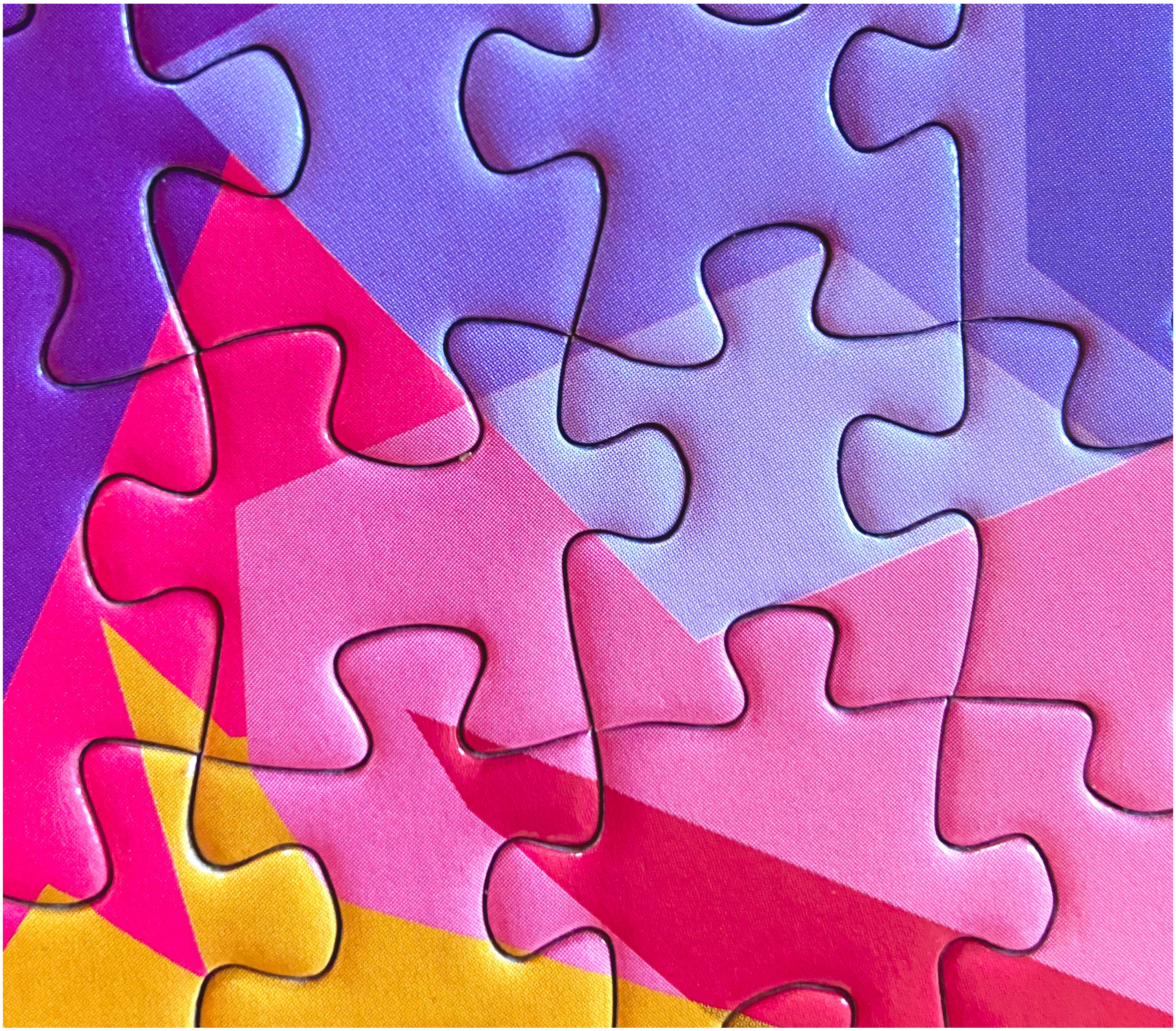
Year Ahead | 2024

Connecting the Pieces



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Connecting the Pieces

By Michael Crook, Chief Investment Officer

Our economic message over the last couple of years has been consistent: the monetary policy arm of the Federal Reserve, the Federal Open Market Committee (FOMC), was behind the curve on inflation and it would take time for FOMC action to appropriately slow inflation and the economy. There was always going to be a time to shift that view, and for us that time came in early November (That's All, Folks!) when it became clear that strong third quarter growth had not carried forward into the fourth quarter (Fig. 1) and inflation, for all intents and purposes, was headed back to 2%.

The Fed was careful about their timing in putting those puzzle pieces together and, after remaining stubbornly hawkish (i.e., more concerned about inflation than growth) in their public comments during the first week of December, used their December 13 meeting to pivot to a soft-landing narrative. While he maintained some balance in his comments about the importance of remaining vigilant in the fight against inflation, Fed Chair Jerome Powell made it clear that the Fed would be cutting policy rates sooner than later.

Investors have been focused on monetary policy and inflation for 2–3 years, but now it's time to look forward to the other factors that will drive markets in 2024. The risks are balanced around whether the Fed has under- or overshot their objective, and we simply won't know for 12–18 months whether the timing and magnitude of the policy shift was correct.

Investors have been focused on monetary policy and inflation for 2–3 years, but now it's time to look forward to the other factors that will drive markets in 2024.

