Wealth Outlook 2024

MID-YEAR EDITION: ALTERNATIVES

The coming spring after a mild winter

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Alternatives have served suitable and qualified investors over the past 24 months. Many hedge funds thrived on increased volatility and dispersion, and private capital strategies showed resilience amid the challenges.

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DANIEL O'DONNELL

Head of Alternatives and Investment Manager Solutions

STEFAN BACKHUS

Head of Alternatives Strategy

JEFFREY LOCKE

Head of Private Equity and Real Estate

MICHAEL STEIN

Head of Liquid Strategies, Hedge Fund and Traditional Investments

MICHAEL YANNELL

Head of Fixed Income and Credit Strategies

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Overview

The global economy is gaining strength and has the potential to continue expanding into 2025 and beyond. The Citi Wealth Office of the Chief Investment Officer (OCIO) forecasts global growth of 2.6% for this year as a whole and 2.9% in 2025, accompanied by easing US inflation[1] – see Wealth Outlook 2024: Mid-Year Edition.

In our view, this period of renewed growth and normalization is the third phase of the global economy's recovery following the brief pandemic slump in 2020. The first phase was the stimulus-driven period of 2020-2021, which was followed by the bear market caution of 2021-2022. Likewise, we see growth and normalization occurring in alternatives deal activity.

So, what might these transitions mean for investors in alternative asset classes – private equity, real estate, and hedge funds – for the rest of this year and beyond?

[1] All forecasts are expressions of opinion, are subject to change without notice and are not intended to be a guarantee of future events.

Alternatives' coming spring after a mild winter

- Amid a strengthening global economy, we expect a revival in private market activity
- Several indicators point to an end of the lull since 2021
- Alternatives have performed better during the market dislocations of 2022 than during prior turbulent periods
- But alternatives come with many risks such as illiquidity and complete loss of capital

Alternatives' resilience

Alternatives have endured a "winter-like" period over the last couple of years. Amid heightened economic and market uncertainty, many private capital investors and managers have significantly stepped back their activities across most sectors. Quarterly, new deal activity globally fell to a low of $373.8 billion across all private sectors, a fall of 55% from the 2021 peak. Exits/distributions in the first quarter of 2024 fell to $84.3 billion, down 76% since 2021 – FIGURE 1.[2]

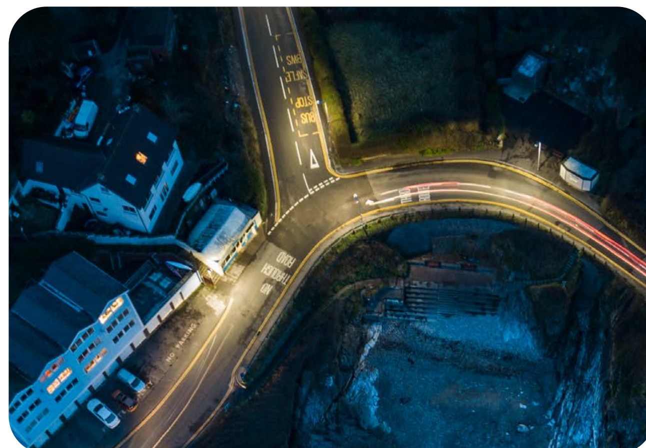
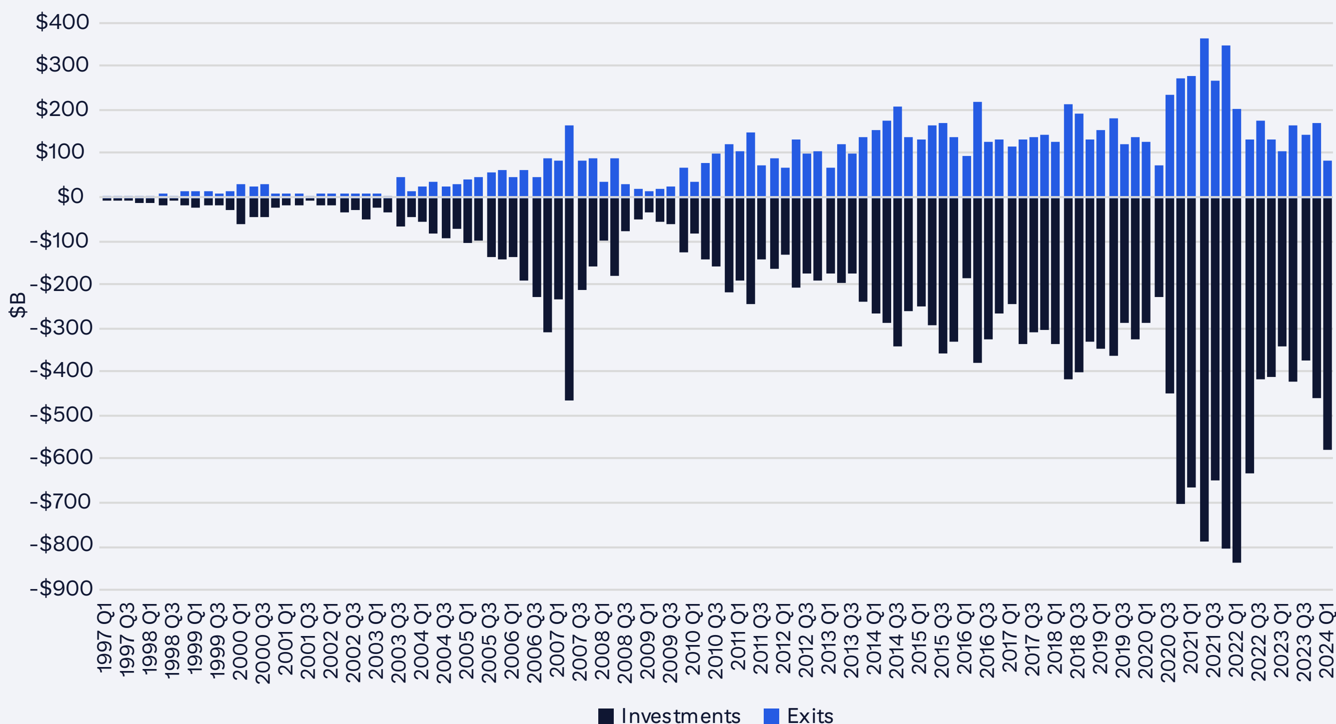


FIGURE 1

Global private capital's dealmaking winter since 2021



Source: Preqin, as of 31 Mar 2024. Chart shows global private capital investments and exits/distributions on a quarterly basis in $bn.

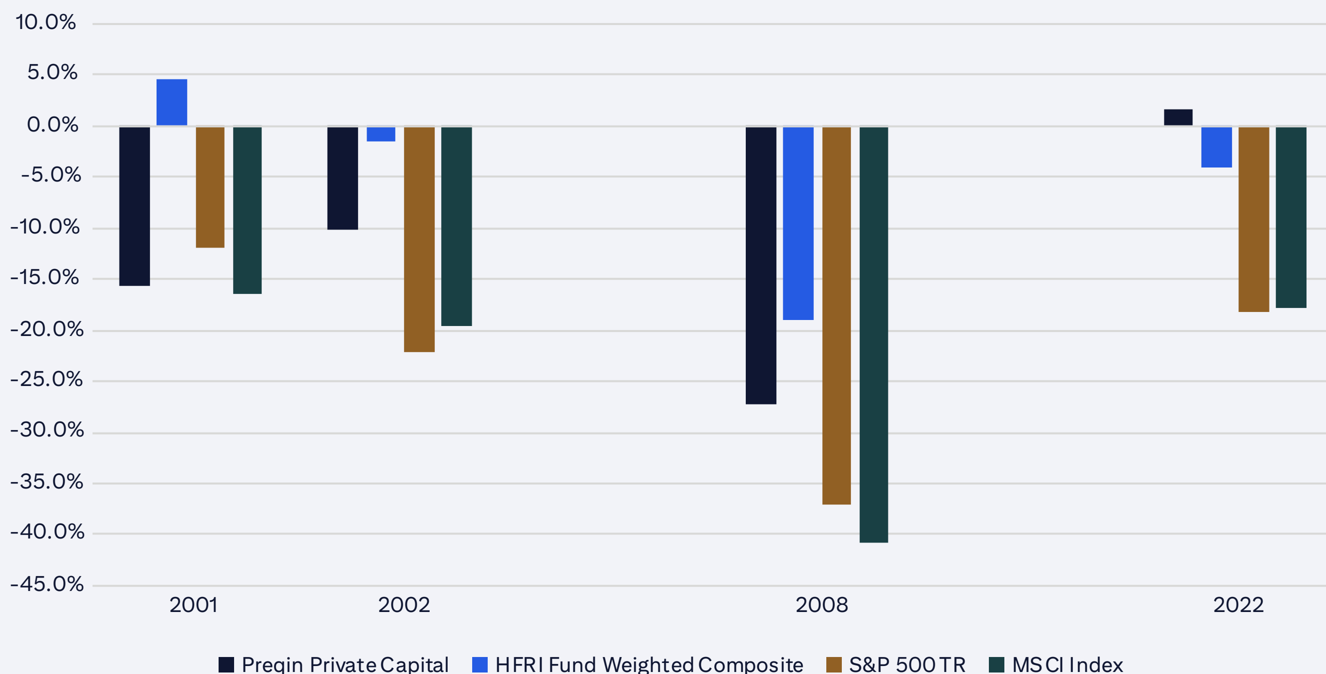
[2] Preqin, as of 31 Mar 2024

Amid this big chill for activity, alternatives' performance has held up in aggregate. Hedge funds, for example, helped mitigate portfolio losses during the worst of the turmoil in equities and fixed income in 2022. Some strategies profited from the volatility, even if some long-only strategies saw increased volatility from the market cycle. Private markets, meanwhile, benefited from a global economy that avoided a major downturn such as was seen in the dot-com crisis and Global Financial Crisis. In those periods, private markets experienced some of the downside risks inherent in their strategies.

This resilience is shown in FIGURE 2 where we contrast what occurred to performance for private capital and hedge funds during 2022 with the fallout from the dot-com crash in 2001-2002 and the Global Financial Crisis in 2008. For alternatives, their performance was different than their experience in previous bouts of public market turmoil. This can also be seen by observing the lack of leveraged loan defaults that have occurred for sponsored transactions in 2022 and 2023 relative to the dot-com crash, the Global Financial Crisis, and the energy sector defaults of 2014-2015 – FIGURE 3.[3] Recent distress has been mainly confined to venture capital-backed "growth at any cost" technology companies with poor business models and the US office real estate sector, beset with post-pandemic challenges.

