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# Investment Committee Review

## Q4 2023

SS&C ALPS Advisors is an open architecture boutique investment manager offering portfolio building blocks, active insight and an unwavering drive to guide clients to investment outcomes across sustainable income, thematic and alternative growth strategies.

### Q4 2023 Asset Class Reviews

- p. 2 **Introduction**
- p. 3 **Macro Review**
- p. 6 **Equities Summary**
- p. 8 **Fixed Income Summary**
- p. 12 **Real Estate Summary**
- p. 15 **Commodities Summary**

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## Introduction

### Fourth Quarter Review

Risk assets staged a robust recovery in the fourth quarter, driven by indications from the Federal Reserve (Fed) regarding potential rate cuts in 2024. Equities exhibited particular strength, surging over 10% following a challenging third quarter. With the exception of Energy, all sectors experienced gains in the fourth quarter. Throughout the year, growth equities, notably led by large-cap growth, dominated returns. Fixed Income also rallied, contributing to positive returns for 2023. Weakness in commodities, influenced by Energy struggles, was partially offset by strength in precious metals. Publicly traded REITs rebounded strongly in the fourth quarter as valuations showed signs of recovery.

### First Quarter Outlook

#### *Executive Summary*

Looking ahead, our outlook, characterized as Neutral +, is influenced by a resilient economic backdrop and the potential conclusion of rate hikes. We recommend investors maintain target allocations with appropriate diversification.

#### *Equities*

After a challenging third quarter, equities rebounded significantly in Q4. Leading the recovery were Large Cap Growth equities, along with a resurgence in some interest rate-sensitive sectors such as Financials, Utilities and Real Estate.

Moving forward, we perceive the risk/return tradeoff in equities as relatively neutral. The resilient US economy and a potentially more dovish Fed stance should support positive equity returns. While we see opportunities within smaller cap stocks, we advise investors to prioritize quality companies within this category.

#### *Fixed Income*

Our guidance from the previous quarter remains consistent:

- *Stay Invested* – higher coupon income and moderating policy impacts support ongoing returns to fixed income.
- *Stay Protected* – prioritize quality and long Treasuries for protection in case of an economic downturn.
- *Stay Flexible* – shorter duration assets can provide liquidity for opportunistic investors as the yield curve normalizes.

Looking ahead, we suggest investors selectively extend duration in Core Fixed Income, monitor credit quality closely and explore opportunities in attractively valued sectors like Mortgages and Asset-Backed Securities.

#### *Real Estate*

After a lackluster performance in the first nine months of 2023, Real Estate equities rebounded strongly in the fourth quarter as valuations normalized and interest rate headwinds subsided.

In 2024, we continue to favor public REITs over private real estate, as private assets face more refinancing and valuation challenges. Specifically, we prefer sectors with macroeconomic tailwinds, including Data Centers, Industrials and Cell Towers.

#### *Commodities*

Our cautious stance on commodities in 2023, driven by concerns about a potential recession and record-level US energy supplies, remains warranted. We maintain a neutral outlook on the broad commodities sector. A potential bright spot could be precious metals, driven by central banks and geopolitical conditions continuing to stimulate demand for gold.

Longer-term, we hold a constructive view on commodities due to a lack of capital expenditures over the past decade, challenging commodity supply. Better-than-expected economic growth and a sustained shift to clean energy could further boost demand.

### Summary

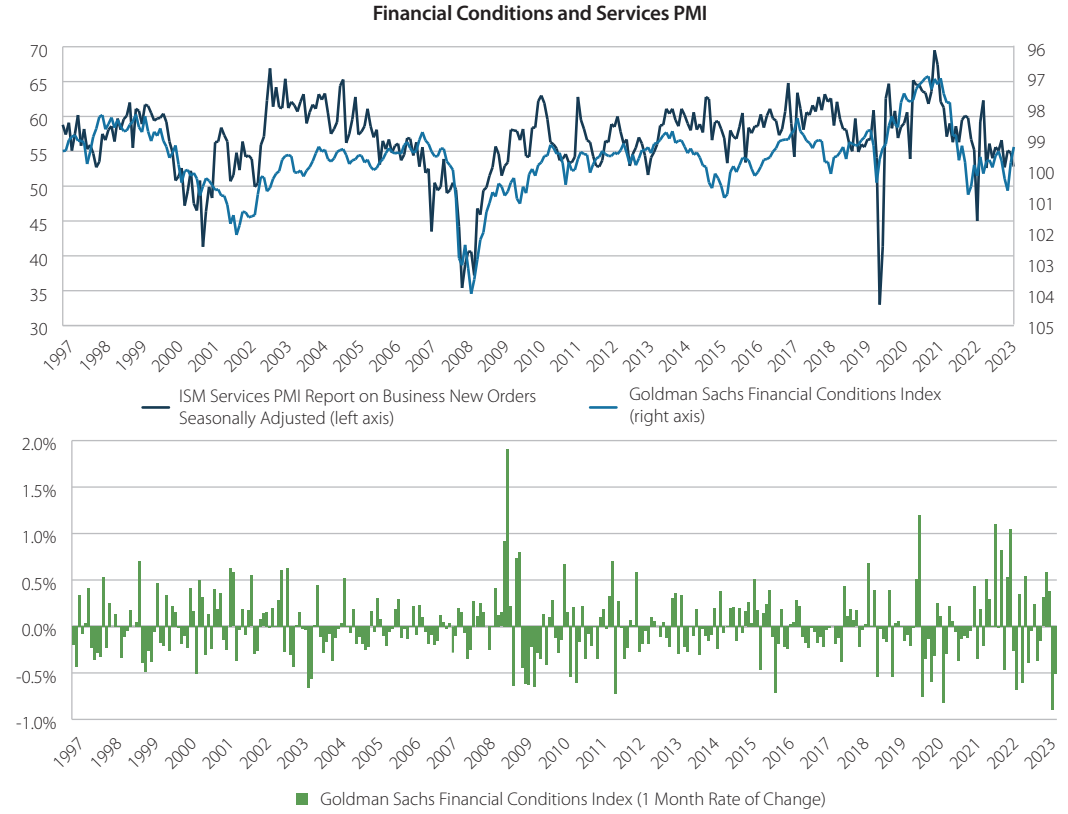
Financial conditions significantly eased in the fourth quarter, leading to a rebound in risk assets from the third quarter. We advocate for investors to remain fully invested at target allocations. In equities, a preference for quality, dividend-paying stocks persists, with an identified opportunity in high-quality smaller cap stocks. Active management is crucial in Fixed Income to capitalize on emerging opportunities. The Real Estate opportunity lies in select REITs, while our overall view on commodities remains neutral, with a particular focus on precious metals.

