MID-YEAR EDITION

Renewed growth, new challenges:

BUILDING RESILIENT PORTFOLIOS

INVESTMENT PRODUCTS: NOT FDIC INSURED · NOT CDIC INSURED
NOT GOVERNMENT INSURED · NO BANK GUARANTEE · MAY LOSE VALUE

Wealth Outlook 2024 | Mid-Year Edition

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Foreword

Andy Sieg
Head of Wealth

Welcome to the mid-year edition of Wealth Outlook 2024, in which we set out key drivers for your core investment portfolio for the rest of this year and beyond. The Office of the Chief Investment Strategist, led by Chief Investment Officer (Interim) Steven Wieting, has assembled this comprehensive analysis for this unique moment in the global economy.

We entered 2024 more positively positioned than many other investors and did not think a recession was probable. Instead, the global economy is experiencing renewed growth. We expect the expansion to continue at least into 2025, with inflation easing further and interest rates moderating.

Despite these improvements, many investors are likely to be distracted by increasing noise as November's US election draws near. This election is significant, but we believe it is unlikely to change the direction of the world economy and markets. That said, there are many other risks, including potential inflationary shocks and unpredictable geopolitical flareups.

Faced with renewed growth and new challenges, we are focused on building resilient core portfolios through diversifying globally across asset classes and staying fully invested.

With markets largely having priced in continued near-term expansion, we anticipate more discernment in equities. We think areas such as US small- and mid-cap growth equities, certain developed and emerging markets, and defensive growth in healthcare remain potentially attractive investment opportunities. We aim to seek income from certain bonds, and for suitable and qualified investors, we see potential in private equity, real estate, and hedge funds.

Once you have explored our latest insights, please reach out to your Citi team who will discuss your portfolio according to your investment objectives. Our global platform includes a wide variety of strategies to help align your allocation with our best thinking. If you are not yet a client, we would be delighted to discuss how we might address your needs.

We look forward to continued partnership and success in 2024 and for years to come.

Andy

Our outlook

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Renewed growth, new challenges

Steven Wieting
Chief Investment Officer (Interim)

The global economy has entered a phase of growth and normalization. While market conditions may be somewhat less than ideal, we see a variety of opportunities to seek returns and mitigate risks.

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Considerations

- After holding up well in early 2024, the global economy is regaining strength and may grow into 2025 and beyond
- Corporate profits are growing again while employment gains are moderating in the US
- We call for greater discernment in equities after the strong gains from 2022's lows
- We favor small- and mid-cap US growth equities, Asian equities broadly, healthcare, investments linked to "economic security," and US dollar-denominated fixed income
- Politics, policy and geopolitical concerns require risk management; we believe global diversification is key

Last year, investors focused on loss avoidance. Many thus missed out on the sharp recovery in core portfolio assets that predictably followed a rare joint decline in fixed income and equities in 2022 – **FIGURE 1**.

After a 20% total return for the MSCI World AC Index in the six months through March 2024[1] – and heading into a typically softer season for market performance – many investors could again lose sight of long-term investment opportunities, with eyes glued to short-term performance. In short, we believe avoiding "myopia" is likely to be more rewarding.

FIGURE 1

Strong 24-month total returns followed the years when US stocks and bonds fell together

Year	MSCI USA YoY % change	10-year US Treasury YoY % change	60/40	1-year forward 60/40	2-year forward 60/40
1931	-43.9%	-2.6%	-27.3%	-1.8%	28.0%
1969	-8.5%	-5.6%	-7.3%	10.5%	24.3%
2022	-19.5%	-12.3%	-16.6%	17.9%	21.0%*

*2022 2-year forward 60/40 return is from 31 Dec 2022 through 30 Apr 2024

Source: CGW Global Asset Allocation and Quantitative Research Team, Global Financial Data (GFD), as of 23 May 2024. S&P 500 TR (Total Return) is used for the US Large Cap index and US 10-Year Govt. Bond TR (Provider: GFD) is used for the 10-Year Total Return. The historical allocation levels use indices and are provided for informational purposes only. The historical index allocation levels should not be taken as an indication of future performance, which may be better or worse than the levels set forth above. The index returns shown do not represent the results of actual trading of investor assets. The indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. **Past performance is not necessarily indicative of future returns. Real results may vary.**

[1] Bloomberg, as of 23 May 2024

As investment professionals, we remain focused on the underlying value opportunities when the "noise level" increases. Over the months ahead, we believe markets may become increasingly captivated by the unpredictable US presidential and congressional election results. The choice of US president alone will be critical for US foreign policy, with great importance for security and trade with some countries – see **Robust positioning amid geopolitical instability** and **Intensifying polarization** articles. But the choice is highly unlikely to dictate the direction of the economy and overall market opportunity. In short, we need to be prepared for a range of possible impacts without derailing core portfolios.

Renewed growth

The global economy has surprised to the upside in the first half of 2024. At Citi Wealth, we were more optimistic than many entering this year, particularly those forecasting recession. However, the renewed expansion has gathered pace even sooner than we might have expected.

We now forecast global growth of 2.6% for this year as a whole and 2.9% in 2025 – FIGURE 2.

Since 2020, the world has experienced intense upheaval with the largest swings in output and inflation since World War II. The steep drop in output around the pandemic was short. Excessive stimulus and rising consumer prices have persisted longer. The Russia-Ukraine war also imparted an intense shock to energy supply chains.

Now, though, greater stability is taking hold, with inflation coming down. Admittedly, inflation in the US has proven somewhat stickier than we had thought likely. However, an aggressive monetary tightening cycle, easing supply chain disruptions and less wild demand swings as COVID spending patterns wane – FIGURE 3. By the end of 2024, we forecast US CPI inflation to have fallen to around 2.5%.

FIGURE 2

Renewed growth: Our global GDP forecasts (%)

CGWI GDP forecasts (%)	2020	2021	2022	2023	2024E	2025E
China	2.2	8.5	3	5.2	5.2↑	4.8↑
US	-2.8	5.8	1.9	2.5	2.4↑	2.3↓
EU	-6.2	5.9	3.5	0.5	0.7↑	1.4↑
UK	-10.4	8.7	4.3	0.1	0.7↑	1.3↓
Global	-3.2	5.9	3.3	2.6	2.6↑	2.9↑

CGWI EPS forecasts (%)	2020	2021	2022	2023	2024E	2025E
S&P 500	-13.5	46.9	6.0	0.6	7.6	6.3

Note: Arrows denote forecast changes from Outlook 2024.

Source: Citi Wealth, as of 15 May 2024. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

We see this period of renewed growth and normalization as the third phase of the global economy and markets' expansion following their short, sharp pandemic slump in 2020. Phase 1 was stimulus-driven euphoria in 2020–21 and phase 2 the period of bear market caution in 2021–22. We think phase 3 can last at least until 2025, whereafter we might see a moderation in economic volatility.

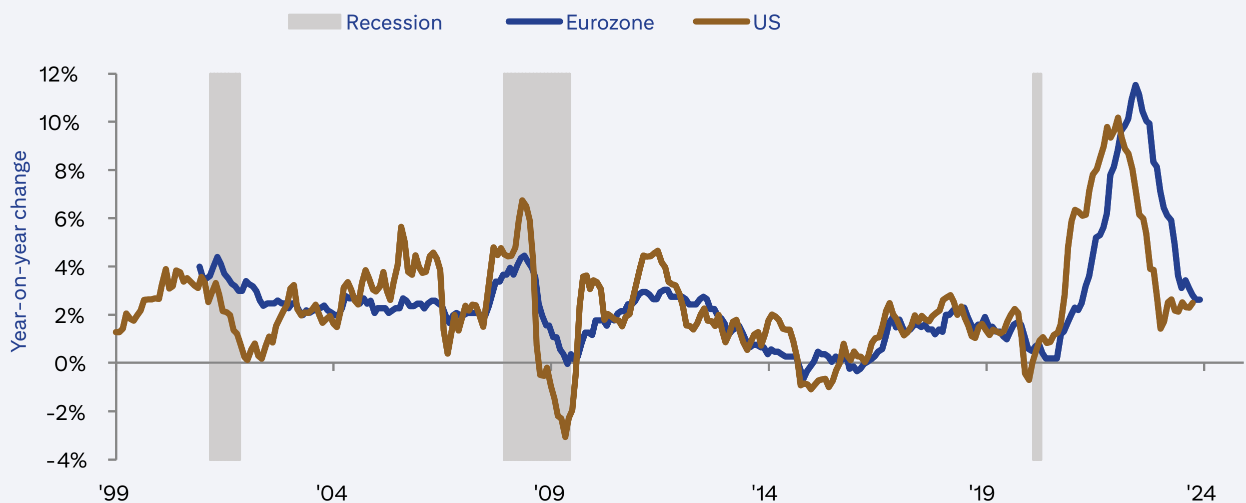
Might we be wrong? It is certainly possible that US demand could persistently outstrip supply. If so, the Fed may keep monetary policy tighter for longer. However, a cooling labor market means we are likely close to the start of an easing cycle. So, our base-case view is that the Fed will partially unwind the hikes that took the Fed funds rate to 5.5% in mid-2023, joining the likes of the European Central Bank and the Bank of England, which are likely to act earlier.

New challenges

Despite our expectation of further growth and normalization, we are mindful of what could go wrong in 2024 and beyond. Were inflation to prove more stubborn than we expect, interest rates may have to remain higher for longer, perhaps even as the jobs market continues to cool. And an inflationary supply shock could weaken profits without relieving rate pressure. Higher US borrowing costs and a stronger dollar might produce a range of negative effects elsewhere in the world, but particularly in emerging economies.

FIGURE 3

The rise and fall of US and European inflation



Source: Haver Analytics, as of 17 May 2024.
Note: US and Harmonized Indexes of Consumer Prices (HICP) used for headline inflation.

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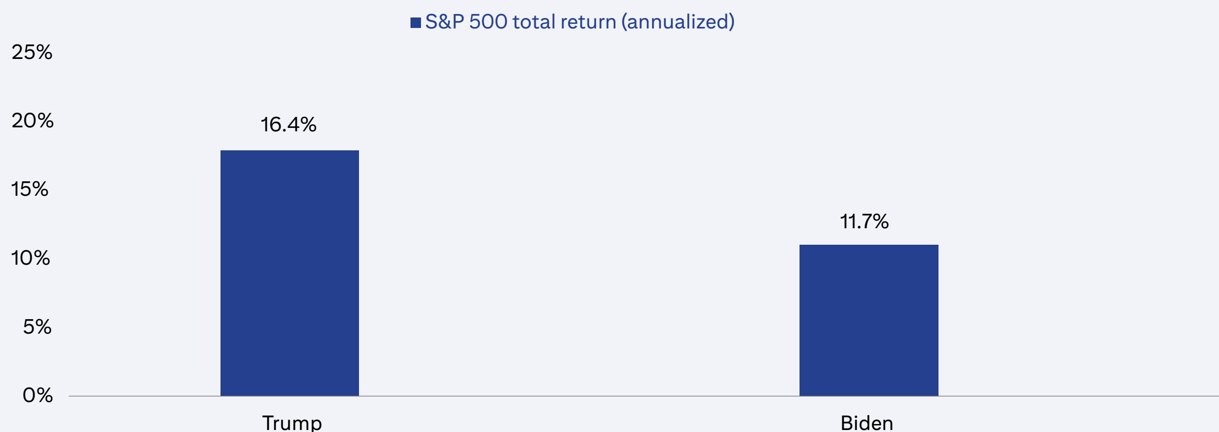
Renewed difficulties in China represent a risk, particularly to Asian growth. In our view, China appears to be picking up – see **Asia: A Chinese comeback could further boost the region**. The duration and full extent of China's property market slump has yet to become clear. We also consider the likelihood of further escalation in China's strategic rivalry with the US and its potential fallout nearer and longer term – see **Intensifying polarization: Navigating risks and potential opportunities**. We consider China's tensions with regional neighbors in **Robust positioning amid geopolitical instability.**

Geopolitics more broadly also poses risks. The unprecedented Iran-Israel hostilities, for example, could spill over into a broader regional conflict, also with the potential for blowback well beyond the Middle East. Fresh Russian breakthroughs in its war with Ukraine could send shockwaves through European markets and perhaps extend to global markets. A major, state-sponsored cyberattack might lead to further tensions that endure much longer than the significant economic disruption of such an event. However, history shows that these shocks very rarely change the direction of the global economy overall – see FIGURE 2 in **Robust positioning amid geopolitical instability**.

Over the months ahead, we believe markets may become increasingly captivated by the unpredictable US presidential and congressional election results. The choice of US president alone will be critical for US foreign policy, with great importance for security and trade with some countries – see **Geopolitics** and **G2** articles. However, the result is highly unlikely to dictate the direction of the economy and the overall market opportunity, as the experience of the first Trump and Biden terms suggests – FIGURE 4.

FIGURE 4

US equities rose under both Trump and Biden



Source: Bloomberg, as of 1 Jun 2024. Trump's term refers to 20 Jan 17 - 20 Jan 2021; Biden's term refers to 2- Jan 2021 - 31 May 2024. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

Equities call for more discernment

After the rally from late 2022's lows, we take a more discerning approach to equities. In our view, markets now price in continued economic expansion.

Given the positive outlook for growth into 2025 and for lower rates, we expect broadening gains for corporate earnings per share (EPS). Until recently, much of the profit momentum was concentrated in a handful of AI-related US tech giants. Now, though, we believe that other industries may begin to see a strengthening, particularly those that suffered an earnings recession last year, such as healthcare.

Rising earnings are likely to support further equity gains, in our view – FIGURE 5. The S&P 500 Index may see a further mid-single-digit percentage increase by the end of 2024, for example. But as we seek to capture the potential benefits of broadening earnings, we have established a tactical overweight position in the S&P 500 Equal Weight Index.

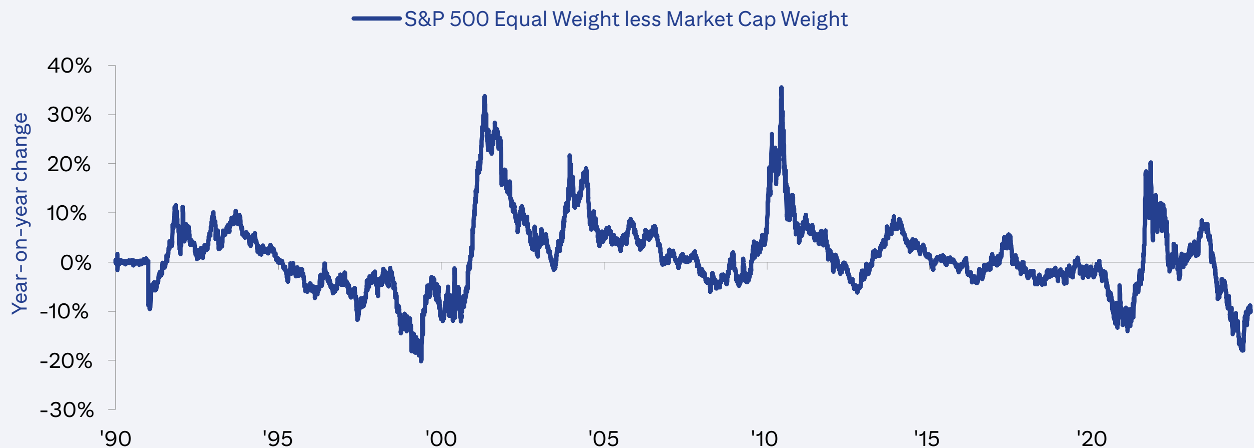
FIGURE 5

Earnings growth may see further market gains

Source: Bloomberg, as of 23 May 2024. EPS shown historically since 2002 with forecast data for 2024–25 from Citi Wealth's Office of the Chief Investment Strategist (OCIS). All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

FIGURE 6

The S&P Equal Weight Index may recover lost ground



Source: Bloomberg, as of 23 May 2024. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

In this version of the index, each constituent makes up just 0.12%–0.27% of the benchmark. By contrast, the top ten constituents of the main S&P 500 – mainly the tech giants – alone represent 33% of its weight. We believe the Equal Weighted Index may reverse its underperformance against the main benchmark – FIGURE 6. We also find US small- and mid-cap growth equities appealing. After non-US shares have fallen behind the performance of US shares in the past twelve months by the most since 2012, we have started broadening our global equities overweight following a strong preference for US dollar assets. In May, we added overweight positions in European ex-UK, Japanese, and emerging equities.

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FIGURE 7

Springs and falls: Seasonality in asset price returns

Total return (%)

Equities	1st quarter average	2nd quarter average	3rd quarter average	4th quarter average
MSCI World Index	2.7	0.3	4.3	1.2
US	2.5	3.1	1.1	5.1

Fixed income				
US Treasury	1.2	1.8	1.3	0.8
US HY (High Yield) Corp	2.3	1.0	1.6	2.7

Source: Bloomberg, as of 1 May 2024. Chart shows seasonality of global and regional market performances. US equity is the US S&P 500 Index; US Treasury is S&P US Treasury Index; High Yield is The S&P US High Yield Corporate Bond Index. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

Looking through equity setbacks

Market setbacks along the way are par for the course. As FIGURE 7 shows, it is slightly more common for equities and credit to soften in the middle quarters of the year and strengthen around the turn of the year. Of course, the unique issues of each year dominate rather than the seasonal pattern. November's US election is one of this year's, the strengthening and broadening of corporate profits being another. The likes of April's equity selloff do not signify the end of an expansion cycle, therefore. Instead, they mark a revival of healthy doubt, increasing return potential.

Heading into an often seasonally softer period for market performance, however, many could again lose sight of long-term investment opportunities with eyes glued instead to the short term. But we believe avoiding such "myopia" is likely to be more rewarding. At Citi Wealth, we remain focused on the underlying, longer value opportunities, especially when the noise level increases. At the asset class level, these may show up in our ten-year strategic return estimates (SREs).

Our SREs suggest the potential for decent annualized returns – FIGURE 8 – across numerous asset classes over the coming decade. Notably, the SREs for small- and mid-cap equities (a subset of Developed Market Equities), Private Equity, and Hedge Funds are not comparable with earlier SREs. This is owing to our switching the index data set used to calculate them to focus on profitable companies with lower measured valuations, thus lowering SREs. We believe this more conservative approach better reflects potential returns.

For core investment portfolios, we continue to see long-term opportunities in "unstoppable trends." These multi-year forces – such as long-term technological, demographic, and geopolitical changes – are reshaping the ways we live and work. These include AI-fueled digitization, the transition to cleaner energy, an increasingly wealthy and aging world population consuming ever more sophisticated healthcare, and the strategic rivalry between the US and China – see our **Unstoppable trends** section.

FIGURE 8

What the next decade may hold in store for asset classes

	2024 mid-year SRE (Strategic Return Estimate)	2024 SRE	2023 SRE
Global Equities*	6.4%	8.7%	7.6%
Developed Market Equities	6.0%	8.2%	7.0%
Emerging Market Equities	10.4%	12.8%	12.9%
Global Fixed Income	5.3%	5.8%	5.1%
Investment Grade Fixed Income	5.1%	5.4%	4.6%
High Yield Fixed Income	6.3%	7.9%	7.4%
Emerging Market Fixed Income	7.1%	8.1%	7.8%
Cash*	3.2%	4.3%	3.4%
Hedge Funds*	8.5%	11.5%	9.1%
Private Equity*	14.6%	19.5%	17.6%
Real Estate	10.8%	10.9%	10.6%
Commodities	2.6%	2.7%	2.4%

Source: CGW Global Asset Allocation and Quantitative Research Team. Strategic Return Estimates (SREs) for Mid-Year 2024 (based on data as of April 2024), prior Strategic Return Estimates for 2024 (based on data as of October 2023) and 2023 SREs (based on data as of October 2022). The Strategic Return Estimates are calculated annually and can be reassessed periodically.

* The Mid-Year 2024 Strategic Return Estimates for small- and mid-cap equities, private equity and hedge funds were adjusted with a source data change (S&P 400 replaced MSCI US Small Cap).

The broadest measure of SMID valuations (MSCI US Small Cap) includes loss-making companies which tend to inflate the valuation of the asset class. By switching to S&P 400 index that includes relatively higher quality companies than MSCI US Small Cap, our estimates become more conservative.

We believe this better reflects the future valuation. This approach, coupled with market performance between October 2023 through April 2024, has lowered some of our SREs.

Related to the SREs on cash, we switched from the current real cash yield to the moving average of the real cash yield.

Returns estimated in US Dollars. All estimates are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Strategic Return Estimates are no guarantee of future performance. Past performance is no guarantee of future returns.

Strategic Return Estimates based on indices are Citi Global Wealth's forecast of returns for specific asset classes (to which the index belongs) over a 10-year time horizon. Indices are used to proxy for each asset class. The forecast for each specific asset class is made using a proprietary methodology that is appropriate for that asset class. Equity asset classes utilize a proprietary forecasting methodology based on the assumption that equity valuations revert to their long-term trend over time. The methodology is built around specific valuation measures that require several stages of calculation. Assumptions on the projected growth of earnings and dividends are additionally applied to calculate the SRE of the equity asset class. Fixed Income asset class forecasts use a proprietary forecasting methodology that is based on current yield levels. Other asset classes utilize other specific forecasting methodologies.

SREs do not reflect the deduction of client fees and expenses. Past performance is not indicative of future results. Future rates of return cannot be predicted with certainty. Investments that pay higher rates of return are often subject to higher risk and greater potential loss in an extreme scenario. The actual rate of return on investments can vary widely. This includes the potential loss of principal on your investment. It is not possible to invest directly in an index.

All SRE information shown above is hypothetical, not the actual performance of any client account. Hypothetical information reflects the application of a model methodology and selection of securities in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading.

Beyond equities

With central bank easing cycles incoming, we continue to seek opportunity in fixed income. Yields have risen somewhat in 2024 as investors have wavered over the likely timing and extent of US Fed rate cuts. But rather than such short-term issues, we see the average real interest rate ahead as a key factor for investors. This seems unlikely to be the ultra-low or negative rates seen around 2020 or the double-digit highs of 1980. In such an environment of decent real yields, we see the potential for a durable and rewarding flow of income for portfolios.

For the fixed income portion of an average investor's asset allocation, we see the greatest value in high-grade intermediate-duration US bonds. Across a range of bond segments, average yields are near 5.5% for 4–5 years. This is much higher than the Fed's estimate of its "longer run" normal policy rate of 2.6%. We delve deeper in **Pursuing portfolio income with intermediate-term bonds**.