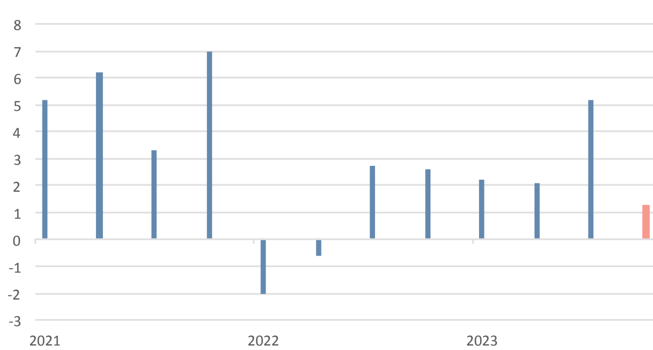
Our 2024 Year Ahead examines where we're at in the economic cycle, discusses some of the risks to economic growth, covers our updated capital market assumptions, and also presents our best ideas in fixed income, private debt, public equity, and private equity.

Mission Accomplished

I rarely see the phrase "Mission Accomplished" without immediately thinking about President George W. Bush's banner on the USS *Abraham Lincoln*. In a highly visible lesson around the perils of declaring victory too early, he

Fig. 1: 3Q23 GDP appears to be an anomaly

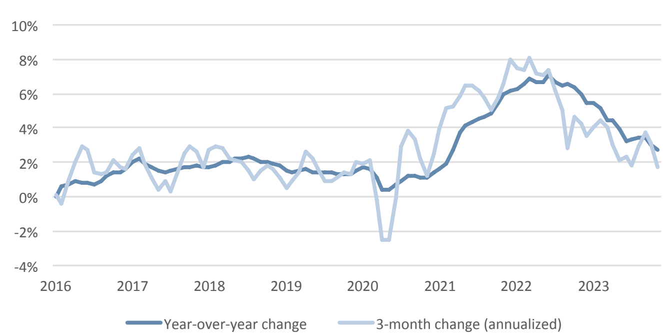
Real GDP, annualized quarterly change



Source: Bloomberg, Mill Creek. 4Q23 is Atlanta Fed GDPNow estimate.

Fig. 2: Inflation continues to moderate

Personal Consumption Expenditures price index



Source: Bloomberg, Mill Creek.

celebrated an end to combat operations in Iraq just six weeks into what would be an eight-year battle.

However, sometimes a mission has been accomplished and it is equally perilous to refuse to admit it. Powell's war against inflation is over. Year-over-year measures of inflation remain elevated, but shorter-term measures all show continued disinflation over the course of 2023 toward the Fed's 2% objective for the Personal Consumption Expenditures (PCE) price index (Fig. 2). In fact, inflation measures that use real-time indicators of housing inflation (a large part of consumer spending) indicate inflation might have already fallen below the Fed's 2% target.

Remarkably, success against inflation has been achieved without triggering significant job losses. Initial jobless claims (Fig. 3) and continuing jobless claims remain very low and aggregate payroll growth (Fig. 4) also remains consistent with a healthy, normal economy. Yes, if you squint at the data, you can find signs of softening — for example, the percentage of employees voluntarily quitting their jobs and the rate of new hiring (Fig. 5) have both fallen significantly — but those rates were unusually high and are now just back to pre-COVID levels.

In sum, December was an appropriate time for Powell to declare victory, and we considered his previous reticence a primary economic risk for 2024. Monetary policy operates with long and variable lags and today's restrictive policy rates will continue to slow the economy well into 2024.

Forecast Errors

The FOMC periodically publishes a "Summary of Economic Projections" (SEP). In March 2021, the FOMC median projection was for inflation of 1.8%, 1.9%, and 2% in 2021, 2022, and 2023, respectively. The FOMC median projection was also for the federal funds rate to end 2021, 2022, and 2023 at 0.1% in each year (no hikes at all). As we all know now, these projections were awful. Inflation was 6.2% in 2021, 5.4% in 2022, and around 2.6% in 2023. Instead of keeping policy rates at zero, the Fed embarked on the fastest hiking cycle in history. The fed funds rate currently stands at 5.25–5.5%.

By March 2023, the Fed had acquiesced on inflation and was essentially projecting that a recession would be necessary to restore price stability. The SEP projected the unemployment rate and inflation would finish 2023 at 4.6% and 3.3%, respectively. The actual numbers were 3.7% and 2.6%. Inflation came down quickly but without the recession the Fed thought would be necessary.

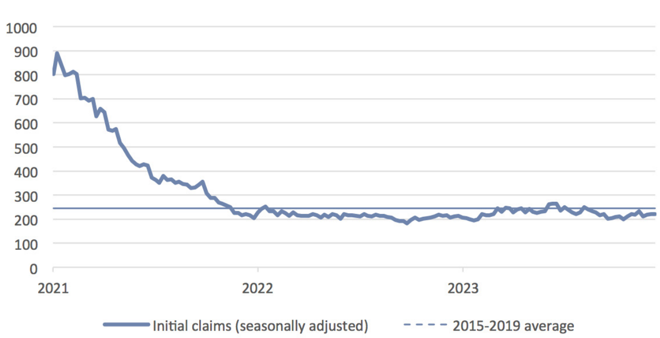
This commentary about bad forecasts isn't meant to target the Fed, as many private forecasters were just as far off base. We've linked to Bloomberg's ridiculous "100% odds of a recession" forecast a few times in our commentaries. We mention forecast misses here as a reminder that predicting the macroeconomic environment is challenging, and the Fed's current forecasts are just as likely to be wrong as were their forecasts from 2021 and 2022. As investors, we monitor the macro environment and occasionally make asset allocation changes when there's a clear mispricing (underweighting fixed income in early 2021, for example), but generally allow fundamental valuations to be the ballast of investment decisions in uncertain waters.

Where are the potential weak links?