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## Marco Review

### Liquidity Cycle

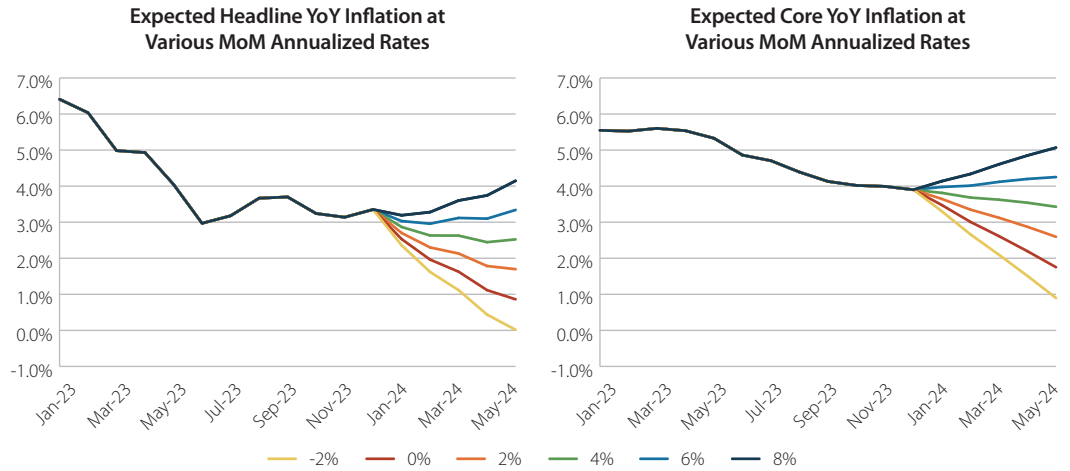
During Q4 2023, financial conditions experienced an unprecedented period of easing, driven by subdued inflation and signals from the Federal Reserve indicating three anticipated cuts in 2024. This resulted in near-record month-over-month spread compression in Investment Grade (IG) in November, followed by the commencement of a broadening period in equity returns.



Source: Bloomberg, 12/31/1997 – 12/31/2023

### Inflation Cycle

Over the last 6 months, container rates have surged by 72%. Disruptions in the Middle East have contributed to shipping congestion, posing a threat to supply chains. However, the Real Goods Personal Consumption Expenditures (PCE) has started to rebound, aligning with the pre-COVID-19 pandemic trend from June 2014 to 2020, following one of the most significant inventory cycles in 2022/23. In December, core inflation month-over-month stood at +0.3% (3.65% annualized run-rate). If these rates persist, there is a greater potential for year-over-year Core Consumer Price Index (CPI) to remain "sticky" in the 3-4% range in the first half of the year. Home prices have reached a bottom, exerting upward pressure on Owners' Equivalent Rent (OER), rent and core inflation. The fastest wage data from Q4 registered at 5%+, driven by a persistently tight labor force due to lower participation among the oldest cohort.



Source: Bloomberg, 1/31/2023 – 5/31/2024  
 Headline Inflation represented by the Consumer Price Index (CPI) and Core Inflation represented by the Personal Consumption Expenditures Price Index (PCE).

### Growth Cycle

While Purchasing Managers' Index (PMI) signals remain mixed, the ISM New Orders Less Inventories indicates a significant improvement in the inventory cycle, often a precursor to a recovery in Manufacturing PMIs. A manufacturing recovery is anticipated in 2024. Fiscal dominance persists, with consumer net worth reaching all-time highs. Notably, this increase in net worth is extending significantly to middle-income and lower net worth consumers, key cohorts that historically drive growth and inflation in the economy.

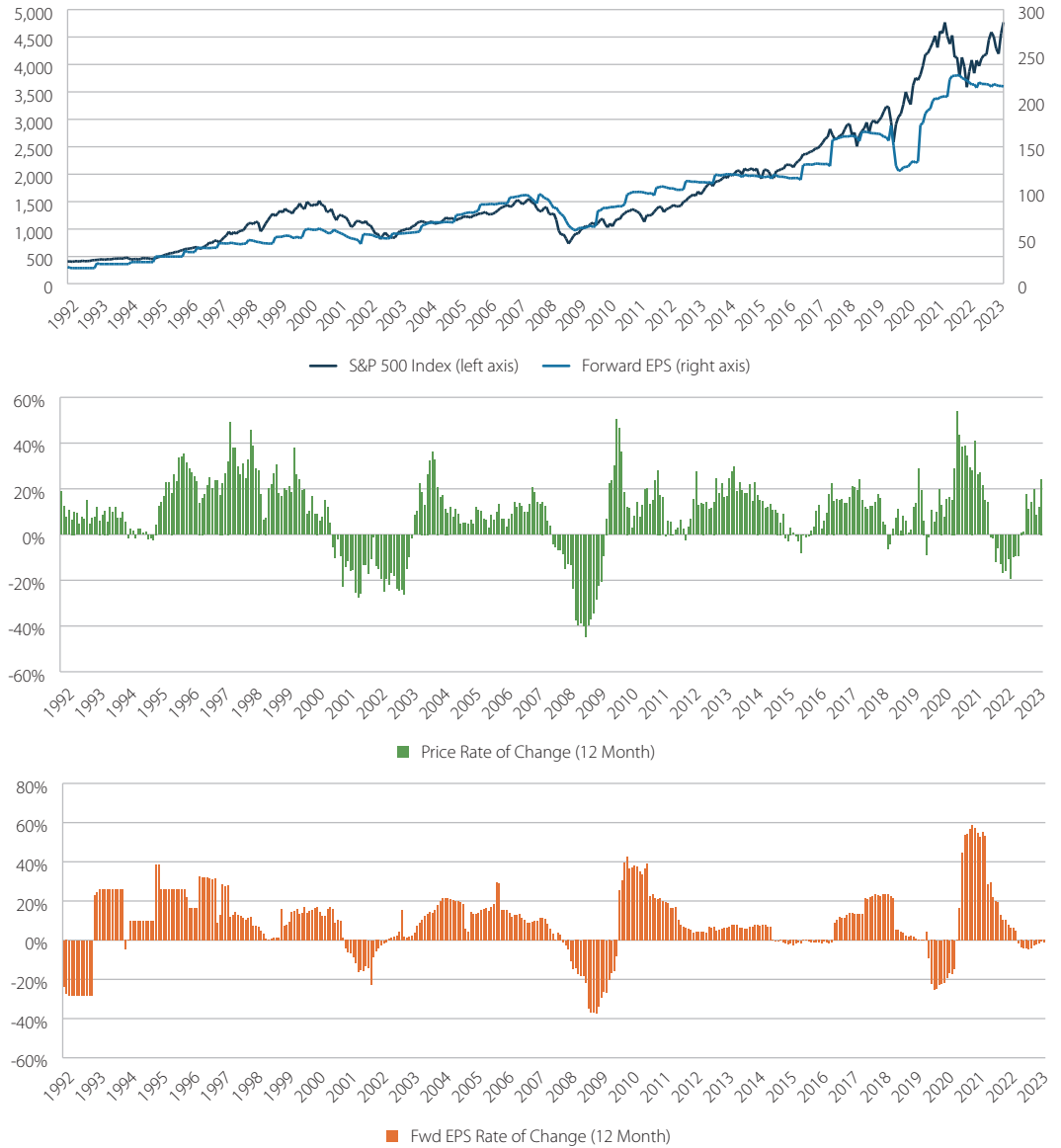


Source: Bloomberg, 12/31/1996 – 12/31/2023

### Profit Cycle

Following an earnings recession in 2022, FY1 US Large Cap earnings have risen by 8.8% over the last 6 months, signaling a recovery in earnings. The substantial spread compression in Investment Grade (IG) and High Yield (HY) sectors has bolstered financial conditions, with the FY1 US Large Cap earnings yield now surpassing IG yield-to-worst. This increased yield makes equities more attractive from a valuation perspective. If earnings materialize as expected, upward revisions and a continuation of the rebound from pre-Global Financial Crisis (GFC) cycle comparative stock-bond yield levels are anticipated.