FIGURE 2

Alternatives showed more resilience in 2022 than prior periods of turmoil

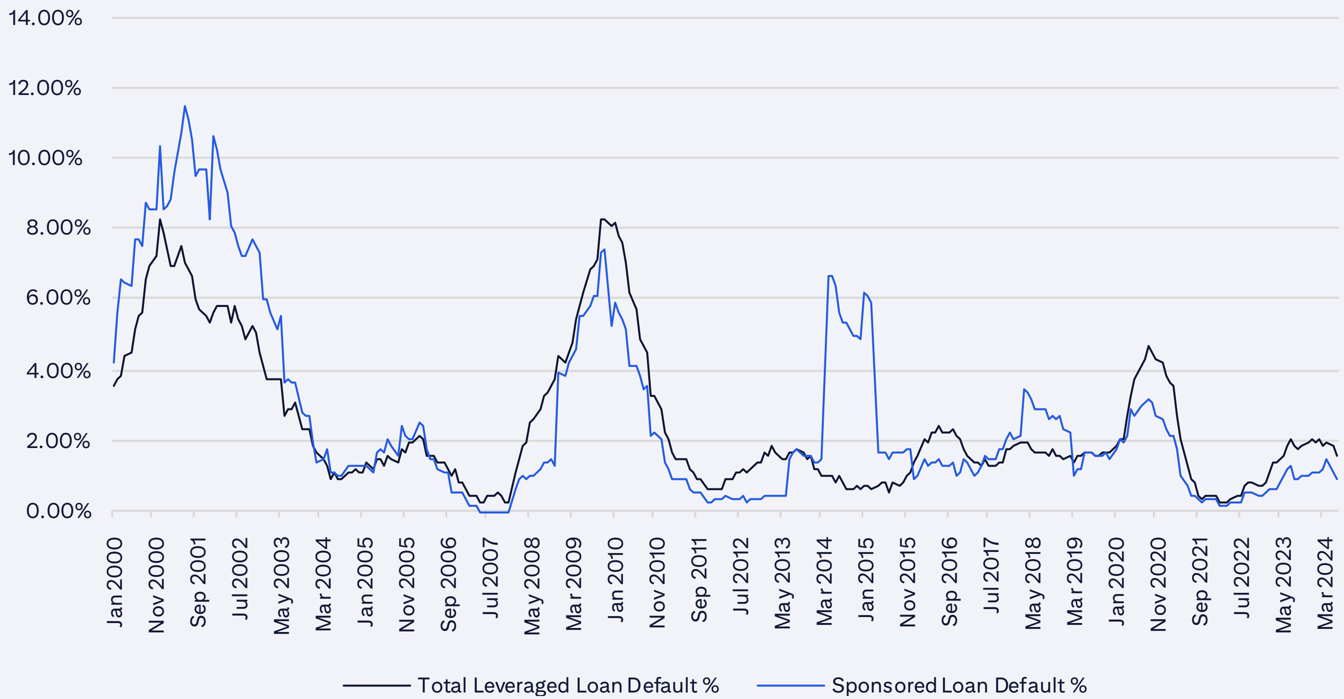


Source: Preqin, HFRI and Bloomberg, as of 31 Mar 2024. Chart shows 1-year returns for global private capital, hedge funds, the S&P 500 and MSCI World Index. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. The Preqin Private Capital Index tracks quarterly returns for over 11,000 private capital funds worldwide. The HFRI Fund Weighted Composite Index tracks the equal weighted returns for all the hedge funds in the HFRI database. **Past performance is no guarantee of future results. Real results may vary.**

[3] Pitchbook LCD, as of 30 Jun 2024

FIGURE 3

Defaults for sponsored loans and leveraged loans overall have not spiked this time



Source: Pitchbook LCD, as of 30 Jun 2024. **Past performance is no guarantee of future results. Real results may vary.**

Unsurprisingly, private capital fundraising growth slowed in 2023. But alternative assets under management (AUM) – as measured by net asset value plus unfunded commitments – reached a new high of $17.8 trillion, as of 31 December 2023 – FIGURE 4. That was 11% higher than at the end of 2022. Even in a lackluster fundraising year, therefore, the positive AUM momentum of the last 20 or more years has endured.

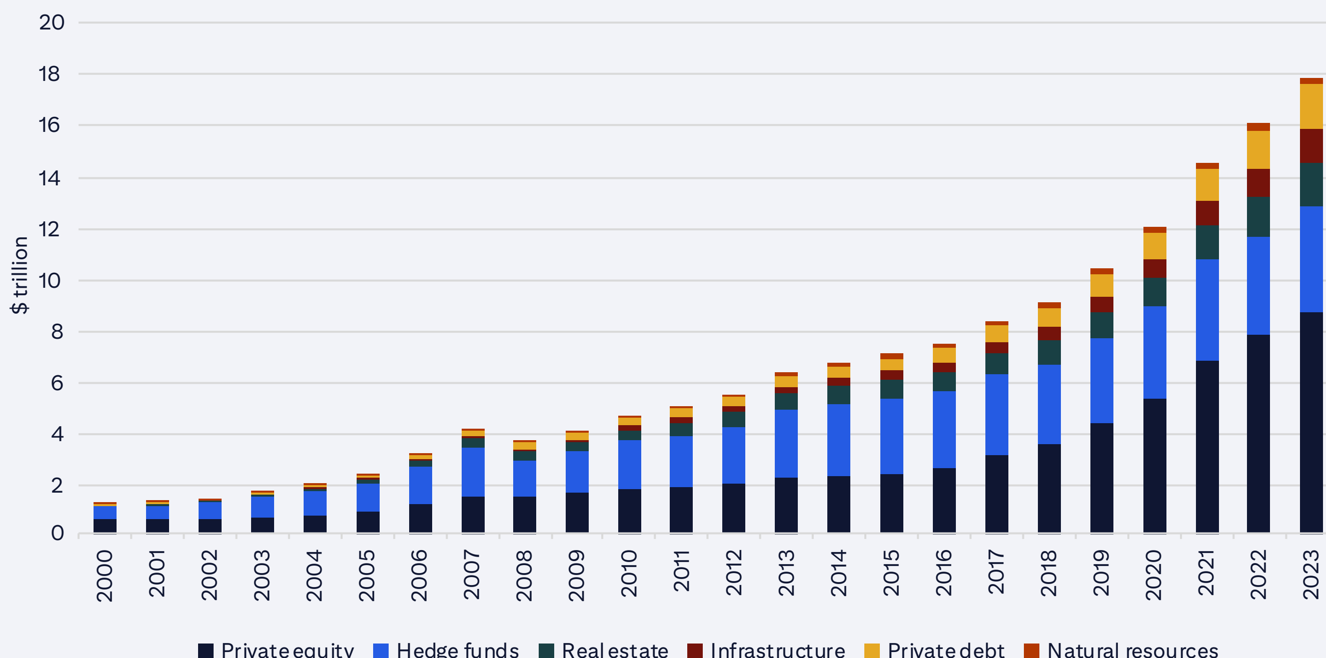
Green shoots for alternatives

Past "winters" for alternatives may provide clues as to when springtime may arrive. During the dot-com crash of the early 2000s, it took ten quarters from the peak to reach a trough in private capital exits. The decline in exit dollar values was 75%. In the Global Financial Crisis period from 2007, it took seven quarters for exits to bottom out, with an even deeper dollar decline of 92%. In both cases, new investment activity began to recover one or two quarters before exits.

As we enter the tenth quarter since the most recent peak in quarterly exits at the end of 2021, the last two quarters of increases in investment activity are one indicator that exit activity may rebound in 2024 and 2025.

FIGURE 4

Growth of alternatives AUM across multiple market cycles



Source: Preqin (for private capital) and HFRI (hedge funds), as of 31 Dec 2023. Chart illustrates the growth from 2000 through 2023 of assets under management (AUM) for alternative investments by strategy. AUM is defined as the cumulative net asset value of managed alternatives funds plus any remaining unfunded commitments for those funds.

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Another way to evaluate cash flow trends in private capital activity is to examine the ratio of exits to investment activity, as many investors seek to balance capital calls with distributions from their private portfolios. However, the long term median of ratio of exits to investments ratio from 1997 to 2023 is actually only 68.5%, as the alternatives industry has continued to grow in size. The 2021 to 2023 period has seen a low of this ratio of 37% that occurred in 2022, which follows a similar bottoming pattern to the dot-com crisis and Global Financial Crisis, which hit 26% and 35%, respectively at their lowest – FIGURE 5. It is too early to definitively call this the beginning of a recovery, but 2023 saw a positive trend in the ratio of exits to investments in private capital from its 2022 low to a ratio of 52%, thus easing the magnitude of the burden on LPs of negative cash flows of the industry.

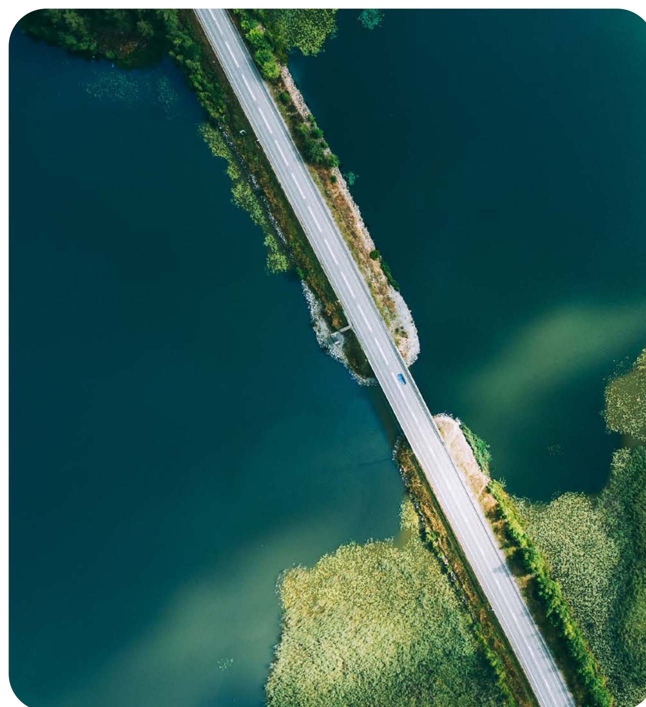
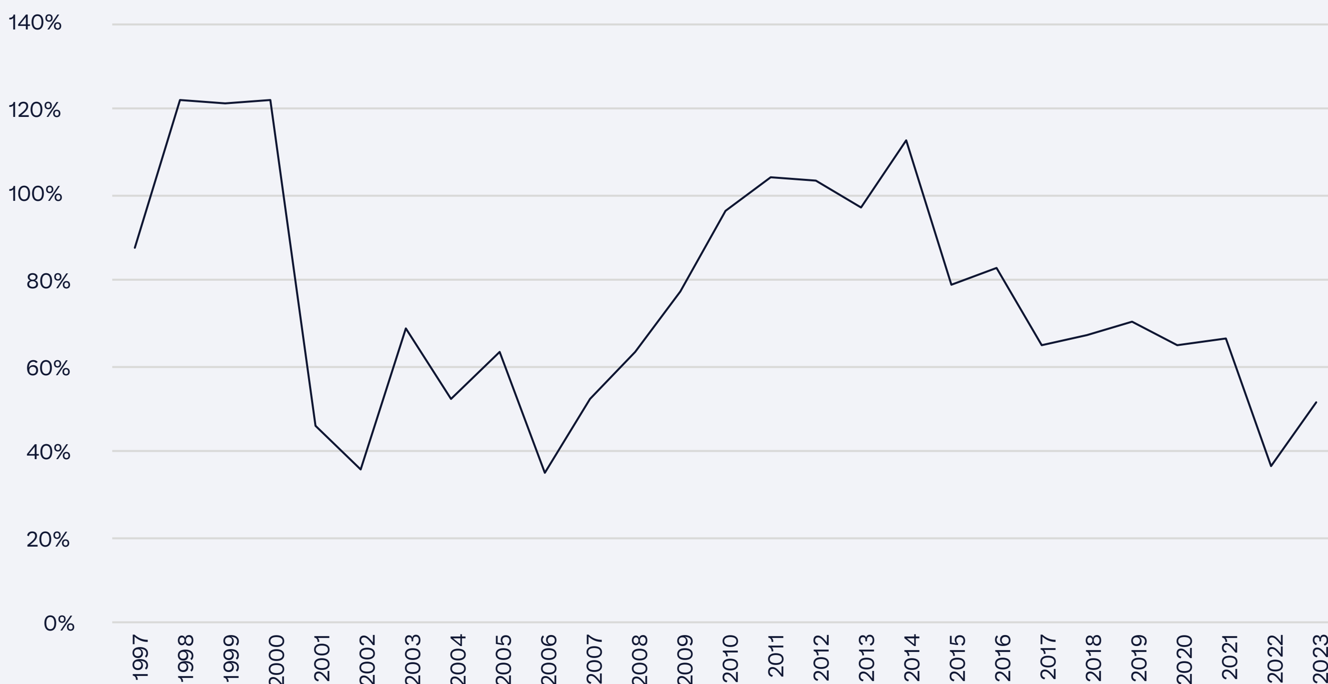