Despite the current widespread investor optimism, there are a number of interest rate-sensitive industries and countries that have been hard-hit by higher interest rates over

Fig. 3: Initial unemployment claims remain very low

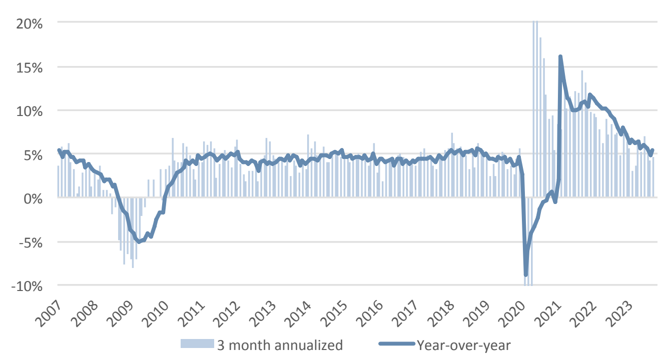
Initial Unemployment Claims, weekly, seasonally adjusted



Source: Bloomberg, Mill Creek.

Fig. 4: Aggregate income growth has normalized

US Index of Aggregate Weekly Payrolls, Total Private



Source: Bloomberg, Mill Creek.

the last two years. The cumulative slowdowns in these industries and countries have not been sufficient to tip the overall balance of economic growth, but they are increasingly something that we must monitor.

Within the US, higher interest rates and an inverted yield curve have severely impacted regional banks and employment in the real estate sector. Banks have tightened standards for virtually all types of lending: credit card loans, consumer loans, auto loans, commercial and industrial loans, and commercial real estate loans. Some of the demand for these loans has moved outside the banking sector into private lending (which we have select exposure to in our private debt fund), but in general, lower credit availability is a headwind for economic growth.

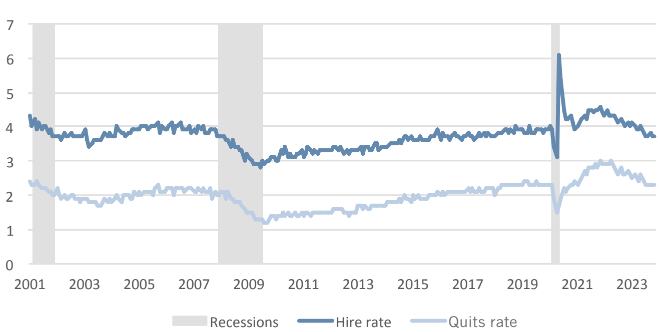
Interest rate-sensitive countries like Canada, the UK, and Australia are also a source of risk for the global economy. Relative to the US, these countries tend to have high levels of household debt, high home prices, and low availability of fixed rate mortgages. As mortgage rates reset and become unmanageable, we could see a deleveraging cycle that impacts consumer spending and leads to forced selling and a default cycle.

'There Are Weeks Where Decades Happen'

A tremendous amount of ink was spilled in 2023 about the dramatic outperformance of seven very exceptional (some might say *magnificent*) stocks: Microsoft, Amazon, Meta, Apple, Alphabet, Nvidia, and Tesla. Due mainly to valuation expansion, an equal-weighted portfolio of those seven stocks appreciated 107% during 2023 versus only 15.5% for the remaining 493 companies in the large-cap index and 16.3% for the international equity market.

Fig. 5: Quit and hire rates have normalized

Quits Rate and Hire Rate from JOLTS Report



Source: Bloomberg, Mill Creek.

While the pace of outperformance for the magnificent seven was unusual, the magnitude was not. Between 1926 and 2016, an average of 45% and 52% of US equities outperformed the US market benchmark and Treasury bills, respectively, during each calendar year. In any given decade only about 37% and 49% of US equities outperformed US market benchmark and Treasury bills, respectively.

In 2023, approximately 27% of stocks in the S&P 500 outperformed the index and about 50% outperformed cash. To rephrase a quote by Vladimir Lenin, it was *a year where a decade happened*. Will it continue? To some extent the outperformance has already ended – the M7 performed in-line with the other 493 companies in the S&P 500 since mid-July and even underperformed US small-cap by about 2.6% in November and December.

Capital Market Assumptions

Two specific items are worth highlighting in regard to our annual Capital Market Assumptions (Fig. 6, next page) update: (1) the decline in the equity risk premium for US equities; and (2) the now-sustained positive correlation between stocks and bonds.

The equity risk premium (Fig. 7, next page) is a technical reference to the expected return differential between stocks and US Treasury bonds. Due in part to the exceptional performance of the stocks that make up the largest components of the US large-cap universe, the US large-cap equity risk premium collapsed from over 4% to less than 3% over the last 12 months. A lower US equity risk premium highlights the importance of remaining diversified across size and geographies as the non-large-cap US areas of the global equity market offer better valuation support at the current time.

Second, stocks and bonds continue to trade together and provide little diversification benefit for a balanced portfolio (Fig. 8, next page). This correlation aspect doesn't show up in our return expectations, but (1) leads to higher estimated and realized portfolio volatility, (2) generates bigger swings, positively and negatively, within the portfolio, and (3) highlights the importance of utilizing alternative strategies that can provide diversification relative to stocks and bonds.

The remainder of this Year Ahead focuses on our best ideas for 2024 within fixed income, private credit, public equities, and public credit. These are all ideas that we have "live" within our investment programs and we expect to contribute to outperformance over the course of 2024.

