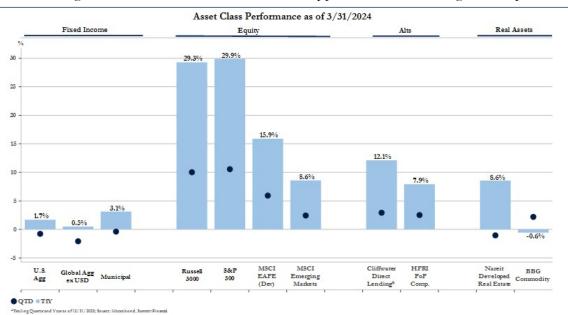
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First Quarter 2024

Key Takeaways

- The first quarter was a continuation of late 2023, characterized by stronger-than-anticipated growth paired with tamer inflation and restrictive monetary policy.
- Markets and risk assets welcomed this environment, evidenced by a strong start for equities and tighter credit spreads.
- Rising rates, however, offset the decline in spreads, resulting in a moderate rise in yields that acted as a headwind for higher-quality fixed income.
- The U.S. Manufacturing Purchasing Managers Index (PMI) returned to expansionary territory while the services (non-manufacturing) PMI remained above 50, both supportive indicators for growth.
- The last mile of inflation fighting is proving to be the hardest to combat with stickier (housing, wages, auto insurance) and more volatile (commodities, food) elements contributing to higher for longer levels.
- The labor market continues to be on solid footing with a sub-4% unemployment rate. Wage growth remains positive but the rate of change has fallen from peak, supporting lower inflation.
- U.S. large-cap stocks again led markets higher, although market breadth shows some signs of broadening. The magnificent seven has turned into the fab four and ~40% of constituents have outperformed the index YTD.
- The S&P 500 Index is historically concentrated with ~one-third contained within the top 10 holdings. Notably, top names have been disproportionate positive contributors to EPS growth.
- International equity markets were positive but lagged U.S. counterparts. Although more compelling valuations offered some support, disappointing growth, and renewed USD strength weighed on relative results.
- There was a modestly negative start to the year for investment grade fixed income as yields rose. Despite frustrating recent results, higher quality yields and duration are important elements to maintain in diversified portfolios.
- Private real estate activity is thawing contributing to renewed price discovery. An uptick in activity could lead to volatility in the short run but bring back the potential for price appreciation, in addition to yield, in the future.
- Private credit strategies maintain elevated yields reflective of higher base rates and still attractive spreads. Increased competition for loans paired with the potential for credit stress could serve as headwinds in 2024 and beyond.
- Equity market valuations leave little room for error while fixed income valuations are more supportive. Paired with expectations for a benign economic environment, risk assets appear vulnerable to negative surprises.



Economy

Global growth continued to exceed modest expectations entering the year. Much of the domestic economic resilience is attributed to a strong labor market powering a strong consumer. Labor markets maintain minimal slack and have somehow 'toed the line' of being supportive of growth while not reigniting a surge in inflation – a scenario that defied many economists' predictions. One potential reason is the upswing in immigration which data suggests is plugging the employment gap preventing additional pressure to push wages higher. Strong employment and moderate wage growth pulled consumer sentiment up from historic lows reached mid-2022 to the highest level since immediately following the pandemic.

The Fed used messaging as a tool to fine-tune policy and sentiment throughout this transitory policy stage. Hopes for six cuts were quickly dispelled with more questioning if even three cuts are feasible. Ultimately, barring some exogenous shock, one to three small cuts appear most likely to serve as more of a signaling mechanism/course correction versus having a sizeable, direct impact on the economy. Given the criticized pace of raising rates in response to elevated inflation coming out of the pandemic, the Fed will be careful to not ease too quickly and risk reviving inflation.

Economic growth outside of the U.S. is more varied and generally less robust. Momentum in the Eurozone recovery has slowed and is becoming bifurcated. Southern European economies (mainly Italy, Spain, Portugal, and Greece) have well outgrown counterparts while Germany and other North European nations, previously looked to power the region's growth, have barely budged since the pandemic. Within Asia, Japan's growth is showing renewed signs of life as the Bank of Japan is just starting the process of normalizing monetary policy. The combination supported a recent rally in the local equity market, but yen weakness has eroded some of the gains for USD-based investors. China's economy could finally be bottoming with PMIs gaining into expansionary territory and exports rising. Monetary easing also appears to be helping although the property market remains strained and an unwillingness to substantially devalue the yuan puts a cap on government intervention.