FIGURE 5

Private capital net cash flow ratio comes off its 2022 low



Source: Preqin, as of 31 Mar 2024. Chart shows the ratio of exits to new investments in global private capital.

The current lack of liquidity has seen many investors step back and commit less capital to fewer managers. Private capital fundraising slowed 20.5% in 2023 to $1.2 trillion from 2022 levels with 2,800 funds closed, 48% less than 2022. This was 31.5% below the fundraising peak of $1.7 trillion in 2021. Fundraising in the first quarter of 2024 totaled $295 billion, similar to the same quarter in 2023. First quarter fundraising was highly concentrated, with funds over $1 billion attracting 81.2% of fundraising dollars.

Today's liquidity conditions are just amplifying the trend of investors' dollars flowing to fewer, more experienced managers. Hedge funds, by contrast, have enjoyed increased fundraising momentum thanks to their attractive risk-adjusted returns over the past two years. Total hedge fund assets have risen for the last six quarters running, reaching a record global AUM of $4.3 trillion in the first three months of 2024.[5]

In early 2024, elevated volatility and equity and credit market dispersion – along with continued geopolitical unrest – are providing a broad set of potential opportunities that may generate alpha and manage risk via various hedge fund strategies.

For private equity, we see early signs of deal activity restarting. Broader public markets are recovering, which enables normalization in mergers & acquisitions (M&A), credit, and initial public offering (IPO) markets. If volumes in these areas increase further, it would be conducive to private equity investment and exit activity this year and next.

Global M&A activity dipped to a 10-year low in 2023 of approximately $2.8 trillion. But in the final quarter of 2023 and the first half of 2024, dealmaking accelerated amid growing confidence in the economic outlook and a further rally in public equity. Global M&A volumes were $2.4 trillion for the nine months ending 28 June 2024, 24% above the prior nine-month period and 23% up year-over-year.[6] A key driver here was the rebounding syndicated loan market, which had been depressed since mid-2022.

For the first six months of 2024, leveraged loan volume was $355.9 billion, up 135% over the same period in 2023 and surpassing the 2023 total of $328.1 billion. Importantly, this included some large buyout transactions, implying renewed willingness to finance private equity transactions.[7]

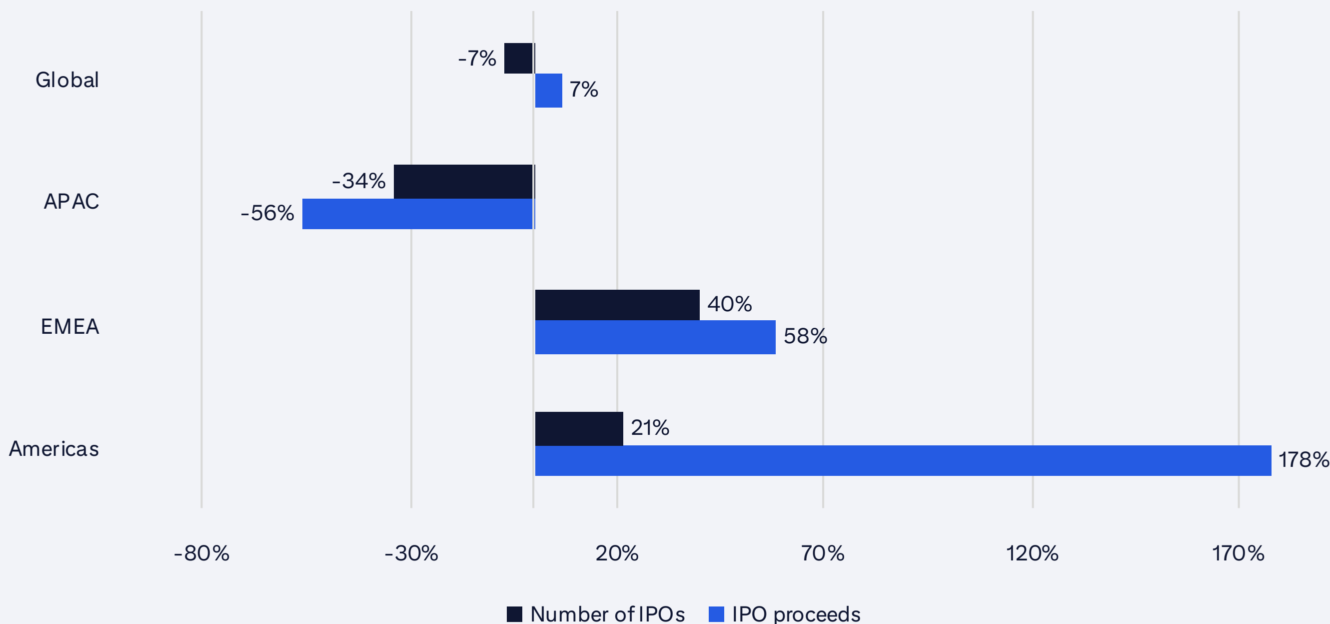
Lastly, IPO markets in the Americas and Europe have seen renewed issuances. In the first half of 2024, there were 86 IPOs in the Americas, totaling $17.8 billion in proceeds, with 249 IPOs in Europe totaling $24.0 billion. These represent increases over the same half a year earlier – FIGURE 6. Private equity and venture-backed IPOs represented 41% of the proceeds globally.

In all, we believe that springtime has arrived for alternatives. On the pages that follow, we consider the outlook for returns and our favored investments across the asset classes.

[5] HFR, Inc., as of 31 Mar 2024
[6] EY Global IPO Trends Q2 2024, as of 17 Jun 2024
[7] Pitchbook LCD, as of 30 Jun 2024

FIGURE 6

IPO rebound in the Americas and Europe



Source: EY Global IPO Trends Q2 2024, as of 17 Jun 2024. Chart shows year-over-year change in IPOs and proceeds in the first quarter of 2024.

The rise of the individual investor

Alternatives have now experienced several decades of positive absolute and relative performance. This has driven alternatives' AUM higher, as has the shift away from bank lending toward unregulated private sources of lenders. Nevertheless, many private funds have faced increased demands to return cash to their investors over the past 18 months. Investors have had to manage capital calls on existing commitments and make new commitments to funds.

For managers to retain access to capital for making new investments over the coming decade and beyond, they now understand the need to expand their pool of investors beyond the institutions that have dominated their investor base. This is a new development for individual investors who are suitable and qualified to invest in alternative investments. Managers who may have historically shunned individual investors, regardless of being qualified for alternatives, are seeking them out. Accordingly, we are seeing a rise in the number and quality of managers opening up to individual investors via different platforms.

In addition, innovative private capital structures that seek to simplify the process of investing and managing exposures to the sector are helping "democratize" alternatives asset classes, again by broadening its investor base – see **The rise of evergreen structures**. We therefore believe we are at the dawning of the next age for alternatives, where more investors who are qualified for alternatives will have access to these asset classes, but they will still need to determine if alternatives are suitable for their portfolios. New investors will best be served by working with a financial professional to balance the risks and rewards of incorporating alternatives into portfolios.

Allocating core portfolios for the long term: Focus on quality and income

- Alternatives are in demand by investors, with many potential opportunities only available privately
- We favor operationally focused private equity and equity hedge fund managers
- Income seeking is another possibility via various alternative strategies for suitable investors
- Hedge funds offer a range of directional and diversifying strategies[8]
- In real estate, we see potential in the likes of the industrial and hospitality sectors
- But alternatives come with many risks such as illiquidity and complete loss of capital

With the global economy strengthening and alternatives emerging from a "winter" period for activity, what role might these asset classes play in a core portfolio for qualified and suitable investors today? And which themes are relevant?

The decision to allocate to alternatives should always be taken with a long term view and considering investment objectives, risk tolerance, illiquidity level, investor qualifications and overall suitability for the asset class relative to the rest of a core portfolio. It is important to remember that alternatives come with unique risks, such as liquidity constraints, often higher volatility. Entire loss of capital is possible. Assessing alternatives allocations must reflect an individual's objectives, risk tolerance and liquidity requirements.

Alternatives are playing an increasingly important role in financial markets, with investors' appetite growing. Some 87% of US companies with revenues over $100 million are private. That is over 19,000 companies in an investable universe that may only be potentially accessible by investors via private markets.[9]

The advantage of building a portfolio of individual investments is customization. The downside is the added due diligence required by you and your financial professional. Another option is to outsource manager/fund selection to a platform, "multi-manager" or fund of funds that invests across various managers and often numerous strategies. This can provide access to specialist expertise in each asset class and strategy. Thus leveraging built-in due diligence capabilities and a potentially higher level of diversification than an individual investor could likely achieve. There is a wide variety of choices available to qualified investors, ranging from single strategy (such as equity, real estate or credit funds) to broadly diversified "all-in-one" funds.