S&P 500 Earnings Expectations vs. Price



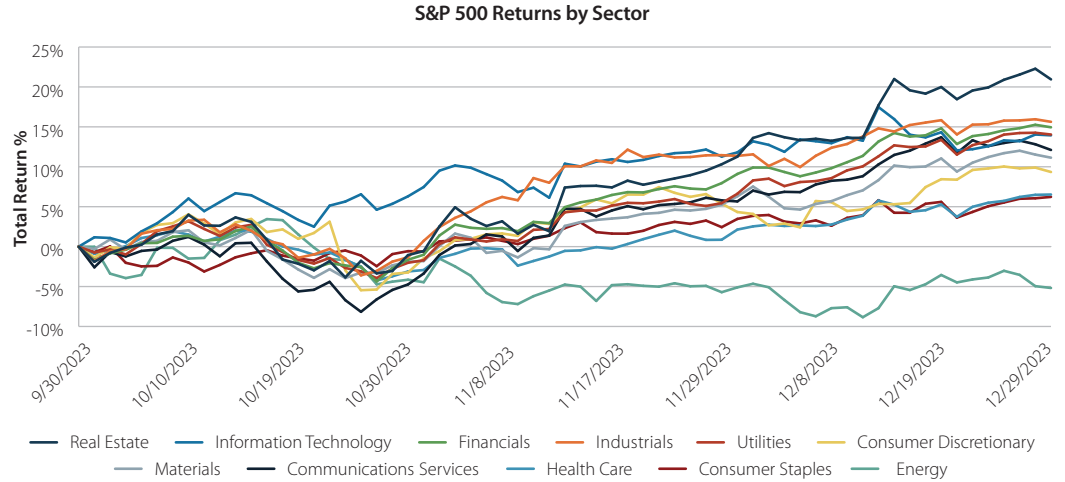
Source: Bloomberg, 1/31/1992 – 12/31/2023

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## Equities Summary

### Fourth Quarter Review

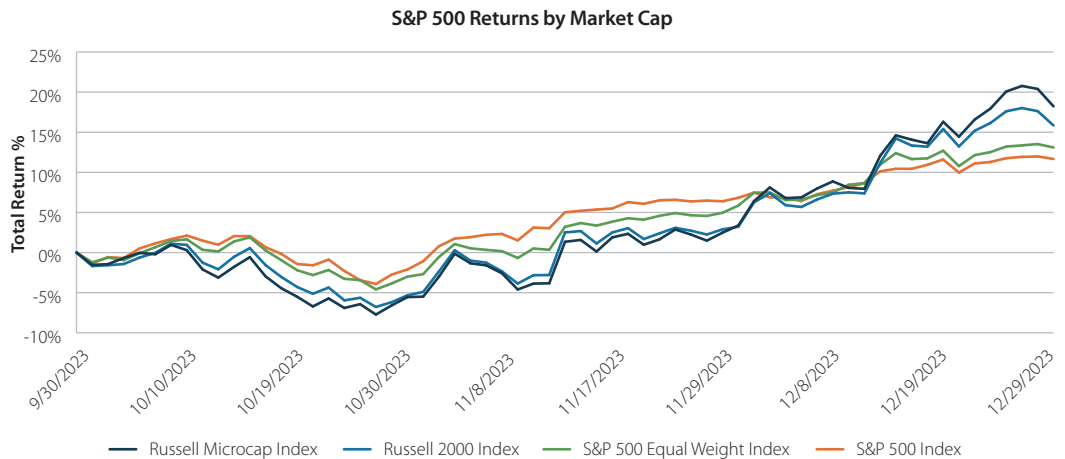
The fourth quarter of 2023 saw a significant shift driven by a sharp reversal in long-term interest rates, propelling most stocks. Sectors sensitive to interest rates, including Real Estate, Financials and Utilities, finally gained momentum. The quarter concluded with the S&P 500 Index posting an 11.68% gain, trailing the Nasdaq 100 Index at 14.60%, and the Dow Jones Industrial Average recording a 13.09% gain.



Source: Bloomberg, 9/30/2023 – 12/31/2023

**Past performance is no guarantee of future results.**

In broad equity indices, we observe an inverse relationship between interest rate sensitivity and size. Consequently, Small-Cap stocks experienced significant benefits from the decline in interest rates. Adding to their advantage, credit spreads compressed during this period, alleviating the pressure of the upcoming wave of refinancing activity.

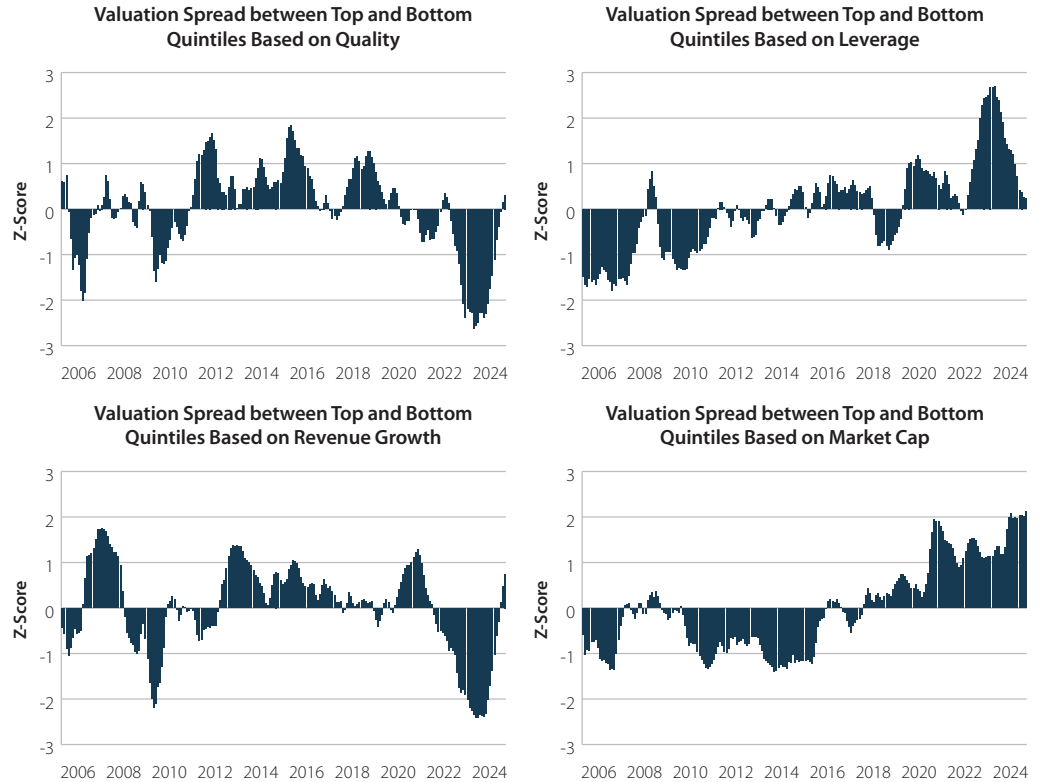


Source: Bloomberg, 9/30/2023 – 12/31/2023

**Past performance is no guarantee of future results.**

## First Quarter Outlook

As we delve into the outlook for 2024 and examine potential market trends, we are struck by the neutrality reflected in nearly all of our favorite indicators. Unlike the past year, which witnessed a significant reversion trade, this development is no longer applicable. Consequently, we uphold a neutral positioning across the board, with the only exception being the potential for Small-Caps to outperform Large-Caps. However, it is crucial to note that the quality of Small-Caps has witnessed a significant decline over the last two decades, influenced by the growth of private markets. Therefore, one must carefully consider whether Large-Cap outperformance is a secular trend. Accordingly, any Small-Cap position requires a discerning focus on quality.