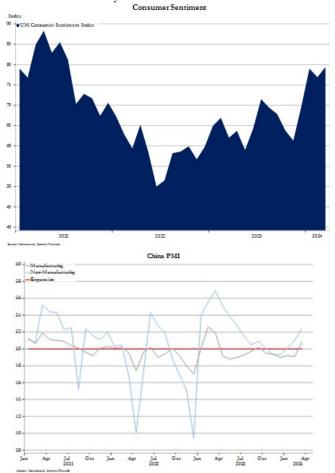
The global economy has made significant progress in normalizing following a whipsaw in growth, inflation, and policy during and immediately following the pandemic. The new normal reflects a world of positive, albeit modest, growth, structurally higher but more moderate inflation, and likely greater macro uncertainty.

Consumer Sentiment is Back from the Dead

- A strong job and stock market have fueled an impressive rise in sentiment from historic mid-2022 lows.
- Higher sentiment leads to greater spending further supporting the economy and pushing off recessionary concerns, for now.
- Sentiment is particularly important leading into an election year which can impact the results.

China's Economy Finally Bottoming?

- China's manufacturing and service PMIs have returned to expansionary territory (above 50).
- Monetary support has loosened credit conditions, helping markets and consumer confidence.
- Political relations and exports are improving but challenges in the property market remain.
- Reaching the 5% growth target may still be a stretch, but China may be at a positive inflection point.



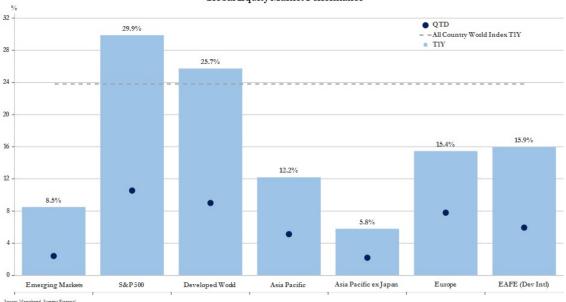
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Equity Markets

The S&P 500 index posted a 10.6% return for the quarter, mainly driven by valuation expansion stemming from a boost in investor sentiment on the back of strong economic growth, although earnings growth also positively contributed. Developed international markets bested emerging markets with the MSCI EAFE index returning 5.8% versus the MSCI EM index's 2.4%, as concerns around China's growth prospects remain. Despite recent positive performance, dollar strength continues to erode international market returns for USD investors and adds a layer of complexity when considering asset allocation decisions.

Growth stocks drove most of the outperformance for developed markets backed by stellar earnings growth from the Magnificent Seven. Japanese stocks boomed during the quarter as the Bank of Japan began normalizing its monetary policy in March and ended its negative interest rate regime. European equities continued to lag U.S. stocks but still offer attractive valuations and a potentially shrinking economic growth gap.

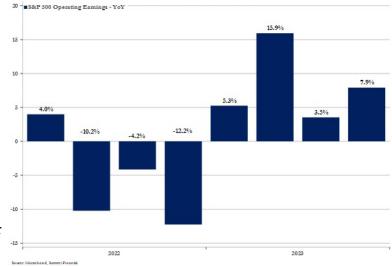
Volatility remained low and contained throughout the quarter which, when coupled with other promising economic data, adds support to the prospect of a soft landing. Valuations remain elevated for US stocks, particularly large caps, while other portions of the market are more reasonably priced. Lofty valuations often leave little room for error or undershooting expectations. Out of favor portions of the market continue to lag but are presenting more compelling valuation opportunities.



Global Equity Market Performance

What Strong Q4 Earnings Say About Stocks

- S&P 500 operating earnings grew by almost 8% YoY in Q4, flipping the pessimistic script leading into the year.
- Information Technology, Consumer Discretionary, Utilities, and Communication Services all saw doubledigit growth, while Energy, Materials, Healthcare, and Financials all had double-digit declines.
- The boost in earnings may be attributed to companies adapting to a higher rate and inflation environment by cutting costs and boosting efficiency.
- The 2024 forecasted EPS for the S&P 500 index is expected to increase from \$220 currently to \$244 by year end.



