John Gambla, Senior Vice President, CFA, FRM, PRM

Rob Guttschow, Senior Vice President, CFA

Despite the Federal Reserve (the "Fed") raising rates over the past year at the fastest pace since the early 1980s, risk assets remained on a positive and robust trajectory in the first quarter of 2023. Investors appeared not to be thinking about the likely economic impact from 500 basis points (bps) of tightening this cycle. Rather, they seemed more focused on the Fed potentially cutting rates sooner than later. The high-profile failure of two banks, a collaborative rescue of a third, and the forced sale of Credit Suisse to UBS did not seem to shake the confidence of investors. It did apparently cause some concern among financial regulators as it prompted the U.S. government (Federal Reserve, FDIC and the U.S Treasury) to take the unprecedented action of guaranteeing all depositors in the failed banks regardless of the amount of the deposit. Depending upon one's perspective, the markets are either extraordinarily resilient or in need of extraordinary support and by extension, extraordinarily fragile.

The inflation rate, as measured by the US Consumer Price Index YoY, remained on a downward path but price levels as measured by the US CPI Urban Consumers NSA Index hit an all-time high in the first quarter. A falling but positive rate of inflation does not mean prices are decreasing, it means that prices are rising less rapidly. While it may seem to be a subtle distinction, it is not. The economic reality is very tangible to anyone who has bought a used car or groceries recently. The math is inescapable, higher prices

sting. Higher prices destroy purchasing power and result in consumers being less well off. To offset this reality, wages need to rise as fast or faster than the rate of inflation. Even though wages have been moving up, they are not keeping pace with the headline inflation rate and therefore real wages remain in negative territory. Wages often exert upward pressure later in the inflationary cycle and because of this there is concern that the Fed's end goals will be much more difficult to achieve. However, some employment metrics, specifically the JOLT indicators, are starting to fluctuate and show the potential to roll over. We believe this would be a perilous development for the Fed. Prices are still quite elevated in many areas of the economy compared to pre-pandemic levels (Figure 1). If employment weakens, we believe this could set the stage for an extremely hard landing as consumers never regain the earnings power they have lost to inflation over the past two years. A weakened banking sector, combined with a rapidly deteriorating employment picture is precisely the scenario that will place enormous pressure on the Fed to cut rates and loosen financial conditions even though inflation has not been brought under control, in our opinion. We believe this is reminiscent of what occurred in the 1970s and early 1980s.

Figure 1 Price Changes 54.71% 60% 44.90% 32.50% 35.76% 31.13% 40% 27.43% 22.68% 20% 3.48% -2.38% -2.92% -20% -12.41% -22.14% -25.11% -40% -37.65% -41.09% -60% Global Food ■ YoY ■ Vs. Dec 2019

Source: Bloomberg, data as of 3/31/23.

The Fed raised the Fed Funds Target rate by a total of 50 bps in the first quarter, 25 bps in February and 25 bps in March. The Fed felt it necessary in their March statement to articulate "the U.S. banking system is sound and resilient" which we believe is a bit odd given that the FDIC, the Fed and the U.S. Treasury jointly had to step in a mere two weeks earlier and take the unprecedented action of guaranteeing all deposits at two failed banks and subsequently having Secretary of Treasury, Janet Yellen, say that similar action would be taken if needed for other banks, in the hopes of preventing a banking contagion. If the banking system is so sound and resilient, why the nuclear option? Just as puzzling to us was the continued assertion that the Fed says they are highly sensitive to inflation and remain focused on their 2% target. We believe this feels like it has all the makings of another policy error reminiscent of the Fed's intransigence that inflation was transitory back in early 2021. The U.S. 3-month T-bills ended the quarter at 4.75%, the highest level since 2007.

Alternative Investments ("alternatives") were mixed for the quarter, with positive returns in 6 of 10 categories. None of the categories kept pace with resurgent global equity markets. The average underperformance versus the S&P 500 Index was -792 bps. Only 1 of 10 categories outperformed the Bloomberg US Aggregate Bond Index for the quarter. On average, there was -339 bps of underperformance. Hedged equity was the best performing category (+3.38%). Other notable gainers were real estate (+1.57), event driven (+1.40%) and distressed/restructuring (+1.21%). Commodities (-5.36%) and managed futures (-3.89%) were the worst performing categories (See Figure 2 and Figure 3 on next page).

References to specific companies or securities should not be construed as a recommendation to buy or sell any such security, nor should they be assumed profitable.