Source: Bloomberg, 4/30/2006 – 1/31/2024

From a macroeconomic standpoint, one can formulate either a bullish or bearish case. We assert that a notable distinction between the current economic landscape and the decade preceding the pandemic lies in the increased influence of fiscal policies on shaping markets, diverging from the predominant reliance on monetary measures in the past. This shift is anticipated to expand the scope of growth and foster different winners in the future compared to historical trends. While we would like to adopt an optimistic "all systems go!" approach, we remain cognizant that we may be closer to the end of a cycle than the beginning. We are attentive to potential challenges related to refinancing, leading economic indicators and the prospect of rising unemployment, and are actively monitoring emerging developments.

Navigating conflicting signals and growth drivers, our focus remains on maintaining a foundation rooted in quality and dividends, irrespective of the sector. Should growth persist or accelerate, these stocks are poised to reap the benefits. Conversely, in the face of potential downside risks materializing, these stocks function as a protective shield. Additionally, we advocate for a broad preference for international exposure, driven by the advantages of diversification, more appealing valuations and the potential weakening of the dollar following the conclusion of rate hikes. In the event of this scenario unfolding, foreign exchange dynamics could act as a favorable tailwind for international markets.

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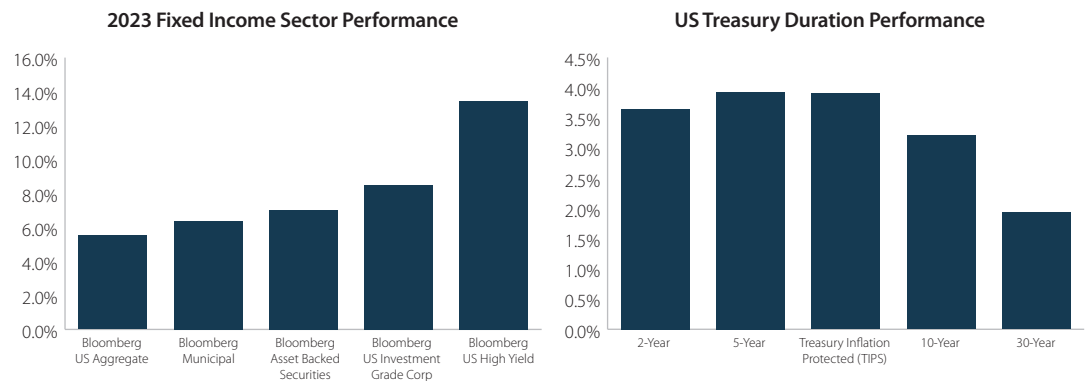
## Fixed Income Summary

### Fourth Quarter Review

In the quarter, all major fixed income sectors experienced significant positive returns attributed to a shift in the monetary policy and economic projections of the Federal Reserve during its December meeting. While the bond market had anticipated a continuation of the familiar "higher for longer" messaging from the Fed, it received a surprising new projection. This projection outlined multiple rate cuts in 2024, coupled with expectations for lower inflation and economic growth.

The core bond market, exemplified by the Bloomberg US Aggregate Bond Index, exhibited a robust rebound from year-to-date losses. It achieved a notable 6.82% return for the fourth quarter, concluding the year with an overall total return of 5.53%.

All sectors and tenors reaped the rewards of the shift to lower rate levels, with particular emphasis on the 10-year benchmark US Treasury. Its yield experienced a significant 90 basis points (bps) decline from its October highs, settling at 3.88%, nearly mirroring its starting level at the beginning of the year. The credit markets reacted to this bull flattening of the yield curve, resulting in tighter spreads across all major credit sectors:



Source: Bloomberg, all maturities are the Bloomberg Generic Government Note/Bonds, as of 12/31/2023  
**Past performance is no guarantee of future results.**

### Policy Analysis and Implications for 2024

The Fed's shift in monetary policy holds significant implications for Fixed Income and traditionally provides support. Historically, bear bond markets are uncommon during periods of Fed easing. However, policy risk remains a constant concern for fixed income investors, with both the Fed and the market having inaccurately forecasted the terminal policy rate three times in the post-pandemic era.

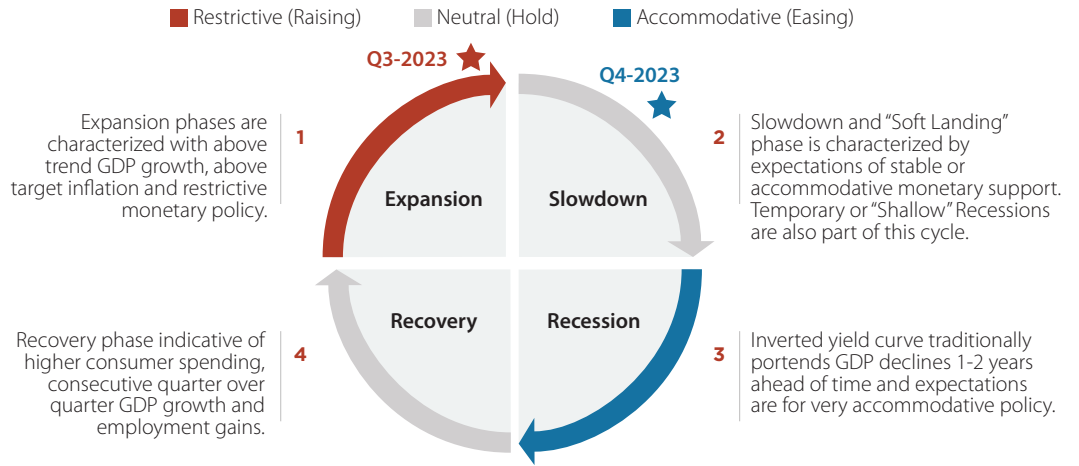
Looking ahead to Q1 2024, many of the risks for bonds from 2023 persist. A crucial factor is the resilience of the economy in sustaining wage gains and spending, potentially leading to stickier inflation than anticipated. Despite this, job growth is decelerating, and certain sectors, including the government, face increased costs for refinancing and new loans compared to 5 or 10 years ago.

New risks emerge for 2024, including apprehensions about the record national debt, the national elections and the level of fiscal spending. We believe these risks will contribute to an environment that may heighten economic risks and increase volatility in fixed income prices. Nevertheless, they might also act as a tailwind for bond investors in the long run.

With a balanced risk baseline, the foundation of an overall constructive view for fixed income in 2024 is built on the convergence of the business cycle transition with a change in monetary policy—although the timing of this transition remains uncertain. A high-level overview of this framework is depicted on the following page (see chart "Federal Reserve Policy and Business Cycle Progression").