S&P 500 Operating Earnings

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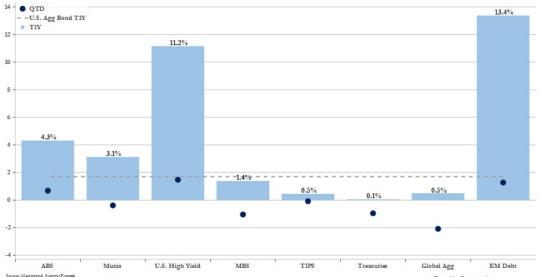
Fixed Income Markets

Overall, fixed income markets entered 2024 a bit more subdued than they finished 2023, with most portions generating modest returns. The Fed continues to suggest that interest rate cuts are coming, but Treasury yields, a key driver of mort-gage rates and other borrowing costs, continue to rise. The 10-year Treasury yield ended 0.32% higher for the quarter, despite ticking down 0.05% in March. The yield curve inversion persisted throughout the quarter and has now stretched to a record 21 months, with -0.42% of inversion at quarter end.

Following a strong second half of 2023, many portfolio managers believe bond markets still offer investors good value due to attractive nominal, real, and relative yields. Supply and demand dynamics could be a key theme going forward, as Treasury supply remains heavy and non-Treasury is more modest. High yield continues to benefit from an improving economic picture as predictions of a forthcoming recession have become scarce.

MBS dropped 1.04%, despite contributions from Non-agency MBS. Within the subsector, longer dated and lower rated tranches posted the best relative performance, buoyed by resilient home prices and increasing confidence in a soft or no-landing scenario. CMBS remains a sector in transition and detracted in Q1, with declines in office property valuations and growing stress in the multifamily sector continuing to weigh on performance.

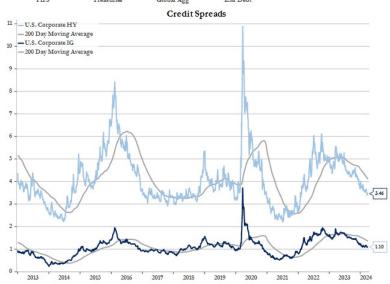
On the municipal side, rates climbed more than short-term Treasury yields as both markets responded to expectations moving from six to three Fed rate cuts by year end. After experiencing outflows in 2022 and 2023, investor demand has returned, with net inflows for the quarter totaling over 7 billion. Most subsectors produced modestly negative returns for the quarter, with the sector returning -0.39% as a whole. Similar to the taxable market, credit has been a bright spot and high yield is outperforming broader indices due to credit spreads narrowing despite a rising interest rate environment.



Fixed Income Sector Performance

Credit Spreads Continue to Tighten

- Credit market valuations are becoming increasingly expensive with the average IG bond spread versus 10-year U.S. Treasuries closing Q1 at 110 bps, tightening an additional 9 bps since year end.
- The average high yield spread narrowed 26 bps and is hovering around 346 bps, well below its 10-year average of 414 bps.
- Credit spreads at these levels provide little compensation for risk, especially if a slowing economy limits any potential further tightening or credit stress increases.



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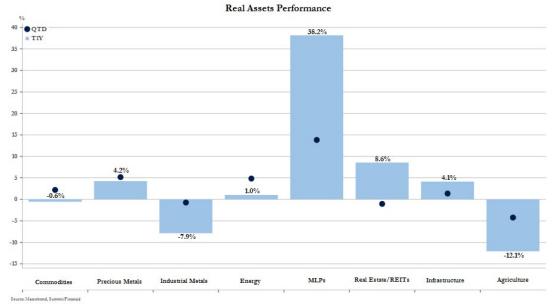
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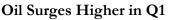
Real Assets