Likewise, we identify potential for suitable and qualified investors to seek returns and diversification in alternative asset classes. After a lull in recent years, private equity and real estate activity could be set for a revival. We are attracted to operationally focused private equity, select real estate strategies addressing the industrial and hospitality sectors as well as certain types of hedge funds – see **Alternatives' private market activity may soon recove**r.

Resilience alongside return potential

While our tactical asset allocation is positioned for continued economic growth and market upside, we are equally mindful of the challenges that may lie ahead. Politics, policy, and geopolitical concerns, for example, require risk management. But this does not consist of holding excess cash in portfolios, in our view.

A key message of ours is to maintain fully invested, balanced portfolios. Over time – and particularly over longer periods – holding balanced allocations across asset classes and geographies has helped to mitigate portfolio volatility. We make the case for such an approach in **Staying the course: Allocating for the long term**.

As part of diversification, we favor exposure to assets that directly relate to some of the challenges the world faces. Geopolitical risk, for example, is prompting some countries to bolster their economic security, such as their access to semiconductors, other technology, and energy, while also ramping up their military capabilities and readiness for cyberattacks. Select investments across defense, traditional energy, cybersecurity, and technology may perform better amid deteriorating geopolitics.

The global economy's normalization and growth are cause for some relief, after the extreme distortions that went before. However, we recognize that neither the economy nor markets present "ideal" conditions. At the same time, we see many possibilities as we navigate this environment as we seek to preserve and grow wealth. Resilient portfolios are our response.

Opportunistic investing: Mid-year update

Citi Wealth believes that most personal wealth aside from direct business holdings, homes and valuable collections should be held in a core investment portfolio. Carefully allocated across asset classes and maintained for the long term, this core portfolio may contain between 80% and 95% of investment wealth. Depending on individual risk tolerance, the remaining 5% to 20% may be invested in a complementary opportunistic portfolio. This portfolio aims to contribute to a higher return overall or a higher risk-adjusted return – or indeed both.

Opportunistic investing spans every asset class. It seeks to exploit economic and market trends, specific market events, dislocations, and mispricings. It aims to capture short- or long-term opportunities that may not be continuously available or attractively priced. In **Wealth Outlook 2024**, we highlighted 11 potential opportunistic investments in areas we favored over a short- to medium-term horizon – FIGURE 9.

Tech and healthcare are the two "super sectors" that outgrow broad economy profits over the longer term. Much like the Industrial Revolution of the 18th and 19th centuries, these sectors best represent what the economy is "becoming." While flush with competition, cyber security software is a critical element of the drive for "economic security" we discussed in **Wealth Outlook 2024**. Semiconductor equipment is a critical element of building secure technology supply chains. We also see a need for duplicative energy supplies in an insecure world consistent with a transition to sustainability in the long run.

As FIGURE 8 shows, these were strong performers among our "top opportunities" over the past six months. While our portfolio emphasis has shifted somewhat more to healthcare from tech, each of the ideas we set out in December 2024 remains a favored return opportunity with a two-year maximum horizon.

FIGURE 9

Our favored opportunistic positions

Top opportunities	Return since OL24 (7 Dec '23)
Semiconductor equipment	37.6%
Medical technology (DJSMDQT)	12.5%
Defense contractors (SPSIADTR)	10.9%
Western energy producers (SPTRENRS)	17.4%
Japan tech/financial shares (NDDUJN)	9.6%
Yen rebound (JPYUSD)	-7.2%
Yield curve normalization (US 10-year UST – 1-year UST)	+24bps
Structured debt (CABS)	3.3%

Where we are moving to the sidelines	Return since OL24 (7 Dec '23)
Cybersecurity equities (NQCYBRN)	8.8%
Publicly traded private capital managers' equities (GLPEXUTR)	13.6%
Copper miners (SOLGLOCM)	34.2%

Source: Office of the Chief Investment Strategist, Citi Wealth; Bloomberg, from 7 Dec 2023 to 21 May 2024. These opportunistic positions exclude alternatives. See Glossary for definitions. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

Robust positioning amid geopolitical instability

Steven Wieting
Chief Investment Officer (Interim)

Geopolitics present an ongoing risk for global investors. We believe constructive portfolio positioning and hedging, rather than cash hoarding, to be the most suitable response.

Considerations

- The global economy and markets have historically rebounded swiftly from geopolitical shocks
- This is because the vast majority have not resulted in widespread economic contraction
- Nevertheless, we believe that geopolitical risks need careful consideration in portfolios
- Escalations of existing conflicts as well as "black swan" events are among the risks
- We favor global diversification and investments such as defense, energy and cybersecurity within core portfolios

The world has shown resilience in the face of macroeconomic shocks in recent times. Pandemic shutdowns, unprecedented stimulus, snarled supply chains, surging inflation, and stringent monetary tightening are among the procession of challenges seen in recent years. Equally, the world has faced persistent bouts of geopolitical tension: acute strains in the relations between global powers, their allies, and proxies. But economic expansion and multiple conflicts globally have historically coexisted.

Two major ongoing conflicts underline this. The Russia-Ukraine war resulted in a historically large disruption to global commodity trade flows. Among many other troubling developments, the Middle East conflict has seen missiles strike commercial vessels in a major shipping lane. Some of the emerging world is still suffering from lost food supplies resulting from both events. Against this backdrop, it may seem remarkable that global commodity prices are not higher. The international crude oil benchmark is around $83, around where it was before Russia invaded Ukraine – FIGURE 1. Natural gas prices in Europe are around 2021 levels. This highlights adaptability to shocks.

FIGURE 1

Tense world, contained oil prices

Source: Bloomberg, as of 21 May 2024. 7 October marked the Hamas attack on Israel. **Past performance is no guarantee of future results. Real results may vary.**

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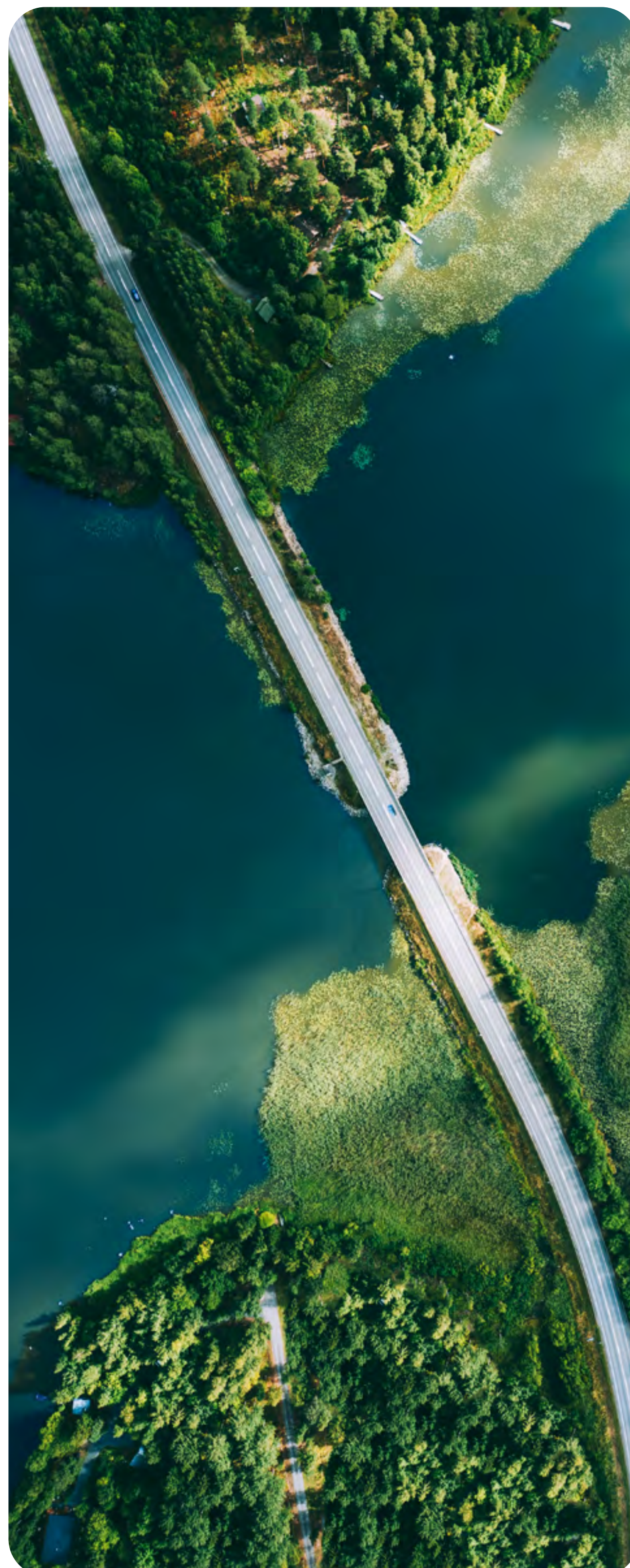
We have long noted the pattern that regional conflicts and geopolitical “close calls” very rarely catalyze a change in the direction of the world economy. As such, their impact on markets has been historically fleeting – FIGURE 2. Even so, we do not ignore risk management. Global diversification helps portfolios withstand regional shocks whose impact can be much greater upon local assets than ones elsewhere.

So, what further geopolitical challenges might the world encounter in the coming years? We consider five potential scenarios that concern many investors. We do not pretend this list is anywhere near exhaustive. Crucially, it does not and cannot include potential “black swan” events – extremely rare, high-impact occurrences that may seem obvious in hindsight. However, as managers of risk, we actively contemplate such eventualities and prepare portfolios as best we can.



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Heightened Russia-NATO tensions

As the war in Ukraine grinds on, it is important not to lose sight of the risk of spillover. The flow of Western weapons and real-time intelligence to Ukraine continues to infuriate Russia, especially given Ukrainian retaliatory strikes upon its territory. European security agencies are warning of Russian actions against allied nations' infrastructure. A major Russian breakthrough in the war would undoubtedly unsettle Europe, with fears mounting of further aggression toward states nearby Russia.

Middle East conflict contagion

The Israel-Iran hostilities in April were a deliberately contained affair. However, a broadening conflict is not out of the question. For example, Iran-sponsored Hezbollah militias might intensify their attacks upon Israel from neighboring Lebanon. Israel may forcefully seek to eliminate the threat from Hezbollah.

Large-scale cyber attack

In an ever more digitized world, the data and networks that enable our existence are increasingly in the firing line. Cyberwarfare is already a distinctive front in the Russia-Ukraine war. At some point, a state or state-backed actor may conceivably attempt a coordinated online attack against multiple nations, targeting government and military systems, critical infrastructure, key businesses, financial institutions, and more. The potential for economic disruption and physical damage would be significant, even before any retaliation.

FIGURE 2

Geopolitical events have rarely altered the course of the global economy

S&P 500	Initial impact (%)	30 days %	90 days %
Average all events	-3.3	0.8	2.6
Average ex WW2	-3.1	0.9	3.2
Average ex WW2 and oil embargo	-2.6	1.0	4.6

Source: Haver Analytics, Bloomberg as of 14 Apr 2024. All major market events as described in the next table on page 22 from 1941 to 2017. "Initial impact" is defined by the period between the trading day before the event and the trading day after the geopolitical shock period (as determined by Citi Wealth Investments). Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

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FIGURE 2

Geopolitical events have rarely altered the course of the global economy

			S&P 500 (% since event date)			Crude oil (% since event date)			MSCI World ex USA (% since event date)			DXY Dollar Index		
Geopolitical event	Trading day before event	Trading day after initial reaction	Initial reaction	30 days	90 days	Initial reaction	30 days	90 days	Initial reaction	30 days	90 days	Initial reaction	30 days	90 days
Pearl Harbor	12/7/41	12/10/41	-6.87	-2.90	-12.02									
Cuban Missile Crisis	10/19/62	10/23/62	-3.78	7.61	17.16									
JFK assassination	11/21/63	11/22/63	-2.81	3.06	8.28									
US bombs Cambodia	4/29/70	5/26/70	-15.30	-6.43	-4.94				-10.45	-17.01	-16.07	-0.20	-0.23	-0.51
Arab oil embargo	10/15/73	12/5/73	-16.26	-5.61	-15.11			287.04	-14.68	1.96	-18.53	6.98	4.68	12.31
USSR invades Afghanistan	12/24/79	1/3/80	-2.27	5.37	-7.78			8.33	3.94	3.94	11.85	-1.06	-0.71	5.91
Iraqi invasion of Iran	9/9/80	9/11/80	1.28	5.62	5.17			6.66	0.00	3.70	5.81	-0.27	0.36	6.26
US bombs Libya	4/15/86	4/21/86	2.95	-1.39	0.16	-3.91	8.70	-15.65	0.00	6.19	8.16	-4.15	-4.80	-5.30
US invades Panama	12/15/89	12/20/89	-2.06	-3.73	-3.43	2.82	5.08	-6.21	0.00	3.67	-7.04	0.31	-1.69	-0.44
Gulf War	12/24/90	1/16/91	-4.16	0.09	12.10	17.75	-20.67	-31.32	1.75	1.75	15.96	-0.21	-3.61	4.90
World Trade Center bombing	2/26/93	3/1/93	-0.31	1.67	2.04	-0.18	-3.44	-5.81	0.00	8.52	18.62	0.18	-1.15	-4.79
9/11	9/11/01	9/21/01	-11.60	0.45	4.34	-4.09	-17.68	-31.98	-8.48	3.24	5.48	-1.08	0.29	1.85
US invasion of Iraq	3/20/03	3/21/03	2.49	2.06	15.57	-8.16	-5.86	-6.54	1.53	4.58	22.05	0.84	-1.85	-7.89
Russian annexation of Crimea	2/26/14	3/21/14	1.16	0.68	3.62	-3.77	-2.43	-0.92	-2.42	-0.45	3.25	-0.40	-0.31	-0.10
Russian invasion of Ukraine	2/23/22	3/8/22	-3.11	5.54	-8.44	19.04	17.26	18.98	-8.76	-0.36	-7.10	2.99	2.70	5.89
Hamas attack on Israel	10/6/23	10/9/23	0.63	1.33	9.02	2.77	-0.29	-8.60	0.08	2.12	11.09	0.04	-0.96	-3.42
North Korea–related														
Korean War	6/23/50	7/13/50	-12.80	-8.67	1.20									
Operation Paul Bunyan	8/18/76	8/24/76	-3.15	1.64	-4.32	0.00	0.00	0.00	0.00	-0.26	-7.60	0.07	-0.57	-0.12
2006 nuclear test	10/9/06	10/12/06	0.90	2.60	4.60	-1.46	1.09	-7.43	0.46	4.33	8.09	0.43	-1.32	-2.21
2009 nuclear test	4/25/09	4/28/09	-1.28	5.09	13.05	-3.73	19.56	36.56	-2.32	12.28	21.21	0.52	-5.54	-7.04
2013 nuclear test	2/12/13	2/15/13	0.02	2.88	7.53	-0.27	-8.18	-12.49	-0.99	1.15	5.73	0.59	3.12	3.96
2016 nuclear test	9/9/16	9/14/16	-2.55	-0.81	2.97	-3.38	14.12	16.54	-2.06	-0.81	-0.72	-0.01	1.36	6.05
2017 escalation	8/7/17	8/8/17	-0.24	-0.64	4.44	2.19	7.00	21.65	-0.26	-0.49	3.60	0.23	-1.22	1.62
Missile test over Japan	8/28/17	8/29/17	0.08	2.69	6.43	-0.83	10.37	23.06	-0.25	1.80	5.45	0.05	1.25	0.62

Source: Haver Analytics, Bloomberg as of 14 Apr 2024. "Initial Reaction" is defined by the time period between the trading day before the event and the trading day after the geopolitical shock time period (as determine by Citi Wealth Investments). Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

US-China tensions escalate

The hegemonic great power rivalry between the US and China – the world's first and second largest economies – is likely to increase, whatever the outcome of November's US elections – see **Intensifying polarization: Navigating risks and potential opportunities**. That said, tariff policies and defensive alliances may differ starkly under Biden or Trump and potential changes will have to be discounted by investors. A near-term conflict over Taiwan seems unlikely to us. Likewise, hostilities over South China Sea sovereignty issues are not our base case. But this disputed expanse – a key global shipping lane and reserve of traditional and alternative energy supplies – offers another potential flashpoint. Meanwhile, China is supporting Russia's war in Ukraine.

Worsening standoff with North Korea

Relations between the Koreas have deteriorated lately. North Korea's leader began 2024 by declaring South Korea the "principal and invariable enemy," disavowing peaceful reunification. South Korea, for its part, has spoken harshly of the North's "provocations." In defiance of international sanctions, North Korea continues to develop its nuclear and ballistic capabilities. In mid-May, it tested missiles over the East Sea a day after a US-South Korean air drill. It is also widely suspected of providing material to Russia for use in Ukraine. While North Korea's conduct is most likely an attempt to gain negotiating leverage, worse outcomes are not impossible.

Preparing portfolios for geopolitical unrest

None of the above scenarios represent our "base case." However, each new additional conflict may increase the risk of contagion. Potential aggressors may be emboldened as they see that Western powers are preoccupied by existing confrontations.

In preparation for further potential geopolitical shocks, we build globally diversified core portfolios – see **Staying the course: Allocating for the long term**. Resilience to a range of possible positive and negative outcomes is our aim, not simply the highest potential return.

Our experience suggests that holding a broad mix of assets from different geographies has helped mitigate the volatility that alarming international incidents tend to trigger. High-quality fixed income can potentially appreciate even as equities sell off, for example.

Within core portfolios, we favor exposure to industries that seek to address elements of geopolitical risk. We make the case for investments linked to "economic security," for example, including supplies of traditional energy, technology such as semiconductors, defense, and cybersecurity. Many of these tie into our **Unstoppable trends**.

Hedging strategies to mitigate volatility are another possibility, especially with hedging costs at low levels. Such an approach, which includes preservation measures for equity exposure, looks particularly attractive currently, as we do not anticipate gains as large as 2023's for headline US indices. Since these strategies can be complex, they may not be suitable for everyone. Please consult your Citi representative.

By contrast, we do not favor holding excess cash to mitigate portfolio volatility arising from geopolitical or other risks. Given equities' frequently rapid recovery from such episodes, the potential for missing out on returns seems to us a much greater risk to wealth over time.

Asset classes | Global USD Level 3 Asset Allocation (%)

ASSET CLASS	STRATEGIC[1]	TACTICAL[2]	ACTIVE[3]
FIXED INCOME	**37**	**35**	**-2**
Developed Sovereign	18.8	12.7	-6.1
US	8.8	11.9	3.1
Non-US	10	0.8	-9.2
US Securitized	6.1	8.1	2
Developed IG Corporates	6.9	8.6	1.7
High Yield	2	0.5	-1.5
Emerging Market Sovereigns	3.1	3.1	0
Thematic Fixed Income: Preferreds	0	2	2
EQUITIES	**61**	**63.9**	**3**
Developed Equities	52.2	52.9	0.7
Large Cap	46.4	47.1	0.7
US	33.1	33.1	0
S&P 500	33.1	31.6	-1.5
Thematic: Equal-weight S&P 500	0	1.5	1.5
Canada	1.5	1.5	0
Europe	7.4	7.8	0.4
Asia ex-Japan	1.4	1.2	-0.2
Japan	3	3.5	0.5
Small and Mid Cap	5.9	5.8	-0.1
Core Global SMID	5.9	3.3	-2.6
Thematic: US SMID Growth	0	2.5	2.5
Emerging Market Equity	8.7	9	0.3
Thematic Equity: Healthcare Equipment and Supplies	0	2	2
CASH	**2**	**1**	**-1**
COMMODITIES	**0**	**0**	**0**
Level 3 Global USD Portfolio	**100**	**100**	

[1] Strategic = 10-year benchmark

[2] Tactical = 12–18-month view

[3] Active = The difference between tactical and strategic allocations. Minor differences may result due to rounding.

Source: Citi Global Wealth Investments Global Investment Committee and Global Asset Allocation Team, as of 22 May 2024.

The above table is an example for educational and illustration purposes only and does not constitute a portfolio recommendation. It was generated without taking into account any individual's specific circumstances or requirements. Investors looking to develop their portfolio should contact their Citi representative for further guidance.

Risk level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk level 3 may be appropriate for investors willing to subject their portfolio to additional risk for potential growth in addition to a level of income reflective of his/her stated risk tolerance.

The asset classes used to populate the allocation model may underperform their respective indices and lead to lower performance than the model anticipates.

Staying the course: Allocating portfolios for the long term

Kerry White
Head of Portfolio Solutions,
Citi Investment Management

Paisan Limratanamongkol
Head of Strategic Asset Allocation
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Davide Andaloro
Senior Portfolio Manager,
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When certain markets or asset classes dominate performance, concentrated portfolios may seem appealing. Instead, though, we believe investors should seek global, multi-asset class diversification.

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Considerations

- Some investors may feel tempted to hold only US large caps as their equity allocation
- History suggests that such concentration is unlikely to succeed over longer periods
- Stocks or markets that lead today can lag tomorrow
- We seek global diversification across asset classes, while staying fully invested

US large-cap equities have been on quite the winning streak. From the depths of the Global Financial Crisis at the end of 2008 to the end of 2023, this sub-asset class – as represented by the S&P 500 Index – has registered an annualized total return of 14.3%.[1]

By contrast, non-US developed market and emerging markets equities – represented by the MSCI World ex-USA and Emerging Markets indices – have over the same period returned 7.3% and 6.7% respectively.[2] And over the last five quarters, much of US large-cap equities' dominance has come from a handful of leading technology firms, the so-called "Magnificent Seven."[3]

This performance has prompted some investors to ask a searching question: has portfolio diversification had its day? After all, anyone who put their entire equity allocation or even their entire investment wealth in US large-cap equities would have enjoyed strong returns.

The US's unique combination of global economic and technological leadership, strong institutions, and its status as the largest and most liquid market may continue to make US large-cap equities an enticing investment.

However attractive it may sound, an equity allocation to just one geography – or a handful of large, top performing stocks from that geography – is significantly risky. Citi Wealth's investment philosophy is rooted in global diversification across asset classes. This is not based merely on theory but also on our decades of experience building portfolios. Here is why.

Magnificence may not endure

The "Magnificent Seven" US tech giants have captured investors' imagination. In 2023, for example, this group beat the rest of the S&P 500 Index universe by 63%. The S&P's ten largest constituents – which included the Magnificent Seven – thus accounted for 32% of its market capitalization at the end of the first quarter of 2024. This was the highest share in decades and up from 17% ten years earlier. After previous spikes in concentration in recent decades, market leadership has tended to become more evenly spread once more.