An important factor in seeking returns and diversification benefits is "time in the market" – being fully invested in a broadly diversified portfolio. This may provide exposure to compound returns over time – see **Staying the course: Allocating portfolios for the long term** in Wealth Outlook 2024: Mid-Year Edition. By contrast, market timing – trying to get in and out at "favorable" moments to catch uptrends and dodge downtrends is typically doomed to failure.

[8] 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. 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. These internal classifications are based on the analysis and subjective views of Citi Wealth Alternatives and Investment Manager Solutions. The internal classifications are 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.

[9] Apollo Global Management, as of 20 Apr 2024

Tapping into equity markets' broadening rally

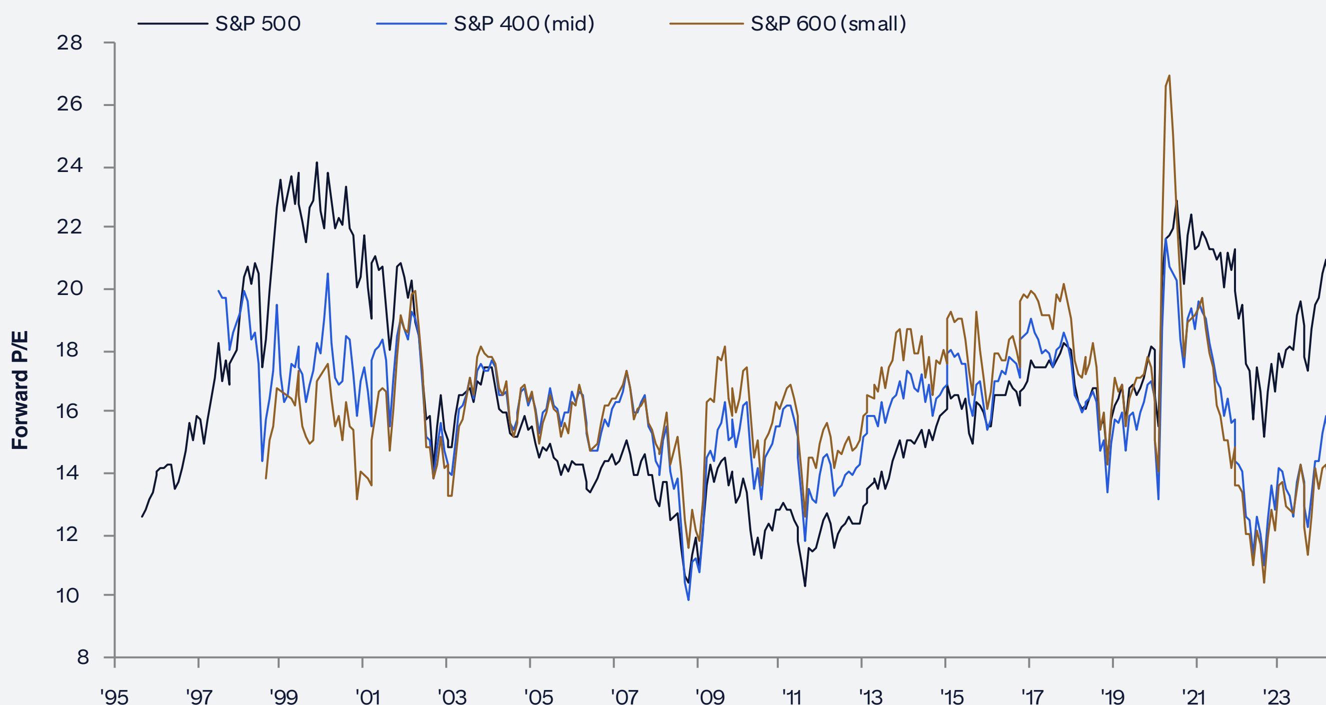
Since early 2022, liquidity in markets has become much less abundant, as central banks have raised interest rates and withdrawn other stimulus measures. The end of the "easy money" era of zero interest rates that began with central bank responses to the Global Financial Crisis and continued through COVID calls for a more discerning approach to investment. The cost of debt has become an important variable in deal underwriting.

Today, there is greater emphasis on quality of business, re-investment opportunities and company management strength. This environment favors investment managers that conduct deep, bottom-up, fundamental analysis. Potential opportunities may exist, for example, among higher quality US small- and mid-cap (SMID) firms that have been left behind as investors have been focusing on mega-cap technology.

In aggregate, US SMID equities are cheap compared to their larger peers by past standards. S&P SMID indexes currently trade at a 28% price/earnings discount to the S&P 500 index, comparable to their 34% peak discount during the post dot-com era – FIGURE 1. However, from 2002 to 2019, these smaller companies traded at a 12% premium to the S&P 500.[10]

FIGURE 1

Small- and medium-sized US firms look cheap



Source: Factset, as of 28 Jun 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. See Glossary for definitions. **Past performance is no guarantee of future results. Real results may vary.**

[10] Factset, as of 28 Jun 2024

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We favor alternatives managers who can identify high-quality companies with strong management teams and ability to re-invest capital seeking high rates of return. Just as today's higher cost of capital looks to favor great companies with effective management teams, it will hamper weaker businesses run by poor managers.

In turn, we see a bigger gap emerging between companies' operating performances and their equity returns. This may favor long-short equity managers who focus on individual stock selection, buying the stronger companies and short-selling their weaker counterparts.

Importantly, hedge fund management firms need to be large enough to pay for the research teams to identify ideas, while staying small enough to avoid distorting the market with their investments. Among long-short managers, there are many approaches. It is important to assess a manager's past returns from both long and short positions.

A shakeup has also taken place within long-short equity management. Many smaller managers with modest performance have been losing assets, hitting their business and ability to attract and retain talent. There is a balance between being too small and too big. We increasingly favor managers with the scale to maintain robust platforms and attract talent from other equity investment firms.

In private equity buyouts and growth, the pursuit of performance begins with operational rather than financial factors. Private equity managers' returns today are derived more from value creation factors such as sales growth, margin expansion, and strategic repositioning, rather than using more borrowed money in the attempt to boost returns. The latter has become less viable with an overall reduction in credit availability and the rise in borrowing costs in recent years.

For example, with the cost of debt going from 6% to 12% for a leveraged buyout, a company must now grow earnings at a much higher rate to hit the same target return. There is typically greater scope for a private equity manager to bolster management teams, tighten financial controls, and drive growth initiatives at less developed, medium-sized businesses rather than at larger, more developed companies.

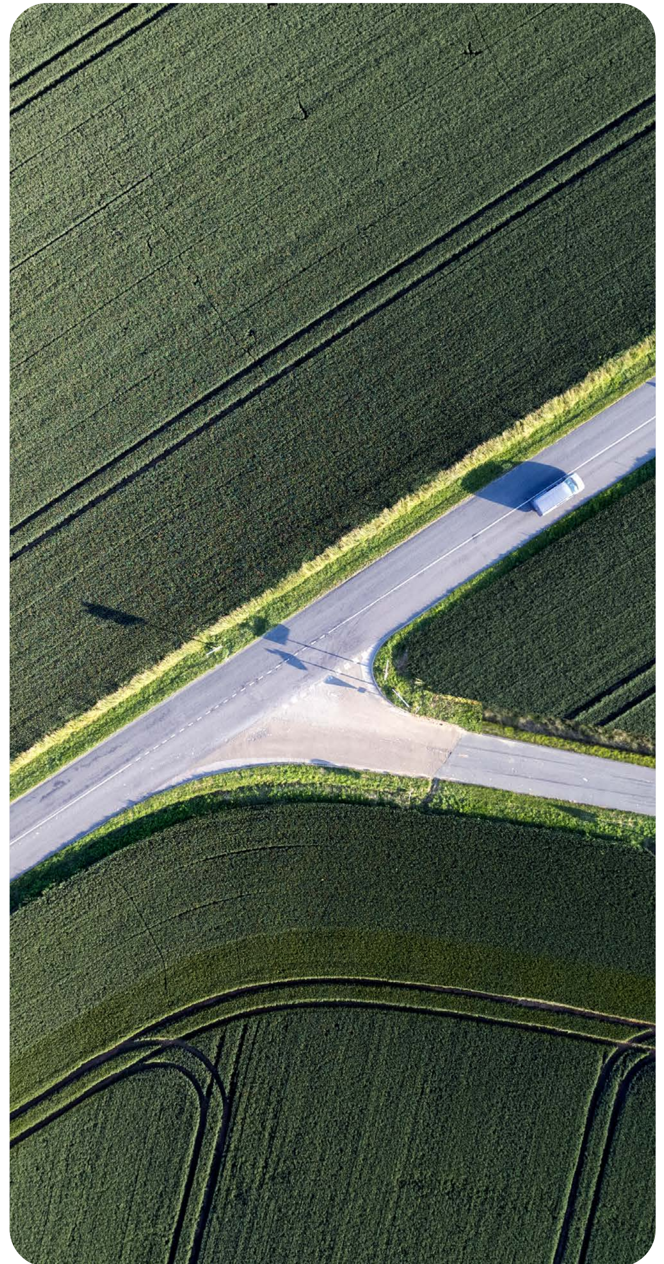
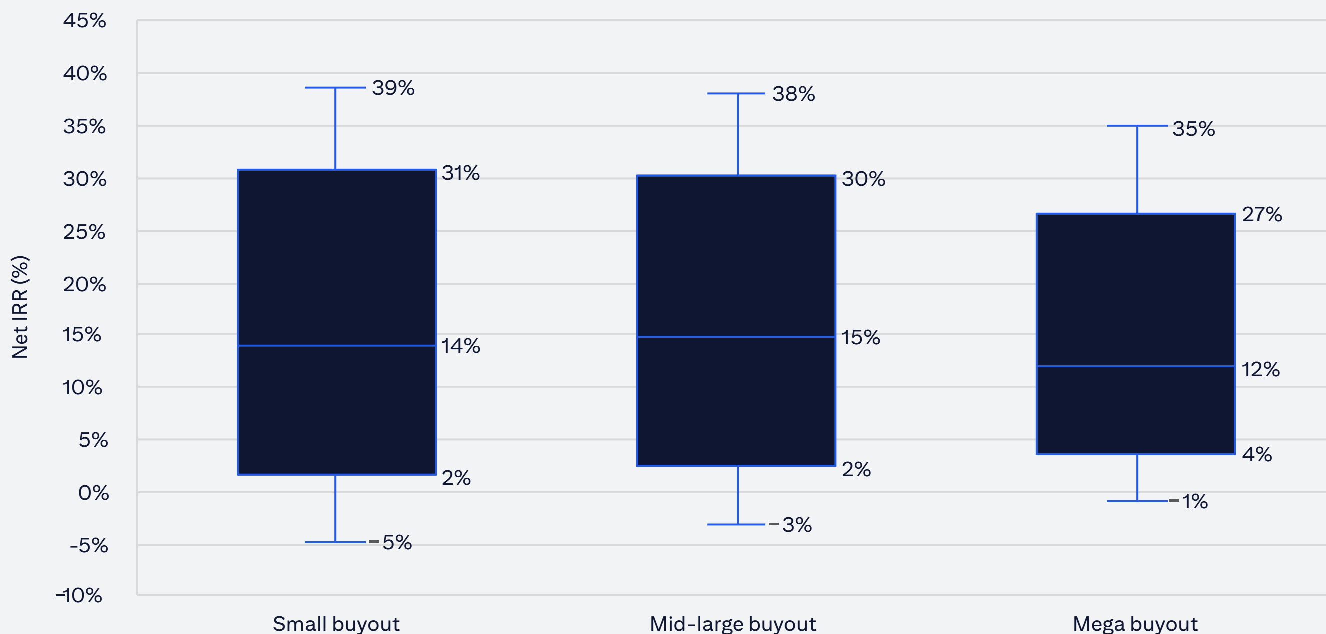


