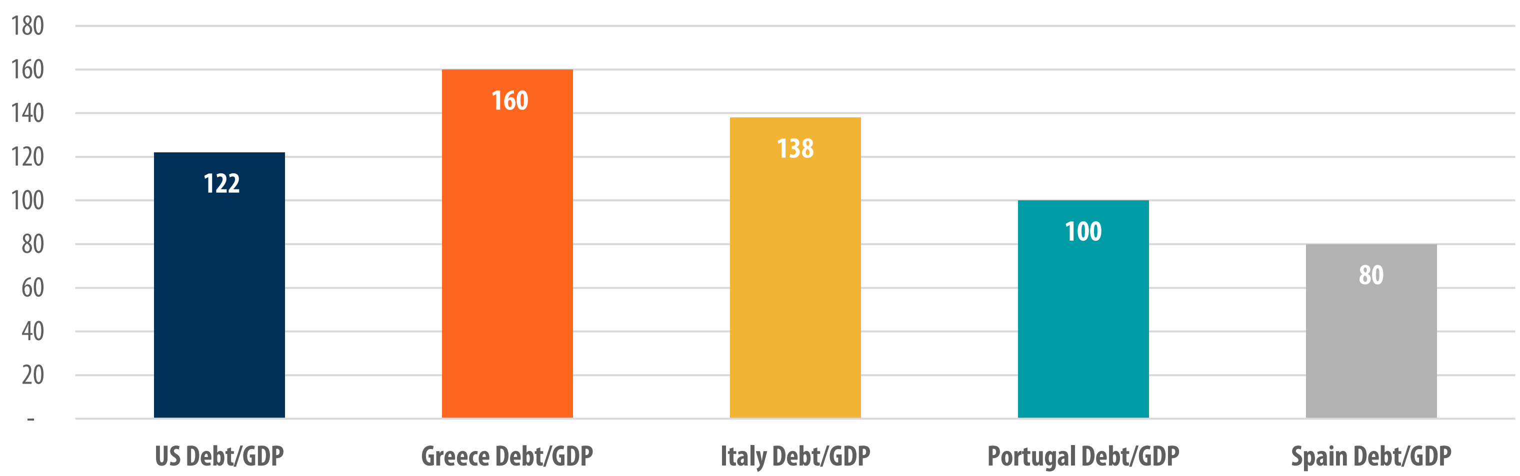
John Gambla, Senior Vice President, CFA, FRM, PRM | **Rob Guttschow,** Senior Vice President, CFA

In the third quarter of 2024, alternative investments ("alternatives") on average, had positive returns with a couple of negative outlier categories. The Federal Reserve (the "Fed") made good on its earlier rhetoric and joined the global rate easing party by cutting the Federal Funds Rate by a larger than expected 50 basis points at the September Federal Open Market Committee ("FOMC") meeting. With inflation continuing to trend lower in the U.S. and China's economy faltering, the case for easing financial conditions seemed to have little resistance in the corridors of the Federal Reserve. Global stock markets as well as domestic bond markets embraced the move whole heartily. Economic data continues to provide little evidence of a slowdown and financial conditions have been accommodative by the Fed's own measure since the last quarter of 2023, in our opinion. Housing remains stable, Gross Domestic Product ("GDP") solid, and employment resilient, if not a touch softer than at its recent zenith. The data seems slightly at odds with the bold move. Is this the soft landing that has been so highly anticipated or the "no landing" that many had hoped would unfold? Or is the redux of the 1970s path in which the Fed eased too early thus reigniting a second wave of inflation. Equities and bonds, we believe, seem to be signaling all clear that inflation is nothing to be concerned about. However, we believe it would be wise to remain open to other potential paths and the implications they might have for financial assets.

Figure 1 Percentage of Government Debt to GDP



Source: Bloomberg. Data as of 9/30/2024. Figures are cumulative since 12/31/21.