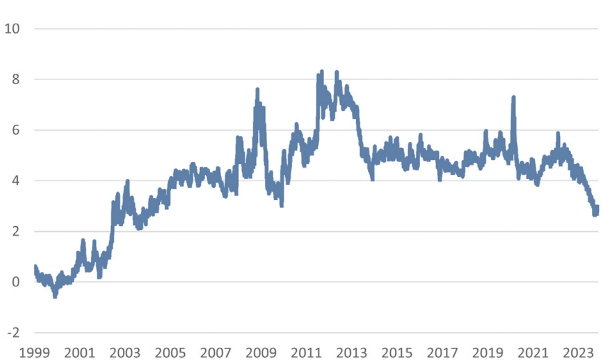
Fig. 6: 2024 Capital Market Assumptions

Asset Class	Jan. 2023 Estimate	Jan. 2024 Estimate	Difference	Estimated Volatility	Sharpe Ratio
Cash and Fixed Income					
US Cash	2.5%	3.0%	0.5%	0.3%	–
US Taxable Bonds	4.8%	5.1%	0.3%	3.1%	0.7
US Treasuries	4.3%	4.6%	0.3%	3.6%	0.4
US Agency Debt	4.9%	5.5%	0.6%	2.1%	1.2
US Corporate IG	5.6%	5.7%	0.1%	5.2%	0.5
US Corporate HY	7.2%	6.9%	-0.3%	6.5%	0.6
Municipal Bonds	3.0%	3.0%	0.0%	3.7%	0.0
Municipal High Yield	5.6%	5.5%	-0.1%	6.6%	0.4
Public Equity					
Global Equity	9.8%	8.7%	-1.1%	13.3%	0.4
United States	9.4%	7.4%	-2.0%	13.5%	0.3
International Developed	10.0%	10.0%	0.0%	14.1%	0.5
Emerging Market	11.0%	11.3%	0.3%	16.0%	0.5
Non-traditional					
Absolute Return	7.6%	8.0%	0.4%	4.7%	1.1
Diversified Private Lending	8.0%	9.0%	1.0%	4.7%	1.3
Private Equity	12.1%	12.2%	0.1%	7.5%	1.2
Other					
Inflation (CPI)	2.5%	2.5%	0.0%		

Source: Bloomberg, Mill Creek.
Mill Creek Capital Advisors' (MCCA) Capital Market Assumptions are forward-looking risk, return, and covariance estimates for a range of broad asset classes. They are created using a quantitative and qualitative process that incorporates current global economic and financial market conditions, market derived forecasts, and proprietary forecasts developed by the Mill Creek Investment Strategy Team. Our Capital Market Assumptions reflect our forward-looking views for one market cycle, which MCCA defines as including a bull and bear market. The duration of a market cycle has historically ranged from 2-15 years but are typically 5-10 years in length. The broad asset classes are not representative of any MCCA investment asset allocation strategies and are used to represent general ranges of risk taking.

Fig. 7: The US equity risk premium has declined

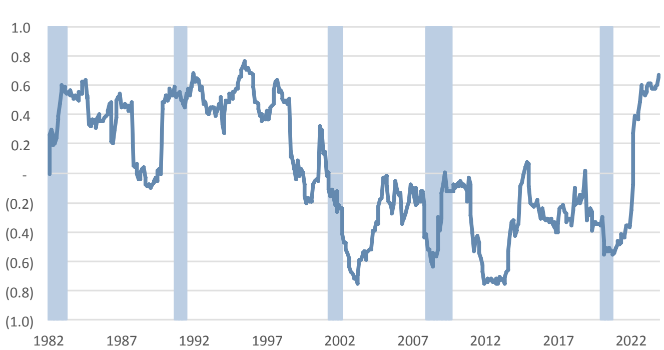
Expected S&P 500 excess return over US Treasuries



Source: Bloomberg, Mill Creek.

Fig. 8: Stock/bond correlations have jumped post-COVID

24-month rolling correlation, S&P/Treasury Bonds



Source: Bloomberg, Mill Creek.

House View Summary

Global economy

- We believe the Federal Reserve ended their hiking cycle in July and will likely cut rates at least one time by March 2024.
- Shorter-term measures of inflation indicate it has fallen enough for the Fed to claim success while the labor market remains intact.
- The high growth rate we saw in 3Q23 didn't continue into 4Q23, but real economic growth remains around 2–3%.
- Interest rate-sensitive countries and sectors constitute the "weak links" for a soft landing. The cumulative impact of these weak links is not yet substantial enough to derail continued growth in the US and developed Europe.

Market perspective

- US mega-cap growth remains at risk for valuation compression. Otherwise, global equities are priced fairly.
- Real interest rates have reverted to pre-2008 levels, but credit spreads are at or below their long-term averages. We are cautious about extending credit risk at the current time but see relative value in high-quality fixed income.
- We continue to see opportunities in niche private debt as banks have restricted lending to commercial real estate and private businesses. Our real asset exposure remains generally limited to farmland, but we expect opportunities in other sectors during the second half of 2024 and into 2025.

Portfolio positioning

- We reduced our underweight to fixed income at the end of 3Q23 and are now neutral to equities, slightly underweight fixed income, and overweight private debt.
- Within private debt, we are allocated to private asset-backed lending, farmland, non-core real estate, closed-end fund direct lending, lower-middle-market direct lending, and specialty finance.
- We are neutral duration and credit in our taxable and tax-exempt fixed income portfolios.
- Within equities, we are slightly overweight US equities and small-cap equities.
- We recommend allocating a portion of equity exposure to private equity.

Risks we're watching

- Spillover effects from interest rate-sensitive sectors and countries into broader global growth.
- Elevated levels of armed conflicts across the globe.
- Signs of an inflation under- or overshoot from monetary policy action in developed countries.