**Federal Reserve Policy and Business Cycle Progression**

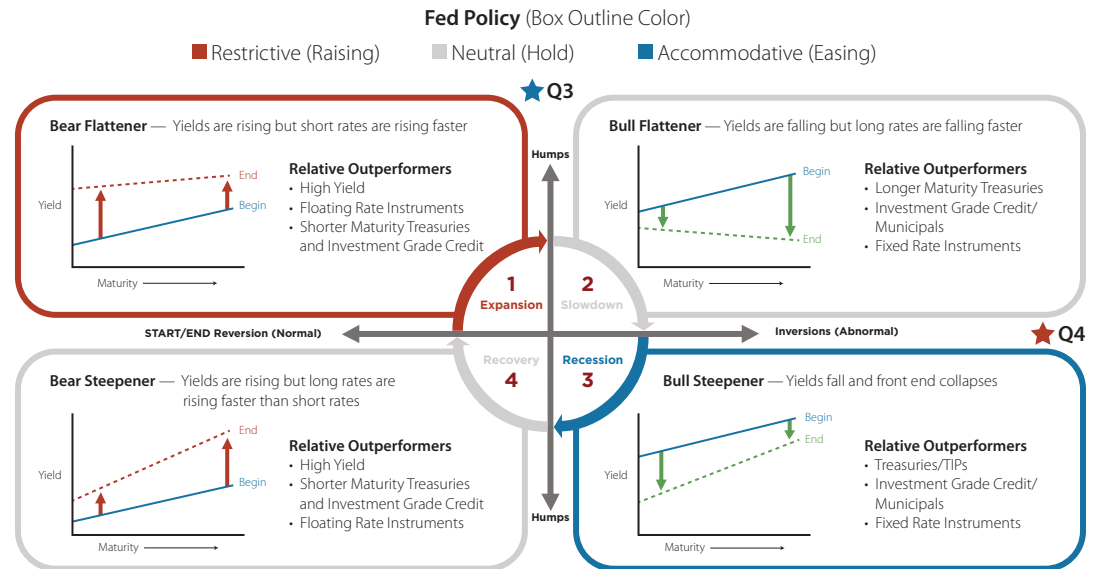


*For Illustrative Purposes Only*

**Implications**

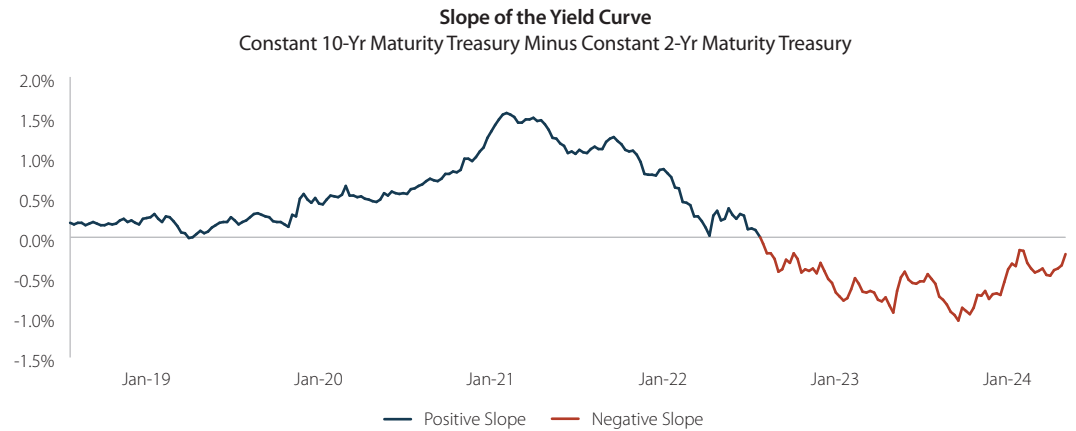
As we approach the end of Q1 2024, we find ourselves two years into the Fed's hiking cycle, and predictably, the yield curve is beginning to normalize. This suggests an anticipation of slower growth and a more accommodative policy in the future. Throughout history, fixed income has demonstrated positive returns in later business cycle environments, particularly in quadrants 2 and 3 above. The implications for positioning in an environment where the yield curve flattens and then steepens are comparable.

In such scenarios, floating rate and high-yield sectors often underperform, while higher quality fixed-rate investments tend to fare better. The nearby chart illustrates these trends:



*For Illustrative Purposes Only*

While we anticipate that 2024 will mark the year of Yield Curve Normalization, characterized by the yield curve reverting to its typical upward-sloping shape, the first quarter is unlikely to witness the realization of this event. The bond market's expectations have already shifted significantly, bidding up both rate and credit prices under the assumption that the Fed will achieve a "soft landing" for the economy—an accomplishment rarely seen. However, the prevailing trend indicates a move towards a flat and positive slope, particularly with any reduction in the Fed Funds rate, as anticipated by our research team sometime in Q2.



Source: Federal Reserve Economic Data-FRED, 10-Year Treasury constant maturity minus the 2-Year Treasury constant maturity yield, 1/23/2019 – 1/17/2024

### Recommendations

As we find ourselves in a new regime of higher interest rates, a different experience from the past 15 years, the role of fixed income within an asset allocation framework becomes increasingly crucial, even amid the continued strong performance of equity markets. Moreover, the need for income intensifies as rates either stabilize, become range-bound or decline in 2024, as anticipated by the market. In the context of asset allocation, fixed income should serve as a stabilizing force over intermediate time periods.

While short-term correlations between US Treasuries and the S&P 500 have been positive, longer-term correlations reveal the stabilizing properties of fixed income with negative correlations. However, in the current environment, post-COVID-19 and with ongoing increases in Treasury debt, we believe that the returns of the Bloomberg US Aggregate Bond Index do not fully capture the benefits of active positioning, the advantages of diversification (given the substantial portion of the index consisting of US Government-related debt) and certainly do not encompass the array of choices available to investors.

Additionally, we perceive valuations as currently expensive across most sectors, with a few exceptions. The 10-year Treasury under 4% implies a "Goldilocks" soft landing economic scenario, achieved only a few times in recent history (2% real GDP growth, 2% inflation and 4% unemployment). There is room for retracement as economic data evolves. In essence, we believe that active fixed income management will be exceptionally critical in the year ahead, even more so than in 2023.

Therefore, we continue to reiterate the mantra—**stay invested, stay protected and stay flexible**. However, we also suggest that Q1 is a good time to begin the following as the market allows (which it should):

- Selectively extend duration into the Core
- Upgrade in Credit Quality
- Move into certain sectors with better valuations and less volatility if rates rise and/or credit spreads widen. Our favorites would be **Agency Mortgages (MBS)** and higher quality (AAA/AA) **Asset-Backed Securities (ABS)**

**Stay Invested** – slower economic growth, higher coupon income and moderating policy impacts can support continued returns to Fixed Income.

**Stay Protected** – higher quality securities and some longer duration Treasuries can offer protection if a recession scenario materializes again.

**Stay Flexible** – maintaining front end liquidity in the form of short duration assets can generate a relatively attractive real rate income stream if the *Higher for Longer* phase re-enters the picture.

***Credit Preferences***

In the coming quarters, our preference leans toward higher quality sectors, including US Agency Mortgages, Investment Grade Credit and high-quality consumer ABS. These sectors are poised to potentially gain the most in a moderating rate environment or provide a degree of protection if the economy experiences a significant slowdown later this year. Conversely, we are less favorable towards lower quality, more credit-spread sensitive sectors. These sectors, not particularly inexpensive on a spread basis, may face increased vulnerability as the economic cycle matures.

***Yield Curve Positioning***

Despite the persistence of an inverted yield curve, it is now less pronounced than in the previous quarter and yields on intermediate core bond funds are now similar with cash yields. This presents an opportunity for investors to gradually transition into intermediate duration before any economic slowdown or clear signals from the Fed about the end of tightening, all without sacrificing yield.