As the nation rolls into the November presidential election amidst all the promises, non-facts, and rancor, neither party has fiscal discipline as a pillar of their platform. The cumulative federal deficit increased over $600 billion in the 3rd quarter to $1.8 Trillion, the largest amount ever, exempting the Covid years or 2020 and 2021. U.S debt stands at over $35 Trillion, more than 3 times the amount at the end of 2008, and over 120% of GDP (highest ever exempting the Covid years or 2020 and 2021) (see Figure 1). U.S. debt as a percentage of GDP at 122%, puts the U.S. in the company of those icons of fiscal restraint, Greece, Italy, and worse than Spain and Portugal. Yet, against this sobering reality, it seems both candidates are in a contest to see who can promise to spend more, not less. Afterall, it is easy to spend other people's money, in our view. How does the U.S. get itself out of deep deficits and from under this mountain of debt? Do we reduce spending, raise taxes, or debase the currency through inflation thus lessening the value of debt and liabilities in real terms? Recent behavior by the Fed and both sides of the aisle are pointing to option 3, in our opinion. The strong move in gold and the decline of the dollar since late 2022 could be viewed as confirmation.

Commentary Continued on Next Page

Alternatives delivered positive performance in 8 out of 10 categories averaging +2.48% for the quarter. Real Estate was the best performing category (+17.08%). Other notable gainers were Fixed Income Arbitrage (+6.90%) and Multi-Strategy (+3.33%). Managed Futures was the worst performing category (-5.98%). With the S&P 500® Index up sharply, it is not surprising that only one alternative category outperformed the long-only equity benchmark. The average underperformance vs the S&P 500® Index was -341 basis points. 2 out of 10 alternative categories outperformed the Bloomberg U.S. Aggregate Bond Index. The average underperformance was -272 basis points (Figure 2 and Figure 3).

Figure 2 Alternatives Performance	Q3 2024	YTD
Real Estate	17.08%	13.71%
Fixed Income Arbitrage	6.90%	11.43%
Multi-Strategy	3.33%	8.28%
Equity Market Neutral	2.97%	7.08%
Event Driven	2.26%	7.09%
Convertible Arbitrage	2.16%	4.12%
Equity Long/Short	0.82%	9.72%
Commodities	0.68%	5.86%
Global Macro	-5.46%	6.95%
Managed Futures	-5.98%	0.35%

Figure 3 Alternatives Performance (Over/Under) Q3 2024	vs S&P 500	vs BB Agg
Real Estate	11.19%	-3.04%
Fixed Income Arbitrage	1.01%	-11.18%
Multi-Strategy	-2.55%	-10.66%
Equity Market Neutral	-2.91%	-2.22%
Event Driven	-3.63%	-2.94%
Convertible Arbitrage	-3.73%	1.70%
Equity Long/Short	-5.07%	-4.38%
Commodities	-5.21%	-1.86%
Global Macro	-11.35%	-5.90%
Managed Futures	-11.87%	1.95%
Average	-3.41%	-3.85%

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 2-year correlations to U.S. equities (less than .60), on average, significantly underperformed those strategies that had a higher correlation with U.S. equities. The spread was 809 basis points (Figure 4). Real asset returns continued their yearlong advance buoyed by a definitive shift to lower rates and what seems like a choice of higher inflation over slower growth by the global central banks (Figure 5).

Figure 4 Correlations (2yr) & Returns	Correlation to S&P 500® Index	Q3 Return
Real Estate	0.82	17.08%
Equity Long/Short	0.74	0.82%
Convertible Arbitrage	0.49	2.16%
Fixed Income Arbitrage	0.29	6.90%
Multi-Strategy	0.25	3.33%
Commodities	0.24	0.68%
Event Driven	0.14	2.26%
Equity Market Neutral	0.12	2.97%
Global Macro	-0.02	-5.46%
Managed Futures	-0.28	-5.98%
Lower Correlation Avg TR (≤0.60)		0.86%
Higher Correlation Avg TR (>0.60)		8.95%

Data from 10/31/22 - 9/30/24. Correlation of monthly returns over 24 months.

Figure 5 Real Assets Returns	Q3 2024	YTD 2024
Real Estate	17.08%	13.71%
Commodities	0.68%	5.86%
Gold	13.23%	27.71%
Average	10.33%	15.76%

Past performance is not indicative of future results. Source for all charts: Bloomberg. As of 9/30/2024.

