0.20	0.25
10-year yields, in %			
USD 10y Treas.	4.10	3.75	3.50
EUR 10y Bund	2.20	2.25	2.25
GBP 10y Gilts	3.94	3.75	3.50
CHF 10y Eidg.	0.69	0.90	0.90
JPY 10y JGB	0.63	1.00	0.80
Commodities			
Brent crude, USD/bbl	74	95	95
WTI, USD/bbl	69	91	91
Gold, USD/oz	2,031	2,050	2,250

Source: Bloomberg, UBS, as of 6 December 2023. Latest forecasts available in the *Global forecasts* publication, published weekly.

Disclaimer

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- **Hedge Fund Risk:** There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-US securities and illiquid investments.
- **Managed Futures:** There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- **Real Estate:** There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- **Private Equity:** There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- **Foreign Exchange/Currency Risk:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a US investor.

UBS Chief Investment Office's ("CIO") investment views are prepared and published by the Global Wealth Management business of UBS Switzerland AG (regulated by FINMA in Switzerland) or its affiliates ("UBS"), part of UBS Group AG ("UBS Group"). UBS Group includes Credit Suisse AG, its subsidiaries, branches and affiliates. Additional disclaimer relevant to Credit Suisse Wealth Management follows at the end of this section.

The investment views have been prepared in accordance with legal requirements designed to promote the **independence of investment research**.

Generic investment research – Risk information:

This publication **is for your information only** and is not intended as an offer, or a solicitation of an offer, to buy or sell any investment or other specific product. The analysis contained herein does not constitute a personal recommendation or take into account the particular investment objectives, investment strategies, financial situation and needs of any specific recipient. It is based on numerous assumptions. Different assumptions could result in materially different results. Certain services and products are subject to legal restrictions and cannot be offered worldwide on an unrestricted basis and/or may not be eligible for sale to all investors. All information and opinions expressed in this document were obtained from sources believed to be reliable and in good faith, but no representation or warranty, express or implied, is made as to its accuracy or completeness (other than disclosures relating to UBS). All information and opinions as well as any forecasts, estimates and market prices indicated are current as of the date of this report, and are subject to change without notice. Opinions expressed herein may differ or be contrary to those expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria.

In no circumstances may this document or any of the information (including any forecast, value, index or other calculated amount ("Values")) be used for any of the following purposes (i) valuation or accounting purposes; (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or (iii) to measure the performance of any financial instrument including, without limitation, for the purpose of tracking the return or performance of any Value or of defining the asset allocation of portfolio or of computing performance fees. By receiving this document and the information you will be deemed to represent and warrant to UBS that you will not use this document or otherwise rely on any of the information for any of the above purposes. UBS and any of its directors or employees may be entitled at any time to hold long or short positions in investment instruments referred to herein, carry out transactions involving relevant investment instruments in the capacity of principal or agent, or provide any other services or have officers, who serve as directors, either to/for the issuer, the investment instrument itself or to/for any company commercially or financially affiliated to such issuers. At any time, investment decisions (including whether to buy, sell or hold securities) made by UBS and its employees may differ from or be contrary to the opinions expressed in UBS research publications. Some investments may not be readily realizable since the market in the securities is illiquid and therefore valuing the investment and identifying the risk to which you are exposed may be difficult to quantify. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS, into other areas, units, divisions or affiliates of UBS. Futures and options trading is not suitable for every investor as there is a substantial risk of loss, and losses in excess of an initial investment may occur. Past performance of an investment is no guarantee for its future performance. Additional information will be made available upon request. Some investments may be subject to sudden and large falls in value and on realization you may receive back less than you invested or may be required to pay more. Changes in foreign exchange rates may have an adverse effect on the price, value or income of an investment. The analyst(s) responsible for the preparation of this report may interact with trading desk personnel, sales personnel and other constituencies for the purpose of gathering, synthesizing and interpreting market information.

Different areas, groups, and personnel within UBS Group may produce and distribute separate research products **independently of each other**. For example, research publications from **CIO** are produced by UBS Global Wealth Management. **UBS Global Research** is produced by UBS Investment Bank. **Research methodologies and rating systems of each separate research organization may differ**, for example, in terms of investment recommendations, investment horizon, model assumptions, and valuation methods. As a consequence, except for certain economic forecasts (for which UBS CIO and UBS Global Research may collaborate), investment recommendations, ratings, price targets, and valuations provided by each of the separate research organizations may be different, or inconsistent. You should refer to each relevant research product for the details as to their methodologies and rating system. Not all clients may have access to all products from every organization. Each research product is subject to the policies and procedures of the organization that produces it.