While our recommendation still leans toward overweighting shorter credit duration securities, we believe it's time to consider reducing that weight and increasing allocations in the belly, or core, duration of the curve— an area we previously underweighted. With the Fed indicating that short rates may have peaked, the likelihood increases that active management can return to its core strength—**choosing the right bonds.**

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## Real Estate Summary

### Fourth Quarter Review

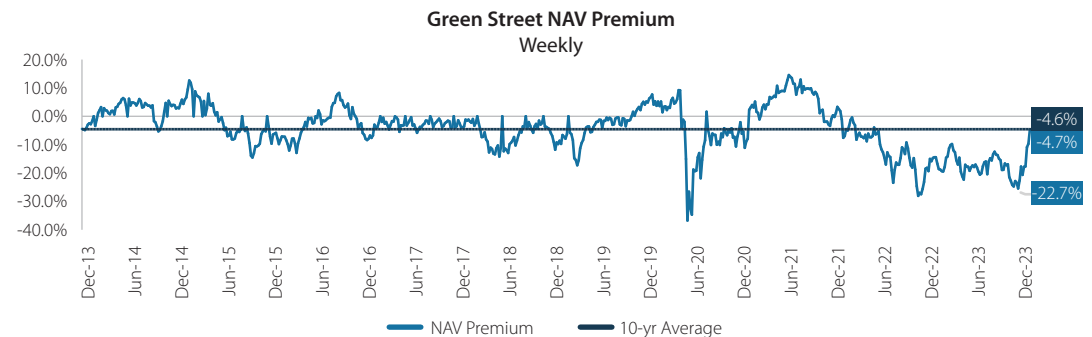
In a sharp reversal from the -8.33% return in Q3 2023, REITs (FTSE NAREIT All Equity REITs) returned 17.98% for Q4 and 11.46% for the calendar year. All major sectors were positive for the quarter, led by Infrastructure/Cell Towers (30.64%), Office (23.54%) and Self-Storage (23.51%) as expectations of additional rate hikes faded and valuations stabilized.

For the calendar year, Data Centers (30.08%), Lodging (23.92%) and Specialty (22.28%) were the strong performers, with only Diversified (-7.59%) and Infrastructure/Cell Towers (-1.52) sectors providing negative returns for calendar year.

REIT Indices	QTD	
	9/30/2023 - 12/31/2023	12/31/2022 - 12/31/2023
<b>FTSE NAREIT All Equity REITs</b>	17.98	11.36
<b>REIT Sector Indices</b>		
<b>Residential</b>		
FTSE NAREIT Equity Residential	9.46	7.66
<b>Retail</b>		
FTSE NAREIT Equity Retail	21.4	10.57
<b>Lodging</b>		
FTSE NAREIT Equity Lodging/Resorts	22.92	23.92
<b>Office</b>		
FTSE NAREIT Equity Office	23.54	2.03
<b>Industrial Warehouses</b>		
FTSE NAREIT Equity Industrial	17.13	19.15
<b>Technology - Cell Towers and Data Centers</b>		
FTSE NAREIT Infrastructure REITs	30.64	-1.52
FTSE NAREIT Equity Data Centers	11.76	30.08
<b>Health Care</b>		
FTSE NAREIT Equity Health Care	10.47	13.94
<b>Self-Storage</b>		
FTSE NAREIT Equity Self Storage	23.51	18.49
<b>Diversified</b>		
FTSE NAREIT Equity Diversified	20.40	-7.59
<b>Specialty</b>		
FTSE NAREIT Equity Specialty	22.47	22.28

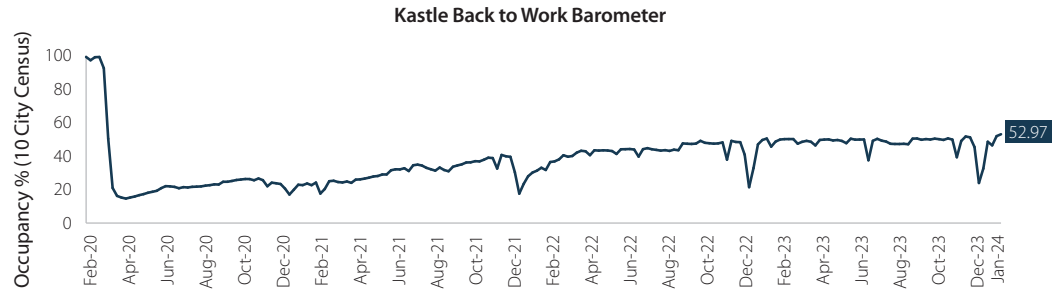
Source: Morningstar, as of 12/31/2023, returns presented are total return  
**Past performance is no guarantee of future results.**

REIT net asset value (NAV) discounts narrowed dramatically in Q4 to -4.7%, just below the 10-year average of -4.6%, as investors recalibrated valuations on the potential for a pause in Fed rate hikes. For well-capitalized REITs, higher rates can be favorable as they can temper supply and enable rent and net operating income (NOI) growth.



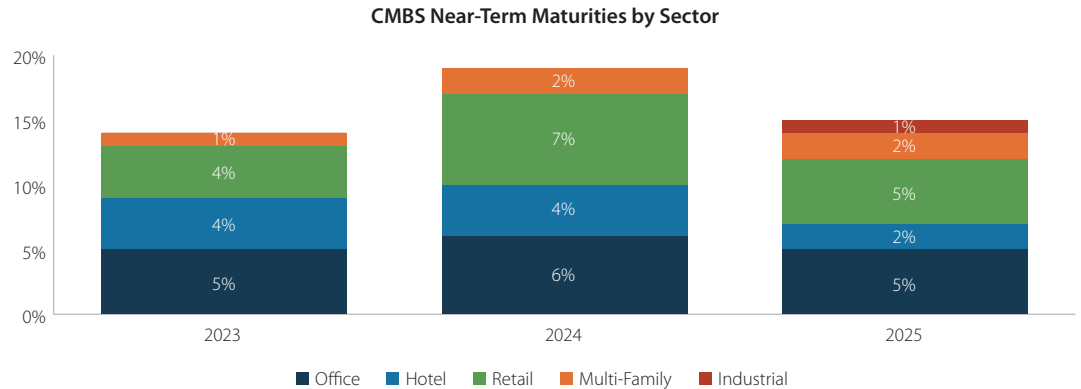
Source: Green Street, as of 12/31/2023

The long hoped-for return to office (RTO) never materialized in 2023 as occupancy census numbers plateaued at ~50%. US office vacancies hit a record high of 19.6% in Q4 2023, surpassing prior peaks from 1991 and 1986. Elevated vacancies are expected to persist for the next several years until supply stabilizes and excess space is absorbed. In 2023, we also learned that 1) conversion economics are currently not compelling, 2) existing office buildings are expensive to tear down and 3) persistent oversupply depresses economics in local markets, creating significant headwinds for the Office sector.

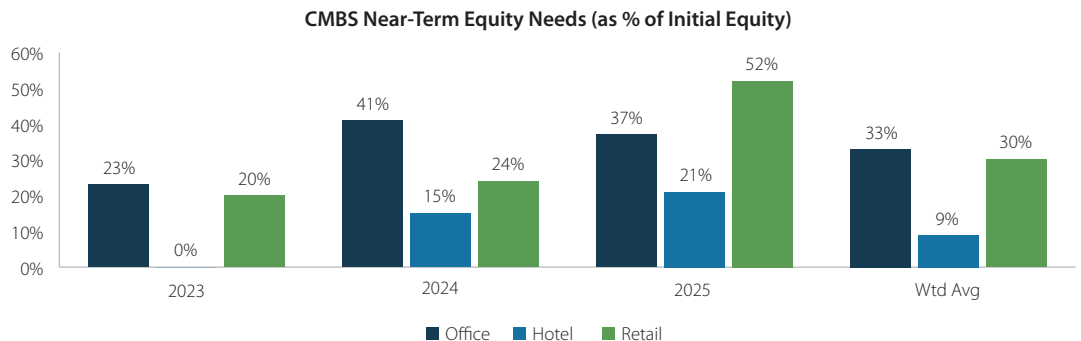


Source: Bloomberg, as of 1/31/2024

We continue to monitor to near-term debt maturities and equity needs of commercial real estate (CRE). With declining asset values, maturing CRE loans will often need substantial fresh equity to be refinanced. Coupled with tightening lending standards, Office, Retail and Hotel sectors face significant headwinds. According to Green Street analysis, additional equity of 10-30% of the initial equity invested may be required for refinancing properties over the next three years. Assuming a total of \$5.5 trillion of CRE debt, \$400 billion of equity may be required in next three years, most of which to refinance Office sector properties.