Within real assets, March capped a generally positive start to the year for most commodities, with oil, gold, copper, and cocoa all ending the quarter trading near YTD highs. The strength has been robust, with more than three quarters of commodities posting positive returns in the quarter, the most since Q1 2022. Gold has been on a remarkable rally, moving \sim 7% higher in Q1 after posting a 13.5% gain in 2023, even as hopes for near-term rate cuts dwindle. Often treated as a portfolio hedge against a weakening economy, recent economic data coming in stronger than expected couldn't weaken demand. Gold's value as a geopolitical hedge remained intact for some investors as the ongoing uncertainty surrounding the Middle East, Ukraine, and upcoming U.S. election cycle bolstered demand. On the industrial side, copper, often seen as a bellwether for the global economy, ended the quarter up 3.5%

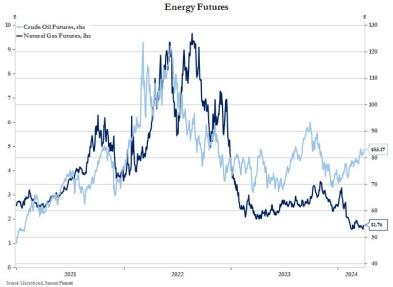
Most Public REIT sectors finished positive in 2023, largely due to the surge that followed the Fed signaling a potential policy shift in Q4, leading many analysts to believe they were well positioned to outperform in 2024. Since then, the asset class has remained mostly flat as the expected timing of a first cut continues to get pushed back and the expected number of cuts continues to decline. Picking up where it left off in 2023, the lodging and resort sector has led the group, returning 5.6% for the quarter. Office properties continue to lag, falling $\sim 0.50\%$ in Q1, as economic uncertainty and lingering resistance to a return to office remain headwinds.

Listed infrastructure returned $\sim 1.4\%$ in Q1 and the macro outlook in 2024 remains supportive due to expectations of slower global growth, above-trend inflation, and interest rate stabilization, which have historically been supportive of infrastructure performance.





- Oil was on a tear through Q1 as ongoing geopolitical tensions in the Middle East, OPEC production cuts, and strengthening demand led crude prices above \$83 per barrel in late March.
- These higher prices could trickle down and contribute to inflation as consumers continue to get pinched at the pump and within retail sectors.
- On the other hand, higher oil prices acted as a tailwind for the greater energy sector and MLPs, which gained 4.8% and 13.8% in Q1, respectively.
- It was a different story for natural gas futures which dropped ~30% due to a large current surplus stemming from a milder than expected winter.



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Alternatives

Private credit continues to provide a robust yield premium relative to public bonds and bank loans. Credit spreads have modestly tightened largely due to increased competition amongst private lenders and a recovery in the bank loan market which has returned as a source of funding. However, spreads remain compelling and in conjunction with elevated base rates have kept yields over 10%. Terms on new loans have loosened but leverage levels and interest coverage have been stable. Despite concerns about higher interest rates, the default cycle has remained muted, although amendments and extensions have doubled since 2021. Private credit deal volume has been healthy driven by add-on loans and refinancing.

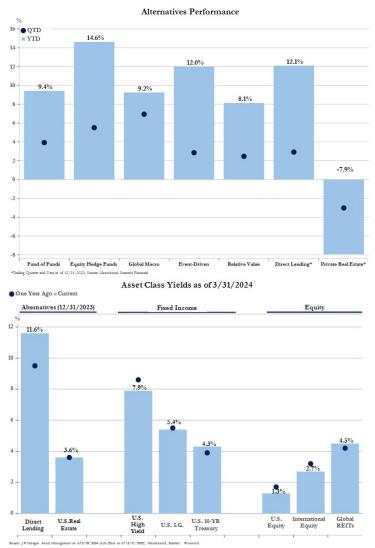
Private equity valuations continue to be supported by rising public equity markets and strong earnings growth. As financial conditions have improved, exit activity has picked with higher M&A and IPO volumes after a slow year in 2023. Like private credit, add on deals have been a large source of new activity. Dry powder continues to increase with fundraising dominated by a concentrated number of well-known firms. Secondaries discounts have moderated, particularly GP-led secondaries, but remain very attractive relative to historical averages. Sellers have been drawn in by the reduced discounts, expanding secondary market volume. Venture Capital, which has seen a sharp fall in fundraising and deal volume and disappointing company performance, has been an area of weakness.