Please click any link to access additional information and insights.

Fourth Quarter 2023 Market Review

- **Monetary Policy**: Monetary policy drove investor sentiment throughout 2023. The first half of the year was characterized by an inflation-focused Federal Reserve and four rate hikes. However, December brought a Fed pivot as Fed Chair Jerome Powell began to address the likelihood of policy rate cuts in 2024.

- **Inflation**: While headline year-over-year inflation remains above the Fed's target of 2%, most short-term measures of inflation indicate that inflation has declined substantially. Whether or not inflation is back to 2%, the Fed will likely deem it close enough and would rather be patient with the "last mile" of inflation reduction instead of inducing a recession.

- **Interest Rates**: Long-term interest rates ended the year nearly where they began (just below 4%), but the path was anything but straight. The 10-Year Treasury Yield fell from 4% to 3.3% after the regional banking turmoil in early March but then rose to 5% in October on the back of unexpectedly strong economic data.

- **Magnificent 7**: The equity story of the year belongs to the "M7" (Amazon.com, Apple, Alphabet, Meta Platforms, Microsoft, Nvidia, and Tesla). Not only did the M7 significantly outpace the rest of the market from a return perspective, but there were points during the year where 100% of the US market return was attributable to the M7.

Index Returns	Q4 2023	Q3 2023	Q2 2023	Q1 2023	2023	3 Years	5 Years	10 Years
Global Equities	11.0%	-3.4%	6.2%	7.3%	22.2%	5.7%	11.7%	7.9%
US Equities	12.1%	-3.3%	8.4%	7.2%	26.0%	8.5%	15.2%	11.5%
Large Cap US	12.0%	-3.1%	8.6%	7.5%	26.5%	9.0%	15.5%	11.8%
Mid Cap US	12.8%	-4.7%	4.8%	4.1%	17.2%	5.9%	12.7%	9.4%
Small Cap US	14.0%	-5.1%	5.2%	2.7%	16.9%	2.2%	10.0%	7.2%
US Growth	14.1%	-3.3%	12.5%	13.9%	41.2%	8.1%	18.8%	14.3%
US Value	9.8%	-3.2%	4.0%	0.9%	11.7%	8.8%	10.8%	8.3%
International Equities	10.4%	-4.1%	3.0%	8.5%	18.2%	4.0%	8.2%	4.3%
Emerging Market Equities	7.9%	-2.9%	0.9%	4.0%	9.8%	-5.1%	3.7%	2.7%
US Taxable Bond Market	6.8%	-3.2%	-0.8%	3.0%	5.5%	-3.3%	1.1%	1.8%
US Municipal Bond Market	5.5%	-2.2%	-0.5%	2.0%	4.6%	0.0%	2.0%	2.2%
Hedge Funds	1.3%	1.8%	1.7%	0.2%	5.1%	4.8%	6.0%	3.8%
Diversified Commodities	-4.6%	4.7%	-2.6%	-5.4%	-7.9%	10.8%	7.2%	-1.1%
Gold	11.6%	-3.7%	-2.5%	8.0%	13.1%	2.8%	10.0%	5.6%

Key Rates (as of stated date)	12/31/23	9/30/23	6/30/23	3/31/23	12/31/22	12/31/20	12/31/18	12/31/13
US 10-Year Treasury	3.9%	4.6%	3.8%	3.5%	3.9%	0.9%	2.7%	3.0%
Barclays Aggregate Bond Index	4.5%	5.4%	4.8%	4.4%	4.7%	1.1%	3.3%	2.5%
BBarc Muni 1-10Yr Blend (1-12) Index	2.8%	3.9%	3.1%	2.7%	3.0%	0.6%	2.2%	1.9%

Source: Bloomberg, Mill Creek. Data as of December 31, 2023. Returns for periods greater than one year are annualized. Index rates are yield to worst.

Indices used to represent periodic capital markets returns include: MSCI ACWI (Global equities), Russell 3000 (US equities), Russell 1000 (Large Cap US), Russell Mid Cap US (Mid Cap US), Russell 2000 (Small Cap US), Russell 3000 Growth (US Growth), Russell 3000 Value (US Value), MSCI EAFE (International Developed), MSCI Emerging Markets Index (Emerging Markets Equities), Bloomberg Aggregate Bond Index (US Taxable Bonds), Bloomberg 1–10 Year Municipal Bond Index (US Municipal Bonds), Credit Suisse Hedge Fund Index (Hedge Funds), Bloomberg Commodity Index TR (Diversified Commodities), and Gold Spot Price (Gold). The Credit Suisse Hedge Fund Index reports with a lag.

The historical index performance results are provided exclusively for comparison purposes over various time periods only. It is not possible to invest directly in an index. Index performance does not reflect any management fees, transaction costs, or other expenses that would be incurred by a portfolio or fund, or transactions in fund shares. Such fees, expenses, and commissions would reduce returns. It should not be assumed that any account holdings will correspond directly to any comparative index reflected herein. Data as of December 31, 2023.

Fixed Income

The Case for Mortgage-Backed Securities in 2024

Nora Pickens, Managing Director

Fixed income investors endured nearly an entire year of steady price declines before finding some relief in late October when the market turned, and the 10-year US Treasury yield dropped from 5% to 4.1% in just six weeks (Fig. 1). This heightened level of interest rate volatility has persisted since the Fed ended its COVID-era stimulus in late 2021. To leverage this market environment, we believe overweighting new-issue agency mortgage-backed securities (MBS) will deliver attractive relative returns in 2024.