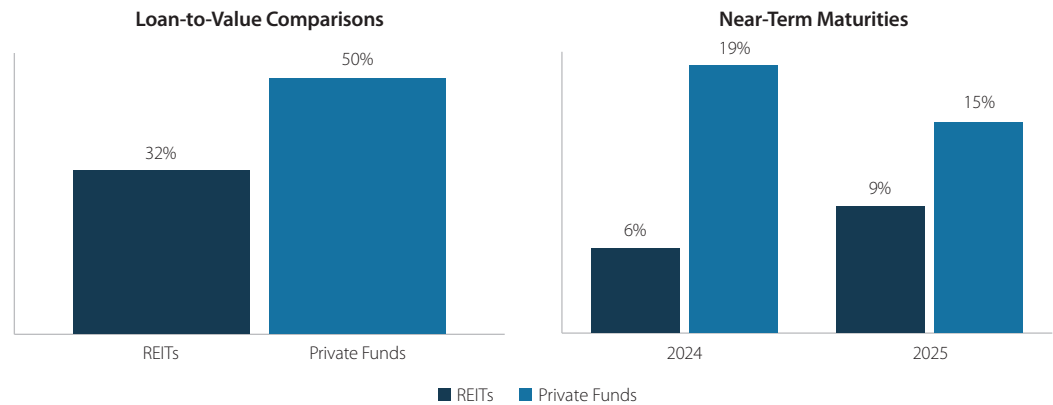
Source: Green Street, as of 10/26/2023



Source: Green Street, as of 10/26/2023

### Public vs Private Real Estate

The disparity in public vs private real estate valuations continues to persist. Relative to private real estate, publicly listed REITs have relatively solid balance sheets, with low leverage ratios (25%-35%), a high percentage of fixed debt (80%-90%), long debt maturities with fixed rates (6-8+ years) and low interest rates (3%-4%), with adequate margins to service their debt with manageable debt-EBITDA ratios (4-6X).



Source: Green Street, as of 12/31/2023

### First Quarter Outlook

Public REITs continue to generate operating income growth above historical averages and we expect this trend to continue over the coming 12-18 months. Sectors with strong demand tailwinds, such as Data Centers, Industrial and Infrastructure/Cell Towers, remain attractive. Over the longer term, Office, Retail and Lodging face significant valuation and refinancing challenges with a less favorable outlook.

As private owners reprice assets lower to prevailing market valuations and confront refinancing hurdles, public REITs, with their relatively strong balance sheets and access to favorable financing, are well positioned to capitalize on an expected convergence between public and private real estate. We expect to see significantly higher merger and acquisition (M&A) activity over the next 12 months which we believe will be constructive for public REITs.

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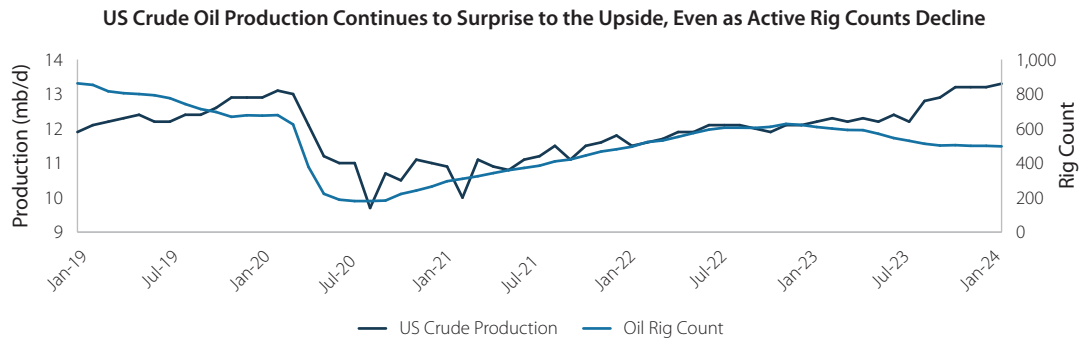
## Commodities Summary

### Fourth Quarter Review

In our fourth-quarter outlook, we forecasted that oil had reached its near-term peak and emphasized precious metals as an intriguing sector. Both predictions have proven accurate, as the energy sector recorded a -18% return in Q4, while precious metals emerged as the sole commodity sector with a noteworthy positive return, standing at +10%.<sup>1</sup> Agriculture and industrial metals held steady, and livestock experienced a decline of 9%. The overall return for commodities for the quarter was -5%, validating last quarter’s neutral outlook even in the face of positive economic growth and sticky inflation.

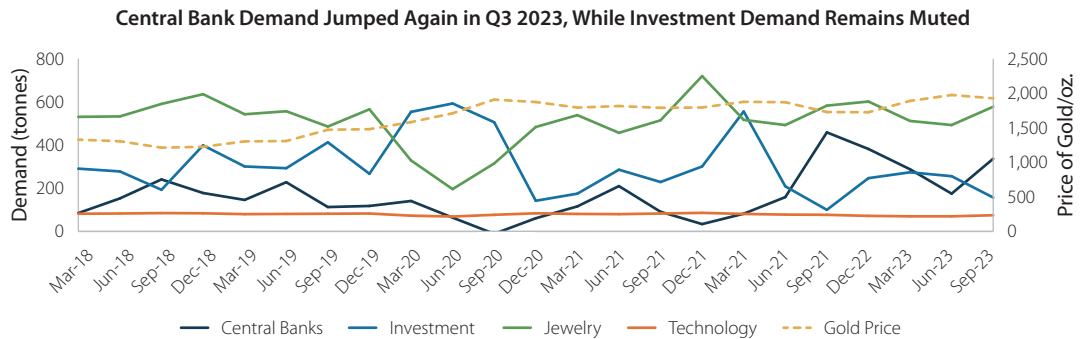
### First Quarter Outlook

We are maintaining our neutral weight outlook on broad commodities. Despite the consistently robust economic data in the US, there is an anticipated significant oversupply of oil in the coming year, with the US continuing to produce at record levels as of the writing of this note.<sup>2,3</sup> Adding to market softness, oil demand in China fell in Q4, which the International Energy Agency (IEA) attributes to the end of China’s post-lockdown travel surge. OPEC production cuts and rising geopolitical tensions, specifically with the Houthis in the Red Sea, have been insufficient to support a significant rebound in oil prices.



Source: Bloomberg, US Department of Energy, Baker Hughes, 1/31/2019 – 1/19/2024

Precious metals retain their status as a sector of interest, given the escalating geopolitical risks. The potential widening of conflicts in the Middle East may stimulate interest in precious metals among both investors and governments. Central bank demand for gold, which surged in 2022 following Russia’s invasion of Ukraine, experienced another increase in Q3 2023 (according to the most recent available data). Meanwhile, investment demand—typically responsive to price increases—has remained subdued, even as gold trades above \$2,000/oz.<sup>4</sup> We anticipate the possibility of renewed investor interest in the coming year, particularly if geopolitical tensions continue to intensify.



Source: World Gold Council, Q1/2018 – Q3/2023

## Risks to Outlook

Escalations involving state actors in the Middle East, such as Saudi Arabia and Iran, have the potential to trigger a sudden and substantial surge in oil prices. While there is an argument for viewing exposure to energy prices as a hedge against the geopolitical tensions discussed in the context of precious metals, we maintain the belief that precious metals may appreciate even in a relatively slow-burning conflict. Specific and significant escalations would be required to outweigh the existing supply/demand dynamics for oil. Although improbable, these escalations are within the realm of possibility, and in such a scenario, a near-term (at least) spike in oil prices could result in overall commodity outperformance.