Commentary Continued on Next Page

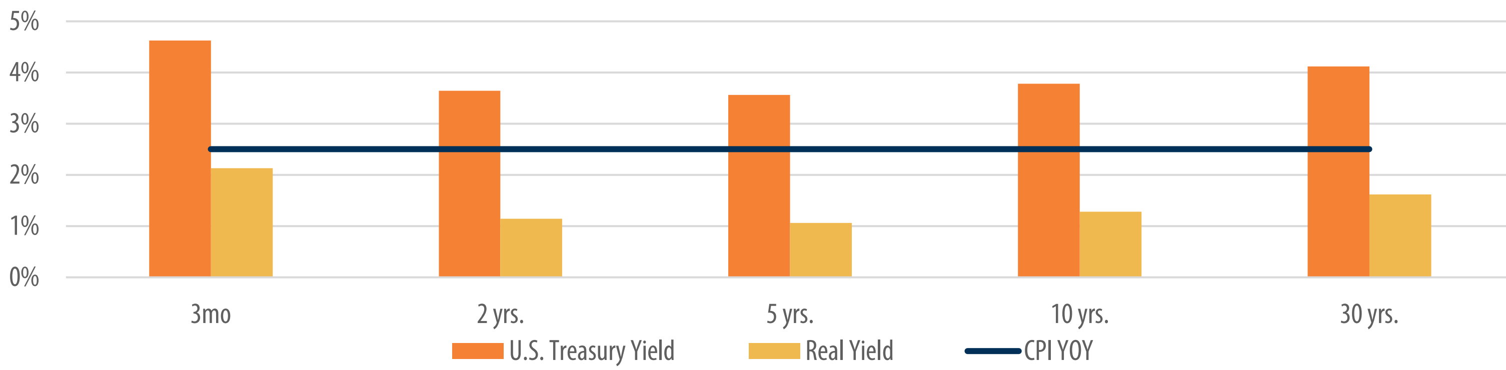
Cryptocurrencies struggled in the third quarter as the Bloomberg Galaxy Crypto Index fell -6.94%. Bitcoin fell -5.69%, Ethereum and Litecoin dropped double digits (-31.04% and -10.45%, respectively). Ripple Digital Assets bucked the sector trend and was up +20.52% (Figure 6). Theft in the digital marketplace continued to be an issue as estimated losses hit $750MM in the quarter. Over half of the quarterly total was comprised of 2 separate thefts. The trend of targeting of centralized exchanges and custodians continues to be a concerning issue. Year-to-date, cryptocurrency thefts are an estimated $2.1 billion, exceeding the total for all of 2023.

Returns for major asset classes were positive in the third quarter of 2024. Equity markets rallied as the long-anticipated rate cutting cycle has started to unfold across the globe, Emerging markets, MSCI EAFE Index and the S&P 500® Index all posted solid gains (+8.72%, +7.26%, and 5.89%, respectively), U.S. Treasuries enjoyed a similarly strong revival (7.97%) as did the broader bond market (+5.20%) and high yield bonds (+5.12%). Commodities were up marginally (+0.68%) as demand weakness emanating from China's faltering economic picture remained troublesome (Figure 7). The movement in real rates was mixed as both nominal rates and CPI came down. Real rates remain positive across the entire Treasury curve (Figure 8).

Figure 6 Cryptocurrency Returns	Q3 2024	YTD 2024
XRP (Ripple Digital Assets)	20.52%	0.76%
Bitcoin	-5.69%	50.05%
BB Galaxy Crypto Index	-6.94%	22.05%
Litecoin	-10.45%	1.26%
Ethereum	-31.04%	14.52%

Figure 7 Asset Class Returns	Q3 2024	YTD 2024
Real Estate	17.08%	13.71%
Emerging Markets	8.72%	16.86%
U.S. Treasury	7.97%	0.00%
International Developed	7.26%	12.99%
U.S. Equities	5.89%	22.08%
U.S. Aggregate Bonds	5.20%	4.45%
High Yield Bonds	5.12%	7.68%
Commodities	0.68%	5.86%
U.S. Dollar	-4.81%	-0.55%
Bitcoin	-5.69%	50.05%

Figure 8 U.S. Treasury Yields and CPI



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 suitable for all investors.**

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.

Source for all charts: Bloomberg. As of 9/30/2024.

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.*

Definitions

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

Coinbase: An online platform for buying, selling, transferring, and storing cryptocurrency.

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.