> — Citi Wealth's investment philosophy is rooted in *global diversification across asset classes*. This is not based merely on theory but also on our decades of experience building portfolios.

[1,2] Bloomberg, as of 10 May 2024

[3] The Magnificent Seven stocks: Amazon.com (AMZN), Apple (AAPL), Google parent Alphabet (GOOGL), Meta Platforms (META), Microsoft (MSFT), Nvidia (NVDA), and Tesla (TSLA)

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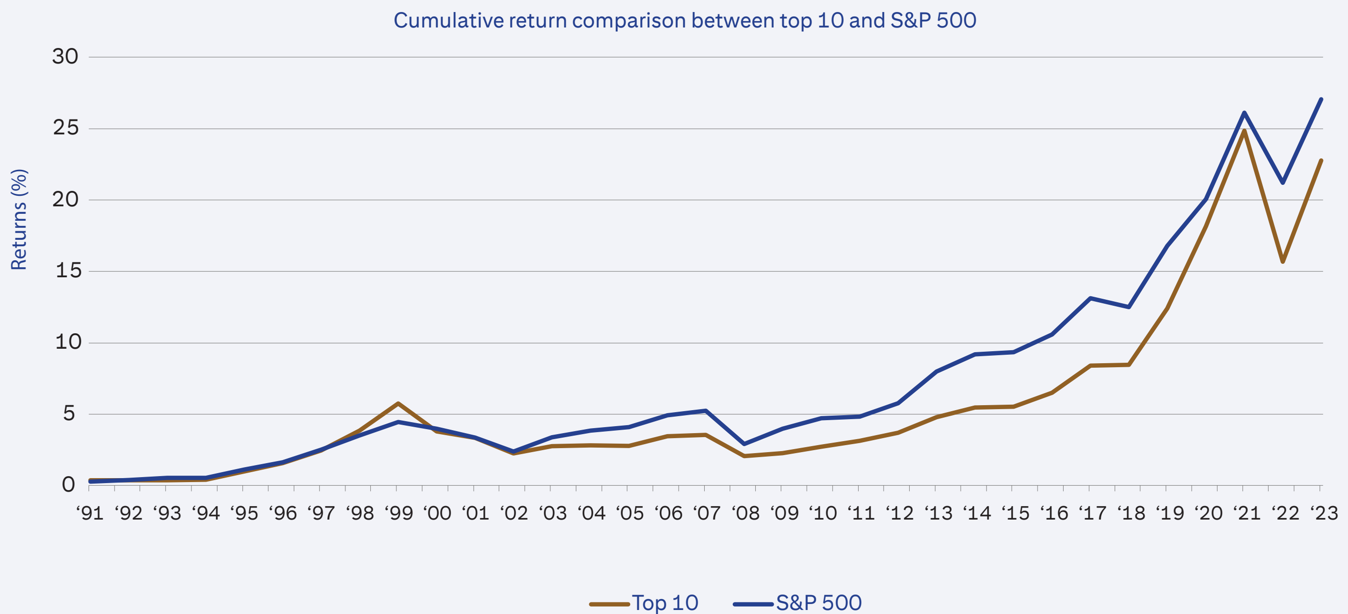
FIGURE 1

Magnificence is impermanent



Source: OCIS (Office of the Chief Investment Strategist) Strategic Asset Allocation and Quantitative Research, and FactSet. Analysis from December 1990 to December 2023. Chart shows the cumulative total returns of the top ten S&P 500 firms by market capitalization at the end of each year over the following 12 months alongside the cumulative total return of the S&P 500. Each point on the chart shows the cumulative return between that point and one year later. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

Some investors may still feel tempted to hold only the Magnificent Seven, given recent outperformance, but we believe such a concentrated bet would be unwise. Put simply, today's leaders may not prove to be those of tomorrow. Between 1991 and 2023, the S&P 500's top ten constituents by capitalization each year underperformed the broader market in subsequent years, observed over multiple time horizons – FIGURE 1.

While we acknowledge the attractions of tech leaders broadly – see **AI-propelled digitization: The race for picks and shovels** – we would not make such holdings a substitute for diversified US equity exposure.

FIGURE 2

Leadership each decade has tended to vary

1950s	1960s	1970s	1980s	1990s	2000s	2010s	2020s
JAPAN 31.39%	AUSTRALIA 12.76%	HONG KONG 24.76%	JAPAN 19.31%	SWITZERLAND 19.73%	AUSTRALIA 14.22%	US 14.12%	US 10.04%
EUROZONE 23.32%	HONG KONG 11.71%	SINGAPORE 24.68%	EUROZONE 19.01%	US 17.67%	SINGAPORE 10.19%	SWITZERLAND 9.46%	UK 9.06%
HONG KONG 18.79%	CANADA 10.12%	JAPAN 21.93%	UK 16.58%	HONG KONG 17.54%	CANADA 9.58%	JAPAN 7.72%	CANADA 7.62%
UK 18.16%	SINGAPORE 9.52%	SWITZERLAND 13.49%	US 13.85%	EUROZONE 14.35%	HONG KONG 8.30%	HONG KONG 6.48%	EUROZONE 5.88%
SINGAPORE 18.13%	JAPAN 8.91%	CANADA 11.44%	SWITZERLAND 13.22%	UK 12.21%	SWITZERLAND 6.05%	EUROZONE 6.11%	AUSTRALIA 3.71%
US 17.19%	US 7.99%	EUROZONE 11.09%	HONG KONG 7.95%	CANADA 11.61%	EUROZONE 3.48%	AUSTRALIA 4.06%	JAPAN 2.85%
AUSTRALIA 15.83%	UK 6.84%	UK 10.80%	CANADA 7.80%	AUSTRALIA 9.21%	UK 3.41%	UK 2.94%	SWITZERLAND 2.71%
SWITZERLAND 15.59%	EUROZONE 5.95%	AUSTRALIA 10.66%	SINGAPORE 6.24%	SINGAPORE 6.98%	JAPAN 1.85%	CANADA 2.58%	SINGAPORE 0.52%
CANADA 14.32%	SWITZERLAND 1.97%	US 6.88%	AUSTRALIA 6.20%	JAPAN 0.45%	US 1.49%	SINGAPORE 1.60%	HONG KONG -9.26%

Source: OCIS Strategic Asset Allocation and Quantitative Research, MSCI and Bloomberg, as of 8 May 2024. The table shows in descending order the total return performance by decade of the ten largest developed major equity market groupings, represented by MSCI national and regional benchmarks. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

Leading markets today can lag tomorrow

Similar considerations apply when it comes to whole equity markets.

Thanks to their strong collective performance, US large-cap equities now represent 62% of the MSCI ACWI IMI Index, a broad global benchmark spanning developed and emerging markets.[4] However, history cautions against extrapolating today's dominance into the long term.

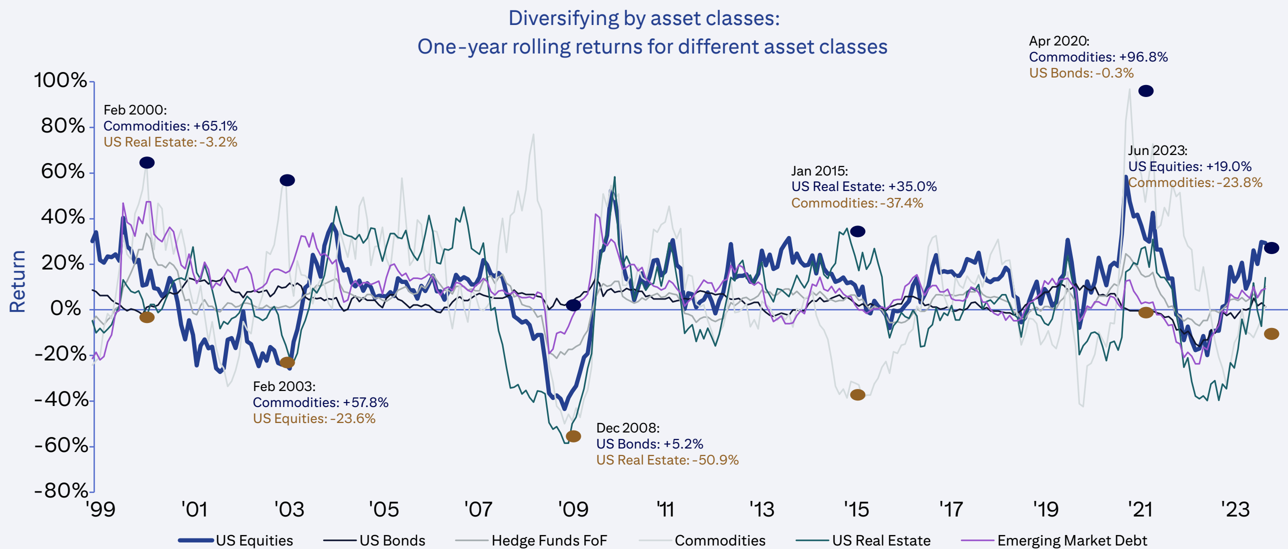
The outperformance of certain markets tends to wax and wane over time. Between 1990 and 2000, for example, US equities also beat other leading equity markets across the world. From 2000 to 2010, however, the situation was reversed, with emerging market equities outperforming.[5] Likewise, Japanese outperformance in the 1980s took its stock market to a 30% share of global capitalization. A multi-year bear market ensued, and even today Japan accounts for only 6% of world equities.

[4] Bloomberg, as of 30 Apr 2024

[5] During the same period, Emerging Market Equities returned 16.1% annually

FIGURE 3

Some asset classes have shown low correlation to equities when most needed



Source: Citi Investment Management, Bloomberg. Analysis as of 2 May 2024. The indices shown refer to the MSCI USA Net Total Returns USD for US Equities, the Bloomberg Barclays US Aggregate Bond Index for US bonds, the HFRI Fund of Funds Composite Index for Hedge Funds, the S&P GSCI Commodity Index for Commodities, and the FTSE EPRA Nareit Developed Europe Index for US Real Estate. The Emerging Market Debt total return is composed of Bloomberg Barclays indices measuring performance of fixed and floating-rate US dollar-denominated emerging markets sovereign debt for the Latin America, EMEA (Europe, Middle East, and Africa) and Asian regions. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

To be clear, this is not to say the US is doomed to poor performance over the next decade. However, valuations for the US – as measured by the cyclical adjusted price to earnings ratio or "CAPE" – are currently high. Over time, high CAPE readings for equity markets have typically given way to low returns over the subsequent decade. At the same time, some markets elsewhere – and particularly in emerging countries – have lower valuations, which suggests the potential for higher returns over the next ten years.

Rather than calling for a wholesale shift from US equities to cheaper markets, our approach calls for considering appropriately sized exposure to both. The relative sizes of our long-term allocations will reflect the divergence in valuations, allocating somewhat less to expensive markets and somewhat more to cheaper ones.

Broadening allocations may enable stronger risk-adjusted returns

With many investors holding disproportionately large positions in a single equity market – often their home market – broadening equity exposure to a globally diversified portfolio is a prudent first step to consider, while also depending upon their investment objectives and risk tolerance. However, it is not sufficient. Equity markets around the world have tended to be correlated. This is especially true during periods when diversification is most needed, mainly equity downturns. We therefore look beyond equities for further potential diversification.

FIGURE 3 shows one-year rolling returns for US equities and other asset and sub-asset classes such as high-quality US bonds, hedge funds, US real estate, commodities and emerging market debt.

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FIGURE 4

Historically, over a longer duration, a 60/40 portfolio has shown potential for consistent returns

Source: Citi Investment Management, as of 2 May 2024. The chart shows the probability of positive and negative returns from holding 60% in the S&P 500 Index and 40% in the Bloomberg Aggregate Bond Index between 1977 and 2023, on a one-, five- and ten-year view. The historical allocation levels use indices and are provided for informational purposes only. The historical index allocation levels should not be taken as an indication of future performance, which may be better or worse than the levels set forth above. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

Year-on-year returns of these asset classes have varied, with some doing well and others poorly at different times.

During various bouts of market stress over the past quarter century, some asset classes have delivered positive returns even as equity markets have fallen. In February 2003, for example, while US equities were down 23.6% year-on-year, commodities were up 57.8%. And in December 2008, when US real estate was down by just over half, US bonds were up 5.2% over the previous year. We believe such dispersion in asset class performance makes a case for allocating across many geographies and asset classes rather than trying to pick winners among them.

Time in the market, not timing the market

Many investors are fixated with timing markets, typically shifting between cash and equities. Their aspiration is to ride uptrends while sidestepping downtrends.

While avoiding market drawdowns has obvious appeal, both financially and psychologically, experience shows it is very hard to accomplish. Typically, market timers end up missing out on valuable stretches of equity gains and earning much lower returns on cash instead.

Staying fully invested and broadly diversified, by contrast, enables investors to seek compound returns over time. High-quality bonds may help offset some of the effects of holding equities during bear markets. FIGURE 4 shows the performance of a combination consisting of 60% exposure to the S&P 500 Index and 40% to the Bloomberg Aggregate Bond Index, which does not represent the performance of an actual portfolio.

How diversified is your portfolio?

Even if you have a portfolio built upon a long-term investment plan, it can still end up overly concentrated if it deviates from the plan, perhaps via a lack of rebalancing.

Portfolio views

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Pursuing portfolio income with intermediate-term bonds

Bruce Harris
Head of Fixed Income Investment Strategy

Joe Kaplan
Senior Fixed Income Investment Strategist

With the likely timing of interest rate cuts pushed back, fixed income has faced challenges this year. Nevertheless, we continue to see compelling value within this asset class.

Considerations

- US growth has been resilient and inflation slightly higher than expected in 2024 so far
- While US fixed income prices have fallen somewhat, high coupons have somewhat offset the effect on total returns
- We expect the US Federal Reserve to cut interest rates this year and into 2025 as inflation falls
- Potential opportunities include intermediate-maturity US Treasuries, investment-grade credit, municipal bonds, and preferred securities

The first few months of 2024 were somewhat difficult for fixed income investors. As the year began, markets were pricing in a bond-friendly scenario of six interest rate cuts from the US Federal Reserve. Reflecting this, the 5- and 10-year US Treasury yields stood around 3.85% and 3.88% respectively.

Market expectations were disappointed, though. US economic growth proved resilient, increasing 1.3% quarter-on-quarter annualized, with unemployment staying below 4%. Inflation has remained slightly under an annualized rate of 4% over the past six months. All this undermined the case for the imminent interest rate cuts that would have further boosted bond prices.

Instead, markets now expect only two interest rate cuts in 2024, amounting to just under 50 basis points (bps), with another 50–75bps in 2025. Fixed income returns have suffered as investors have adjusted to this less favorable outlook.

As US 5- and 10-year Treasuries fell, their yields – which move in the opposite direction to prices – rose to 4.42% and 4.45% respectively as of 23 May. The Bloomberg US Aggregate Bond Index – a broad-based measure of fixed income performance – saw a negative year-to-date total return of some 1.42% as of 22 May 2024.

Some parts of the market did better than others. Take US investment-grade credit – bonds issued by more financially robust companies – which is one of our longstanding favored sub-asset classes. The Bloomberg Intermediate Corporate Bond Index has produced a total return of about 0.29% as of 22 May. This index's shorter duration as well as the additional yield over Treasuries – which adds to overall coupon income – were the main reasons for investment-grade credit's stronger performance.

Investment-grade preferred securities – instruments that combine certain features of equities and bonds – delivered a positive total return of 2.46%, as of 22 May. The positive return was primarily due to a reduction in the spread that preferreds offer over Treasuries, which helped offset the effect of rising interest rates.

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Our positive case for intermediate-term US fixed income

Despite the rocky start to 2024, we remain positive toward intermediate-term US fixed income.

By the end of the year, we expect core CPI inflation will fall from today's elevated levels to a more normal 2.5%. If so, we believe the Fed will start cutting interest rates this year and continue into 2025. Indeed, it may cut more aggressively than the market currently envisages.

As it has indicated on many occasions, the Fed will likely not wait for inflation to fall all the way to its 2% target before cutting interest rates. Instead, it has stated that it will preempt the situation by cutting rates if inflation keeps heading lower or if employment growth significantly weakens. Its motive here is to try to avoid the economy slowing too much. Once investors are convinced that cuts are imminent, we believe Treasury bond prices are likely to rise and yields fall.

Positioning bond portfolios

Given our outlook for a drop in yields for the rest of 2024, how are we positioning our core portfolios? With Treasury yields high by the standards of the last couple of decades, we seek to lock in income around current levels. Our preference is for intermediate-duration portfolios of about 5–6 years. Current yields have been providing a much higher source of return, and we believe high coupon payments will help insulate against any losses in the unlikely event that yields continue moving higher.

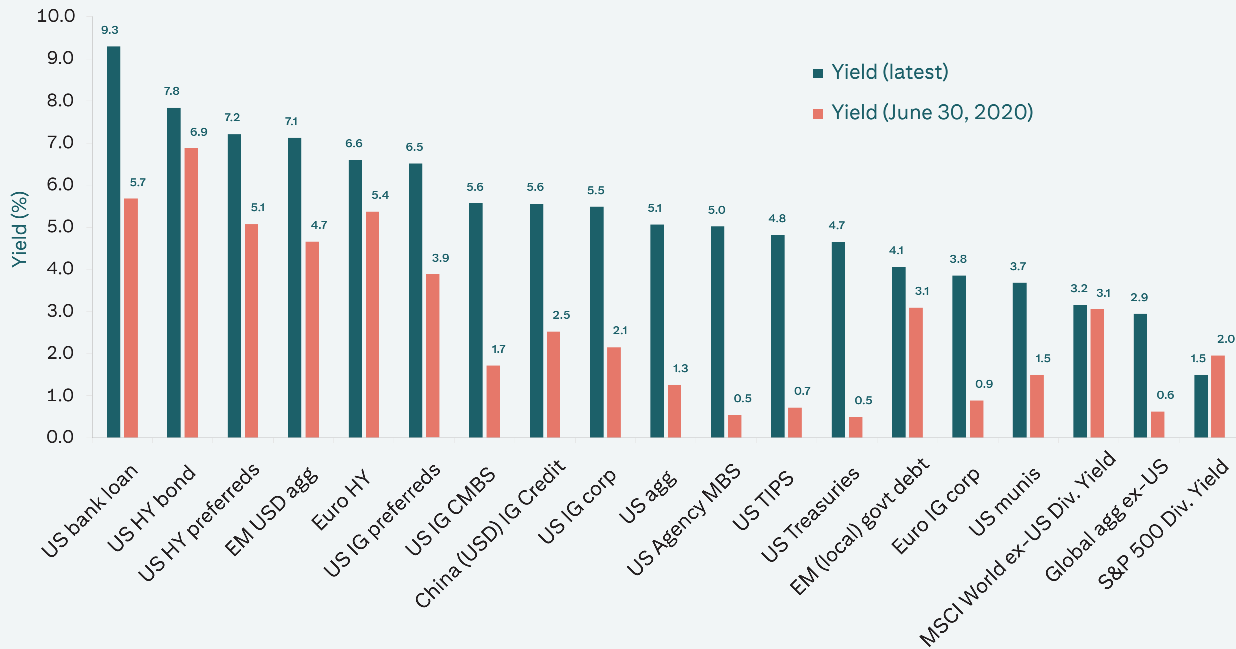
Once the Fed does begin cutting rates, longer dated bonds might typically be expected to be among the best performing based on history. However, we believe the effect could be more muted this time. This is because of an anticipated heavy supply of such bonds, as the US government seeks to finance its large fiscal deficit.

We have conviction in our expectation of falling inflation. However, a risk to our view is if inflation fails to go down into 2025. Indeed, unforeseen factors could even cause it to rise. If that happened, longer duration (above seven years) bond prices may be even more impacted than the intermediate fixed income that we favor.

Within bond allocations in core portfolios, our bias remains toward higher credit quality allocations. These would be intermediate corporate bonds of investment grade, i.e., with credit ratings between AAA and BBB. But we would include securities that straddle the divide between investment grade and high yield, so-called "crossover" bonds that have credit ratings between high BB and low BBB.

FIGURE 1

Bond yields are generally near multi-year highs



Source: Bloomberg, as of 17 May 2024. Indices are unmanaged. An investor cannot invest directly in an index. Index returns do not include any expenses, fees or sales charges, which would lower performance. They are shown for illustrative purposes only and do not represent the performance of any specific investment. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

The case for preferreds, US municipal bonds, and structured credit

Another area for suitable and qualified investors to consider is investment-grade structured credit such as agency-guaranteed mortgage-backed securities and other forms of structured credit via a managed strategy. We also remain favorable on certain investment-grade rated preferred securities – FIGURE 1 – which are predominantly issued by highly rated banks and generally pay higher coupons than senior-rated securities from the same issuer due to preferreds' subordinated payment rank.

For US-based taxpayers, municipal bonds – debt issued by the likes of local and state authorities – offer an interesting possibility as well. At the lower end of the range, yields as of 22 May on the intermediate investment-grade corporate bond index are 5.4% while the intermediate municipal bond index yields about 5.75% (adjusted for both the highest US federal income tax bracket and the investment income tax). At the higher end, preferred securities and BB rated indices each yielded around 6.6%.