FIGURE 2

Higher potential returns but larger gap/dispersion between top and bottom performers for buyout funds targeting smaller companies



Source: Cambridge Associates, as of 31 Dec 2023. Chart shows pooled IRRs by fund size for 1986-2022 vintage years with return dispersion bands bars span from 1st quartile to 3rd quartile range. Outlier bands range from 5 to 95 percentile net IRRs. For vintage between 1986 and 2022. Small buyouts are funds with $750 million or less in commitments, mid-large buyouts span $750 million to $5 billion in commitments and mega buyout funds are funds in excess of $5 billion in commitments. **Past performance is no guarantee of future results. Real results may vary.**

FIGURE 2 shows long term performance for all US buyout funds, with a pooled internal rate of return (IRR) of 13.6% across all fund sizes. This is well above long term average US public market returns of 10.5%.[11] What is more, mid-to-large market funds have delivered a long term pooled IRR of 15%, 300 basis points (bps) higher than the 12% IRR for mega-cap funds, those with above $5 billion in commitments. However, the dispersion of return is lowest for the mega-cap buyout funds.

Mega-managers can raise multi-billion-dollar funds repeatedly from institutions because of their long term track record of returns that meet or exceed investors' expected returns. Typically, these expected returns are a premium over a public benchmark's returns, with a lower dispersion of returns and potentially fewer losses historically. Interestingly, pooled performance for smaller funds – those below $750 million – falls off to 14.2% with comparable upside returns to the mid-large cohort, but with worse downside performance historically.

In order to balance risk and return considerations, one should focus on each buyout and growth manager's individual track record of adding value to their companies while also analyzing downside risk, regardless of fund size.

[11] Annualized total return (with dividends reinvested) for S&P 500 for 1986 through 2023

Buyout and growth managers of all sizes should be considered a key component of core equity exposures.

Credit quality and income via alternatives

With reasonably strong economic growth and inflation easing slowly, markets have priced in the likelihood that rates will be staying higher for longer. While investment grade bonds have continued to suffer in 2024, we believe fixed income continues to offer attractive potential returns as well as potentially mitigating risk in a diversified portfolio.

In credit markets, we expect wider differences between securities' returns and more volatility. In our view, this creates potential opportunities beyond traditional long-only strategies. Hedge funds can seek to take advantage of relative value trading opportunities within liquid fixed income. For example, they could invest in higher yielding and more complex parts of the market and individual securities where additional expertise is needed. Examples range from stressed and distressed corporate debt to structured credit.

As discussed in **Core real estate exposure – opportunities amid cautiousness**, a dislocation has occurred within commercial mortgage-backed securities (CMBS). Well-positioned managers may therefore be able to buy quality credits at attractive yields. However, this window is not expected to remain open indefinitely, so fixed-life vehicles are preferred over typical perpetual life, open-ended mutual fund or hedge fund structures.

For those suitable and qualified investors seeking higher yields, private credit is making a comeback, as these funds typically distribute interest income to their investors. Historically, companies needed to seek credit from banks or public bond markets. For non-investment grade companies, bank capital has become more scarce and leveraged loan and high- yield markets are often difficult to access. For example, the leveraged loan markets had been effectively frozen for two years until thawing in the first quarter of this year. Private credit funds have stepped into this funding vacuum and been able to generate yield for their investors via the interest income they receive through fund distributions. It should be noted that the distribution schedule may differ from other fund structures. Private credit had a yield to maturity (YTM) as of 31 December 2023 of 12.2%, compared to 9.5% for leveraged loans and 7.5% for high-yield bonds.

Admittedly, private credit's yield has seen a slight drop from its recent high of 12.3% on 30 September 2023, reflecting tightening credit spreads. Further tightening, particularly in larger loans, will likely occur now that leveraged loan markets have reopened. However, we believe private credit may continue to enjoy its historical average yield premium of 150-200bps over leveraged loans, given the focus on the middle market and transactions that require a high degree of execution certainty and customization that do not have access to the leveraged loan markets.[12]

Private credit is one of the sectors where private, open-ended vehicles have become increasingly common. These types of investment funds have an indefinite lifespan and their managers can continuously adjust positioning in response to changing market conditions as they seek greater returns and to manage risk while investors stay fully invested – see **The rise of evergreen structures** for a complete discussion of the risks and potential for these open-ended vehicles in private markets.

[12] Cliffwater LLC and Bloomberg, as of 31 Dec 2023.Private credit, as represented by the Cliffwater Direct Lending Index ("CDLI"), leveraged loans are the Morningstar LSTA US leveraged loan 100 and high yield is the Bloomberg High Yield Index.

The role of hedge fund diversifiers in a core portfolio

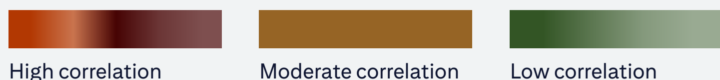
For those investors who meet the risk and investment objectives, hedge funds can play different roles in core portfolios. Some strategies may be used for opportunistic purposes but also seek to mitigate portfolio volatility and correlations to other asset classes. Amid market volatility and macroeconomic uncertainty, diversifying strategies such as relative value, equity market neutral, arbitrage and global macro may potentially provide a lowly correlated source of returns that can complement equities and bonds.

These strategies are available as single-strategy funds or multi-strategy funds that combine them in a vehicle that offers diversification and centralized risk management oversight. Individually, these strategies have low to moderate correlation to equities and bonds. If combined in a multi-strategy fund, they can potentially offer greater diversification and a ready-made allocation to these strategies.

FIGURE 3

Correlation matrix of diversifying hedge fund strategies

Correlation Matrix	HFRI EH: Equity Market Neutral Index	HFRI ED: Merger Arbitrage Index	HFRI Macro (Total Index)	HFRI Relative Value (Total) Index	MSCI World TR Net Index (USD)
HFRI EH: Equity Market Neutral Index					
HFRI ED: Merger Arbitrage Index	0.40				
HFRI Macro (Total Index)	0.38	0.32			
HFRI Relative Value (Total) Index	0.45	0.66	0.33		
MSCI World TR Net Index (USD)	0.31	0.53	0.31	0.58	
Bloomberg Barclays Global Aggregate Total Return Index Value Hedged	0.09	0.14	0.24	0.15	0.19



Source: Bloomberg. Correlations are shown for the period February 1990 to April 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.** Please see Glossary for definition of terms.

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Multi-strategy funds have the potential to improve risk-adjusted returns by incorporating new strategies that may enhance performance and complement existing allocations. Such diversification may help seek returns in a wider range of scenarios, with capital shifted toward strategies according to the market environment.

Multi-strategy funds are utilized as key components of hedge fund allocations, which aim for consistent returns and portfolio diversification given their low correlations to traditional assets. For example, the HFRI RV: Multi-Strategy Index has had a correlation of 0.2 or less to both the MSCI World Index and Bloomberg Global Aggregate Index since inception in February 1990 – **FIGURE 3**.

Importantly, diversifying hedge fund strategies are not necessarily designed to eliminate all market risk, but seek to reduce specific risk components through their investment selection and portfolio construction. They also tend to underperform traditional asset classes under certain market conditions, such as strong equity bull runs. So, investors should consider various types of exposures when constructing a diversifying alternatives allocation.

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The rise of evergreen structures in private markets – a potential new tool for alternatives

In recent years, private fund managers have introduced new structures for investing in private equity, real estate, private debt, and even venture capital – these are often called "evergreen funds." We believe these "evergreen funds" may transform how alternatives are integrated into portfolios and enable access for suitable and qualified investors.

These funds are often labeled as "evergreen," which references their perpetual life, similar to a typical hedge fund. Unlike many traditional private capital vehicles, evergreen funds do not have a predetermined end date. These funds can thus keep accepting new investments from new investors, stay invested for longer, and reinvest the returns they make, potentially enabling the pursuit of new opportunities as market conditions change, allowing investors to stay invested for the longer term. They often invest across a wide range of assets and may thus provide broad diversification. The challenge for investors is that these funds do not distribute investment proceeds but rather reinvest them. Thus, investors seeking liquidity must undertake a redemption process that only occurs periodically (monthly or quarterly) and is not guaranteed to occur. The liquidity profile of these funds is more akin to hedge funds than mutual funds, and they should never be perceived as liquid investments.

Another difference from traditional private capital vehicles is lower investment minimums, sometimes as low as $25,000 or even lower. What is more, the legal and regulatory requirements to become an investor in an evergreen fund are often less stringent, because these funds are often registered with regulators and publicly disclose certain financial information. As such, we believe these funds could enable a "democratization" of alternative investing.

In some cases, evergreen funds may potentially allow investors to redeem holdings on a monthly or quarterly basis. That said, there are usually significant restrictions on redemptions. This is to guard against big outflows that would force the fund to sell assets at unfavorable moments. So, they are certainly not liquid investments.

As of 9 February 2024, estimates of total evergreen funds' assets under management (AUM) stood at $1.05 trillion, or 7.2% of total private capital AUM.[13] The most popular strategies so far are core real estate and infrastructure via private real estate investment trusts (REITs), and private credit via private business development companies (BDCs), often in yield-generating funds. Evergreen vehicles are estimated to represent 27%, 19% and 7% of AUM in these private sectors respectively. By contrast, they make up only about 2% of private equity. But as managers gain confidence in the mechanisms in these structures for managing liquidity, we expect to see a broader range of evergreen offerings.

[13] Pitchbook evergreen AUM as of 9 Feb 2024; Preqin private capital AUM, as of 31 Dec 2023; both are most recent available

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Opportunistic themes for high-conviction investing

- Opportunistic investments seek to complement core portfolios
- We see potential in the continued growth of unregulated capital providers
- Industrial and hospitality real estate strategies look attractive to us
- “Unstoppable trends” may also have opportunistic potential
- But alternatives come with many risks such as illiquidity and complete loss of capital

In our view, globally diversified core portfolios – kept fully invested for the long term – can be the cornerstone of wealth preservation and growth. However, we also believe in complementing core portfolios with an opportunistic portfolio. The aim of opportunistic investing is to increase overall returns, risk-adjusted returns, or both.