Real estate valuations have broadly reset over the past two years in response to higher interest rates and a contraction in investment capital. Investors have been concerned that greater refinancing costs and deleveraging would cause a spike in distressed sales. There are signs of stability in vacancy rates and cash flow growth, although office and lower quality properties are lagging. Strong demand in most sectors and high development costs for new properties is supporting valuations. The strong economy and slowing inflation are positives for rental growth and operating costs. Although deal activity fell to levels last seen almost 10 years ago, transactions are starting to pick up and access to private capital is expanding. Historically a pullback in real estate has been followed by a strong recovery. The structural changes taking place also portend well for properties outside of traditional sectors and in areas with favorable demographic trends.

Hedge Funds, buoyed by optimism over economic conditions and rising markets, had a strong quarter with positive returns in all major categories. Performance dispersion was unusually low with most funds generating positive returns. Larger funds continued to demonstrate a performance edge. Macro funds rebounded as trendfollowing trading strategies returned to favor posting 10%+ for the quarter. Directional long/short equity, activist and credit funds also outperformed. Merger arbitrage, hindered by tight deal spreads and modest M&A volume, was an outlier with a small negative return for the quarter.

A Strong Quarter for Alternative Investments

- Private credit strategies provided stability during a quarter that saw rising interest rates drive down public bond prices. Yields on credit investments are the most attractive in years relative to other asset classes.
- Hedge funds continued the strong run that began last November. Global macro strategies rebounded from a weak period to post the highest quarterly return in 20 years.
- Yields for both public REITs and private real estate are attractive relative to equities. Particularly on an after-tax basis due to the favorable tax treatment of real estate distributions.



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Growth	3/31/2024	12/31/2023	
GDP Now Estimate (Q1 2024)	2.5%	2.5%	
U.S. Leading Economic Indicator (YoY%)*	-6.3%	-7.1%	
Unemployment Rate (%)	3.8%	3.7%	
Initial Claims (Weekly as of 3/29/24, thousands)	221.0	203.0	
Industrial Production (YoY%)*	-0.2%	1.2%	
Consumer Sentiment	79.4	69.7	
ISM Manufacturing Index	50.3	47.4	
ISM Non-Manufacturing Index	51.4	50.6	
Retail Sales (YoY%)*	1.5%	5.0%	
Building Permits (mil)*	1.52	1.49	

Inflation	3/31/2024	12/31/2023
Headline CPI (YoY)	3.5%	3.4%
Core CPI (YoY)	3.8%	3.9%
Core PCE (YoY)*	3.0%	3.0%
Forward Breakeven Inflation Expectation (5-year)	2.2%	2.2%

 Market Sentiment
 3/31/2024
 12/31/2023

 MOVE Index
 86.4
 114.6

 VIX
 13.0
 12.5

 National Financial Conditions Index (NFCI)
 -0.51
 -0.48

Rates & Credit Conditions	3/31/2024	12/31/2023	10-Year Average	
3-M U.S. Treasury	5.5%	5.3%	1.4%	
10-YR U.S. Treasury	4.2%	3.9%	2.3%	
Spreads over 10-YR U.S. Treasuries (bps)				
U.S. Corporate Investment Grade	110	119	114	
U.S. Corporate High Yield	346	372	414	
U.S. Municipal	-71	-65	-4.9	

Federal Reserve Economic Projections	2024	2025	2026
Real GDP (YoY%)	2.2%	1.7%	2.0%
PCE Price Index (YoY%)	2.3%	2.1%	2.0%
Core PCE (YoY%)	2.5%	2.2%	2.1%
Unemployment %	4.0%	4.1%	4.0%