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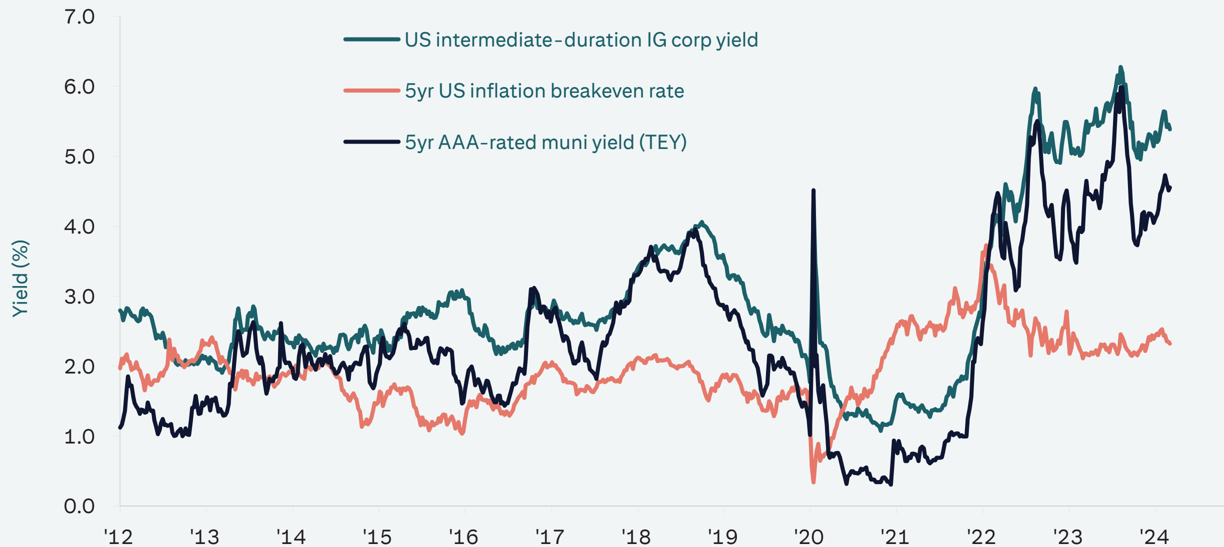
FIGURE 2

Intermediate higher quality bonds offer a wide real spread above Treasuries



Source: Bloomberg as of 17 May 2024. Indices are unmanaged. An investor cannot invest directly in an index. Index returns do not include any expenses, fees or sales charges, which would lower performance. They are shown for illustrative purposes only and do not represent the performance of any specific investment. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

Critically, the real rate above inflation earned on these securities, as measured by the US inflation breakeven rate – FIGURE 2 – is very high compared to the last 15 years.

We do expect some slowing in economic growth, which tends to mean greater credit risk: the risk that some borrowers will be unable to make interest payments or principal repayments. However, we believe that higher rated corporates' balance sheets are currently healthy.

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Alternatives' private market activity may soon recover

Stefan Backhus
Head of Alternatives Strategy

Daniel O'Donnell
Head of Alternatives and
Investment Manager Solutions

While hedge funds have thrived since 2021, private market activity has been muted. We think a pickup may be in store.

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Considerations

- Hedge funds helped mitigate losses during the depths of the equity and fixed income market dislocations of 2022 through 2023, with some strategies actually taking advantage of the volatility
- After a lull since 2021, private investments activity may be about to revive
- These asset classes come with many risks such as illiquidity and complete loss of capital
- For suitable and qualified investors, we favor operationally focused private equity managers
- We see potential in select real estate strategies addressing the industrial and hospitality sectors
- We are also drawn to certain directional and diversifier hedge fund strategies

With the global economy strengthening, what might the rest of 2024 and thereafter hold for alternative asset classes? Despite a deceleration of growth in private capital fundraising in 2023, alternatives AUM (net asset value plus unfunded commitments) reached a new high of $19.7 trillion as of the most recent data available on September 30, 2023, 13% higher than year-end 2022.[1] Hence, our continued belief that regulatory pressures will drive potential opportunities for unregulated, alternative financial strategies.

Continued hedge fund resiliency

Broadly speaking, hedge funds generated positive risk-adjusted returns in early 2024, assisted by market conditions that were more conducive for stock and bond pickers, with Q1 2024 performance of 4.5% for the broad HFRI Fund Weighted Composite Index.[2] Total hedge fund assets have risen for the last six consecutive quarters, reaching a record global AUM of $4.3 trillion in the first quarter of 2024, driven by both performance and investor inflows.[3]

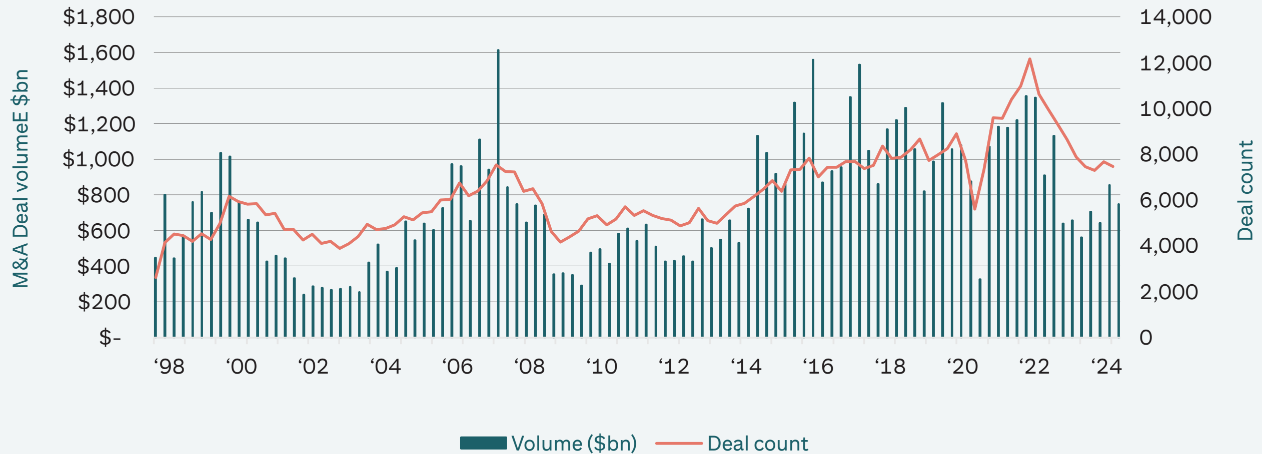
Given the continued potential for elevated economic and political uncertainty, hedge funds' ability to generate returns and mitigate certain risks across market cycles could drive ongoing growth for the asset class. We've seen growth of multi-strategy hedge funds as portfolio diversifiers, alternative credit strategies that complement traditional fixed income allocations, and hedge fund equity strategies to supplement public stock allocations.

[1] Preqin and HFR, as of 30 Sep 2023

[2,3] HFR, as of 31 Mar 2024

FIGURE 1

No deal: Global M&A volume well down from its peak



Source: Bloomberg, as of 31 Mar 2024.

Private market pickup?

Since 2021's peak in activity, private markets – encompassing private equity, real estate, and private credit – have experienced something of a lull. In 2023, new deal activity across all private sectors globally fell 37.2% year-on-year to $1.1 trillion.[4] Investors too have stepped back and concentrated on fewer funds. Private capital fundraising slowed 20.5% in 2023 to $1.2 trillion, 31.5% below the 2021 high of $1.7 trillion.[5]

For private equity, we are still looking for systematic evidence of deals and exits restarting. Since most private market data only appears three months or more later, early clues of a revival must be sought elsewhere. One hint may come from the recent acceleration in global mergers & acquisitions (M&A) activity – FIGURE 1. Volumes rose 32% year-on-year to $1.6 trillion for the six months to 31 March 2024.[6]

[4] Preqin, as of 31 Dec 2023
[5] Pitchbook, as of 31 Dec 2023
[6] Bloomberg, as of 31 Mar 2024

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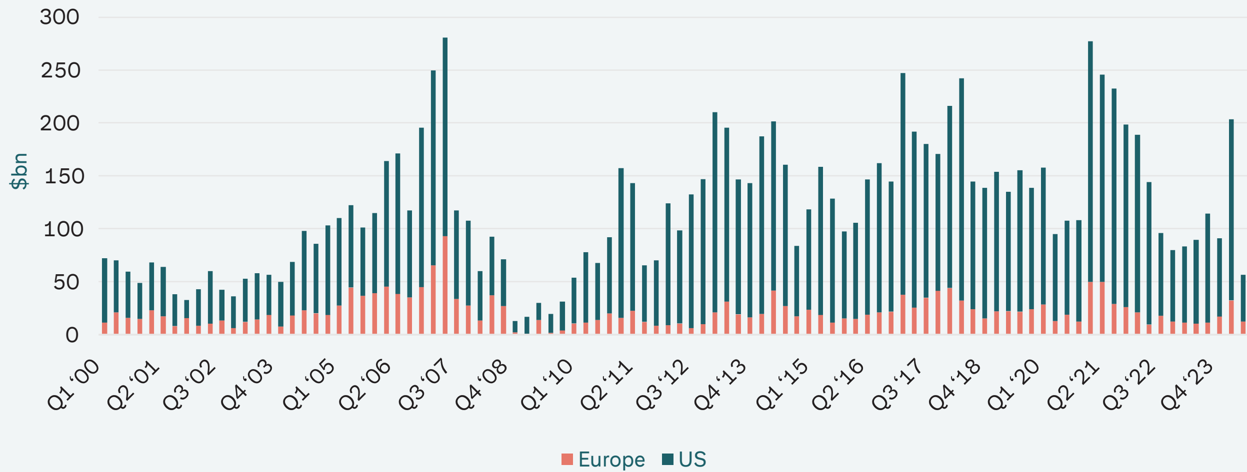
FIGURE 2

Global leveraged/syndicated loans' recent comeback



Source: Pitchbook LCD, as of 26 Apr 2024. Data for Q2 2024 runs to 26 April 2024.

A critical driver of this is a rebound in the syndicated loan market. Having been depressed since mid-2022, this key source of funding for M&A and private deals rose 144% year-on-year to $203.5 billion in the first quarter of 2024 – FIGURE 2.[7] Importantly, this included some large buyout transactions, implying some renewed market willingness to finance private equity transactions once more.

Despite these apparent green shoots, we believe a more robust dealmaking environment will require greater confidence in the outlook for economic growth and interest rates.

Alternatives demand a long-term approach

Still, our case for investing in alternative asset classes is not a market timing decision. Instead, we take a long-term approach. Currently, valuations point to decent potential returns over a ten-year horizon. Our asset allocation methodology AVS estimates that Private Equity may return an annualized strategic return estimate of 14.6%, Real Estate 10.8%, and Hedge Funds 8.8% between 2024 and 2034 – see **Renewed growth, new challenges.**

[7] Pitchbook LCD, as of 26 Apr 2024

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The many risks of alternative asset classes

Alternative asset classes come with substantial and unique risks of their own. As such, they are only for suitable and qualified investors and should only be included in a portfolio in light of each individual's investment objectives, risk tolerance and liquidity requirements.

Especially if an alternative strategy uses borrowed money – or leverage – there is a risk that an investor can lose all of what they put in. During bouts of market stress – such as the Global Financial Crisis of 2008–09 – some individual private equity and real estate transactions lost value more than public equities.

Illiquidity is another major feature of private alternative investments. Many private equity and real estate managers, for instance, require investors to commit their capital for several years. Getting out before the end of the strategy's lifetime may not be possible. And if it is possible, investors may only be able to sell out at a big discount to what they paid. On top of investment risks, there may be operational risks, which arise from managers' processes, policies, and people.

Private equity

For now, US interest rates are staying higher than expected. So, creating value via adding leverage – more borrowed money – is hard for private equity managers. Rather than such costly financial engineering, therefore, managers are focusing even more on improving the sales growth, margin expansion and strategic positioning of the businesses they invest in.

Operationally focused managers spanning the major private equity strategies such as buyouts, growth, and venture capital can find target companies across market cycles and valuation environments. Suitable and qualified investors can align core private equity allocations to the sub-strategy that best fits their risk/return profile.

Private credit

We continue to have conviction in alternatives managers as suppliers of private credit. In Wealth Outlook 2024, we set out how such managers have seen their lending business grow as their lower cost competitors have found themselves constrained by bank regulations - see **Investing with and in unregulated financial companies.** For suitable and qualified investors, we see potential to participate in this long-term growth trend by investing in funds providing private capital strategies. This could be in the form of debt capital, structured products, or direct ownership stakes in the managers themselves.

Real estate

Elevated interest rates and tight credit conditions are the main challenge right now. That is despite positive momentum and encouraging property fundamentals in several real estate sectors. The industrial, retail and hospitality sectors have shown solid operating results during 2023 and into 2024. Certain properties and segments may face financial distress, but dealmaking activity will likely pick up as this year continues and supply challenges from limited construction starts in 2022–2023 begin to create more opportunities to deploy capital. Managers may begin deploying capital into growth areas such as industrial and hospitality properties.

Hedge funds

Amid market turbulence and macroeconomic uncertainty, diversifier[8] hedge strategies may provide some downside mitigation. While they can potentially profit from volatile markets, they may underperform during bull markets. Diversifiers include relative value strategies, which seek to profit from discrepancies between related securities; global macro strategies, which exploit market movements caused by major economic trends and events; and trend-following strategies, which latch on to up- and down-moves in markets.

Directional[9] strategies across activist, long/short equity and credit funds can try to use their skill to pick securities and exploit periods of dispersion or asset mispricing. We see such conditions as particularly prevalent in small- and mid-cap (SMID) equities, pan-Asia equities, and securitized credit including the current dislocation in the commercial and mortgage-backed securities market.

[8,9] See Glossary for definition

Diversifying and Directional are Citi descriptors based on a fund's strategy and objective that CGW Alternatives has developed and uses to categorize alternatives funds. Such descriptors have not been approved by the portfolio managers of any of the underlying funds making up the portfolio. The internal classification noted above is subject to change without notice. Please see Glossary at the end of this document for the definitions of "Diversifying" and "Directional" funds.

Are digital assets going mainstream?

Deborah Querub
Head of Digital Assets, Citi Wealth

The arrival of US-listed ETFs has brought Bitcoin into the investment mainstream. We see digital assets potentially playing an increasing role in the financial system's digitization.

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Considerations

- The first US-listed spot bitcoin ETFs have seen large asset inflows since their debut
- This adds further to bitcoin's investment profile, fueling the "store of value" narrative
- While sometimes referred to as "digital gold," bitcoin has not consistently behaved like gold during stress periods
- We believe digital assets and blockchain innovation may play an increasing role in the financial system's digitization

History was made in January this year when 11 spot bitcoin exchange-traded funds (ETFs) received approval from the US Securities and Exchange Commission (SEC). Trading on the New York Stock Exchange and Nasdaq began the next day, enabling investors to gain exposure to the largest and best-known cryptocurrency in the same way that they have long bought and sold bundles of equities, bonds, or commodities.

Demand was strong for the newly approved products. In the first two days alone, the 11 ETFs accumulated $4bn in assets under management (AUM).[1] By the end of the first quarter, this figure had grown to more than $58bn – FIGURE 1 – with over $180bn having changed hands during the period. Such interest was unprecedented in the history of ETFs.[2]

While uptake was rapid, the journey to approval had been anything but. The first application to launch a bitcoin ETF was made in 2013, with multiple further rejections over the following years. Even as it changed its stance this year, the SEC reminded investors that its approval of the ETF listings did not represent its approval or endorsement of bitcoin. The regulator emphasized that spot bitcoin's price was impacted by fraud and manipulation, which in turn impacts the ETFs' holdings of bitcoin.

[1,2] Bloomberg, as of 23 May 2024

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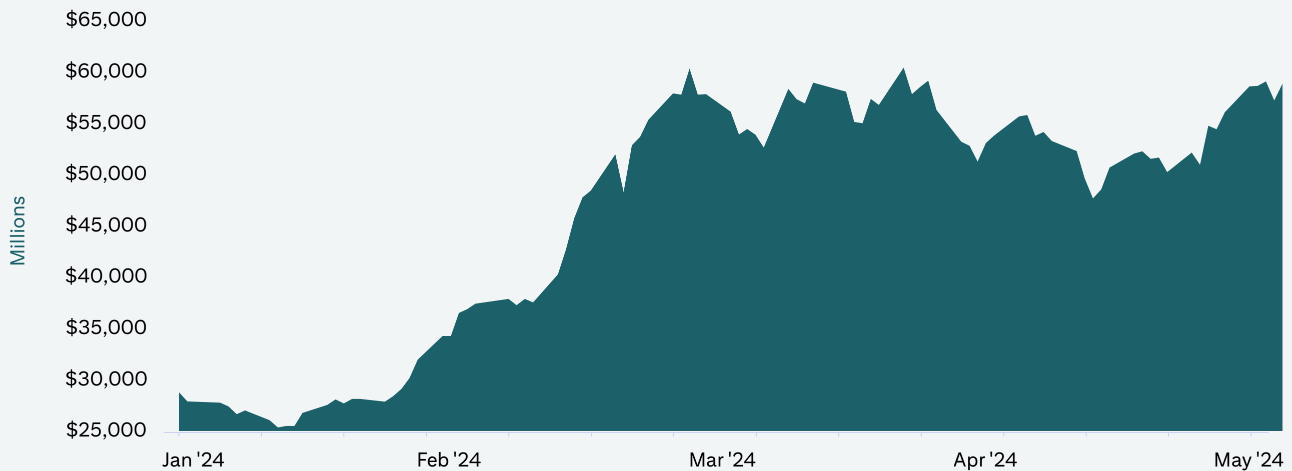
FIGURE 1

Total US spot bitcoin ETF assets under management



Source: FactSet, as of 24 May 2024. The chart shows the collective assets under management (AUM) for 11 US-listed bitcoin exchange-traded funds (ETFs).

What has changed?

Despite the SEC's warnings, the spot bitcoin ETFs' launch has given the cryptocurrency even greater visibility. In the eyes of some, this will also amount to more credibility. Spot bitcoin exposure is now accessible via a familiar and regulated financial product, which also has lower risk of hacking and fraud than holding the cryptocurrency directly in a digital wallet.

At the same time, not all cryptocurrency enthusiasts welcomed bitcoin's entry into the investment mainstream. In the white paper that introduced Bitcoin to the world in 2008,[3] it was described as a decentralized and anonymous peer-to-peer electronic cash system, not meant to be controlled by central authorites. However, the ETFs are issued by large, centralized, government-regulated asset managers. These investment vehicles also cannot be used as currency, contrary to the original intention behind Bitcoin.

Digital means of exchange or digital store of value?

When Bitcoin's white paper was first published, bitcoin was envisaged as a medium of exchange. In 2010, 10,000 bitcoins were spent on two pizzas, considered the currency's first commercial transaction. However, long transaction settlement times, network fees, and bitcoin's dramatic price volatility have deterred its use for day-to-day purchases. Despite recent enhancements that seek to make the Bitcoin network more efficient, a new narrative has taken hold – bitcoin as a store of value.

Rather than digital cash, bitcoin often gets called "digital gold." And there are indeed similarities. Both assets have scarcity value. Only 212,582 tons of gold may have been mined since the dawn of time.[4] By design, bitcoin's total supply is limited to 21 million coins, with more than 93% already in circulation.[5]

[3] Bitcoin: A Peer-to-Peer Electronic Cash System, as of Oct 2008

[4] World Gold Council, as of 1 Feb 2024

[5] Bloomberg, as of 14 Mar 2024

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FIGURE 2

Bitcoin performance compared to major asset classes

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S&P 500 12.0%	Bitcoin 37%	Bitcoin 119.0%	Bitcoin 1300.0%	US Agg 0.0%	Bitcoin 92.0%	Bitcoin 302.0%	Bitcoin 58.0%	Commodities 20.0%	Bitcoin 156.0%
US Agg 6.0%	US Agg 1.0%	High Yield 17.0%	EM Equities 35.0%	High Yield -2.0%	S&P 500 29.0%	Gold 20.0%	Commodities 30.0%	Gold -1.0%	S&P 500 25.0%
High Yield 3.0%	S&P 500 -1.0%	EM Equities 15.0%	S&P 500 18.0%	Gold -3.0%	EM Equities 21.0%	S&P 500 15.0%	S&P 500 29.0%	High Yield -11.0%	High Yield 13.0%
EM Equities 1.0%	High Yield -5.0%	Commodities 14.0%	Gold 13.0%	S&P 500 -7.0%	Gold 18.0%	EM Equities 14.0%	High Yield 5.0%	US Agg -13.0%	Gold 12.0%
Gold -2.0%	Gold -11.0%	S&P 500 11.0%	High Yield 8.0%	Commodities -9.0%	High Yield 15.0%	US Agg 7.0%	EM Equities 0.0%	EM Equities -18.0%	EM Equities 9.0%
Commodities -18.0%	EM Equities -14.0%	Gold 8.0%	Commodities 6.0%	EM Equities -15.0%	Commodities 10.0%	High Yield 6.0%	US Agg -2.0%	S&P 500 -20.0%	US Agg 6.0%
Bitcoin -58.0%	Commodities -25.0%	US Agg 3.0%	US Agg 4.0%	Bitcoin -73.0%	US Agg 9.0%	Commodities -3.0%	Gold -4.0%	Bitcoin -65.0%	Commodities -2.0%

Sources: Bloomberg, as of 1 May 2024. Quilt constructed using the following indices: Bitcoin: Bitcoin Spot Index, Gold: Bloomberg Gold Tracker Total Return Index, S&P 500: SPX Index, Emerging Equities: Dow Jones Emerging Markets Total Return Index, High Yield: ICE BofA US High Yield Index, US Agg: Bloomberg US Agg Total Return Value Unhedged USD, Commodities: Dow Jones Commodity Total Return Index. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

The physical varieties of both can be bearer assets, such that whoever possesses them is deemed to be the owner. Neither have central registers of ownership, which creates a degree of anonymity. The comparison goes only so far, however. A recent study by Citi Research found that bitcoin does not have the same store-of-value properties that gold does.[6] Investors have often treated gold as a "safe haven" during unsettled times, with its price rising on average during the ten worst months for equities since 2010. By contrast, bitcoin has usually been negative in such periods.

At times, the cryptocurrency has behaved in a more gold-like fashion. When some US regional banks failed in March 2023, bitcoin's directional movement was similar to that of gold. But as Middle East tensions rose sharply in April 2024, bitcoin's initial price reaction was negative, while gold rose.

Also in contrast to gold, bitcoin has performed better than six leading asset classes and sub-asset classes in seven of the last ten years but has been the worst performing in the other three, demonstrating the particular volatile nature of the cryptocurrency – FIGURE 2.

Citi Research believes that the nascent nature of the technology and its relatively early stage of adoption means that bitcoin's correlation with technology equities and other risky, long-duration assets is likely to persist. That said, the overarching potential of bitcoin to mature into both a medium of exchange and a store of value is a narrative that cannot be ignored.

[6] Citi Research, Digital Asset Take Crypto's Gold Bug, as of 15 Apr 2024

Beyond Bitcoin

The world of digital assets beyond Bitcoin continues to evolve, meanwhile. Tokenization is where ownership rights to an asset are converted into a digital token. The underlying asset could be physical – such as a real property or an artwork – or intangible, such as a share in a company. The ownership record is recorded on a public or private blockchain, the same type of technology that Bitcoin runs on. Tokenization can, for example, enable fractional ownership, breaking large assets into lots of smaller stakes. These stakes can potentially be bought and sold securely on a digital platform, thus increasing the liquidity of the underlying asset.