As a refresher on the asset class, MBS are bundled packages of single-family mortgages (mostly 30-year terms). Mortgages are issued to near-prime and prime borrowers effectively guaranteed by the US government. The sector accounts for 27% of the taxable investment-grade bond market and historically has earned roughly 100 basis points above the 10-year US Treasury.

Because MBS are effectively guaranteed by the US government, the yield premium earned by the asset class versus Treasuries is entirely related to prepayment risk. Homeowners have the option, but not the requirement, to prepay their mortgage at any time before maturity. MBS investors earn a premium for being short of this optionality. As such, MBS is analogous to being long a risk-free Treasury bond and short a call option on that bond. So, an MBS investor might earn a risk-free yield of 4% + option premium of 1%, equaling a 5% yield in total.

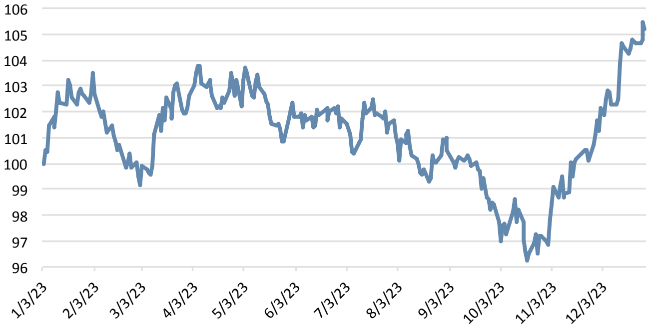
Extreme interest rate moves over the past 24 months have created large price discrepancies for MBS issued in 2023 versus older vintages:

- Call options related to mortgages issued in 2020–2021 are nearly worthless. Homeowners who locked in 3% mortgages are pleased. It would take a significant rate decline before refinancing the debt makes economic sense. In other words, these homeowners place little value on being long the “call option” embedded in their mortgage.
- In contrast, call options on new-issue MBS are expensive. Homeowners closing mortgages today place more value on preserving the optionality to refinance (i.e., MBS premium earned selling this option is more valuable) because interest rates only need to drop modestly before it becomes attractive to reset.
  - » Other market dynamics, including heightened interest rate volatility and the inverted yield curve, are also pushing up the price of new-issue MBS options.
  - » To quantify, new-issue MBS are trading 150 bps over Treasuries compared to the longer-term average of 100 (Fig. 2).

To summarize, older MBS are short an option worth pennies and new MBS are short an option trading at a very high price. Given the price discrepancy, we believe shifting to an overweight position in 2023 vintage MBS will be additive to portfolios versus the passive market-cap MBS index. This trade will do well in a range of interest rate environments but will perform best in a soft-landing scenario where the Treasury curve steepens due to falling yields on short-term bonds. With new-issue MBS spreads trading at decade-high levels and the Fed nearing the end of its rate-hiking cycle, we view this to be an ideal time to move forward with this tactical position.

Fig 1: The bond market experienced steady losses through October

Investment growth of the Bloomberg US Aggregate Index



Source: Bloomberg, Mill Creek.

Fig. 2: New-issue MBS are earning an attractive yield vs Treasuries

30-year new-issue agency MBS yield less 10-year US Treasury yield (basis points)

Source: Bloomberg, Mill Creek.

Equities

Higher Real Yields Make the Case for High-Quality Active, Small-Cap Investing

Sam McFall, Managing Director

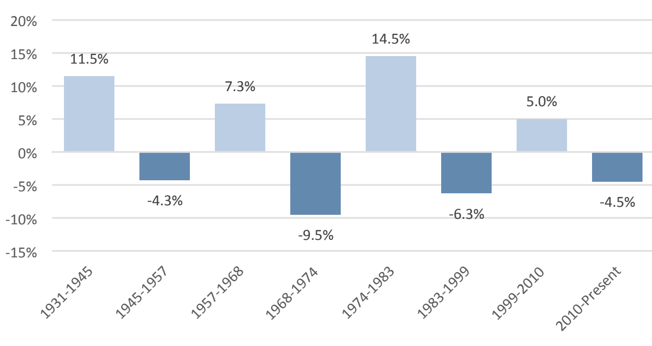
The current cycle of small-cap underperformance relative to large-cap has cost global equity allocators approximately 450 basis points per year from 2010 to the present (Fig. 1). During this period, the quality of the small-cap index has eroded significantly. Active managers who assess quality tend to evaluate companies based on forward-growth prospects, valuations, competitive position, and talent of the management team. Fundamentally, active managers will seek to avoid loss-makers. Based on data compiled by Furey Research, approximately 7% of the companies within the Russell 2000 have zero revenue, while 37% of the index constituents are unprofitable. The presence of these companies with no revenue is up 6x since the global financial crisis (GFC), while the percentage of unprofitable companies has increased by 2.5x.

The decline in the quality of the small-cap index can be attributed in large part to the growth of the private markets. For many high-quality companies, value creation is now occurring while they are private, perhaps delaying their going public until they are mid- or even large-cap companies. Private equity takeouts of small public companies are more common too. Meanwhile, the boom in venture capital investing has contributed to the number of zero-revenue or unprofitable companies going public as investors seek an exit. With many of the best small companies no longer contributing to the Russell 2000's return, the index's return potential may be diminished, but an opportunity may still exist for active managers.