The compensation of the analyst(s) who prepared this report is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking, sales and trading or principal trading revenues, however, compensation may relate to the revenues of UBS Group as a whole, of which investment banking, sales and trading and principal trading are a part.

Tax treatment depends on the individual circumstances and may be subject to change in the future. UBS does not provide legal or tax advice and makes no representations as to the tax treatment of assets or the investment returns thereon both in general or with reference to specific client's circumstances and needs. We are of necessity unable to take into account the particular investment objectives, financial situation and needs of our individual clients and we would recommend that you take financial and/or tax advice as to the implications (including tax) of investing in any of the products mentioned herein.

This material may not be reproduced or copies circulated without prior authority of UBS. Unless otherwise agreed in writing UBS expressly prohibits the distribution and transfer of this material to third parties for any reason. UBS accepts no liability whatsoever for any claims or lawsuits from any third parties arising from the use or distribution of this material. This report is for distribution only under such circumstances as may be permitted by applicable law. For information on the ways in which CIO manages conflicts and maintains independence of its investment views and publication offering, and research and rating methodologies, please visit www.ubs.com/research-methodology. Additional information on the relevant authors of this publication and other CIO publication(s) referenced in this report; and copies of any past reports on this topic; are available upon request from your client advisor.

Important Information About Sustainable Investing Strategies: Sustainable investing strategies aim to consider and incorporate environmental, social and governance (ESG) factors into investment process and portfolio construction. Strategies across geographies approach ESG analysis and incorporate the findings in a variety of ways. Incorporating ESG factors or Sustainable Investing considerations may inhibit UBS's ability to participate in or to advise on certain investment opportunities that otherwise would be consistent with the Client's investment objectives. The returns on a portfolio incorporating ESG factors or Sustainable Investing considerations may be lower or higher than portfolios where ESG factors, exclusions, or other sustainability issues are not considered by UBS, and the investment opportunities available to such portfolios may differ.

External Asset Managers / External Financial Consultants: In case this research or publication is provided to an External Asset Manager or an External Financial Consultant, UBS expressly prohibits that it is redistributed by the External Asset Manager or the External Financial Consultant and is made available to their clients and/or third parties.

USA: Distributed to US persons only by UBS Financial Services Inc. or UBS Securities LLC, subsidiaries of UBS AG. UBS Switzerland AG, UBS Europe SE, UBS Bank, S.A., UBS Brasil Administradora de Valores Mobiliarios Ltda, UBS Asesores Mexico, S.A. de C.V., UBS SuMi TRUST Wealth Management Co., Ltd., UBS Wealth Management Israel Ltd and UBS Menkul Degerler AS are affiliates of UBS AG. **UBS Financial Services Inc. accepts responsibility for the content of a report prepared by a non-US affiliate when it distributes reports to US persons. All transactions by a US person in the securities mentioned in this report should be effected through a US-registered broker dealer affiliated with UBS, and not through a non-US affiliate. The contents of this report have not been and will not be approved by any securities or investment authority in the United States or elsewhere. UBS Financial Services Inc. is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.**

For country information, please visit ubs.com/cio-country-disclaimer-gr or ask your client advisor for the full disclaimer.

Additional Disclaimer relevant to Credit Suisse Wealth Management

You receive this document in your capacity as a client of Credit Suisse Wealth Management. Your personal data will be processed in accordance with the Credit Suisse privacy statement accessible at your domicile through the official Credit Suisse website <https://www.credit-suisse.com>. In order to provide you with marketing materials concerning our products and services, UBS Group AG and its subsidiaries may process your basic personal data (i.e. contact details such as name, e-mail address) until you notify us that you no longer wish to receive them. You can optout from receiving these materials at any time by informing your Relationship Manager.

Except as otherwise specified herein and/or depending on the local Credit Suisse entity from which you are receiving this report, this report is distributed by Credit Suisse AG, authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA). Credit Suisse AG is a UBS Group company.

Version D/2023. CIO82652744

© UBS 2023. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.