*As of 2/29/2024

Source: Bloomberg and Federal Reserve Bank of Atlanta

Definitions

Term	Definition	
CBOE Volatility Index (VIX)	The CBOE Volatility Index (VIX) reflects the market's real-time expectation of 30-day forward-looking volatility. It is created by the Chicago Board of Options Exchange (CBOE).	
Chicago Fed National Financial Conditions Index (NFCI)	The Chicago Fed's National Financial Conditions Index (NFCI) provides a comprehensive weekly update on U.S. financial conditions in money markets, debt and equity markets, and the traditional and "shadow" banking systems	
Consumer Confidence Index	The Consumer Confidence Index is a measure based on a survey administered by The Conference Board that reflects prevailing business conditions and likely developments for the months ahead. This monthly report details consumer attitude, buying intentions, vacation plans, and consumer expectations for inflation, stock prices, and interest rates.	
Consumer Price Index	The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.	
Core Inflation	Core Inflation is a measure of economic inflation that excludes food and energy	
Headline Inflation	Headline Inflation is a measure of the total economic inflation that includes food and energy prices	
ISM Manufacturing Index	The ISM Manufacturing Index, also known as the purchasing managers' index (PMI), is a monthly indicator of U.S. economic activity based on a survey of executives covering all North American Industry Classification System's businesses in the manufacturing sector.	
ISM Non-Manufacturing Index	The ISM Non-Manufacturing Index is a monthly indicator of U.S. economic activity based on a survey of executives covering all North American Industry Classification System's businesses in the services (or non-manufacturing) sector.	
Leading economic indicators (LEI)	Leading economic indicators (LEI) are statistics that precede economic events. They predict the next phase of the business cycle;	
Merrill Lynch Option Volatility Estimate Index (MOVE Index)	The MOVE index, or Merrill Lynch Option Volatility Estimate Index, is a gauge of interest rate volatility in the U.S. Treasury market. It is calculated from options prices, which reflect the collective expectations of market participants about future volatility. The index measures the implied volatility of U.S. Treasury options across various maturities	
OECD Composite leading indicators (CLIs)	The OECD Composite leading indicators (CLIs), designed to anticipate turning points in economic activity relative to trend	
Personal Consumption Expendi- tures Price Index (PCE)	Personal Consumption Expenditures Price Index (PCE) is 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 price index is known for capturing inflation (or deflation) across a wide range of consumer expenses and reflecting changes in consumer behavior	
S&P 500 12-Month Forward P/E ratio	S&P 500 12-Month Forward P/E ratio uses the forecasted earnings per share of the company over the next 12 months for calculating the price-earnings ratio. It is calculated by dividing the price per share by forecasted earnings per share over the next 12 months	
S&P Case-Shiller Home Price Index	The S&P Case-Shiller Home Price Index measures the value of single-family housing within the U.S. The index is a composite of single-family home price indices for the nine U.S. Census divisions.	
The Federal Funds Rate	The Federal Funds Rate is the target interest rate range at which commercial banks borrow and lend their excess reserves to each other overnight, which is set by the Federal Open Market Committee (FOMC)	
Treasury Bill (T-Bill)	A Treasury Bill (T-Bill) is a short-term U.S. government debt obligation backed by the Treasury Department with a maturity of one year or less;	
U-3 unemployment rate	The U-3 unemployment rate is the most commonly reported rate in the United States, representing the number of unemployed people actively seeking a job	
United States Industrial Production	United States Industrial production refers to the output of industrial establishments and covers sectors such as mining, manufacturing, electricity, gas and steam and air-conditioning. This indicator is measured in an index based on a reference period that expresses change in the volume of production output;	
National Financial Conditions Index (NFCI)	The National Financial Conditions Index (NFCI) is a weighted average of a large number of variables (105 measures of financial activity) each expressed relative to their sample averages and scaled by their sample standard deviations.	
Short Interest Ratio	The short interest ratio is a mathematical indicator of the average number of days it takes for short sellers to repurchase borrowed securities in the open market. The ratio is calculated by dividing the total number of shorted shares of a stock by the average daily trading volume.	
Consumer Sentiment	Consumer Sentiment is represented by The University of Michigan Consumer Sentiment Index which rates the relative level of current and future economic conditions.	
Building Permits	Building Permits measures the change in the number of new building permits issued by the government. Building permits are a key indicator of demand in the housing market.	
Retail Sales	Retail sales are an economic metric that tracks consumer demand for finished goods. This figure is a very important data set as it is a key monthly market-moving event. Retail sales are reported each month by the U.S. Census Bureau and indicate the direction of the economy.	
Industrial Production	Industrial production refers to the output of industrial establishments and covers sectors such as mining, manufacturing, electricity, gas and steam and air-conditioning. This indicator is measured in an index based on a reference period that expresses change in the volume of production output.	
Initial Claims	Initial claims refers to the government report on the number of workers applying for unemployment benefits for the first time following job loss.	