<sup>1</sup> Source: Bloomberg, 9/30/2023 – 12/31/2023. The energy sector proxy used for this analysis is the Bloomberg Energy Subindex Total Return (BCOMENTR Index). The precious metals proxy is the Bloomberg Precious Metals Subindex Total Return (BCOMPRTTR Index). The industrial metals sector (proxy: Bloomberg Industrial Metals Subindex Total Return (BCOMINTR Index)) did have a small positive total return for the quarter, at +0.15%, though we do not consider this material enough to be “of note.”

<sup>2</sup> Source: International Energy Agency (IEA), January 2024 Oil Market Report

<sup>3</sup> Source: Bloomberg, with the most recent reading of 13.3mb/d on 1/19/2024 matching previous record set in December

<sup>4</sup> Source: World Gold Council



## Definitions

*Basis Point (bps): a unit that is equal to 1/100th of 1% and is used to denote the change in a financial instrument.*

*Bloomberg Intermediate US High Yield Index: measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. The intermediate duration segment of the index includes bonds with maturities of 1 to 10 years.*

*Bloomberg Energy Subindex (BCOMENTR Index): a commodity index composed of futures contracts on crude oil, heating oil, unleaded gasoline and natural gas. It reflects the return of underlying commodity futures price movements only and is quoted in USD.*

*Bloomberg Industrial Metals Subindex (BCOMINTR Index): reflects the returns that are potentially available through an unleveraged investment in the futures contracts on industrial metal commodities.*

*Bloomberg Municipal Index: serves as a benchmark for the US municipal bond market.*

*Bloomberg Precious Metals Subindex (BCOMPRTR Index): reflects the returns that are potentially available through an unleveraged investment in the futures contracts on precious metals commodities. The Index currently consists of two precious metals commodities futures contracts (gold and silver).*

*Bloomberg US Aggregate Bond Index: a broad-based benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, fixed-rate agency MBS, ABS and CMBS (agency and non-agency).*

*Bloomberg US Asset-Backed Securities Index: a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index only includes ABS securities.*

*Bloomberg US Corporate Bond Index: measures the investment grade, fixed-rate, taxable corporate bond market.*

*Consumer Price Index (CPI): a measure of the average change over time in the prices paid by urban consumers for a representative basket of consumer goods and services.*

*Debt-to-EBITDA Ratio: compares a company's total obligations to the actual cash the company brings in from its operations. It reveals how capable the firm is of paying its debt and other liabilities if taxes and the expenses from depreciation and amortization are deferred.*

*Dow Jones Industrial Average: a stock market index of 30 prominent companies listed on stock exchanges in the United States. The DJIA is one of the oldest and most commonly followed equity indexes.*

*Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA): a measure of a company's overall financial performance.*

*FTSE NAREIT All Equity REITs Index: a free-float adjusted, market capitalization-weighted index of US equity REITs. Constituents of the index include all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property.*

*FTSE NAREIT Equity Data Centers Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Data Center REITs in the parent index.*

*FTSE NAREIT Equity Diversified Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Diversified REITs in the parent index.*

*FTSE NAREIT Equity Health Care Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Health Care REITs in the parent index.*

*FTSE NAREIT Equity Industrial Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Industrial REITs in the parent index.*

*FTSE NAREIT Equity Lodging/Resorts Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Lodging/Resorts REITs in the parent index.*

*FTSE NAREIT Equity Office Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Office REITs in the parent index.*

*FTSE NAREIT Equity Residential REIT Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Equity Residential REITs in the parent index.*

*FTSE NAREIT Equity Retail Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Retail REITs in the parent index.*

*FTSE NAREIT Equity Self Storage Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Self Storage REITs in the parent index.*

*FTSE NAREIT Equity Specialty Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Specialty REITs in the parent index.*

*FTSE NAREIT Infrastructure REITs Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Infrastructure REITs in the parent index.*

*Goldman Sachs Financial Conditions Index: a weighted average of short-term interest rates, long-term interest rates, the trade-weighted dollar, an index of credit spreads and the ratio of equity prices to the 10-year average of earnings per share.*

*Investment Grade (IG): a rating that signifies that a municipal or corporate bond presents a relatively low risk of default. To be considered an investment grade issue, the company must be rated at 'BBB' or higher by Standard and Poor's or Moody's. Anything below this 'BBB' rating is considered non-investment grade.*

*ISM Manufacturing Inventories Index: a monthly indicator of US inventory levels. A reading over 50 shows inventories have risen from the previous month while a reading below 50 shows a decline in inventories.*

*ISM Manufacturing New Orders Index: shows the number of new orders from customers of manufacturing firms reported by survey respondents compared to the previous month. A reading over 50 shows orders have risen from the previous month while a reading below 50 shows a decline in orders.*

*ISM Manufacturing PMI: measures the change in production levels across the US Economy from month to month.*

*ISM Services PMI: a composite index based on the diffusion indexes for four service economy indicators with equal weights: Business Activity (seasonally adjusted), New Orders (seasonally adjusted), Employment (seasonally adjusted) and Supplier Deliveries.*

*Kastle Back to Work Barometer: a measure of current average weekly (first time a day) swipe activity across a 10-city sample of commercial office buildings which utilize Kastle building security, compared to a weekly average from before office use dropped due to COVID-19. The 10-city sample includes: Houston, Chicago, Austin, New York, Dallas, Los Angeles, San Francisco, Washington D.C., San Jose and Philadelphia.*

*NASDAQ 100 Index: one of the world's preeminent large-cap growth indexes. It includes 100 of the largest domestic and international non-financial companies listed on the Nasdaq Stock Market based on market capitalization.*

*Owner's Equivalent Rent (OER): amount of rent that would have to be paid in order to substitute a currently owned house as a rental property. Surveyed data.*

*Personal Consumption Expenditures Price Index (PCE): a measure of the prices that people living in the United States, or those buying on their behalf, pay for goods and services. The PCE is known for capturing inflation (or deflation) across a wide range of consumer expenses and reflecting changes in consumer behavior.*

*Purchasing Managers' Index (PMI): an index of the prevailing direction of economic trends in the manufacturing and service sectors. It consists of a diffusion index that summarizes whether market conditions, as viewed by purchasing managers, are expanding, staying the same, or contracting.*

## Definitions (continued)

*Real Estate Investment Trust (REIT): companies that own or finance income-producing real estate across a range of property sectors. Listed REITs have characteristics of both the income potential of bonds and growth potential of stocks.*

*Russell 2000 Index: measures the performance of the small-cap segment of the US equity universe.*

*Russell Microcap Index: measures the performance of the microcap segment of the US equity market.*

*S&P 500 Equal Weight Index: the equal-weight version of the widely-used S&P 500. The index includes the same constituents as the capitalization weighted S&P 500, but each company in the index is allocated a fixed weight.*

*S&P 500 Index: widely regarded as the best single gauge of large-cap US equities. The index includes 500 leading companies and covers approximately 80% of available market capitalization.*

*Z-Score: a numerical measurement that describes a value's relationship to the mean of a group of values, measured as standard deviations from the mean. If a Z-score is 0, it indicates that the data point's score is identical to the mean score. A Z-score of 1.0 would indicate a value that is one standard deviation from the mean.*

*One may not invest directly in an index.*

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AAI000624 5/31/2024