We see many potential uses for this next generation architecture. By embedding them with software code, tokens can be made smart. This can enable transactions that execute when certain conditions are fulfilled, revenue sharing based on smart contracts, and voting by token holders on decisions relating to the platform or underlying asset. Both digital tokens and the smart contracts behind them can also be made to interact across different platforms and systems.

For mainstream adoption to occur, however, there are many challenges to overcome in the short term. These nascent technologies are global, decentralized and often borderless. They exist in a fragmented legal and regulatory landscape. But while mass adoption of digital assets could still be years away, momentum is building. Governments, large institutions, and corporations are shifting from pure research to action setting new legislation, building proofs of concept, and creating real-world use cases. We therefore see digital assets and their underlying technology and risks as a paradigm shift with the potential to transform key aspects of global finance. Due to the nature of digital assets and their especially uncertain future, they may not be suitable for all investors.

This article is for educational purposes and should not be used as the basis for any recommendation. There are critical risks involved with investing or engaging with digital assets, including but not limited to counterparty risk, duration/reinvestment risk and directional risk.

Commodities: Adaptability but limited opportunities

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Maya Issa
Senior Investment Strategist

Joseph Fiorica
Head of Global Equity Strategy

Malcolm Spittler
Senior US Economist

Leading commodity markets have absorbed geopolitical and economic shocks well in recent times. We see some possibilities for portfolios.

Considerations

- Commodity markets have displayed flexibility in the face of various shocks
- Traditional energy producers may continue outperforming energy commodities
- Gold may rise further, although we prefer other potential portfolio hedges
- While we no longer favor copper opportunistically, it may have long-term upside potential

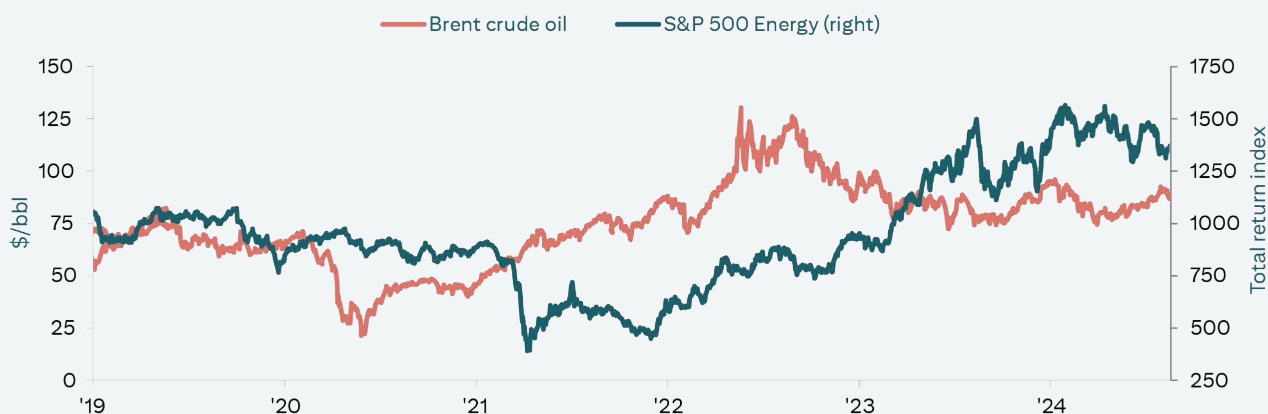
The global economy has shown not only resilience in recent years but also adaptability. In the face of multiple shifts and shocks, governments, businesses, and consumers have found ways to cope and indeed thrive.

The price of oil bears testament to this. Crude currently trades at the same level as before Russia's invasion of Ukraine. This is despite the huge initial spike in oil, and Europe significantly scaling back its purchases of Russian supplies. Global trade was quickly rearranged, with Europe switching to US, Saudi Arabian, and Norwegian imports, and Russian exports diverting to China and India.

Such adaptability has helped to sustain global growth. This contrasts with numerous past episodes when energy prices surged, and recessions followed. One factor here is that the world has become ever more efficient in how it burns fossil fuels. As a result, we see a constrained outlook for the price of oil, with sustained surges unlikely. In this environment, we believe that western extraction and pipeline investments may continue to perform better than energy commodities. US energy equities have done well as the US has increased oil output – **FIGURE 1**.

FIGURE 1

US energy equities have outperformed crude



Source: Haver Analytics, as of 30 May 2024. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

Electrification of the economy

If the world is to use less fossil fuels over time, it must invest heavily in cleanly produced electricity supplies. Achieving this will require a lot more of another commodity: copper. The red industrial metal is an indispensable component in digital infrastructure, clean energy, electric vehicles, and defense, to name but a few. We highlighted this in **Wealth Outlook 2024** – see **OPEC's unlikely role in the energy transition**. Recycling and new mining will be essential but may not be enough to meet demand. We therefore look for long-term gains in copper's price.

The spot copper price has gained 26% in 2024 so far amid low inventories of the metal. Citi Research believes that spot copper could rise another 20% in price by the end of 2025. In our view, though, copper mining equities may now factor in much of such a rise after their 30% increase since we published **Wealth Outlook 2024**. We believe investors should now expect less vibrant near-term returns, and we no longer favor copper miners as an opportunistic investment.

Gold: Record highs but risks too

Gold has a very different profile from copper. Whereas the price of copper has often risen when the global economy has been looking up, the precious metal can experience greater investor demand during downturns. Some may view it as a "safe haven" asset in unsettled times. This includes during bouts of sharp inflation, reflecting gold's reputation as a scarce resource and store of value.

Lately, gold has appreciated despite rising US real interest rates. Historically, the metal has moved in the opposite direction to inflation-adjusted rates. But since the US Federal Reserve began tightening monetary policy in March 2022, the gold price is up 23%. What is behind this breakdown in its relationship with real rates, which was last seen in 2006 when gold was in the middle stages of a bull run?

We believe the answer lies partly in unusually large central bank purchases of the precious metal – FIGURES 2 AND 3. Foreign reserves data shows a $35.6 billion jump in China's official gold holdings over the past year alongside some selling of US Treasuries. Another source of demand has been from Asian retail investors. Both these buying trends may continue, but we would not simply assume that they will.

The Fed could soon cut interest rates, perhaps earlier than markets expect. This could see a resumption of the traditional relationship, with falling real rates further boosting the gold price. However, with gold already near an inflation-adjusted record, we would not merely assume ongoing gains. Rising geopolitical tensions could also support more upside. Were Chinese buyers to continue to retreat from US Treasuries and reallocate to gold, this may be helpful.

However, we would not chase gold higher simply because the crowd may do so. We acknowledge the value that the metal may add to a diversified portfolio, potentially helping to mitigate inflation, geopolitical, and equity risks in certain situations. However, we note that US Treasuries offer attractive yields at current levels as well as some of the risk mitigation properties of gold.

For those seeking equity hedges, there are also other strategies to consider. Currently, the cost of some of these strategies is low, owing to a lack of market volatility.

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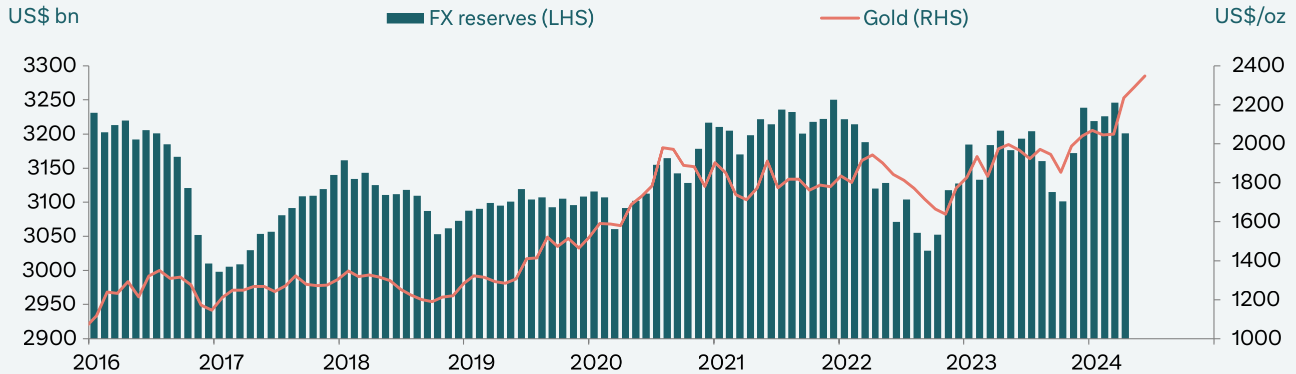
FIGURE 2

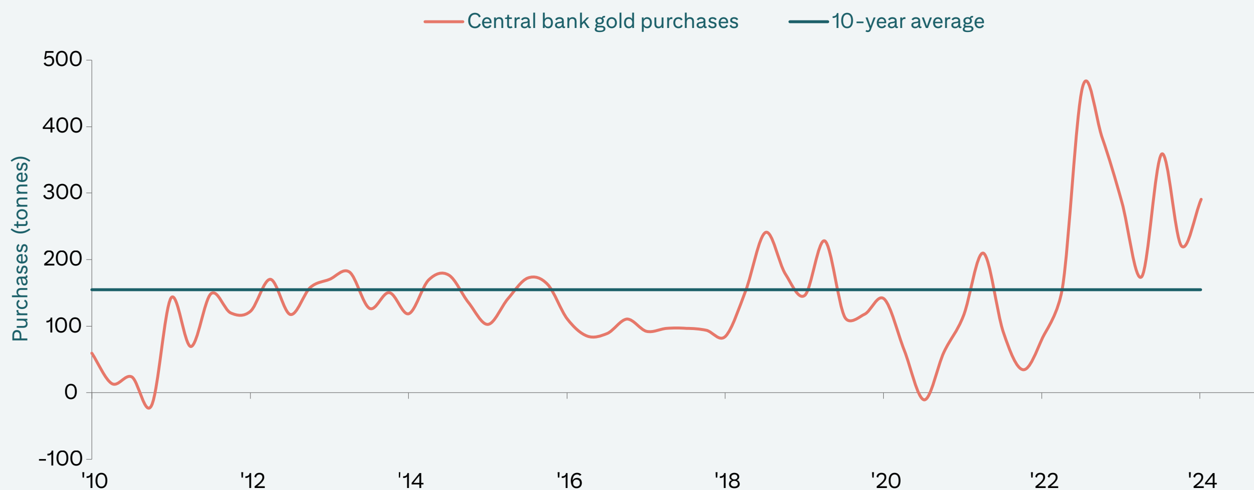
China foreign exchange reserves vs gold price



Source: Bloomberg, Haver Analytics as of May 15, 2024. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of an specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. **Past performance is no guarantee of future results. Real results may vary.**

FIGURE 3

Central bank gold purchases have been above the decade's average



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Unstoppable trends

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AI-propelled digitization: The race for picks and shovels

Joseph Fiorica
Head of Global Equity Strategy

Cecilia Chen
Global Equity Investment Strategist

The artificial intelligence revolution looks set to deepen and broaden. While not without risks, we favor portfolio exposure to this unstoppable trend.

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Considerations

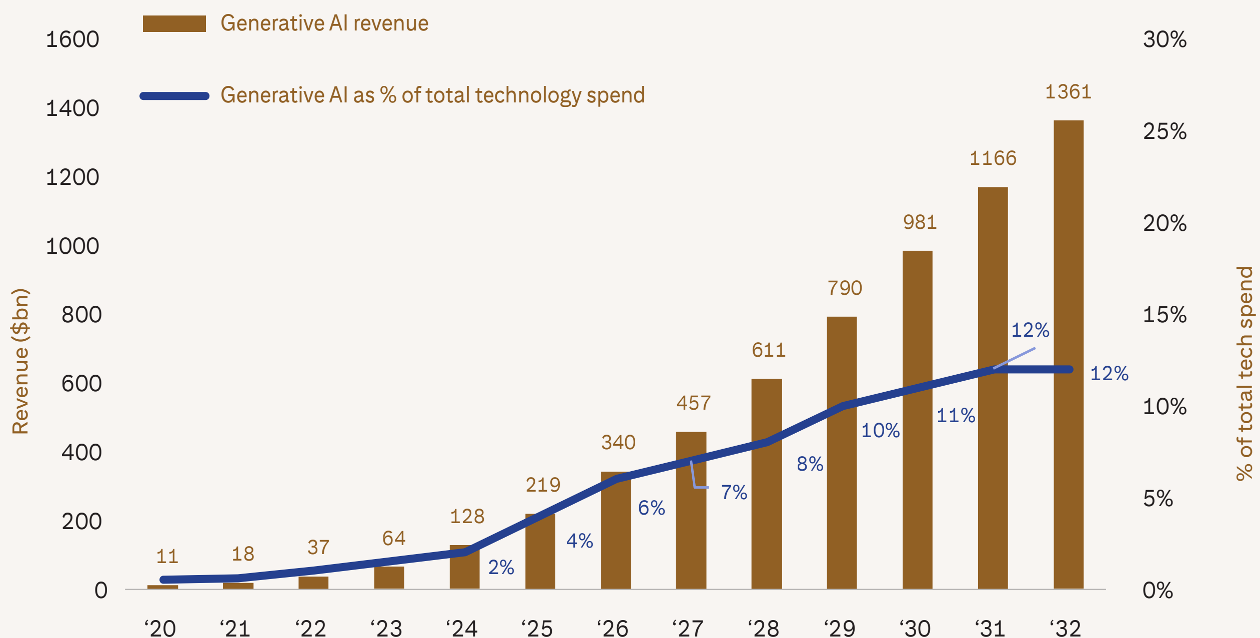
- The AI revolution continues apace but remains in its early stages
- We reiterate our conviction in AI infrastructure and select AI users such as robotics and automation, drug discovery, and cyber security
- Given AI's energy needs, we also favor electrical grid constructors and power generators near data centers
- Risks include new regulations, supply chain disruption, tech disappointments, and valuations

Artificial intelligence continues its advance. Companies globally are increasingly investing in this game-changing technology and are set to derive greater revenues accordingly in the coming years – FIGURE 1. We believe that they will have to do so to remain competitive. As such, we see AI-propelled digitization as an unstoppable trend.

In Wealth Outlook 2024, we highlighted five areas with potential to benefit from these early stages of the AI revolution. Mega-cap tech leaders – which control the data and processing power needed to build the most human-like AI models – have a head start in the race for market share. However, one of the strongest performing AI sub-themes in 2024 to date has been AI infrastructure as investors allocate to the "picks and shovels" enabling this digital gold rush. We also outlined three investable AI use cases: robotics and automation, drug discovery, and cyber security, where we also reiterate our long-term bullish case.

FIGURE 1

Global generative AI spending and revenue



Source: Bloomberg Intelligence, based on IDC, eMarketer and Statista, as of 28 Mar 2024. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events.

AI infrastructure: Picks and shovels

Our favorite AI opportunity, semiconductor equipment, has risen 41% since we highlighted it in Wealth Outlook 2024. While the largest semi equipment companies within MSCI AC World Semi & Semi Equipment Index retreated somewhat in the second quarter after mixed performance from non-AI–related segments, demand for AI-tuned chipmaking equipment is accelerating.

According to research company Gartner, 80% of companies globally will use generative AI in their business by 2026, up from under 5% in 2023.[1] The world's largest fabrication foundry in Taiwan, for example, sees AI-related revenue growing at a rate of 50% annually and expects to further expand its AI capacity in 2025, after a projecting doubling thereof in 2024.[2]

Given the chip supply shortage, many countries are racing to revitalize domestic semiconductor manufacturing by increasing subsidies to leading providers worldwide. The CHIPS Act in the US has announced more than $23bn in grants and up to $18bn in loans to six companies so far, including semi giants from Taiwan and Korea.

The European Union's Chips Act aims to double the bloc's global semiconductor output to 20% of world output by 2030 via a $47bn package. Japan also granted $25.7bn to attract leading players to produce in its market. We expect leading players along the AI semi supply chains to benefit most from geographical diversification in production and increased investment globally.

Surging demand for AI computational power has also been driving innovation in AI infrastructure and data centers, pointing to broadening AI opportunities. Currently, most AI compute demand comes from training of large language models (LLMs), which consume significant electricity and data.

While training-optimized chips cannot be manufactured fast enough today, investors are already debating when supply and demand may balance out. Indeed, once users complete training LLMs, computing demand will likely plummet. Inference – where trained models make predictions using live data – will likely then become a focus.

Inference computing is much more energy- and cost-efficient. Shifting demand for chips associated with different stages of computing is therefore likely, from graphics processing units (GPUs) optimized for training to application-specific integrated chips (ASICs). The largest tech companies, which are also typically the largest data center operators, are already incorporating in-house ASICs and providing AI infrastructure as a service (IaaS) to clients.

We expect next-phase beneficiaries to include more specialized semiconductor players with partnerships with leading data centers.

[1] Gartner Identifies the Top 10 Strategic Technology Trends for 2024, Bloomberg, as of 16 Oct 2023

[2] Bloomberg, as of 25 Apr 2024

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FIGURE 2

Performance and valuations of AI beneficiaries

	Return since Wealth Outlook 2024	Forward P/E	Historical forward P/E
Semi & semi equipment	36.3%	27.7	17.6
Electrical equipment	31.4%	26.5	19.3
Building materials	27.1%	21	17.8
Robotics/AI	17.6%	36	31
Healthcare tech	9.8%	66.0	122.2
Cyber Security	9.2%	26.5	27.2

Source: FactSet, data range from the publication of Wealth Outlook 2024 on 7 Dec 2023 to 23 May 2024. Indices are unmanaged. An investor cannot invest directly in an index. Index returns do not include any expenses, fees or sales charges, which would lower performance. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Electrical equipment is represented by S&P 500 Electrical Equipment Industry GIC Level 3 Index; Semi & Semi equipment by the Philadelphia Stock Exchange Semiconductor Index; Building materials by the S&P 500 Building Products Industry GICS Level 3 Index; Robotics / AI Global Robotics & Artificial Intelligence Thematic Index; Cyber Security by Prime Cyber Defense Index; Healthcare tech by ROBO Global Healthcare Technology and Innovation Index. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

More power needed to power AI

Beyond the quest for chips and computational power is the electricity needed for data centers enabling AI computing. The International Energy Agency (IEA) estimates electricity consumption could double by 2026, fueled by data centers, AI and cryptocurrency mining demand.[3] The near-term increase in data center capacity has forced electricity generators to buy more natural gas.

The two main drivers of data center electricity demand are computing and cooling. Indeed, electrical and heating, ventilation and air conditioning equipment (HVAC) manufacturers linked to data center buildout have seen share prices surge this year, similar to AI tech leaders – FIGURE 2. Especially during the AI buildout's training phase, electrical grid constructors and power generators close to data centers may keep performing well.

[3] IEA, Electricity 2024, as of Jan 2024

Chatbot wars: Too early to pick winners

New chatbots continue to enter the market. Each model, trained on its own data set, has its own personality and applications. But which one might become the "Google" of chatbots remains unclear. Given the risk of trying to pick winners at this stage, we prefer AI infrastructure until supply increases toward demand.

Navigating AI's risks

Amid rapid technological progress and strong investment performance, it is important not to overlook AI's risks. While we do not believe they are in bubble territory, high AI-related valuations leave investments vulnerable to disappointments. The latter could come from new regulations or technological setbacks. A massive cyberattack that breached the latest defenses could damage that subsector's credibility. Disruptions to supply chains from geopolitical shocks or raw materials shortages are a further risk.

Seeking AI exposure

For portfolio exposure to AI "picks and shovels," robotics and automation, drug discovery, and cyber security, we see various possibilities, including actively managed strategies. For suitable and qualified investors, capital markets strategies may enable more focused and even bespoke exposure to individual sub-themes within AI, while seeking enhanced upside or income.

As in prior technological revolutions, we expect a next generation of leaders to be incubated and developed in the well-established technology venture capital, growth and private equity ecosystem. Alternative investment strategies targeting next-generation solutions in software and computing may also offer a way for suitable and qualified investors to get in early into this next phase of digitization. As the AI revolution broadens in the years ahead, we believe potential opportunities may do likewise.

Cleaner and smarter: How AI can help fuel the energy transition

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Investment Strategist and Senior US Economist

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Head of Sustainable Investing

The energy transition is vital to prosperity and wellbeing. We believe AI can further enable this shift, with implications for investors in multiple sectors.

Major economic advances have always required great inputs of energy. Today's revolution in artificial intelligence (AI) is no exception. While data and advanced semiconductors are often cited as the lifeblood of AI, this transformative technology is also a voracious consumer of electricity.

As this digital leap forward gathers pace – see **AI-propelled digitization** – related energy consumption seems set to rise rapidly. The large data centers that are integral to deep learning and large-scale data processing constantly guzzle power as they crunch information and cool themselves down. Meanwhile, making their semiconductor components is one of the most energy-intensive manufacturing processes of all.

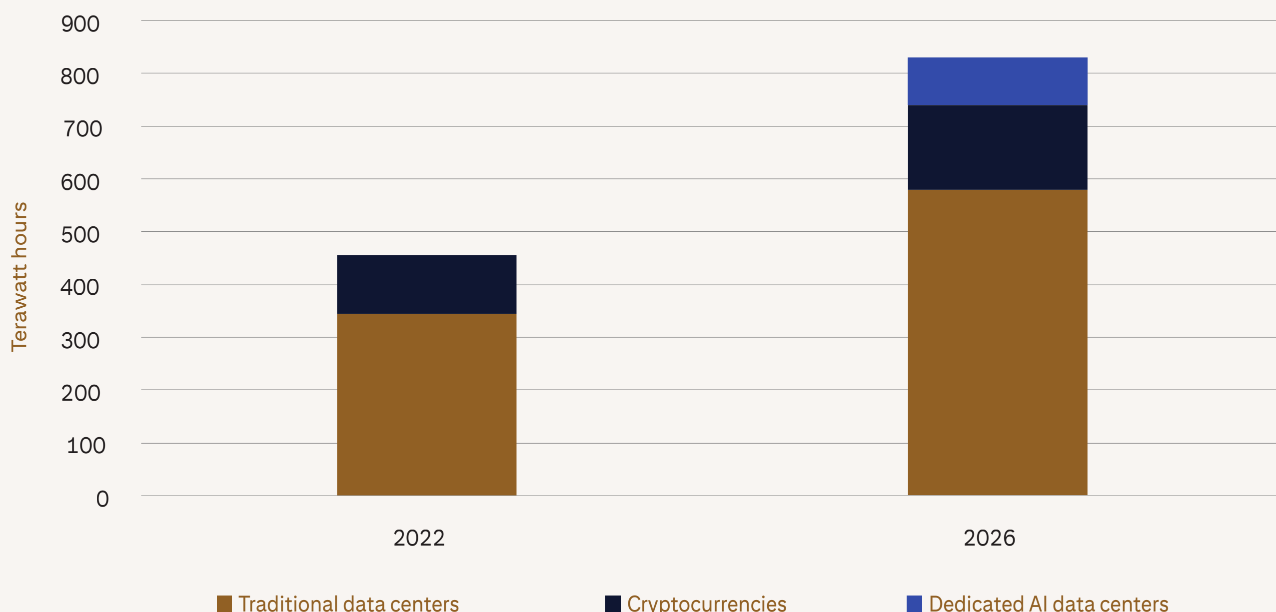
In 2022, the combined demand of traditional and AI-dedicated data centers and cryptocurrencies may already have hit 2% of global energy demand. This could conceivably double by 2026 – FIGURE 1.