Arising from high-conviction views, opportunistic investments are frequently concentrated rather than diversified. While often short-term, opportunistic alternatives positions should be able to be held for the longer term. They exist both in traditional and alternative asset classes. Among the latter are potential opportunities linked to timely ideas that we believe may benefit from current market conditions, shifting investor perceptions or faster-than-expected growth. But that potential benefit must be balanced by the long term commitment that an investment in an alternative opportunity may require.

Alternatives: The growth epicenter of unregulated financial companies

Private capital fundraising growth slowed in 2023. Nevertheless, alternatives AUM – as measured by net asset value plus unfunded commitments – reached a new high of $17.8 trillion, as of 31 December 2023. That was 11% higher than at the end of 2022.

Ongoing investment performance and the cumulative availability of dry powder (or unused commitments from investors) from the prior strong fundraising years of 2020-2022 have continued the long term AUM momentum that the alternatives asset class has enjoyed.[14]

We covered the many drivers of this ongoing growth in **Investing with and in unregulated financial companies** in Wealth Outlook 2024: Mid-Year Edition. We explored how alternatives managers have seen their businesses grow faster and broaden to new market segments as bank regulatory requirements have constrained traditional lending institutions, historically the lowest cost capital providers. Given the stresses seem by small and mid-sized banks in early 2022, more restrictions are likely to further burden regulated entities, creating potential growth opportunities for alternative providers. Though there is always the potential for increased regulation affecting alternatives managers in the future.

This growth presents a diversified set of potential opportunities for the sector. These can allow qualified investors to build an alternatives portfolio and participate in this long term trend via funds that provide capital to managers and general partners across the risk/return spectrum. This capital could be in the form of debt, structured investments, or direct ownership stakes in the managers.

[14] Preqin and HFRI, as of 31 Dec 2023

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Core real estate exposure – potential opportunities amid cautiousness in certain sectors

The real estate industry reflects many powerful forces in the world around us. These include the ever-growing influence of digital technologies, increasing environmental concerns, demographic changes, regional return-to-work dynamics, and consumer resilience. Such trends are driving the performance of various real estate asset types.

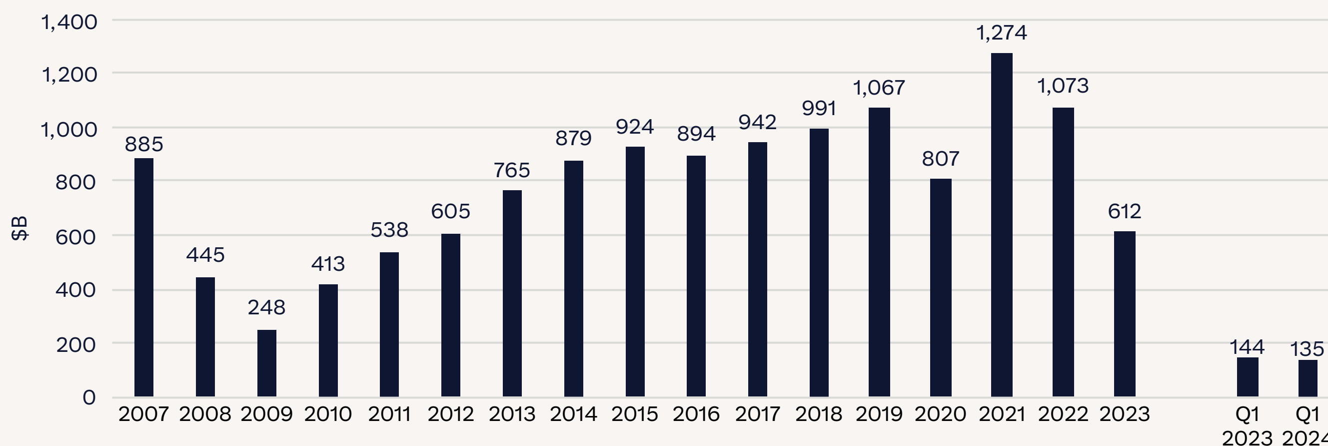
Despite troubles and ongoing risk in areas such as US offices, Chinese residential development, and parts of retail, much of the real estate market has held up well. Properties that address today's tenant needs around quality, technology and environmental concerns, can command premium rents and sale prices, regardless of market dynamics.

Overall, global commercial real estate deal volumes in 2023 and the first quarter of 2024 were hit by economic uncertainty and elevated interest rates. Real estate investors remained cautious. Investment volumes globally were down 44% year-over-year in 2023 from $1.07 trillion to $594 billion, falling another 6% year-over-year in the first three months of 2024. Direct real estate investment last year dipped to its lowest level since 2011 – FIGURE 1.

Regionally, investment volumes in 2023 fell 50% year-on-year in the Americas, 46% in Europe and 29% in Asia.[15] Elevated interest rates and tight credit conditions were the primary obstacles to deal flow and investor interest, despite positive property fundamentals in several sectors. The path to lower rates is still uncertain and the risk of rates staying higher for longer will likely continue to constrain dealmaking near term.

FIGURE 1

Direct real estate investment crumbled to 12-year lows in 2023



Source: JLL, as of Mar 2024. Chart shows direct real estate investment, 2007-Q1 2024

[15] JLL Global Real Estate Perspective, May 2024, as of 31 Mar 2024

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Industrial real estate fundamentals remain healthy globally. In many mature markets, supply is constrained, with near all-time low overall vacancy rates of 4.8% in the US and 3.6% in Europe.[16] Some relief for tenants may come from new supply due through the rest of 2024. However, the current interest rate environment is suppressing further new construction, pushing additional new deliveries to late 2025 or beyond. However, long term demand drivers – such as supply chain relocation away from China – should keep growth positive in 2024 and beyond – see **Navigating intensifying G2 polarization**.

With the COVID pandemic behind us, hospitality has continued to thrive as consumers make up for lost time. For hotels globally, revenue per available room (RevPAR) – a metric that reflects prices charged and occupancy levels – was 11.7% above 2019's pre-COVID levels as of 31 December 2023. This positive momentum continued for the first two months of 2024, with growth of 14.7% over the equivalent period in 2019.[17]

The recovery in hospitality has been led by leisure travel, but urban and business travel also surged in the second half of 2023 and into 2024.[18] As with other sectors, high interest rates will stifle new development near term. "Value-add" strategies that maximize existing properties' value are therefore the focus.

Elsewhere, the picture is mixed and caution is warranted. Office is the weakest segment, with demand highly uncertain. We remain cautious about investing here, but regional distinctions can potentially create pockets of opportunity. There are also some important office subclass distinctions, particularly in the US. Class A buildings – those with the newest amenities and facilities, situated in the most desirable locations – saw low vacancies and rent increases in 2023. By contrast, the vacancies for Class B or C non-prime space kept rising. In retail, work-from-home trends that hit city center and office markets keep us cautious, also supported meaningful growth in suburban retail properties.

Global housing markets have been primarily driven by rental demand for the past 18 months, boosting the multifamily sector. However, investor demand for multifamily was somewhat mixed in 2023 after several years of strong price gains as valuations were hit by elevated interest rates. The multifamily sector's average cap rate – a yield figure reached by dividing net operating income by a property's value – fell below that of the other property types and the sector's own history. This high valuation made multifamily more susceptible to a pullback.[19]

Lately, banks have had limited room for underwriting new loans. Regulatory stress tests and liquidity requirements are pushing them to change the makeup of their lending portfolios. However, the demand for loans is not going unmet. Structured credit investors are stepping up to fill the gap left by banks.

This type of lending involves creating portfolios of debt instruments – such as commercial or consumer loans and mortgages – slices or "tranches" of which are then sold on to investors. Investors can select structured credits according to the quality of the assets backing the loans, credit support, and the risk/return profile. The returns are above those available on corporate bonds with the same credit rating.

We currently see potential in BBB-rated commercial backed mortgage securities (CMBS). These instruments are secured by mortgages on the likes of industrial properties, offices, shopping centers

[16] CBRE, as of 31 Dec 2023
[17] JLL, Global Real Estate Perspectives, Feb 2024, as of 31 Dec 2023
[18] Deloitte 2024 Travel Outlook, Jan 2024
[19] CBRE, as of Feb 2024

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and so forth. A BBB rating implies moderate levels of risk – see disclosures at the end of this publication. BBB-rated CMBS spreads – or the additional yield they offer over US Treasuries of similar maturity – have risen lately owing to negative sentiment. They are now higher than they have been for three-quarters of their history, since the CMBS market emerged in the early 1990s. Unlevered yields are in double digits for securities backed by first mortgage loans.

Over time, spreads have rarely exceeded 600bps for a prolonged period. We therefore currently see a window to invest at potentially attractive levels.[20] However, with the higher risk of default for lower quality properties, having managers with expertise in underwriting individual properties and credits is critical.

Unstoppable trends

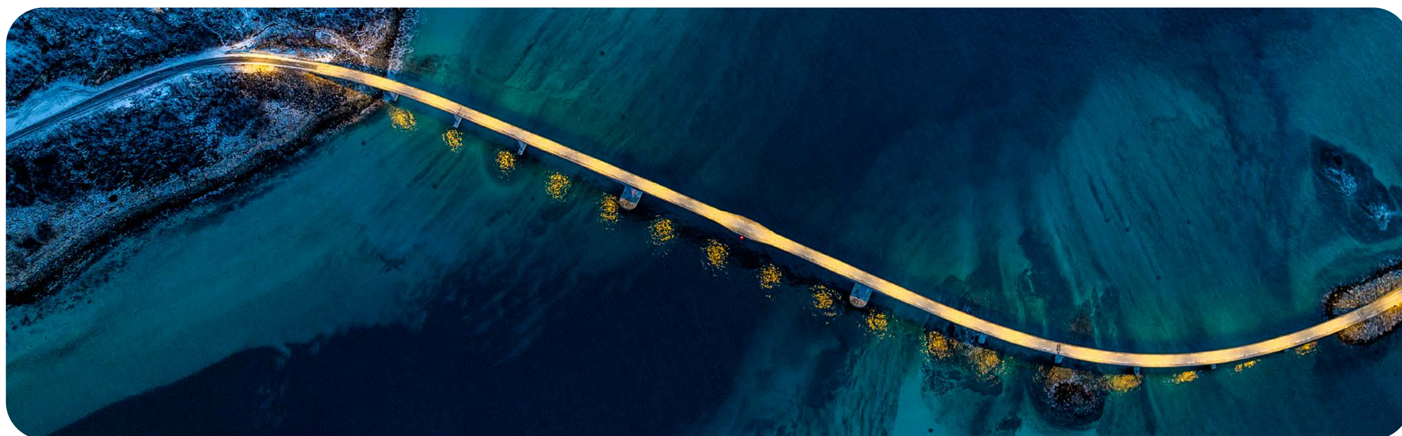
AI-propelled digitization

With the proliferation of artificial intelligence (AI), the next phase of the digital revolution is underway. We believe this may transform how we live and work, potentially creating a new generation of leading companies across sectors such as robotics, automation, drug discovery and cyber security.