We have previously written about the relative value of small-caps versus large-caps, which is certainly part of the bull case going forward, but we also believe the extended period of "free money" post-GFC distorted markets and price discovery. As interest rates have begun to normalize, the potential for active managers, particularly small-cap managers, to add value has greatly increased as managers will be able to select well-capitalized, growing, and high-return companies, while the highly levered, loss-makers that have weighed on the small-cap asset class are likely to underperform. We believe the reemergence of positive real yields should be a key factor in the performance of high-quality small-cap equities going forward (Fig. 2). The last cycle of relative outperformance by smalls over large-caps coincided with a period of real yields more in-line with today. A sustained period with higher interest rates should lead to greater return dispersion thereby creating more winners and losers, ultimately benefiting active managers.

Fig. 1: The duration of the current cycle of small-cap underperformance has been longer than average

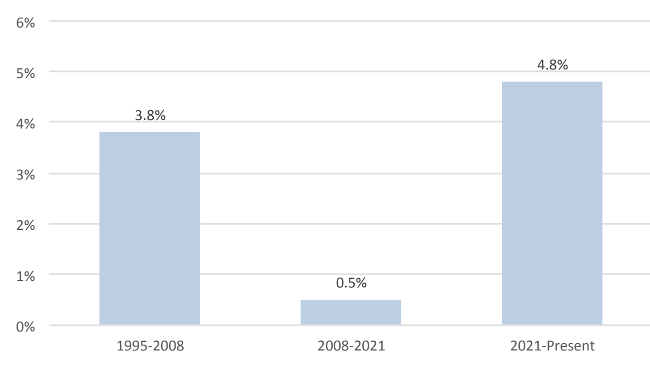
Relative annualized returns: small-cap less large-cap



Sources: Furey Research Partners, FactSet, Mill Creek.

Fig. 2: Normalization of rates creating necessary conditions for quality stocks to outperform

Relative annualized returns: R2000 high-quality less R2000



Sources: Furey Research Partners, FactSet, Mill Creek.

Private Credit

Navigating the Evolving Landscape of Private Debt in 2024

Nora Pickens, Managing Director

Enthusiasm for private debt strategies continued in 2023. While final numbers are still being tallied, fundraising likely exceeded $200 billion for the year, overtaking venture capital as the second most popular private market strategy (Fig. 1). Key drivers of growth include decade-high expected returns, an increasing pipeline of deals spurred by regional bank turmoil, and the prevalence of retail-based vehicles expanding access to the space.

The mega shops continue to dominate the field. The top three firms control over 50% of the $1.4 trillion private credit universe.[1] These organizations are sophisticated, well resourced, and have raised ample capital to fund deals ranging from $500 million to $1 billion in size. While scale has its advantages, we believe alpha generation has moderated in this area of private debt due to the increasingly commoditized and streamlined nature of the sponsor-backed, upper-middle-market direct lending ecosystem.

Partially for this reason, in 2024, we are most excited to fund non-sponsor-backed, smaller loans ($5–50 million) in sectors experiencing the most blowback from banks retreating from capital markets activity (Fig. 2). These include real estate, tech, and specialty finance among others. This undersupply of capital combined with the fragmented nature of the micro/lower middle market has the potential to generate risk-adjusted returns last observed post-global financial crisis (GFC).

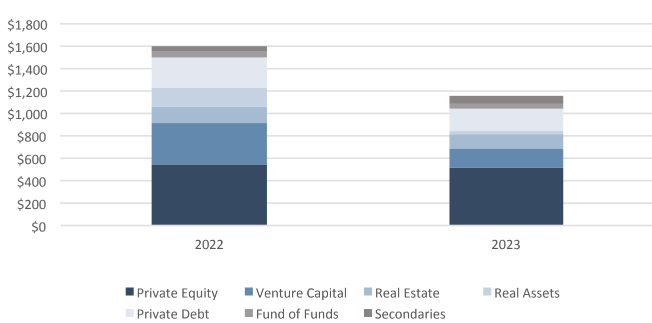
We recently increased our exposure to a strategy that is actively sourcing these opportunities and plan to deploy additional capital to the space in 2024. To illustrate, the manager recently funded an $18 million senior loan to a leading tech-enabled B2B marketplace connecting independent consultants with enterprise clients, including over 30% of the Fortune 500 and some of the largest private equity and consulting firms in the United States. Proceeds from the transaction were used to recapitalize $15 million of existing debt from a super-regional bank, providing liquidity to support growth initiatives and extend the duration for a planned exit in 18–24 months. Terms include a SOFR+1050 yield (~16%), 1.5% origination fee, 0.35% penny warrants in the company's most recent Series F preferred, and 36-month term with partial amortization beginning in month 18. Protective covenants include a minimum revenue, EBITDA, and liquidity requirement. LTV, from an enterprise value perspective, is in the 15–20% range while pro forma cash plus accounts receivable exceeds the loan size at closing.

Before Silicon Valley Bank's collapse in March 2023, the existing bank lender would have likely refinanced this loan. Today, a sizable pipeline of deals offering mid-teen returns supported by enhanced collateral/covenant protection now exists for the smaller end of the market. We are excited about the landscape and will continue to focus on sourcing the most attractive opportunities.

[1] https://www.churchillam.com/wp-content/uploads/2022/12/Insider-Power-Players-in-Private-Credit.pdf?trk=organization_guest_main-feed-card_feed-article-content

Fig. 1: Private debt flows increase relative to other strategies

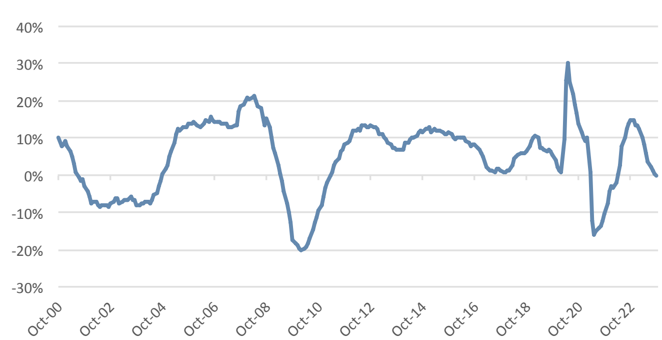
Global private capital raised by type



Source: Pitchbook, Mill Creek. Represents trailing 12-month data as of 9/30/2023 and 9/30/2022.