All charts shown herein are for illustrative purposes only and not indicative of any investment. The performance illustrations exclude the effects of taxes and brokerage commissions or other expenses incurred when investing. **Past performance is not indicative of future results** and there can be no assurance past trends will continue in the future. An investor cannot invest directly in an index. See last page for definitions of asset class indexes and other terms discussed herein.

Figure 2 Alternative Performance

	Q1 2023	2022
Hedged Equity	3.38%	-10.13%
Event Driven	1.40%	-4.83%
Equity Market Neutral	0.59%	1.21%
Real Estate	1.57%	-25.17%
Commodities	-5.36%	16.09%
Distressed/Restructuring	1.21%	-4.27%
Volatility Arbitrage	0.07%	4.69%
Credit Arbitrage	-0.28%	-1.93%
Macro	-2.95%	8.98%
Managed Futures	-3.89%	3.73%

Source: Bloomberg, data as of 3/31/23.

Figure 3 Alternative Performance (Over/Under) vs S&P 500 Index

	Q1 2023
Hedged Equity	-4.11%
Event Driven	-6.09%
Equity Market Neutral	-6.91%
Real Estate	-5.93%
Commodities	-12.86%
Distressed/Restructuring	-6.29%
Volatility Arbitrage	-7.43%
Credit Arbitrage	-7.78%
Macro	-10.45%
Managed Futures	-11.39%

Source: Bloomberg, data as of 3/31/23.

Traditionally, managed futures and macro strategies are viewed as having lower correlations to equities because they are diversified across a variety of markets and often employ shorting as part of their approach. Strategies that had lower two-year correlations to U.S. equities (less than 0.60), on average, significantly underperformed those strategies that had a higher correlation with U.S. equities. The spread was -386 basis points (Figure 4).

Real asset returns were mixed. Broad commodities fell sharply on concerns over a slowing global economy and a potential U.S. recession. Real estate posted a small gain though the outlook for commercial real estate remains a concern. Gold surged late in the quarter as the worries about a banking crisis prompted investors to look for safe havens (Figure 5).

Figure 4 Correlations (2yr) & Returns

	S&P 500 Index	Q1 2023
Hedged Equity	0.88	3.38%
Event Driven	0.77	1.40%
Equity Market Neutral	0.10	0.59%
Real Estate	0.89	1.57%
Commodities	0.38	-5.36%
Distressed/Restructuring	0.65	1.21%
Volatility Arbitrage	-0.28	0.07%
Credit Arbitrage	0.37	-0.28%
Macro	-0.14	-2.95%
Managed Futures	-0.37	-3.89%
Lower Correlation Avg TR (<=0.60)		-1.97%
Higher Correlation Avg TR (>0.60)		1.89%

Source: Bloomberg, data as of 3/31/23. Correlation of monthly returns over 24 months.

Figure 5 Real Assets

	Q1 2023	2022
Real Estate	1.57%	-25.17%
Commodities	-5.36%	16.09%
Gold	7.96%	-0.28%
Average	1.39%	-3.12%

Source: Bloomberg, data as of 3/31/23.

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Cryptocurrencies experienced a breathtaking move up in the first quarter of 2023 as risk aversion seemed to dissipate in sympathy with other risk assets. While hacks/thefts continued, the \$400MM estimates for the quarter seemed to be a significant improvement over the multibillion dollar collapses and alleged fraud that occurred in 2022. The Bloomberg Galaxy Crypto Index was up +59.67% and the bellwether Bitcoin was up +71.68%. Ethereum and Ripple were both up over 50% while Litecoin was up over 27% (Figure 6). The strong move in Bitcoin at the end of the quarter coincided with the failure of Silicon Valley Bank but narratives that cryptocurrency was reasserting itself as an alternative to fiat currencies or the traditional banking system seems a bit premature. The move could easily be one of a high beta asset having a strong reaction to a possible end to the Fed tightening cycle and the beginning of an easing cycle.

Returns for major asset classes were sharply positive in the first quarter of 2023, exceptions being the U.S. Dollar and Commodities. International developed rallied (+8.47%) as did U.S. equities (+7.50%). Despite a weaker dollar, commodities fell sharply (-5.36%) as energy and industrial sectors prices retreated on worries of recessionary pressures. U.S economic data continued to show flashes of weakness, but no definitive trends have emerged. U.S. Treasuries moved sharply higher (+6.52%) while U.S. aggregate bonds rallied (+2.96%). Prices, as measured by the Consumer Price Index (CPI) marched higher but the rate of inflation continued to trend lower (6.0%) down from a high of 9.1% in 2022). With the exception of short rates, nominal yields moved lower, and the yield curve pushed further into inversion.