However, the transformational potential for established technology and software companies could be just as compelling if they adapt nimbly.

Companies globally are increasingly investing in the adoption of AI, with private equity-led companies at the forefront. The next generation of potential AI leaders is being incubated and developed in the well-established technology venture capital, growth and private equity ecosystem. Private market strategies targeting next-generation solutions in software and computing are a way for investors to seek early-stage exposure to this next phase of the digital age.

The number of newly funded AI companies increased 40.6% in 2023 year-over-year to 1,812. This represented an 8.1% increase over the prior all-time high of 1,676 in 2021 – FIGURE 2. The average size of investment in these new companies was $32.4 million.[21] While large-cap public AI companies might currently be enjoying strong investment performance, their valuations are already quite elevated. Private strategies can seek AI-driven returns at a much smaller scale, albeit with potentially higher technology and adoption risks.

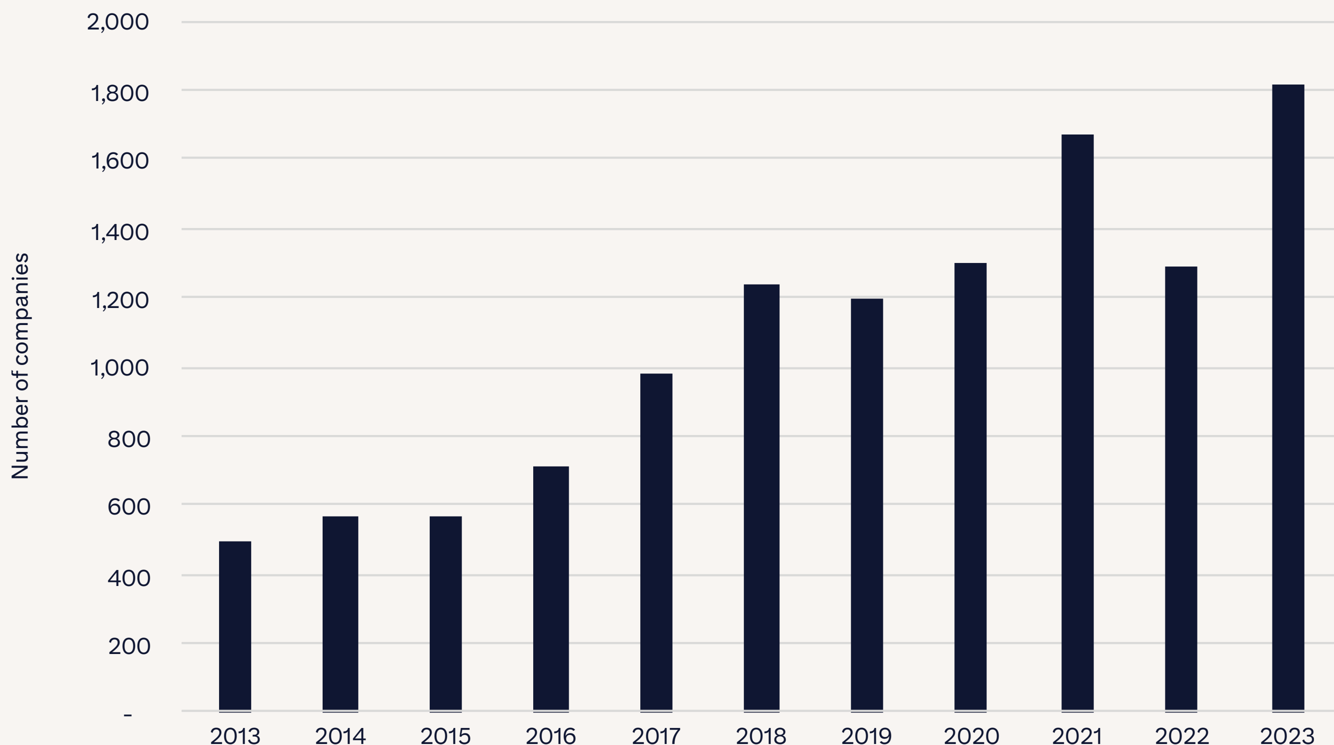


[20] Marathon Asset Management, LP, JP Morgan, as of 2024

[21] Nestor Maslej, Loredana Fattorini, Raymond Perrault, Vanessa Parli, Anka Reuel, Erik Brynjolfsson, John Etchemendy, Katrina Ligett, Terah Lyons, James Manyika, Juan Carlos Niebles, Yoav Shoham, Russell Wald, and Jack Clark, "The AI Index 2024 Annual Report," AI Index Steering Committee, Institute for Human-Centered AI, Stanford University, Stanford, CA, April 2024

FIGURE 2

Newly funded AI companies worldwide



Source: Nestor Maslej, Loredana Fattorini, Raymond Perrault, Vanessa Parli, Anka Reuel, Erik Brynjolfsson, John Etchemendy, Katrina Ligett, Terah Lyons, James Manyika, Juan Carlos Niebles, Yoav Shoham, Russell Wald, and Jack Clark, "The AI Index 2024 Annual Report," AI Index Steering Committee, Institute for Human-Centered AI, Stanford University, Stanford, CA, Apr 2024

AI requires accelerated energy transition

AI-propelled digitization will require much more electricity to power and cool all the large-scale data processing. Data centers, cryptocurrencies and AI together consumed around 460 terawatt-hours (TWh) of electricity worldwide in 2022, some 2% of global electricity demand. In the US, they already accounted for 4%.

The International Energy Agency's base case estimate is an annual electricity consumption of 830 TWh by 2026, up 80%. However, the forecasted range is wide, with a high of 1,050 TWh to a low of 620 TWh.[22] This reflects the uncertainty around the pace of AI deployment and potential advances in energy efficiency.

In any event, it seems likely that surging demand will strain existing electricity grids. Given the ongoing commitments of governments around the world to embracing cleaner energy, this heightens the need to shift away from hydrocarbons and raise efficiency.

By 2050, electricity production may have grown 2.6 times from 2023 levels to 71,000 terawatt hours. A $50 trillion investment in new transport infrastructure and transition enabling technologies may be required, with a great deal coming from

[22] IEA, International Energy Agency, "Electricity 2024: Analysis and forecast to 2026," as revised May 2024

the state.[23] In addition, we believe there will be numerous opportunities to invest in the technology and services to facilitate the energy transition via private equity and hedge fund strategies.

Navigating intensifying G2 polarization

The US and China – the "G2" powers – are locked in an escalating strategic rivalry. Recent diplomatic efforts to find common ground may have softened rhetoric on both sides. However, the G2 powers remain polarized in multiple spheres. We expect this to persist, whoever wins the US presidential election – see **Intensifying Polarization** in Wealth Outlook 2024: Mid-Year Edition.

Polarization has far-reaching implications for the global economy, trade, technology and finance, with impacts on portfolios everywhere. Our investment approach to this theme does not call for picking sides. Instead, we seek ways to benefit from the various shifts across industries and supply chains. Also, less liquid assets such as private equity, real estate, and hedge funds should be considered in light of long term factors and local market dynamics.

For example, the continued shift in economic power toward Asia has been an unstoppable trend for several years and will likely continue amid the G2 tensions. We continue to focus on investment opportunities in developed Asia and greater China for both return potential and diversification, while also being consistent with other thematic trends. We believe that actively managed investment strategies may be a way for investors to pursue this often-complex theme. The potential scope for investment in sectors in Taiwan, Korea, and Japan, are very intertwined with China and the global economy as both partners and competitors. Thus, our preference is for strategies from regionally based specialist managers with expertise in market and security selection.

Long/short equity hedge funds with regionally based research teams may potentially outperform by identifying both winners and losers and shifting capital between countries and sectors. Given the many risks from G2 polarization, continuous portfolio diversification and risk management are important considerations when navigating regional market volatility.

The G2 polarization's effects extend far beyond Asia. For example, US and European policies that aim to bolster their economic and technological security have seen tightening restrictions on Chinese imports and access to key technologies. These and other powers want to develop supply chains that reduce their dependence on China, bringing production back onshore or to friendly nearby countries.

We seek to invest in this "near-shoring" trend. One potential beneficiary we identify is industrial real estate, which includes factories, warehouses, and other logistical properties. This has been one of the most resilient sectors globally since 2020, as discussed in – **Core real estate exposure – potential opportunities amid cautiousness in certain sectors**. Part of the reason for this is companies seeking premises closer to home. Other drives include the ongoing advance of e-commerce and seeking to optimize location to be closer to customers or distribution networks.

We believe these forces will continue to drive demand for industrial real estate. Of course, there are many risks, including high interest rate challenges, cost inflation for developers, and general macro-economic concerns.

[23] IEA, International Energy Agency, "Electricity 2024: Analysis and forecast to 2026," as revised May 2024

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Glossary

Asset class definitions

Cash is represented by US 3-month Government Bond TR, measuring the US dollar-denominated active 3-month, fixed-rate, nominal debt issues by the US Treasury.

Commodities asset class contains 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 commodity (e.g., oil, coal), industrial metals (e.g., copper, iron ore), and agricultural commodity (i.e., soy, coffee) respectively. Reuters/Jeffries CRB Spot Price Index, the TR/CC CRB Excess Return Index, an arithmetic average of commodity futures prices with monthly rebalancing, is used for supplemental historical data.

Developed Market Corporate Fixed Income is composed of Bloomberg Barclays indices capturing investment debt from seven different local currency markets. The composite includes investment grade rated corporate bonds from the developed-market issuers.

Developed Market Equity is composed of MSCI indices capturing large-, mid- and small-cap representation across 23 individual developed-market 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.

Developed Investment Grade Fixed Income is composed of Barclays indices capturing investment-grade debt from 20 different local currency markets. The composite includes fixed-rate treasury, government-related, and investment grade rated corporate and securitized bonds from the developed-market issuers. Local market indices for US, UK and Japan 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 Citi Wealth Alternatives and Investment Manager Solutions. 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 Citi Wealth Alternatives and Investment Manager Solutions. 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.

Emerging Market Fixed Income is composed of Barclays indices measuring performance of fixed-rate local currency emerging markets government debt for 19 different markets across Latin America, EMEA and Asia regions. iBoxx ABF China Govt. Bond, the Markit iBoxx ABF Index comprising local currency debt from China, is used for supplemental historical data.

Emerging Markets (EM) Hard Currency Fixed Income is represented by the FTSE Emerging Market Sovereign Bond Index (ESBI), covering hard currency emerging market sovereign debt.