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Label	Index	Index Description
U.S. Agg	Bloomberg U.S. Aggregate Bond Index	The Bloomberg U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS, and CMBS (agency and non-agency).
Global Agg ex USD	Bloomberg Global Aggregate Index	The Bloomberg Global Aggregate Index is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes Treasury, government-related, corporate, and securitized fixed-rate bonds from both developed and emerging markets issuers.
Municipal	Bloomberg Municipal Bond	The Bloomberg Municipal Bond Index covers the U.S. dollar-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds,
Russell 3000	Index Russell 3000 Index	revenue bonds, insured bonds, and pre-refunded bonds. The Russell 3000 Index measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market. It is constructed to provide a comprehensive, unbiased, and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are included.
S&P 500	S&P 500 Index	The S&P 500 Index is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. It measures the movement of the largest issues. Standard and Poor's chooses the member companies for the 500 based on market size, liquidity, and industry group representation. Included are the stocks of eleven different sectors.
MSCI EAFE (Dev)	MSCI EAFE Index	The MSCI EAFE Index (Europe, Australasia, Far East) captures large- and mid-cap representation across developed markets countries around the world, excluding the U.S. and Canada. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
MSCI Emerging Markets	MSCI Emerging Markets Index	The MSCI Emerging Markets Index captures large- and mid-cap representation across emerging markets countries across the world. The index covers approximately 85% of the free float- adjusted market capitalization in each country.
Fund of Funds		The HFRI Fund of Funds Composite Index is an equally weighted hedge fund of funds benchmark composed of global constituent funds. The underlying constituents are typically diversi- fied among multiple managers and styles to provide a comprehensive representation of the hedge fund of funds investment space.
Nareit Developed Real Estate	FTSE EPRA/NAREIT Developed Index	The FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real estate companies and REITS worldwide. Index constituents are free float-adjusted, subject to liquidity, size, and revenue screening for inclusion.
BBG Commodity	Bloomberg Commodity Index	The Bloomberg Commodity Index reflects commodity futures price movements and is calculated on an excess return basis. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production, and weight-caps are applied at the commodity, sector, and group level for diversification. The roll period typically occurs from the 6th-10th business day based on the roll schedule.
Developed World	MSCI World Index	The MSCI World Index captures large- and mid-cap representation across developed markets countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
Asia Pacific	MSCI AC Asia Pacific Index	The MSCI AC Asia Pacific Index captures large and mid cap representation across 5 Developed Markets countries and 8 Emerging Markets countries in the Asia Pacific region. With 1,537 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country
Asia Pacific ex Japan	MSCI AC Asia Pac ex. Japan	The MSCI AC Asia Pacific ex Japan Index captures large and mid cap representation across 4 of 5 Developed Markets countries (excluding Japan) and 9 Emerging Markets countries in the Asia Pacific region. With 1,312 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
Europe	MSCI Europe Index	The MSCI Europe Index captures large- and mid-cap representation across developed markets countries in Europe. The index covers approximately 85% of the free float-adjusted market capitalization across the European developed markets equity universe.
ABS	Bloomberg US Asset-Backed Securities Index	The Bloomberg US ABS Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index only includes ABS securities.
U.S. High Yield	Bloomberg U.S. Corporate High-Yield Index	The Bloomberg U.S. Corporate High-Yield Index measures the U.S. dollar-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. Bonds from issuers with an emerging markets country of risk, based on Barclays EM country definition, are excluded.
MBS	Bloomberg U.S. Mortgage- Backed Securities Index	The Bloomberg Mortgage-Backed Securities Index tracks fixed-rate agency mortgage-backed pass-through securities guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon, and vintage.
TIPS	Bloomberg U.S. Treasury Inflation Notes 1-10 Year Index	The Bloomberg U.S. Treasury Inflation Notes 1-10 Year Index measures the performance of the U.S. Treasury Inflation-Protected Securities (ITIPS) market with less than 10 years to maturity. TIPS are inflation-protected bonds (IPBs) that are issued by the U.S. Treasury. Their face value is pegged to the CPI and adjusted in step with changes in the rate of inflation.