Real yields remained negative (Figure 8) but the spread to 0% has continued to narrow significantly. If the inflation rate continues its downward trend, positive real yields may be in the cards for mid to late 2023. Historically, negative real yields have been regarded as extremely accommodative, though one might question if a decade of 0% nominal rates and consistently deep negative real rates may have altered that dynamic to the point where any real rate close to 0% is actually restrictive.

Alternatives have historically provided significant diversification benefits when paired with a portfolio of traditional assets, in addition to both competitive absolute returns and attractive risk-adjusted returns. Please Note: Alternative investments may employ complex strategies, have unique investment, and risk characteristics that may not be appropriate for all investors. Diversification does not guarantee a profit or protect against loss.

Figure 6 Cryptocurrency Returns

	Q1 2023	2022
BB Galaxy Crypto Index	59.67%	-70.19%
Bitcoin	71.68%	-64.30%
Ethereum	51.56%	-67.48%
XRP (Ripple Dig.Asst)	59.21%	-58.72%
Litecoin	27.68%	-51.99%

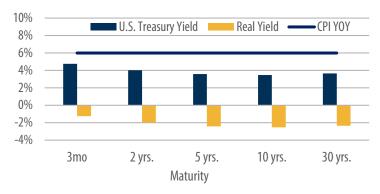
Source: Bloomberg, data as of 3/31/23.

Figure 7 Asset Class Returns

	Q1 2023	2022
U.S. Equities	7.50%	-18.11%
International Developed	8.47%	-14.45%
Emerging Markets	3.96%	-20.09%
U.S. Treasury	6.52%	-31.04%
Real Estate	1.57%	-25.17%
Commodities	-5.36%	16.09%
High Yield Bonds	3.80%	-11.88%
U.S. Aggregate Bonds	2.96%	-13.01%
Bitcoin	71.68%	-64.30%
U.S. Dollar	-0.98%	8.21%

Source: Bloomberg, data as of 3/31/23.

Figure 8 U.S. Treasury Yield Curve and CPI



Source: Bloomberg. U.S. Treasury Yields as of 3/31/23. CPI YoY as of 3/31/23.

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Definitions

10-Yr Treasury: Yield of U.S. Treasury securities maturing in approximately 10 years.

30-Yr Mortgage Rate: is a fixed interest rate home loan that will be paid off completely in 30 years if you make every payment as scheduled.

Aggregate Bonds: The Bloomberg US Aggregate Bond Index is a broad-based benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market.

Beta: A measure of price variability relative to the market.

Bitcoin: A digital currency using encryption techniques created for use in peer-to-peer online transactions Introduced in 2008 by a person or group using the name Satoshi Nakamoto.

Bloomberg Galaxy Crypto Index (BGCI): The BGCI is designed to measure the performance of the largest cryptocurrencies traded in USD.

Commodities: The Bloomberg Commodity Index is made up of exchange-traded futures on physical commodities and represents 20 commodities, which are weighted to account for economic significance and market liquidity.

Consumer Price Index (CPI): A measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food, and medical care. It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them. Changes in the CPI are used to assess price changes associated with the cost of living.

Correlation: A statistical measure that quantifies the extent to which two or more data series fluctuate together. Values run from -1.0 to +1.0.

Credit Arbitrage: Hedge Fund Research HFRI Event-Driven Credit Arbitrage Index. Credit Arbitrage strategies employ an investment process designed to isolate attractive opportunities in corporate fixed-income securities; these include both senior and subordinated claims as well as bank debt and other outstanding obligations, structuring positions with little of no broad credit market exposure. These may also contain a limited exposure to government, sovereign, equity, convertible or other obligations but the focus of the strategy is primarily on fixed corporate obligations and other securities are held as component of positions within these structures.

Cryptocurrency: A digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend.

Distressed/Restructuring: Hedge Fund Research HFRI Event-Driven Distressed/Restructuring Total Index. Distressed/ Restructuring strategies employ an investment process focused on corporate fixed-income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings.

Emerging Markets: The MSCI Emerging Markets Index captures large and mid cap representation across Emerging Markets (EM) countries. The index covers 85% of the free float-adjusted market capitalization in each country.

Equity Market Neutral: Hedge Fund Research HFRI Equity Hedge Equity Market Neutral Index. Equity Market Neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Ethereum: Ethereum is a platform that offers programming code of any decentralized application. It has been linked to payment style transactions. Ether is the cryptocurrency issued through open-source code executed on thousands of nodes.