In our view, rampant electricity demand from AI is yet another reason in favor of the global transition from fossil fuels to clean energy. We have long argued that this shift is vital in the fight against climate change and to bolster energy security in an uncertain world. Given its vital importance – and the growing commitment of governments and society to its acceleration – we regard the energy transition as an unstoppable trend.

Rather than clean energy merely helping to power the AI revolution, however, we believe the AI revolution can help advance the energy transition.

FIGURE 1

AI set to crank up the power



Source: IEA and others via Statista, as of Apr 2024. Chart shows electricity demand from data centers, artificial intelligence data centers, and cryptocurrencies worldwide in 2022, with a forecast for 2026 (in terawatt hour, an energy unit equivalent to one trillion–watt hours). All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events.

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Harnessing AI in the energy transition

As in many other industries, AI has many existing and potential applications in clean energy. For example, it can analyze sun and wind patterns to help select the choice of location for new solar capacity and wind farms, while considering the impact on the surrounding area.

In the same way, AI can help predict supply and demand, reflecting weather forecasts and likely consumer needs. With such real-time information, energy producers can seek to integrate variable flows of renewable energy into the grid. Monitoring grid activity can also help anticipate faults and minimize downtime.

It is not just clean energy–related companies that can put AI to positive effect, though. Traditional energy players – such as upstream oil and gas exploration and producers – are increasingly using AI to enhance efficiency and reduce their environmental impact. Advanced data analytics are helping to identify likely new supplies, manage flows through pipelines, troubleshoot, track emissions, and better integrate with renewable energy supplies.

For energy consumers, AI has many possibilities too. Using live insights into world electricity prices, tech giants such as Google now switch activities between their facilities globally to minimize costs. Increasingly, we expect electricity consumption to occur where it is most abundant and cheapest at any given moment. Electricity effectively thus becomes a globally mobile commodity, overcoming the challenges of intermittent sun and wind.

Both homes and commercial premises will deploy smart devices to adapt their own energy usage. Many cutting-edge buildings already regulate their heating and cooling in this way, analyzing temperature conditions and occupancy patterns to do so. And as battery technology and on-site renewable generation spread, AI can help to determine when to store electricity, sell electricity to the grid or draw it therefrom.

In combination, these and many other developments can enable a future where an increasing proportion of cleaner energy is used and with greater efficiency.

The risks around the energy transition

We believe the greatest risk in relation to the energy transition is that of insufficient action. More extreme weather events, flooding and wealth destruction would be the likeliest result.

As critical as the transition is, though, it comes with risks of its own. For example, geopolitical standoffs could disrupt access to vital raw materials or vital technologies, stalling the necessary adoption of clean energy. And the more digitally dependent our energy infrastructure becomes, the greater the target it may become for hackers.

Populist movements – which often rail against the initial expense and upheaval of reducing fossil fuel use – could also hinder uptake in some countries. This may be especially true in regions where the local economy depends heavily on traditional energy extraction. Ultimately, though, we expect technological progress and falling costs to hold sway.

FIGURE 2

Transition sectors' performance and valuations

	Last 12-month price return	Forward P/E	Historical average forward P/E ratio
Global clean energy	-28%	17.0	20.8
Global copper miners	22%	17.0	23.4
Developed market traditional energy	12%	11.1	21.4

Source: Bloomberg, as of 30 Apr 2024. Copper miners are represented by the Solactive Global Copper Miners Index; clean energy by MSCI Global Energy and traditional energy by the MSCI World Energy Index. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

Positioning for the energy transition

The intersection of two unstoppable trends – the energy transition and digitization – could be transformative for many industries and companies, in our view. We therefore seek long-term exposure in core portfolios.

While electricity may prove to be the greatest enduring cost of the AI revolution, this does not make us want to invest in its providers. Instead, we prefer companies that are creating or deploying products that boost energy efficiency. These span renewable energy technology specialists, those with energy efficiency–enabling AI solutions, and their beneficiaries, publicly traded and private.

While our longer term focus is on renewables, these considerations apply to traditional energy producers and consumers. We like Western oil & gas producers and pipelines in the near term given geopolitical risks and favorable pricing trends.

With the rollout of both AI and renewable energy infrastructure, we see potential from copper, a fundamental input in both. Indeed, we note that copper miners have outperformed global clean energy producers since the start of 2022 – FIGURE 2.

Amid high interest rates and a supply glut of renewable solutions emanating from China, renewable energy equity performance has disappointed for some time. Once interest rates begin falling, though, we believe this trend may reverse.

We see a compelling case for regularly assessing portfolio exposure to polluting, energy-intensive businesses, especially those currently reliant on fossil fuel sources. The environmental damage they may cause and the potential regulatory changes they may encounter represent an additional risk to investments in those companies. We would instead consider seeking exposure to firms committed to energy-efficient practices and the use of clean energy.

Healthcare's improved prognosis

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Given attractive valuations, compelling innovations, and increasing demand, we continue to favor short- and long-term exposure to healthcare.

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Considerations

- Aging populations, rising wealth, and innovation could drive healthcare's earnings over time
- AI has a wide array of applications in the sector, albeit with barriers to implementation
- Among the risks we see are political backlashes, cyberattacks, and higher-for-longer interest rates
- We favor selective exposure to healthcare via specialist actively managed strategies

Are the global healthcare sector's vital signs strengthening? After struggling in 2023, its performance has perked up somewhat in 2024.

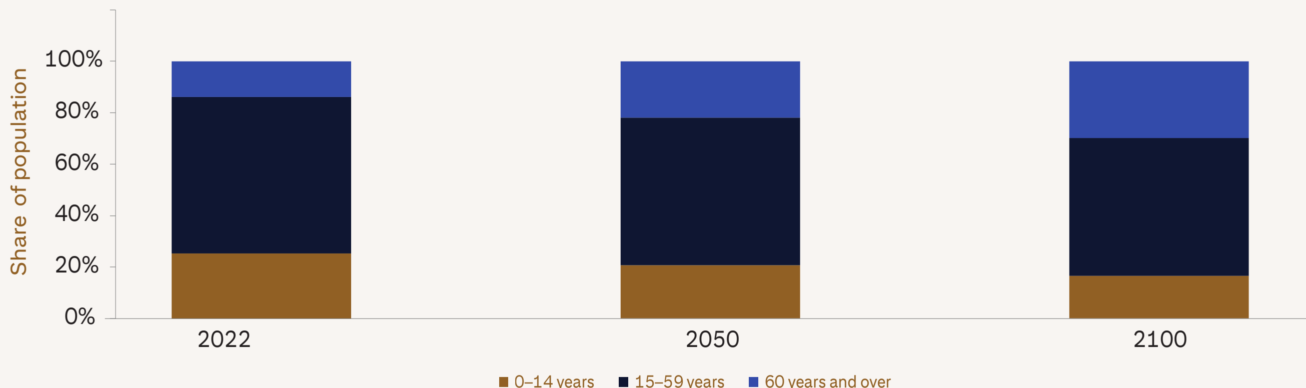
The MSCI World Health Care Index, for example, has broken upward, hitting an all-time high. While this is still less than the broader equity market has achieved, we see a healthier path for returns ahead.

In Wealth Outlook 2024, we argued that the sector was due for recovery – see **For investors, healthcare innovation is on sale**. We therefore remain tactically overweight in our asset allocation. However, our conviction goes well beyond any immediate prospect of recovery. It is the sector's long-term potential that makes it most appealing for portfolios, in our view.

We believe demand for healthcare is set to keep growing. The world's population continues to age rapidly – FIGURE 1. By 2050, the over-60s may make up 22% of all those alive, up from 13.9% in 2022. Combined with the effect of increasing wealth, this points to greater spending on getting and keeping well. By the start of the next decade, global spending on healthcare could potentially rise from around 6.05% of gross domestic product (GDP) to a new peak of 6.26%, with much higher figures across developed economies.[1]

FIGURE 1

The world's swelling senior cohort



Source: Statista, as of Apr 2024. Projected distribution of the world's population from 2022 to 2100, by age group. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events.

[1] Statista, GDP share of health expenditure worldwide from 2014 to 2029, as of Apr 2024

Addressing the needs of an older and wealthier population will present challenges. Already, the healthcare industry is suffering from personnel shortages. We expect the response partly to involve a shift from reactive care – i.e., tending to the sick – to proactive care – i.e., stopping people from falling sick – FIGURE 2. We also anticipate technology to substitute for labor.

The power of innovation in healthcare

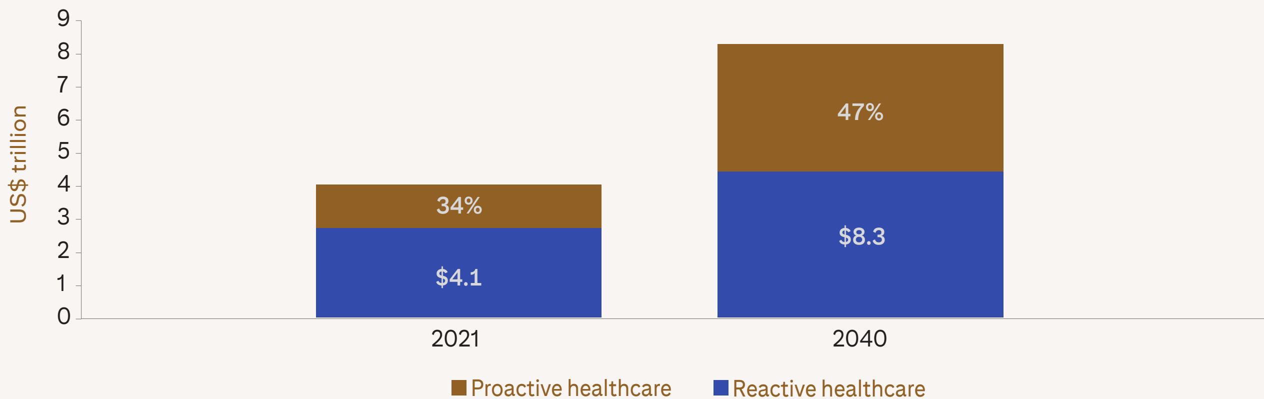
Innovation will be a key driver of both these potential shifts, in our view. And a big part of this is likely to be the application of artificial intelligence (AI). We believe this applies throughout this broad and diverse sector, from the providers of health insurance and care plans to those that discover and produce treatments to equipment makers.

Take drugmakers, for example. AI could speed up the process of predicting protein shapes and how biomolecules will behave. This could potentially cut drug discovery time by 70% as well as accelerating clinical trials.[2] Currently, it takes an average of 10.5 years to get a product from first trials to approval in the US. Getting successful new products to market quicker would be a win for patients and likely spur greater profitability.

Administration is another field where AI could make inroads. Currently, as much as 15% to 35% of healthcare costs may be admin-related. Machine learning could increasingly assume many repetitive but vital chores – such as claims processing – eliminating as much as a quarter of administration expenses while also saving time.[3]

FIGURE 2

Prevention each day may keep the doctor away



Source: Deloitte Consulting – Navigating the Future of Health™ in an era of change, as of Apr 2024. Chart shows the expected shift from reactive to proactive in US healthcare between 2021 and 2040, expressed in inflation-adjusted US dollars. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

[2,3] Citi Global Insights - Smart Thinking on AI in Health, as of April 2023

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While many innovative companies are exploring or actively integrating AI, the full benefits will likely take time to achieve. This is not for want of potential AI solutions, however. Instead, we see patient suspicion, clinical conservativism, privacy, and legal liability considerations as among the main obstacles.

Risks to our prognosis

Despite the favorable combination of rising demand and advancing innovation, we acknowledge risks to our positive prognosis for healthcare.

Regulatory pressures in relation to pricing or process will remain a challenge for much of the sector. The runup to November's US presidential election could see discordant rhetoric against care providers and drugmakers, for example. However, with other issues more pressing for voters, the focus on healthcare reform is expected to be muted this time around.

The ongoing digitization of the sector, while positive for patient and investor outcomes, also increases the risks of cyberattacks. Such malicious incidents can lead to reputational and financial damage to target companies.

In the immediate term, further postponements of expected US interest rate cuts could also weigh on parts of the sector's performance.

Our view for portfolios

We reiterate our case for exposure to healthcare in core portfolios depending on client suitability and objectives. First, we see the potential for outperformance over the next twelve months or so. Indeed, we note that the sector has returned 3.5% on average in US presidential years since 1992, slightly ahead of the S&P 500 Index during those periods. Overall, we note that US healthcare trades at a slight discount to the broader market, while global healthcare is at a slight premium – FIGURE 3.

However, it is the longer term prospects that we find most attractive. As well as growth, healthcare has often displayed defensive characteristics, holding up better in times during economic and market downturns. Innovation and rising demand for healthcare constitute an unstoppable trend, in our view.

Given the often highly technical nature of healthcare companies, we believe that actively managed strategies from specialist managers may offer an appropriate way to access the sector.

FIGURE 3

Portfolio treatment at a reasonable price

Sector	Return since Outlook 2024	Forward P/E	Average forward P/E since 2000
Pharmaceuticals	15.1	18.1	14.3
Equipment & supplies	11.4	24.8	19.6
Providers & services	0.7	14.8	14
Biotech	8.7	20.7	17.1
Life sciences	13.7	29	21.6
HC technology	4.7	30.7	32.8
Global healthcare	10.9	19.4	15.5

Source: Bloomberg, as of 23 May 2024. Pharmaceuticals is S&P Pharmaceuticals Select Industry Index; Equipment & suppliers is MSCI Health Care Equipment & Suppliers Index; Providers & services is MSCI Health Care Providers & Services; Biotech is S&P Biotechnology Select Industry Index; Life sciences is S&P 500 Life Sciences Tools & Services Industry Index; Healthcare technology is MSCI Health Care Technology Index; Global healthcare is MSCI World Health Care; Global equities is MSCI AC World; Forward PE is the index's current price level divided by its consensus forecast earnings per share, average forward PE since 2000 is mean of the same metric since 2000. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees, or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary.**

Intensifying polarization: Navigating risks and potential opportunities

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The US and China remain locked in a multidimensional strategic rivalry. We expect them to move yet further apart, creating challenges but also diversification for global investors.

Considerations

- We believe polarization between the US and China is set to reshape global trade, geopolitical relations and many investments
- Both are seeking to gain an edge in crucial technologies and create obstacles for the other
- Among the potential opportunities we see are supply chain diversification beneficiaries, copper-related investments and tech leaders in the US and China
- A G2 world is a riskier place, with the potential for supply chain shocks and some heightened security risks
- One risk is further near-term trade restrictions from the US that could put downward pressure on the Chinese yuan with spillovers to broader asset markets

Are relations between the world's two foremost powers warming up?

In 2024, there have been signs of détente amid the fierce strategic competition between the US and China. Following their November 2023 summit meeting, Presidents Xi and Biden held their first phone call in almost two years.

Likewise, China has hosted visits from Secretaries Blinken and Yellen, the latter ending her trip by declaring relations to be on a "stronger footing" and denying that the US was seeking to decouple economically from China. In the background, working parties from both sides are collaborating on common responses to challenges spanning financial markets, money laundering, and terrorist financing.

Meanwhile, the odds of a US-China conflict over Taiwan have receded, in our view, after the island's pro-independence party narrowly won the presidency but lost the legislative branch in January elections.

The US-China struggle persists

Despite the recent improvement in the mood music, however, the G2 powers remain deeply polarized. Their struggle continues unabated on many levels. We have long argued that G2 polarization has far-reaching implications for the world economy, trade, finance, technology, regional and even global stability. Inevitably, this also affects investors' portfolios and will continue to do so. For these reasons, we regard G2 polarization as an "unstoppable trend."

Why China and the US will keep moving apart

Our base case is not that the present state of polarization merely persists, though. Instead, we expect divisions between the US and China to worsen long before they improve. We believe this to be the logical consequence of both sides' existing policies.

Start with technology. Each side is trying hard to outdo the other with their own advances but also by obstructing the other. The US moved in April to force the Chinese owners of the TikTok social media platform – which has 170 million US users – to divest its ownership stake or be banned from the US. Shortly beforehand, the Chinese authorities had forced Apple to restrict Chinese users' access to various apps, having already prohibited government employees from using iPhones for work matters last year.

— We expect *US-China divisions* to worsen long before they improve

While not that important in themselves, such developments are part of a much bigger picture. In March, China's foreign minister spoke about the "bewildering levels of unfathomable absurdity" of US constraints on his nation's trade.[1] This followed US efforts to coax its allies to further restrict semiconductor technology sales to its principal rival.

[1] Bloomberg, as of 6 Mar 2024

As well as retaliatory tariffs, China deploys nontariff barriers such as administrative measures, inspections, and quotas in relation to US imports. US businesses operating in China frequently complain of unfair treatment and policy uncertainty, with consequent reluctance to make new or additional direct investments there.

The scope for further measures from each side is significant. China's state-subsidized drive for dominance in various key technologies including solar, electric vehicles and batteries has already produced oversupply and is stoking fears of deflation and unfair competition in the US and elsewhere. Further US restrictions on such exports could invite retaliation. The Chinese authorities have already restricted exports of rare earths processing technology, a field it dominates.

What will the US presidential election mean for relations with China?

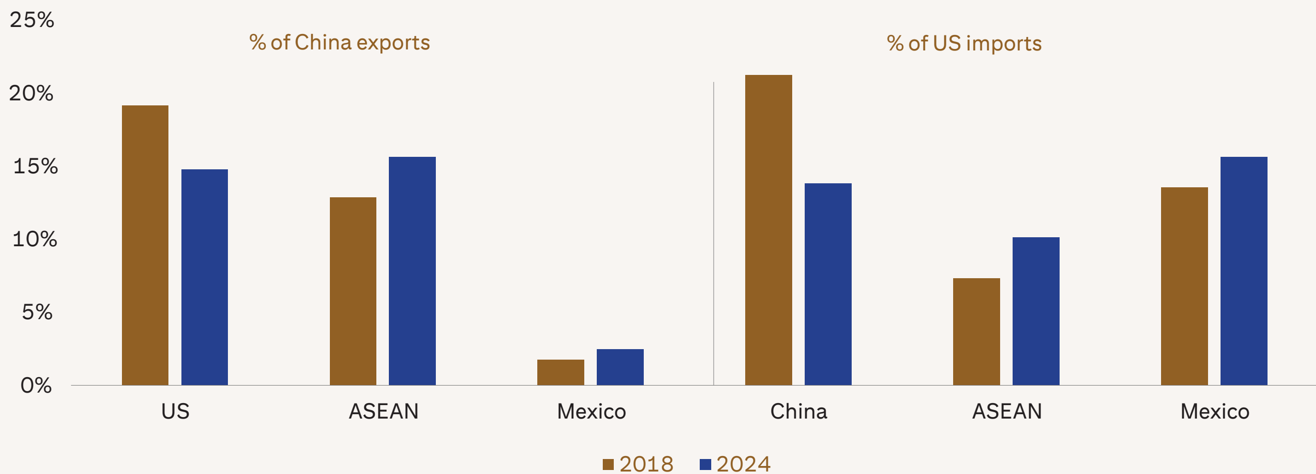
Whichever candidate wins November's US presidential election, toughness on China is likely to persist. Ahead of the contest, rhetoric and perhaps policy could sharpen, as this plays well with an electorate that polling consistently shows to be highly suspicious of China.

Donald Trump's vision of US-China trade relations is in some ways the harsher, involving as much decoupling as possible compared to President Biden's selective but nonetheless substantial version. The former has promised to put a 60% tariff on all Chinese imports and a blanket 10% tariff on those from everywhere else. This could impart at least an initial shock to the system, although exporters on both sides have become adept at sidestepping such levies.

In any event, we expect policy measures that reinforce US economic security by onshoring and "friend-shoring," as well as evolving restrictions on Chinese imports and access to key technologies. This drive to bolster US economic security is already boosting trade with Mexico, Thailand, Korea, and Vietnam, while denting that with China – FIGURE 1. The US has also made several industrial policy steps to increase its competitiveness in some of the same markets China has eyes on.

FIGURE 1

US shifting trade toward partners and neighbors



Source: Haver Analytics as of April 30, 2024

Positioning portfolios amid polarization

Our G2 thesis does not call for picking sides via investment portfolios. Instead, we should seek to adapt portfolios to the deepening rivalry and its consequences. Our emphasis is thus on building globally diversified allocations that include tech leaders in both the US and China, agile players that serve the two sides of the G2 divide, and potential beneficiaries of supply chain and trade shifts.

As rival supply chains continue developing, we seek to invest where the duplicative tech production capacity is emerging. This includes Taiwan, Mexico, Japan, and Korea. India, meanwhile, has taken over from China as Asia's new growth engine. We note that most of these markets have been among the world's strongest performing since early 2023 – **FIGURE 2**.