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

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: The Credit Suisse AllHedge Equity Market Neutral Index is a subset of the Credit Suisse AllHedge Index that measures the aggregate performance of equity market neutral funds. Equity market neutral funds typically take both long and short positions in stocks while seeking to reduce exposure to the systematic risk of the market (i.e., a beta of zero is desired). Equity Market Neutral funds typically seek to exploit investment opportunities unique to a specific group of stocks, while maintaining a neutral exposure to broad groups of stocks defined for example by sector, industry, market capitalization, country, or region. The index has a number of subsectors including statistical arbitrage, quantitative long/short, fundamental long/short and index arbitrage. Managers often apply leverage to enhance returns.

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: The Credit Suisse AllHedge Event Driven Index is a subset of the Credit Suisse AllHedge Index that measures the aggregate performance of event driven funds. Event driven funds typically invest in various asset classes and seek to profit from potential mispricing of securities related to a specific corporate or market event. Such events can include: mergers, bankruptcies, financial or operational stress, restructurings, asset sales, recapitalizations, spin-offs, litigation, regulatory and legislative changes as well as other types of corporate events. Event driven funds can invest in equities, fixed income instruments (investment grade, high yield, bank debt, convertible debt and distressed), options and various other derivatives. Many managers may use a combination of strategies and adjust exposures based on the opportunity sets in each subsector.Gold: The return of the gold spot price as quoted as U.S. dollars per Troy Ounce.

Fixed Income Arbitrage: The Credit Suisse AllHedge Fixed Income Arbitrage Index is a subset of the Credit Suisse AllHedge Index that measures the aggregate performance of fixed income arbitrage funds. Fixed income arbitrage funds typically attempt to generate profits by exploiting inefficiencies and price anomalies between related fixed income securities. Fixed income arbitrage funds seek to limit volatility by hedging out exposure to the market and interest rate risk. Strategies may include leveraging long and short positions in similar fixed income securities that are related either mathematically or economically. The sector includes credit yield curve relative value trading involving interest rate swaps, government securities and futures; volatility trading involving options; and mortgage-backed securities arbitrage (the mortgage-backed market is primarily U.S.-based and over-the-counter).

Global Macro: The Credit Suisse AllHedge Global Macro Index is a subset of the Credit Suisse AllHedge Index that measures the aggregate performance of global macro funds. Global macro funds typically focus on identifying extreme price valuations and leverage is often applied on the anticipated price movements in equity, currency, interest rate and commodity markets. Managers typically employ a top-down global approach to concentrate on forecasting how political trends and global macroeconomic events affect the valuation of financial instruments. Profits can be made by correctly anticipating price movements in global markets and having the flexibility to use a broad investment mandate, with the ability to hold positions in practically any market with any instrument. These approaches may be systematic trend following models, or discretionary.

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

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.

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.

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.

Long/Short Equity: The Credit Suisse AllHedge Long/Short Equity Index is a subset of the Credit Suisse AllHedge Index that measures the aggregate performance of long/short equity funds. Long/short equity funds typically invest in both long and short sides of equity markets, generally focusing on diversifying or hedging across particular sectors, regions or market capitalizations. Managers typically have the flexibility to shift from value to growth; small to medium to large capitalization stocks; and net long to net short. Managers can also trade equity futures and options as well as equity related securities and debt or build portfolios that are more concentrated than traditional long-only equity funds.

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.

Monetary Policy: Is the tool used by central banks to influence the money supply, and with it, the economy at large.

Multi-Strategy: The Credit Suisse AllHedge Multi-Strategy Index is a subset of the Credit Suisse AllHedge Index that measures the aggregate performance of multi-strategy funds. Multi-strategy funds typically are characterized by their ability to allocate capital based on perceived opportunities among several hedge fund strategies. Through the diversification of capital, managers seek to deliver consistently positive returns regardless of the directional movement in equity, interest rate or currency markets. The added diversification benefits may reduce the risk profile and help to smooth returns, reduce volatility and decrease asset-class and single-strategy risks. Strategies adopted in a multi-strategy fund may include, but are not limited to, convertible bond arbitrage, equity long/short, statistical arbitrage and merger arbitrage.

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.

Recession: Is a significant decline in economic activity that lasts longer than a few months.

Ripple Digital Assets: 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. 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.

U.S. Equities: The S&P 500® Index. An unmanaged index of 500 companies used to measure large-cap U.S. stock market performance.

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 Yield: Yield of U.S. Treasury securities maturing in approximately 3 months, 2 years, 5 years, 10 years, or 30 years.

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