Event Driven: Hedge Fund Research HFRI Event-Driven (Total) Index. Investment Managers who maintain positions in companies currently or prospectively 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.

Gold: The return of the gold spot price as quoted as U.S. dollars per Troy Ounce.

Hedged Equity: Hedge Fund Research HFRI Equity Hedge (Total) Index. Investment Managers who maintain positions both long (positions that are owned) and short (positions that are owed) in primarily equity and equity derivative securities. Hedged Equity managers would typically maintain at least 50%, and may in some cases be substantially entirely invested in equities, both long and short.

High-Yield Bonds: The Bloomberg US High Yield Very Liquid Index (VLI) is a component of the US Corporate High Yield Index that is designed to track a more liquid component of the USD-denominated, high yield, fixed-rate corporate bond market. The US High Yield VLI uses the same eligibility criteria as the US Corporate High Yield Index, but includes only the three largest bonds from each issuer that have a min amount outstanding of USD500mn and less than five years from issue date.

Inflation is the decline of purchasing power of a given currency over time.

International Developed: The MSCI EAFE Index is designed to represent the performance of large and mid-cap securities across 21 developed markets, including countries in Europe, Australasia and the Far East, excluding the U.S. and Canada. The index is a free-float weighted equity index.

JOLTS: The Job Openings and Labor Turnover Survey produces data on job openings, hires and separations.

Litecoin: A peer-to-peer cryptocurrency and open source software project similar to Bitcoin, Litecoin uses blockchain technology to process transactions. Litecoin, referred to as an alt-coin can process blocks faster than Bitcoin, uses a different mining algorithm and has larger supply.

Macro: Hedge Fund Research HFRI Macro (Total) Index. Investment Managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed-income, hard currency and commodity markets.

Managed Futures: BarclayHedge US Managed Futures Industry Top 50 (BTop 50) Index. The Index seeks to replicate the overall composition of the managed futures industry with regard to trading style and overall market exposure.

Nominal yield of a bond, depicted as a percentage, is calculated by dividing total interest paid annually by the face, or par, value of a bond.

Real Estate: The Dow Jones US Real Estate Index is designed to track the performance of real estate investment trusts (REITs) & other companies that invest directly or indirectly in real estate through development, management or ownership, including property agencies.

Real Yield or Real Interest Rate has been adjusted to remove the effects of inflation to reflect the real cost of funds to the borrower and the real yield to the lender or to an investor.

Ripple: Known as XRP, Ripple is a cryptocurrency that can be used on open source distributed ledger created by the company Ripple. It is built upon the principles of blockchain as an on-demand option for faster cross border payments.

U.S. CPI Urban Consumers NSA Index: Measures the change over time in the prices paid by urban consumers for a market basket of consumer goods and services, not seasonally adjusted.

U.S. Equities: The S&P 500 Index. An unmanaged index of 500 stocks (currently 505) used to measure large-cap U.S. stock market performance.

U.S. 30-Yr Treasury Yield: Yield of U.S. Treasury securities maturing in approximately 30 years.

U.S. Dollar: The U.S. Dollar Index (USDX) indicates the general international value of the U.S. dollar. The USDX does this by averaging the exchange rates between the USD and major world currencies. The ICE US computes this by using the rates supplied by some 500 banks.

U.S. Treasury: The ICE U.S. Treasury 20+ Years Bond Index is part of a series of indices intended to assess U.S. Treasury issued debt. Only U.S. dollar denominated, fixed-rate securities with minimum term to maturity greater than twenty years are included.

Year-over-Year (YoY): is a calculation that helps compare growth over the previous 12 months and automatically negates the effect of seasonality.

Volatility Arbitrage: Hedge Fund Research HFRI Relative Value Volatility Index. Volatility strategies trade volatility as an asset class, employing arbitrage, directional, market neutral or a mix of types of strategies, and include exposures which can be long, short, neutral or variable to the direction of implied volatility, and can include both listed and unlisted instruments. Directional volatility strategies maintain exposure to the direction of implied volatility of a particular asset or, more generally, to the trend of implied volatility in broader asset classes. Arbitrage strategies employ an investment process designed to isolate opportunities between the price of multiple options or instruments. Volatility arbitrage positions typically maintain characteristic sensitivities to levels of implied and realized volatility, levels of interest rates and the valuation of the issuer's equity, among other more general market and idiosyncratic sensitivities.

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