Treasuries	Bloomberg U.S. Treasury Index	The Bloomberg U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index. STRIPS are excluded from the index because their inclusion would result in double-counting.
EM Debt	Bloomberg Emerging Mar- kets Tradeable Debt Index: Total Return	This index measures the performance of emerging market debt on a total return basis
Precious Metals	Bloomberg Precious Metals Subindex	Formerly known as Dow Jones-UBS Precious Metals Subindex (DJUBSPR), the index is a commodity group subindex of the Bloomberg CI. It is composed of futures contracts on gold and silver. It reflects the return of underlying commodity futures price movements only and is quoted in USD.
Industrial Metals	Bloomberg Industrial Metals Subindex	Formerly known as Dow Jones-UBS Industrial Metals Subindex (DJUBSIN), the index is composed of futures contracts on aluminum, copper, nickel and zinc. It reflects the return of underlyying commodity futures price movements only. It is quoted in USD.
Energy	Bloomberg Energy Subindex	Formerly known as Dow Jones-UBS Energy Subindex (DJUBSEN), the index is a commodity group subindex of the Bloomberg CL It is 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.
MLPs	Alerian MLP Index	The Alerian MLP Index is a float-adjusted, capitalization-weighted index whose constituents earn most of their cash flow from midstream activities involving energy commodities. It tracks energy infrastructure Master Limited Partnerships (MLPs).
Real Estate/REITs	S&P 500 Real Estate Index	The S&P 500® Real Estate comprises those companies included in the S&P 500 that are classified as members of the GICS® Real Estate sector.
Infrastructure	S&P Global Infrastructure Index	The S&P Global Infrastructure Index is designed to track 75 companies from around the world chosen to represent the listed infrastructure industry while maintaining liquidity and tradabil- ity. To create diversified exposure, the index includes three distinct infrastructure clusters: energy, transportation, and utilities.
Agriculture	Bloomberg Agriculture Subindex	Formerly known as Dow Jones-UBS Agriculture Subindex (DJUBSAG), the index is a commodity group subindex of the Bloomberg CI. It is composed of futures contracts on coffee, corn, cotton, soybeans, soybean oil, soybean meal, sugar and wheat. It reflects the return of underlying commodity futures price movements only and is quoted in USD.
HFRX Global HF	HFRX Global Hedge Fund Index	The HFRX Global Hedge Fund Index is comprised of funds representing the overall hedge fund universe. Constituent funds include but are not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event-driven, macro, merger arbitrage, and relative value arbitrage. The underlying strategies are asset-weighted based on the distribution of assets in the hedge fund industry.
Equity Hedge Funds	HFRI Equity Hedge Index	The HFRI Equity Hedge Index is an equally weighted hedge fund benchmark composed of investment managers who maintain both long and short positions, primarily in equity and equity derivative securities. Equity hedge managers typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.
Global Macro	HFRI Macro Index	The HFRI Macro Index is an equally weighted hedge fund benchmark composed of investment managers which trade a broad range of strategies in which the investment process is predicat- ed on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency, and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches, and long- and short-term holding periods.
Event-Driven	HFRI Event-Driven Index	The HFRI Event-Driven Index is an equally weighted hedge fund benchmark composed of investment managers who maintain positions in companies currently or prosectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Event-driven exposure includes a combination of sensitivities to equity markets, eredit markets, and idiosyncratic, company-specific developments.
Relative Value	HFRI Relative Value Index	The HFRI Relative Value Index is an equally weighted hedge fund benchmark composed of investment managers who maintain positions in which the investment thesis is predicated on the 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 can range broadly across equity, fixed income, derivative, or other security types.
Direct Lending	Cliffwater Direct Lending Index	The Cliffwater Direct Lending Index seeks to measure the unlevered, gross of fee performance of U.S. middle-market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements. Private Credit Investments (Direct Lending) involve a high degree of risk, including the loss of the entire investment. International investments carry additional risks, which include differences in financial reporting standards, currency exchange rates, political risks unique to a specific country, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks.
Private Real Estate	NCREIF Property Index	The NCREIF Property Index is a quarterly, unleveraged composite total return for private commercial real estate properties held for investment purposes only. Constituents include operat- ing apartment, hotel, industrial, office, and retail properties.