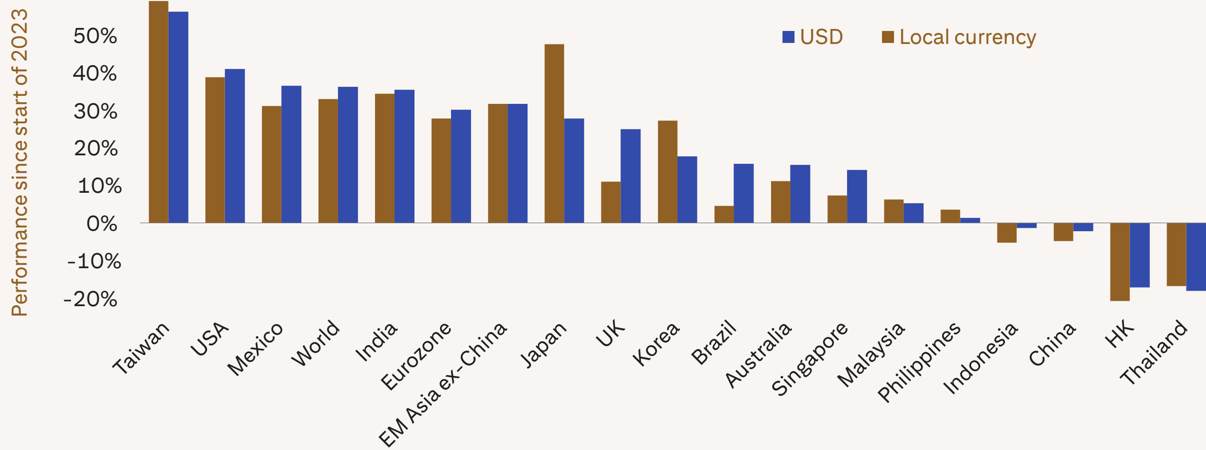
In Southeast Asia, we favor Indonesia, which may benefit from supply chain diversification in more traditional industries and as a commodity producer.

Of course, bringing US supply chains onshore or into friendly countries can incur higher labor costs. Given this, we make the case for manufacturers that integrate robotics and AI-enabled logistics.

Besides equity exposure, we see potential for suitable and qualified investors in industrial real estate in North America and Europe. Manufacturers and distributors in those regions will require many more strategically located production facilities and warehouses rated "class A" – the newest and best-appointed category – as they seek to bolster their supply chains.

FIGURE 2

Supply chain beneficiary markets' performance



Source: Bloomberg, as of 24 May 2024. Indices are unmanaged. An investor cannot invest directly in an index. Index returns do not include any expenses, fees or sales charges, which would lower performance. They are shown for illustrative purposes only and do not represent the performance of any specific investment. **Past performance is no guarantee of future results. Real results may vary.**

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We see copper in likely high demand over the coming decades, being a key component in electric vehicles, renewable energy infrastructure, and batteries. Supply is likely to be tight – FIGURE 3 – while there are no substitutes for now. As AI use accelerates – see **Cleaner and smarter: How AI can help fuel the energy transition** – we expect an upsurge in clean energy demand, putting further pressure on copper supplies.

While G2 polarization calls for long-term portfolio exposure, near-term cyclical forces are also at work. Agile players and other beneficiaries may see rising profits as global manufacturing improves further and as monetary conditions potentially ease in late 2024 and into 2025.

Given the cross-border complexities of G2 polarization and its potential beneficiaries, we believe that actively managed investment strategies and, for suitable and qualified investors, capital markets strategies may be a good way to allocate to this theme.

The many risks of G2 polarization

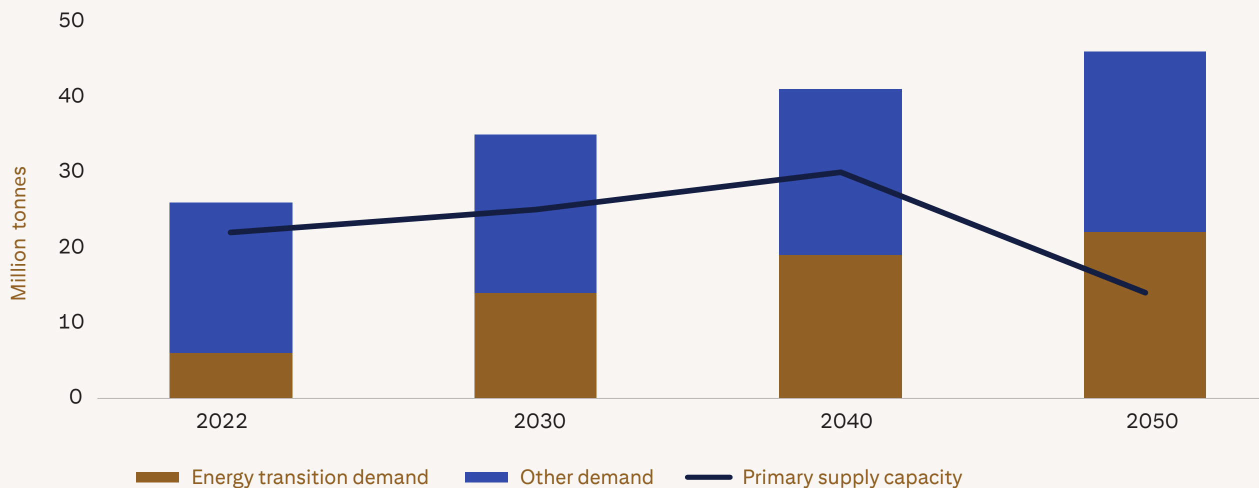
While we see G2 polarization as a source of potential opportunities, we acknowledge the many risks involved. Although not our base case scenario, a severe escalation of tension between the two powers could see dislocations to global supply chains, lower growth, and financial market volatility.

Chinese overproduction risks exporting deflation, which would likely further elevate geopolitical tensions, not just in the US but also Europe and emerging markets such as Chile.

The Chinese yuan may be the next victim of intensified G2 polarization. If additional sanctions and protectionist policies materialize, China's central bank may allow the yuan to weaken further. A previous episode of yuan depreciation in 2015 led to widespread corrections in global equities for a short period. Global investors might seek to hedge yuan exposure and other portfolio risks if tensions flare.

FIGURE 3

Growing copper supply shortage



Source: Global X, Charting Disruptions 2024. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events.

Regional previews

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Asia: A Chinese comeback could further boost the region

Ken Peng
Head of Asia Pacific Investment Strategy

With early signs of a near-term turnaround in China, its bargain-priced equities could regain more normal valuations. We see continued upside potential in other regional markets meanwhile.

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Considerations

- We have increased our allocations to China and broader Asian emerging markets
- Albeit having unique risks for certain foreign investors, Chinese equities may outperform
- We remain constructive on Japanese and Taiwanese equities
- Asian local currency bonds may offer better performance once Fed easing begins
- Low yielding emerging currencies in Asia may strengthen more when US rates come down

China's economy and markets have begun to look healthier in 2024, after the toughest conditions in two decades. First quarterly GDP growth of 5.3% year-on-year beat expectations, as did trade, while consumption rose moderately. Policy stimulus is now being applied to boost real estate and consumer demand, while regulations are being tweaked to incentivize companies to focus more on shareholder returns. We raise our growth forecast to 5.2% for 2024 and 4.8% for 2025. A recovering Chinese economy is likely positive for the expansion regionally.

Admittedly, China still faces many structural impediments to growth, particularly its declining population and complicated business environment. These will require serious attention from the authorities to sustain longer term growth.

For our other favored markets, macroeconomic developments remain positive. Japan continues to experience elevated wage growth and inflation, which are boosting company revenue and earnings expectations. The Bank of Japan is likely to take further steps to normalize monetary policy. However, its slow pace has minimally impacted economic and earnings growth.

Across the region, we see Southeast Asia as likely to see stronger growth in 2025 – **FIGURE 1**.

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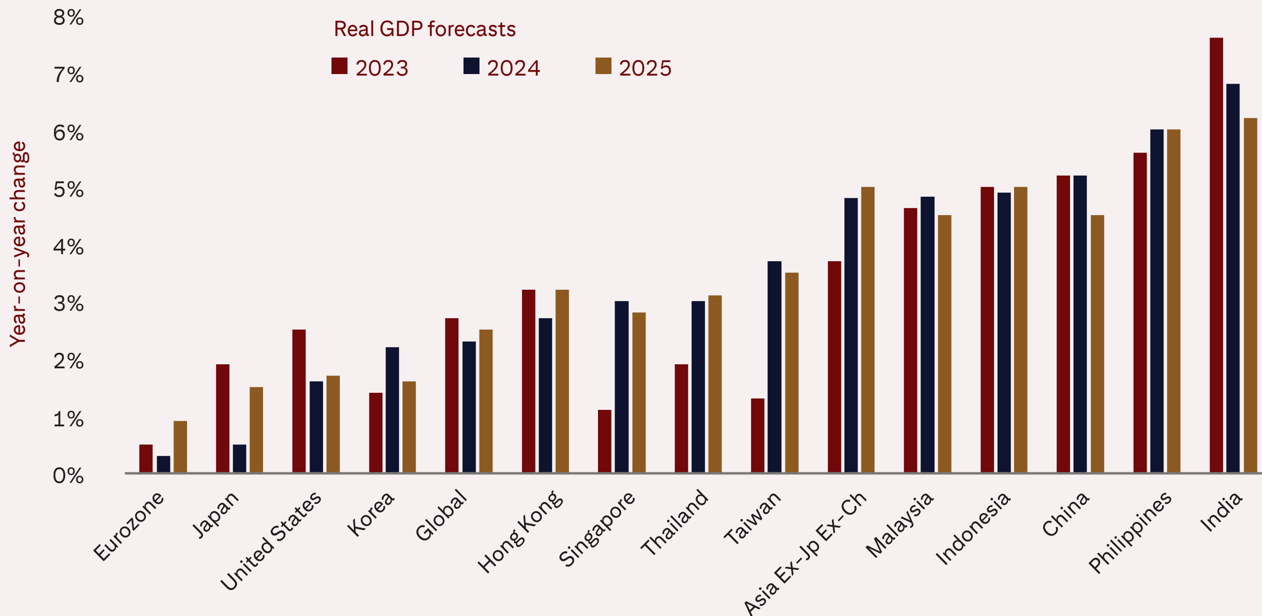
FIGURE 1

Growth to rise in the East?



Source: Citi Research Global Economic Outlook & Strategy, as of April 2024. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events

Equities

Chinese equities have broken out of their three-year bear market trend. Policies to address housing oversupply and debt issues, state-backed purchases of Mainland and Hong Kong equities, fading downward pressure on the Chinese yuan, and data security clearance for electric vehicle makers to develop full self-driving vehicles have boosted sentiment.

The most potentially impactful policy was a set of new rules to govern securities markets. For the first time, these included measures to improve investor returns, such as requiring listed companies to lift dividends and buybacks or be moved to a “special treatment” board. A similar move by the Tokyo Stock Exchange led to higher valuations.

Further signs of progress may come from positive earnings forecast revisions as well as signals of further policy steps at the Third Plenum, a major meeting of the top ruling party officials scheduled for July, particularly on real estate, tech regulation, taxation, and potential demand stimulus.

Our favored markets have performed well year-to-date. These included reflating and reforming Japan (up 7% year-to-date in US dollar terms), and AI-driven Taiwan (18%). The potential for lower US interest rates and a weaker dollar could boost regional equities broadly. Among regional sectors, we remain most positive on IT, telecom and consumer discretionary.

The US-China relationship remains a key risk. However, the previous rounds of significant tariffs under the Trump administration did not significantly hurt the Chinese economy. The real culprits were the property crisis and domestic demand decline, which we believe have bottomed. Chinese businesses are also diversifying their markets and supply chains to mitigate trade risk. Other risks to the region such as additional G2 protectionism – see **Intensifying polarization: Navigating risks and potential opportunities** – could also drive down the Chinese yuan. It is still too early to tell when and how tariffs may escalate and impact China's economy and markets.

Fixed income

Asian fixed income has been largely resilient despite rising US rates in 2024 to date. But throughout, Asian investment-grade US dollar bond yields were 10–20 basis points (bps) below those in the US of similar duration and rating. This has eroded such bonds' appeal to US dollar-based investors globally.

Local currency bonds may also offer interesting potential, especially if the US dollar weakens in the second half as the Fed approaches its rate-cutting cycle. Inflation has been subdued in Asia ex-Japan, with average consumer price readings already below 2.5%. Even countries with previously sticky inflation like India and Philippines have benefited, while the likes of China and Thailand are in deflation. Real five-year government bond yields in Asia are 80bps higher than that in the US. So, once the Fed cuts, Asian rates may fall, boosting local bonds. The key risk with local currency bonds is mainly a resurgence in the US dollar, which could occur if protectionism toughens.

Currencies

All major Asian currencies have weakened against the US dollar year-to-date, led by Japan's yen, down 10%. EM Asia has held up better, with Indian rupee roughly flat, while the Chinese yuan only lost 1.8%, as the Peoples' Bank of China took measures to stabilize the currency. Low-rate and less managed currencies like the Thai baht, Korean won, and Taiwanese dollar lost the most among Asian emerging markets.

Asian central banks are leaning toward easing but are likely to wait for the Fed before acting. If the Fed begins to cut rates, low-yielding currencies will probably react most, as those countries have little room to cut rates and are most sensitive to changes in the difference in interest rates with the US. The higher yield available from holding dollars makes the US currency more attractive to many investors. Meanwhile, those with high real yields may seek to lower them to support their economies and may not move as much against the dollar.

Japan and Australia may tighten policy, but likely limited in scope. While both may strengthen when the US dollar weakens, the yen may have greater upside potential, given that the dollar's greater interest rate premium over the yen has much more scope to narrow.

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Europe: From recessionary conditions to gradual recovery

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With the growth outlook modestly improving, we see selective opportunities in regional equities and fixed income.

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Considerations

- Europe is set for slow recovery this year and more of a pickup in 2025
- In equities, we favor technology, real estate, and industrials
- Rate cuts in Europe and the UK may benefit local intermediate fixed income, but euro and sterling may also come under pressure
- Risks to our outlook include stalling Chinese growth and another inflationary shock

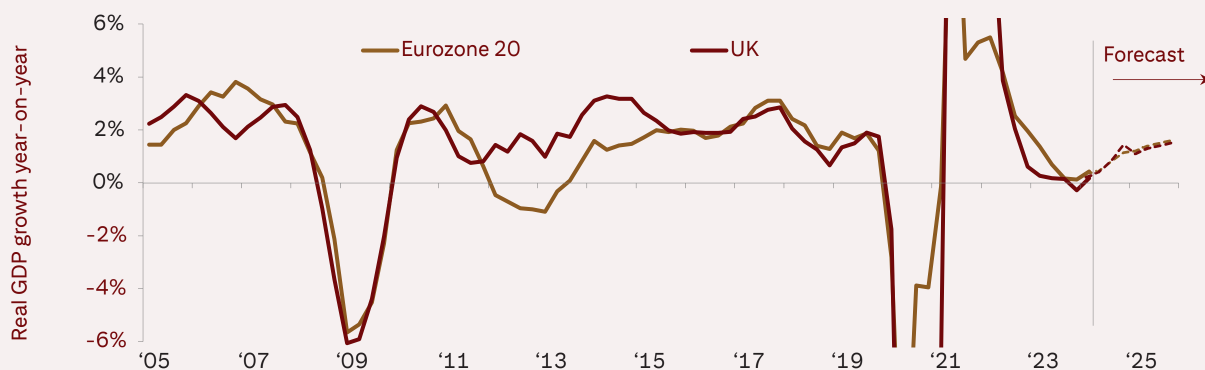
Having slightly contracted in late 2023, European economic activity has stabilized in early 2024. Destocking and net trade subtracted from growth, but domestic demand has proven resilient. This is despite the fading effect of government support measures aimed at offsetting higher energy prices following the Ukraine invasion.

Forward-looking sentiment measures point to further increases in GDP growth perhaps as soon as in the second quarter of 2024. With inflation continuing to moderate, central banks are beginning to shift away from their hawkish rhetoric, opening the door to possible rate cuts in 2024.

We expect a slow recovery for the rest of 2024 and likely acceleration in 2025 – FIGURE 1. The rebound in GDP will likely be broad-based. Households should benefit from real disposable income gains, while firms may increase capital expenditure plans as their order books improve.

FIGURE 1

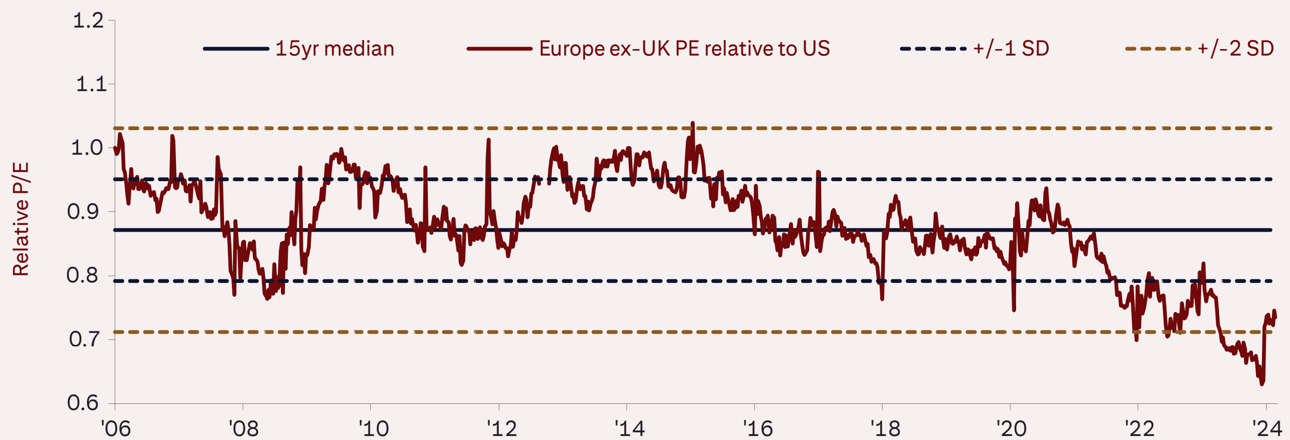
Modest recovery following mild contraction



Source: Eurostat, Office for National Statistics and Citi Global Wealth Investments, as of 3 May 2024. All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events.

FIGURE 2

European equities are cheap versus US



Source: MSCI, Bloomberg and Citi Global Wealth Investments, as of 3 May 2024. Chart shows the relative forward price/earnings ratio between the MSCI Europe ex-UK Index and MSCI USA Index, the median relationship since 2006 and two standard deviations either side of the median. **Past performance is no guarantee of future returns. Real results may vary.** Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

Big negative supply shocks – disrupting global supply chains and lifting commodity prices – would challenge our assumptions. Such a scenario would damage confidence and stoke inflation, at least temporarily. A key risk for 2025 is a potential wave of tit-for-tat tariff increases between the US, Europe, and China.

Equities

As of 22 May, the Stoxx 600 index has performed strongly, up 8.5% in US dollar terms. On 22 May, we upgraded European ex-UK equities to an overweight position against a backdrop of improving global growth, moderating inflation, softening wage growth and the likelihood of ECB rate cuts.

Fundamentals favor stronger European ex-UK earnings-per-share (EPS) growth, up 8.7% and 10.8% in 2024 and 2025 respectively. Profit margins should remain elevated, supported by slowing inflation and moderating wage growth. Investors may be rewarded as firms extend their share buybacks, potentially boosting return on equity.

Absolute European ex-UK forward price to earnings ratio is at fair value and, relative to the US, is more than one standard deviation below the 15-year average.

We favor cyclical over defensive sectors. Our preferences are technology, real estate, and industrials. Risks may come from slowing Chinese growth and higher-than-expected global inflation delaying rate cuts.

Fixed income

Slower domestic demand growth in Europe, stricter government spending rules, and more muted inflationary pressures than in the US bolster the case for European investors to have exposure to their respective nations' government bond markets.

We expect the European Central Bank (ECB) and Bank of England (BoE) to cut policy rates in June and August respectively. We believe this may generate potential returns for euro- and/or sterling-based investors who extend through to medium-term duration.

Over the next 18 to 24 months, we estimate that the ECB policy rate could fall by around 200bps from 4% to their equilibrium level. For the BoE, rate cuts could amount to as much as 275bps to 2.5%.

Currencies

Amid disappointing European growth and US strength, European currencies wilted somewhat in early 2024. Geopolitical tensions further boosted the appeal of the US dollar. The euro, sterling and Swiss franc may fall further in coming quarters, as their respective central banks potentially cut rates earlier than the Fed, making the US dollar look yet more attractive in yield terms. Nevertheless, we expect the dollar to weaken toward its long-term average.

Latin America: Lackluster growth to persist

Jorge Amato
Head of Latin America Investment Strategy

Further economic progress relies on global growth but also improving local fiscal discipline. Greater equity valuation discounts are likely needed to entice investors.

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Considerations

- Latin America's below-potential economic growth is set to continue into 2025, with inflation easing but at a slower pace
- A dip in Latin American equities may entice more international investors into these markets
- While many regional bonds offer high yields, they face price risk from volatility in US bonds
- Regional risks include a worsening of global conditions and failure to make fiscal progress

Latin America is on track for below-potential real GDP growth of around 2% in 2024.[1] Regional inflation of around 4.1% continues to slow, albeit at a slower pace.[2] As such, some central banks are suggesting they may take longer to cut interest rates or to reach their end-of-cycle rate targets. Consensus forecasts for 2025 are for growth around 2% and inflation around 3.6%.[3]

The main policy focus for most countries is fiscal, with budget deficit reduction proving challenging. Meanwhile, strong commodity prices are swelling exports, while the US drive to relocate supply chains nearer to home is boosting inward investment.

The Mexican general election of 2 June saw Claudia Sheinbaum, President Manuel Lopez Obrador's anointed successor, emerge victorious. We believe Ms Sheinbaum may prove more pragmatic than her predecessor.

In Argentina, President Javier Milei's heavy spending cuts have produced the country's first quarterly balanced budget since 2008. The next stage of his complex stabilization program will require skillful negotiation with political parties over key structural reforms to find a path to economic growth. There are some early signs of progress here, but much work lies ahead.

Challenges for the region for the coming months include uncertainty over November's US elections, domestic fiscal policy, the fragmentation of global trade, any slowing of economic activity, inflation, and interest rates and commodity prices.

[1-3] Bloomberg, as of 10 May 2024

Equities

After 2023's 33% total return for the MSCI Latin America Index, regional equities have been more mixed in 2024.[4] While the same benchmark is down 6.7% year-to-date, the dispersion between country returns was significant. Brazil and Mexico have fallen 14.6% and 1.5% respectively.[5] By contrast, Peruvian equities are up nearly 20% and Argentina up almost 28%.[6] Energy and metals–related sectors and companies have outperformed as the prices of crude oil, gold, nickel, zinc, and copper have gained between 10% and 25%,[7] boosting earnings.

So far, we have stayed tactically neutral on Latin American equities. On the one hand, valuations look attractive compared to their past averages. On the other, investors will likely want to see more progress on structural reforms and greater risk appetite before raising allocations. Should the MSCI Latin America Index dip from 2500 to 2300-2400, we believe the risk/reward ratio might become more tempting.