Fig. 2: Banks are issuing fewer loans

Commercial and industrial loans, all commercial banks (% change y/y)



Source: St. Louis Federal Reserve, Mill Creek.

Private Equity

Targeting Growth in Health Care and Industrial Services in 2024

Andrew Murray, Managing Director

At Mill Creek, our primary focus in private equity centers on control-oriented strategies in the North American middle market, particularly targeting profitable, founder-owned businesses. These strategies bring a combination of sector expertise and/or value-creation initiatives, including operational initiatives and robust add-on capabilities. In 2024, we are most excited about health care and industrial services. In health care, we expect continued penetration of private equity capital to deliver value-based care and support a shift toward home. On the industrial services front, we foresee a decade-long trend supporting critical infrastructure services such as power, transportation, and disaster response. Our interest in these areas stems from their potential significant value creation in the current economic and market conditions.

First, by all measures, the US economy has completed its transition to a services-based economy. According to the US Bureau of Economic Analysis (BEA), professional and business services, real estate, finance, and health care make up the bulk (70%) of US GDP. In comparison, goods-producing industries like agriculture, manufacturing, mining, and construction play a smaller role. Despite political attention on the "return of US manufacturing," it is becoming less and less relevant economically. As Steve Jobs said to President Obama in 2011, "Those jobs aren't coming back." To underscore this shift, our private equity exposures emphasize two specific subcomponents of the North American market: health care and industrial services.

Health Care Services

The challenges associated with the US health care system are well documented, notably a persistent increase in costs without a corresponding reimbursement system. In this highly regulated market, private equity emerges as a key player through fostering innovative business models and care delivery networks that offer more efficient and improved care.

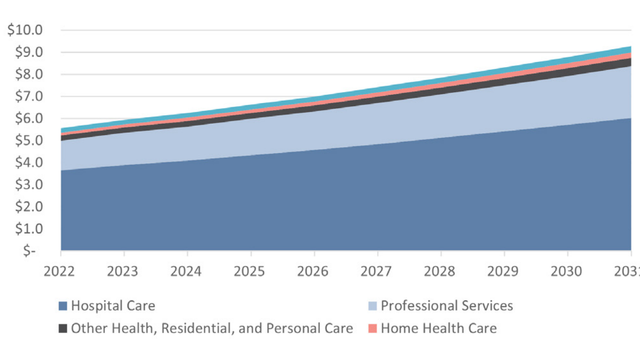
For example, home health care services are forecasted to grow at 7.4% through 2031 (Fig. 1). With hospital closures and reduced bed counts, providers are innovating in transport, communications, and service mechanisms to deliver care packages to millions of locations across the country. This has led to direct investments specifically in the home health and hospice segment (Fig. 2).

Industrial Services

We are also excited about critical industrial services, which includes various growth areas such as energy transition, cloud computing, and data center buildouts, and improvements in the nation's core transportation backbone. The US economy, operating on an aging infrastructure, necessitates ancillary services to support three major structural shifts: (1) energy transition, (2) transportation upgrades, and (3) state-of-the-art cloud computing infrastructure. Boston Consulting Group noted a significant trend in a recent study which projects $19 trillion in expected capex spending through 2030 that has already been announced in various public forums. On the technology side,

Fig. 1: Home health care is expected to be the fastest-growing segment of the industry

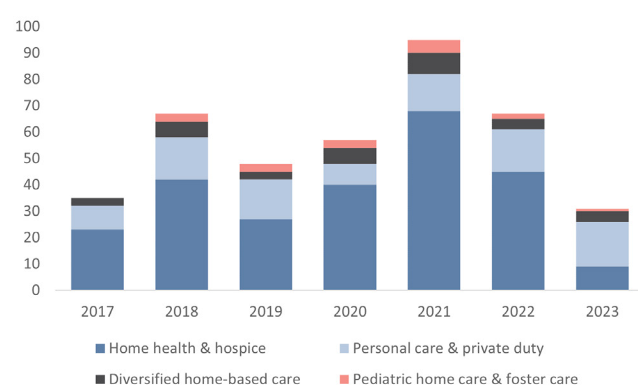
Forecasted national health expenditure by type



Source: Centers for Medicare & Medicaid Services, Office of the Actuary, Mill Creek.

Fig. 2: Home-based care is a key area of focus for private equity

Home-based care PE deal count by subcategory



Source: PitchBook, Q3 Health Care Services Report, Mill Creek. Data as of 9/30/23.

IDC predicts spending on cloud infrastructure to have a compound annual growth rate (CAGR) of 11.2% over the 2022–2027 forecast period, reaching $153 billion in 2027 and accounting for 69% of total compute and storage infrastructure spend. These are healthy macro trends that many of our private equity partners will invest behind.

In conclusion, we believe these segments of the market (1) will benefit from substantial tailwinds in a variety of economic environments, (2) have an abundance of opportunities for private equity capital, and (3) have the potential to generate outperformance over the long term.

[1] https://www.bcg.com/publications/2023/bridging-the-vast-gap-in-net-zero-capital

[2] https://www.idc.com/getdoc.jsp?containerId=prUS51007723

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