Equity Market Neutral is an investment strategy in which the portfolio manager attempts to exploit differences in stock prices by being long and short an equal amount in closely related stocks.

Evergreen Fund is broad term used to describe an investment fund that is open-ended and has no set maturity or termination date and continually accepts new investors and capital while also providing a mechanism for investors to exit their investment. Evergreen funds reinvest profits and may or may not distribute yield to investors.

Hedge Funds are composed of investment managers employing different investment styles as characterized by different sub categories – 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 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; Barclays Trader CTA Index: The composite performance of established programs (Commodity Trading Advisors) with more than four years of performance history.

High Yield Bank Loans are debt financing obligations issued by a bank or other financial institution to a company or individual that holds legal claim to the borrower's assets in the event of a corporate bankruptcy. These loans are usually secured by a company's assets, and often pay a high coupon due to a company's poor (non-investment grade) credit worthiness.

High Yield Fixed Income is composed of Barclays indices measuring the non-investment grade, fixed-rate corporate bonds denominated in US dollars, 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 emerging market debt.

Multi-Strategy Hedge Funds combine different single hedge fund strategies in one portfolio and differentiate considerably from each other. Most often, such portfolios include a variety of long-short, relative value and event-driven strategies.

Private Credit is debt financing provided by non-bank lenders such as hedge funds, private debt funds, business development companies (BDCs) and specialty finance companies. Private credit can take on various forms, including direct loans, mezzanine financing or private debt funds. Small- and medium-sized companies most commonly take on private credit.

Private Equity is an alternative investment class which at its most basic form is the capital or ownership of shares not publicly traded or listed on a stock exchange. Its characteristics are often driven by those for Developed Market Small-Cap Equities, adjusted for illiquidity, sector concentration and greater leverage.

Real Assets are physical assets that have an intrinsic worth due to their substance and properties. Real assets include precious metals, commodities, real estate, land, equipment, and natural resources.

Real Estate Investment Trust or REIT is a corporate entity that either has bulk or all 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 an 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 SEC as REITs, but do not trade on major stock exchanges.

Relative Value Hedge Funds maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk-adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

Structured Credit is an investment strategy which involves pooling similar debt obligations and selling off the resulting cash flows. Structured credit products are created through a securitization process, in which financial assets such as loans and mortgages are packaged into interest-bearing securities backed by those assets, and issued to investors. This, in effect, re-allocates the risks and return potential involved in the underlying debt.

Index definitions

Bloomberg Barclays Global Aggregate Total Return Index is a flagship measure of global investment grade debt from 24 local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

Bloomberg US Corporate High Yield Bond Index measures the USD-denominated, high-yield, fixed-rate corporate bond market.

Cliffwater Direct Lending Index (CDLI) measures the un-levered, gross-of-fees performance of US middle-market corporate loans, as represented by the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility criteria.

HFRI (EH) Equity Hedge: Equity Market Neutral Index is an index of equity market neutral strategies, which employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. These can include both factor-based and statistical arbitrage/trading strategies. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

HFRI (ED) Event-Driven: Merger Arbitrage Index is an index of merger arbitrage strategies, which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction. Merger Arbitrage involves primarily announced transactions, typically with limited or no exposure to situations which pre-, post-date or situations in which no formal announcement is expected to occur. Opportunities are frequently presented in cross border, collared and international transactions which incorporate multiple geographic regulatory institutions, with typically involve minimal exposure to corporate credits. Merger Arbitrage strategies typically have over 75% of positions in announced transactions over a given market cycle.

HFRI Fund of Funds Composite Index is an index of fund of funds, which invest with multiple managers through funds or managed accounts. The strategy designs a diversified portfolio of managers with the objective of significantly lowering the risk (volatility) of investing with an individual manager. The Fund of Funds manager has discretion in choosing which strategies to invest in for the portfolio. A manager may allocate funds to numerous managers within a single strategy, or with numerous managers in multiple strategies. The minimum investment in a Fund of Funds may be lower than an investment in an individual hedge fund or managed account. The investor has the advantage of diversification among managers and styles with significantly less capital than investing with separate managers.

HFRI Fund Weighted Composite Index is a global, equal-weighted index of single-manager funds that report monthly net of all fees performance in US Dollar and have a minimum of $50 million under management or $10 million under management and a 12-month track record of active performance. The index does not include fund of funds.

HFRI Macro (Total) Index is an equal weighted index of multiple macro fund managers. Macro involves investing by making leveraged bets on anticipated price movements of stock markets, interest rates, foreign exchange and physical commodities. Macro managers employ a "top-down" global approach and may invest in any markets using any instruments to participate in expected market movements. These movements may result from forecasted shifts in world economies, political fortunes or global supply and demand for resources, both physical and financial. Exchange-traded and over-the-counter derivatives are often used to magnify these price movements.

HFRI Relative Value (Total) Index is an equal weighted index that maintains positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types.

Merrill Lynch High Yield Master II Index is an index commonly used for high-yield corporate bonds. The Master II is a measure of the broad high yield market, unlike the Merrill Lynch BB/B Index, which excludes lower-rated securities. It is an unmanaged index comprised of over 1,200 high yield bonds representative of high yield bond markets as a whole. It includes zero-coupon bonds and payment-in-kind (PIK) bonds.

Morningstar LSTA US Leveraged Loan 100 Index is designed to measure the performance, activity, and key characteristics of the most tradeable loans in the US leveraged loan market (see "Bank loans, also known as leveraged loans," above). Index constituents include the 100 largest facilities (i.e., outstanding loans) at any given time in the US, weighted by market value, subject to a single loan facility weight cap of 2%.

MSCI World TR Net Index covers large- and mid-cap equities across 23 Developed Markets countries. With 1,603 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

Pitchbook Private Capital Index is a capital-weighted, aggregate quarterly returns index which captures private equity, venture capital, real estate, real assets, private debt, funds of funds, and secondaries funds.

Preqin Private Capital Quarterly Index captures the return earned by investors on average in their private capital portfolios, based on the actual amount of money invested in private capital partnerships.

S&P 500 Index is a capitalization-weighted index that includes a representative sample of 500 leading companies in leading industries of the US economy. Although the S&P 500 focuses on the large-cap segment of the market, with over 80% coverage of US equities, it is also an ideal proxy for the total market.

S&P U.S. High Yield Corporate Bond Index is designed to track the performance of US dollar-denominated, high-yield corporate bonds issued by companies whose country of risk use official G-10 currencies, excluding those countries that are members of the United Nations Eastern European Group (EEG).

SG (Societe Generale) Trend Index is designed to track the 10 largest (by AUM) trend following CTAs and be representative of the trendfollowers in the managed futures space. The index is equal-weighted and reconstituted annually.

Other terminology

Aggregate Deal Value USD BN is the total value of deals that occurred in the specified time period, for the specified asset class.

Business Development Company, also known as a BDC, is a regulated investment company that raises capital from individual and institutional investors through the sale of shares in the stock market. BDCs provide financing to private companies, typically small- and mid-sized businesses. BDCs are required to distribute a significant portion of their taxable income to shareholders in the form of dividends.

Collateralized loan obligations or CLOs are securities that are backed by a pool of loans. CLOs are a means to repackage portfolios of loans to be sold to investors and generate liquidity for loan underwriters to make additional loans.

Corporate Acquisition is defined as a corporate transaction where one company purchases a portion or all of another company's shares or assets. Acquisitions are typically made in order to take control of, and build on, the target company's strengths and capture synergies.

Correlation is a statistical measure of how two assets or asset classes move in relation to one another. Correlation is measured on a scale of 1 to -1. A correlation of 1 implies perfect positive correlation, meaning that two assets or asset classes move in the same direction all of the time. A correlation of -1 implies perfect negative correlation, such that two assets or asset classes move in the opposite direction to each other all the time. A correlation of 0 implies zero correlation, such that there is no relationship between the movements in the two over time.

EV/Revenue Multiple is a ratio that compares the total valuation of a firm's operations (enterprise value) to the amount of sales generated in a specified period (revenue).

G2 or Group of Two is a hypothetical and an informal grouping made up of the United States of America and People's Republic of China that was first proposed by C. Fred Bergsten. While the original concept had a strong economic focus, more recent iterations have a more all-encompassing focus.

IPO or Initial Public Offering refers to the process of offering shares of a private corporation to the public in a new stock issuance for the first time. An IPO allows a company to raise equity capital from public investors.

IRR or Internal Rate of Return is a metric used in financial analysis to estimate the profitability of potential investments. IRR is a discount rate that makes the net present value (NPV) of all cash flows equal to zero in a discounted cash flow analysis.

Leveraged Buyout (LBO) is the acquisition of another company using a significant amount of borrowed money (bonds or loans) to meet the cost of acquisition. The assets of the company being acquired are often used as collateral for the loans, along with the assets of the acquiring company.

Nearshoring refers to a business strategy that involves companies shifting their manufacturing and production operations closer to their main markets, allowing them to reduce transportation costs and deliver their products faster to customers.

Net IRR, or internal rate of return, is a performance measurement equal to the internal rate of return after fees and carried interest are factored in. It is used in capital budgeting and portfolio management to calculate an investment's yield or overall financial quality by calculating an expected rate of return.

Non-traditional credit is a term used to describe debt instruments that are not issued by regulated banks or traded on an open market.

Public listing refers to a security which is publicly traded on an established stock exchange or national market system; and, with respect to an entity, that such entity is the issuer of a security that is publicly listed.

Refinancing refers to the process of revising and replacing the terms of an existing credit agreement, usually as it relates to a loan or mortgage.

Restructuring is a significant action undertaken by a company in order to modify its operations with the intention of reducing debt, increasing efficiency and improving the business going forward. A business restructure is most common in companies facing financial difficulties.

Secondary Buyout refers to a transaction involving the sale of a portfolio company by one financial sponsor or private equity firm to another. This kind of buyout indicates the end of the seller's control or involvement with the company.

Shadow banking system is a term used to describe financial intermediaries that engage in bank-like activities, usually lending, but are not subject to banking regulatory oversight.

Sponsor Acquisition refers to the acquisition directly or indirectly by a company (and/or its respective affiliates).

Strategic Return Estimates (SRE) are Citi Global Wealth Investments' forecast of returns for specific asset classes over a 10-year time horizon. The forecast for each specific asset class is made using a proprietary methodology that we believe is appropriate for that asset class.

Trade Sale is the disposal of a company's shares or assets, in whole or in part to another company, an M&A exit, in other words, in which the target company is acquired for cash or stock.

Vintage Year in the private equity and venture capital industries refers to the year in which a fund began making investments or, more specifically, the date in which capital was deployed to a particular company or project. Investors may cite the vintage year in order to gauge a potential return on investment (ROI).

Volatility is a statistical measurement of the variability of return, commonly defined as either the standard deviation of returns. The higher an asset or asset class's volatility, the riskier it is seen as being.

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