Fixed income

Latin American bonds denominated in US dollars have avoided the pain felt by other fixed income markets. The Bloomberg Latin American Aggregate Index yields close to 8.5%, with a 1.8% year-to-date total return, despite the sharp rise in US Treasury rates.[8] This outperformance, however, has been highly concentrated on Argentine bonds, whose prices have risen 25% to 45%.[9]

We believe attractive nominal yields across the credit spectrum represent potential opportunity. For example, Latin American corporate and sovereign bonds issued by some of the world's largest commodity exporters have solid fundamentals and offer attractive yields.

Increased currency volatility and central bank easing cycles are reducing the appeal for international investors of buying local currency bonds in the hope of both yield and foreign exchange gains. Currency hedging may potentially assist such investors.

The main challenge for all fixed income markets will continue to be elevated volatility in US rate markets, which translates into overall risk aversion.

Currencies

Much volatility and slight declines summarize action in 2024 so far. Higher policy rates, portfolio inflows, and strong commodity prices have supported external accounts, driving nominal currency appreciation over the last two years. At current levels, we believe the risk-reward ratio favors taking a more conservative approach. Investors might consider adopting a more active hedging strategy toward their local currency exposure. The Mexican peso is near the upper end of its historical valuation range, as measured by the real effective exchange rate. This leaves it more exposed to potential falls relating to its own national elections and those in the US. The Brazilian real may see more volatility, possibly pushing it toward the top of its price trading range.

[4-9] Bloomberg, as of 10 May 2024

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North America: Recovering profits, delayed rate cuts

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Stronger-than-expected US growth and a rise in bond yields has set the stage for a range of potential regional equity and fixed income opportunities.

Considerations

- US economic strength is boosting corporate earnings but deferring rate cuts
- Potential equity opportunities include small- and mid-cap growth, healthcare, and industrials
- An equal-weighted version of US large-caps has less concentration risk in the biggest names
- We also like government and investment-grade corporate bonds with two- to five-year maturities
- Risks include supply chain disruption and tighter-for-longer monetary policy

The US economy has proven to be resilient despite the fastest Fed rate hikes in history. Following "rolling recessions" in certain parts of the economy in 2023, the outlook has strengthened further. Corporate profits are growing, while unemployment remains low at 3.9%. As a result, the Fed has not yet delivered any of the six to seven rate cuts expected as 2024 began. Three cuts between now and the end of the year seem likely.

Since we published Wealth Outlook 2024 in early December 2023, we have raised our US GDP growth forecast from 1.6% to 2.4% for this year. And while we previously looked for a 5% increase in S&P 500 earnings per share (EPS), we now expect 8%. In 2025, we estimate a further 6% EPS uplift. All 11 sectors of the market – including healthcare, financials and industrials – may show potential growth in 2024–2025. We look for the stock market rally to broaden beyond technology as a result. This and our other expressions of opinion are not intended to be a forecast of future events or a guarantee of future results.

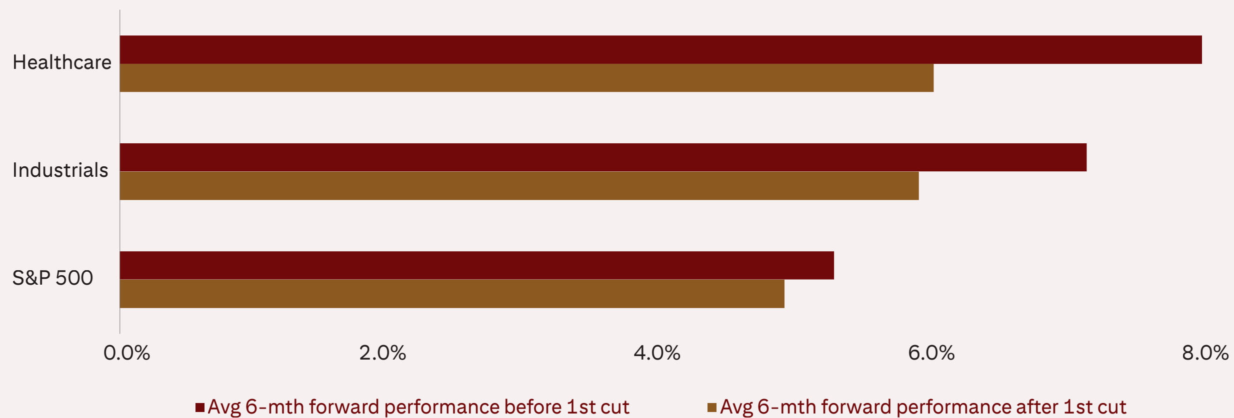
Inflation has fallen from 9% in June 2022 to 3.4% in April 2024. We forecast it will reach 2.5% by the end of this year. Against this backdrop, we see the US Treasury 10-year yield falling toward 4.0% and the US dollar surrendering some of its year-to-date gains against other major currencies as the Fed cuts.

Supply chain disruptions and monetary policy remaining restrictive for too long rank as risks to our view. But despite the ongoing Middle East and Ukraine wars as well as trade tensions between the US and China, the New York Fed's Global Supply Pressure Index is at normal peacetime levels.

Historically, markets have become more cautious in the six months before a presidential election. Defensive equities often outperform cyclicals, with Treasuries often beating credit. The opposite typically occurs in the six months after the election. The S&P 500 has risen in 13 of the past 15 election years and posted double-digit annualized returns in both the Trump and Biden administrations.

FIGURE 1

Fed rate cuts have driven equities higher



Source: FactSet and Haver Analytics, as of 20 Apr 2024. Chart shows performance of the S&P 500 Index and its Industrials and Healthcare sectors six months either side of Fed interest rate cuts beginning Jul 1995, Sep 1998, Jan 2001, Sep 2007, and Aug 2019. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. **Past performance is no guarantee of future results. Real results may vary**. See Glossary for definitions.

Equities

For now, we are positioning portfolios for a broader based equity rally driven by potential growth, an upturn in the global manufacturing cycle, and lower interest rates. We favor some exposure to an equal-weighted version of the S&P 500 – i.e., where each stock represents 0.2% of the index – that has a lower valuation multiple and, by definition, no concentration in the Magnificent Seven.[1]

We also have an overweight position in small- and mid-cap (SMID) growth to complement large-cap exposure. We see potential opportunity in sectors such as industrials and healthcare, which tend to outperform the broader market around first Fed rate cuts – FIGURE 1. We also like companies that pay dividends or are closely aligned with our unstoppable trends.

[1] The Magnificent Seven stocks: Amazon.com (AMZN), Apple (AAPL), Google parent Alphabet (GOOGL), Meta Platforms (META), Microsoft (MSFT), Nvidia (NVDA), and Tesla (TSLA)

Fixed income

High-quality US bonds offer higher yields than those that prevailed during the past decade. We see value in government and investment-grade corporate bonds with two- to five-year maturities, and in municipal bonds for US investors seeking after-tax income. Treasury Inflation-Protected Securities (TIPS) may help preserve against the risk of inflation proving stickier than currently forecasted. Preferred securities rank higher in the capital structure and provide yields that exceed the dividends and buybacks being returned to investors in the common shares.

Glossary

Asset class definitions (including indices) used in the Citi Wealth Investment's Adaptive Valuation Strategies framework:

Cash also includes "cash equivalents" such as money market funds, CDs, and short-term Treasury bills beyond fully fungible cash sitting in a savings or checking account. While this asset class is considered very low risk (since the chances of losing one's money are practically nil), it does come with an opportunity cost and the risk that its value could be eroded by inflation over time. Cash in the US is represented by the three-month government bond Treasury rate, measuring the US dollar (USD)–denominated active three-month fixed-rate, nominal (i.e., non-inflation-adjusted) debt issued by the US Treasury.

Commodities are an asset class containing the index composites – GSCI Precious Metals Index, GSCI Energy Index, GSCI Industrial Metals Index and GSCI Agricultural Index – measuring investment performance in different markets, namely precious metals (e.g., gold, silver), energy (e.g., oil, coal), industrial metals (e.g., copper, iron ore) and agricultural (e.g., soy, coffee), respectively. The Reuters/Jeffries CRB Spot Price Index and the TR/CC CRB Excess Return Index, an arithmetic average of commodity futures prices with monthly rebalancing, are used for supplemental historical data.

Diversifying funds are alternatives funds that are typically expected to display low and often negative correlation and/or beta to traditional risk asset classes such as equities over an investment cycle (though some funds in this category may display variable degrees of market correlation at certain points of the cycle). Such funds are designed to perform better during periods of high market volatility and generally may provide attractive diversification benefits to a client's portfolio, although returns may vary between gains and losses and can be volatile during any given period. This internal classification is based on the analysis and subjective views of CGWI Alternatives. The internal classification is subject to change without notice to investors and there is no guarantee that the funds will perform as described above. It is important to note that the market strategy described above will not completely eliminate market risk. There is no guarantee that alternatives funds classified as "Diversifying" will perform as described above. Alternatives funds should not be invested in based on their classification as "Diversifying" and other assets in a client's overall portfolio should be taken into consideration before an investment is made.

Directional funds are alternatives funds expected to display moderate to high positive correlation and/or beta to traditional risk asset classes such as equities over an investment cycle (though some funds in this category may display variable levels of correlation at certain points of the cycle). Such funds often invest with a (sometimes significant) net-long bias, and because of this may also carry a higher level of risk. This internal classification is based on the analysis and subjective views of CGWI-alternatives. The internal classification is subject to change without notice to investors and there is no guarantee that the funds will perform as described above. It is important to note that the market strategy described above will not completely eliminate market risk. There is no guarantee that alternatives funds classified as "Directional" will perform as described above. Alternatives funds should not be invested in based on their classifications as "Directional," and other assets in a client's overall portfolio should be taken into consideration before an investment is made.

Global developed market (DM) corporate fixed income is composed of Bloomberg indices capturing investment debt from seven different local currency markets. The composite includes investment-grade (IG) corporate bonds from the DM issuers.

Global DM equity is composed of MSCI indices capturing large-, mid- and small-cap representation across nine individual DM countries as weighted by the market capitalization of these countries. The composite covers approximately 95% of the free float–adjusted market capitalization in each country.

Global DM IG fixed income is composed of Bloomberg indices capturing IG debt from seven different local currency markets. The composite includes fixed-rate Treasury, government-related, and IG corporate and securitized bonds from the DM issuers. Local market indices for the US, UK and Japan are used for supplemental historical data.

Global emerging markets (EM) equity is composed of MSCI indices capturing large- and mid-cap representation across 20 individual EM countries. The composite covers approximately 85% of the free float–adjusted market capitalization in each country. For the purposes of supplementing long-term historical data, local-market country indices are used wherever applicable.

Global EM fixed income is composed of Bloomberg indices measuring the performance of fixed and floating-rate, USD-denominated EM sovereign debt for three different regions: Latin America; Europe, Middle East and Africa (EMEA); and Asia.

Global EM local currency fixed income, specifically the Bloomberg Emerging Markets Local Currency Government Index, is a flagship index that measures the performance of EM debt denominated in the local currencies (as opposed to in foreign currencies, such as US dollars – see "USD-denominated EM fixed income," below). Classification as an EM is rules-based and reviewed annually. Sometimes the term "unhedged" is used (as in "local currency fixed income unhedged") to clarify that absent other modifications the exposure comes with potential upside and downside risk from repatriating returns into one's native currency. An investor then may (or may not, depending on one's confidence about the potential upside) deploy an FX hedging overlay to help neutralize the currency risk.

Global high-yield fixed income is composed of Bloomberg indices measuring the non-investment-grade, fixed-rate corporate bonds denominated in USD, British pounds, and euros. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below, excluding EM debt. The Ibbotson High Yield Index – a broad high-yield index including bonds across the maturity spectrum within the BB-B rated credit quality spectrum included in the below-investment-grade universe – is used for supplemental historical data.

Hedge funds are composed of alternative investment managers employing different investment styles as characterized by different subcategories. Some tend to involve the use of leverage (and therefore also the potential for asymmetric losses) and lower liquidity, along with some combination of greater diversification and the potential for enhanced returns. The subcategories include various components of the HFRI Fund-Weighted Composite Index: HFRI Equity Long/Short (positions both long and short in primarily equity and equity-derivative securities); HFRI Credit (positions in corporate fixed-income securities); HFRI Event-Driven (positions in companies currently or prospectively involved in a wide variety of corporate transactions); HFRI Relative Value (positions based on a valuation discrepancy between multiple securities); HFRI Multi-Strategy (positions based on realization of a spread between related yield instruments); HFRI Macro (positions based on movements in underlying economic variables and their impact on different markets); and Barclays Trader CTA Index (the composite performance of established programs, such as Commodity Trading Advisors, with more than four years of performance history).

Large-cap stocks refer to a company with a market capitalization value of more than $10 billion. Also referred to as "big cap," large cap describes a class of popular stocks preferred by investors for their stability.

Preferred stock, or “preferreds,” is a form of stock that acts almost like a bond. Investors who buy them are usually offered a fixed dividend payout on a set schedule for as long as they own those shares, which offers some more predictability than standard dividend-paying common shares. But there are also downsides: dividend payments can be deferred if the company has a financial hardship; the shares come with no voting rights; and while the shares trade on an exchange as common shares do, most companies don’t issue preferred stock so the total market for them is small and liquidity can be limited.

Private credit investing, a subset of private equity, is an asset class defined by non-bank lending where the debt is not issued or traded on the public markets. Private credit can also sometimes be referred to as "direct lending" or "private lending." Private credit covers a wide variety of strategies that span the capital structure and borrower types – from senior secured loans for blue-chip corporate borrowers to special and distressed situations. Different private credit carries different risk/reward based on the seniority of the loans. That said, private credit can be a good complement to fixed-income strategies, offering potential incremental income, resilience, enhancement of returns, and diversification.

Private equity is an alternative investment class which in its simplest form is the capital or ownership of shares not publicly traded or listed on a stock exchange. Private equity generally requires investors to make a longer term commitment, but in exchange may offer an “illiquidity premium” – that is, the potential for elevated returns. Private equity’s characteristics are often driven by those for DM small-cap equities (which, after all, tend to be the size of company bought by a private equity fund), adjusted for illiquidity, sector concentration, and greater leverage and can include secondaries, buyouts, growth, venture capital and co-investments.

Real assets have a tangible form and intrinsic worth because of their properties and substance. The assets can include precious metals, commodities, real estate, equipment, and natural resources. They can be good diversifiers for a portfolio because of their somewhat low correlation to financial assets like stocks and bonds. In contrast, commodity futures, exchange-traded funds (ETFs), and real estate investment trusts (REITs) are financial assets whose value depends on the underlying real assets and thus are not quite “real.”

Real estate investment trust (REIT) is a corporate entity that either has the bulk or all of its asset base, income and investments related to real estate. In the US, under Security and Exchange Commission (SEC) guidelines, for an entity to qualify as a REIT at least 90% of its taxable annual income to shareholders in the form of dividends must be from real estate. While typically REITs are publicly traded, not all are, as public non-listed REITs (PNLRs) can register with the SEC as REITs but do not trade on major stock exchanges. REITs are subject to special risk considerations like those associated with the direct ownership of real estate. Real estate valuations may be subject to factors such as changing general and local economic, financial, competitive, and environmental conditions. REITs may not be suitable for every investor. Dividend income from REITs will generally not be treated as qualified dividend income and therefore not eligible for reduced rates of taxation.

Small- and mid-cap (SMID) stocks unite the faster growth of small companies with the higher quality of mid-size firms so investors can gain access to a more resilient and less volatile collection of growing stocks. In the US, the most-used SMID-cap benchmark is the Russell 2000 Index, which straddles all the stocks in the small-cap (S&P 600) and mid-cap (S&P 400) space.

Structured credit is a type of investment in which an issuer utilizes securitization to pool similar debt obligations, creating novel financial instruments to enable better use of available capital or serve as a cheaper source of funding, especially for lower-rated originators. Different classes of securities (typically with different credit ratings) from the same pool of assets are often pooled (called “tranching”) to create different investment classes for the securities. Structured credit can offer investors an opportunity for enhanced yield and diversification benefits at the portfolio level. Products include US mortgage-backed securities (MBS), asset-backed securities (ABS) and commercial-mortgage-backed securities (CMBS). When designated “Agency” (as in “US Agency MBS”), it means that in addition to a first lien, underlying loans are secured by a guarantee from a US Government-Sponsored Enterprise (GSE) such as Fannie Mae or Freddie Mac.

USD-denominated EM fixed income is represented by the FTSE Emerging Market Sovereign Bond Index (ESBI), covering the sovereign debt of EM governments issued in USD. The most common form of what is also known as "hard currency" debt, these bonds are less volatile than local debt due to the lack of EM currency risk.

Other index definitions:

AI Global Robotics and Artificial Intelligence Thematic Index is made up of companies in such areas as industrial robotics and automation, non-industrial robots, and autonomous robots.

ACWI Investable Market Index (IMI) captures large-, mid- and small-cap representation across 23 Developed Markets (DM) and 24 Emerging Markets (EM) countries.* With 9,022 constituents, the index is comprehensive, covering approximately 99% of the global equity investment opportunity set.

Bloomberg US Aggregate Bond Index consists of the US IG fixed-rate bond market, including government and credit securities, agency mortgage pass-through securities, ABS and CMBS.

Bloomberg US Corporate Bond Index measures the IG fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by US and non-US industrial, utility, and financial issuers.

Bloomberg Latin American Aggregate Bond Index is a broad composite covering sovereign, corporate, and other investment grade securities from that region.

Bloomberg US Treasury Index measures USD-denominated, fixed-rate, nominal debt issued by the US Treasury.

Cambridge Associates LLC US Private Equity Index measures US private equity funds – buyout, growth equity, private equity energy, and subordinated capital funds – including fully liquidated partnerships.

Global Supply Chain Pressure Index (GSCPI) is a measurement of supply chain conditions. The index, created and maintained by the Federal Reserve Bank of New York, tracks variables from several indices in transportation and manufacturing usually related to prices, inventory, and delivery times.

The HFRI Fund-Weighted Composite Index is a global, equal-weighted index of single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in U.S. Dollar and have a minimum of $50 Million under management or a 12-month track record of active performance. The HFRI Fund-Weighted Composite Index does not include Funds of Hedge Funds.

ICE BofA US ABS & CMBS Yield Index tracks the performance of USD-denominated IG asset-backed and commercial mortgage-backed corporate debt publicly issued in the US domestic market.

MSCI All-Country World Index (ACWI) is designed to represent performance of the full opportunity set of large- and mid-cap stocks across 23 developed and 24 emerging markets. As of May 2022, it covered more than 2,933 constituents across 11 sectors and approximately 85% of the free float–adjusted market capitalization in each market.

MSCI AC World Healthcare Index includes large- and mid-cap securities across 23 DM and 24 EM countries. All companies in the index are classified as being in the Healthcare sector per the Global Industry Classification Standard (GICS®).

MSCI ACWI Semiconductors & Semiconductor Equipment ESG Filtered Index includes large- and mid-cap securities across 23 DM and 8 EM countries.* The index aims to represent the performance of a select set of companies from the semiconductors and semiconductor equipment industries that excludes companies involved in certain controversial businesses or have low ESG Controversies and Ratings scores relative to a reference universe.

MSCI ACWI Total Return Index measures the price performance of developed and emerging markets including the reinvested income. It is widely used as a proxy for global equities.

MSCI China Index captures large- and mid-cap representation across China A shares, H shares, B shares, Red chips, P chips and foreign listings (e.g., ADRs). With 704 constituents, the index covers about 85% of this China equity universe.

MSCI EM ex China Index (CAD) captures large- and mid-cap representation across 23 of the 24 EM countries, excluding China. With 672 constituents, the index covers approximately 85% of the free float–adjusted market capitalization in each country.

MSCI EM Index captures large- and mid-cap representation across 24 EM countries. With 837 constituents, the index covers approximately 85% of the free float–adjusted market capitalization in each country.

MSCI Healthcare Equipment and Services Index comprises companies involved in manufacturing healthcare equipment and services, such as medical devices, healthcare facilities, and healthcare services providers.

MSCI Health Care Providers and Services captures the performance of the healthcare services sector, such as companies involved in hospitals, nursing homes, and managed care providers.

MSCI World Energy Index captures the large- and mid-cap energy sector segments – including exploration, production, and refining oil and gas – across 23 Developed Markets (DM) countries.*

MSCI World Health Care Index captures large- and mid-cap health care segments across 23 Developed Markets (DM) countries.

Philadelphia Stock Exchange Semiconductor Index (PHLX Semiconductor, "SOX") is an equity index mainly made up of firms involved in the production and sale of semiconductor products such as microchips, computers, and networking equipment.

The Prime Cyber Defense Index consists of companies engaged in the fight against cybercrime, by way of providing cyber defense applications or services, or providing hardware or software for cyber defense activities, among other eligibility criteria.

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S&P 500 Building Products Industry is made up companies from the S&P 500 Index involved in the manufacturing, distribution, and sale of building materials and products used in construction and home improvement.

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STOXX Europe 600 Index represents stocks of varying market capitalization across 17 European countries, covering around 90% of the region's investable market.

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Alpha and/or numeric symbols used to give indications of relative credit quality. In the municipal market, these designations are published by the rating services. Internal ratings are also used by other market participants to indicate credit quality.

Bond credit quality ratings		Rating agencies	
Credit risk	**Moody's[1]**	**Standard & Poor's[2]**	**Fitch Ratings[2]**
Investment grade			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa	AA	AA
Upper medium grade (strong)	A	A	A
Medium grade	Baa	BBB	BBB
Not investment grade			
Lower medium grade (somewhat speculative)	Ba	BB	BB
Low grade (speculative)	B	B	B
Poor quality (may default)	Caa	CCC	CCC
Most speculative	Ca	CC	CC
No interest being paid or bankruptcy petition filed	C	D	C
In default	C	D	D

[1] The ratings from Aa to Ca by Moody's may be modified by the addition of a 1, 2, or 3 to show relative standing within the category.

[2] The ratings from AA to CC by Standard and Poor's and Fitch ratings may be modified by the addition of a plus or a minus to show relative standing within the category

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- lack of liquidity in that there may be no secondary market for the fund and none is expected to develop;
- volatility of returns;
- restrictions on transferring interests in the Fund;
- potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- absence of information regarding valuations and pricing;
- complex tax structures and delays in tax reporting;
- less regulation and higher fees than mutual funds; and
- manager risk.

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