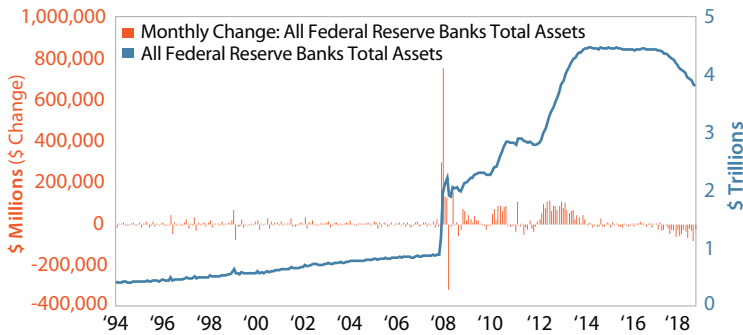


# Alternatives Update

## 2nd Quarter 2019

After the great financial crisis, the “New Normal” became a fixture in the capital markets financial lexicon. Use of that phrase has slowly faded, though it could easily be resurrected in a modified form - the “New FED”. One might say that the “New FED” is all about easy monetary conditions all the time, despite what inflation, unemployment or GDP might be indicating. The “New FED” is on board with Modern Monetary Theory (MMT) and its mantra of printing money and issuing debt with few or no constraints. As evidence, look at the near trillion-dollar U.S. spending deficit that is now a fixture of the U.S. economy, the \$3.8 trillion-dollar Federal Reserve balance sheet, and the desire to cut interest rates to support these. A call for easier monetary policy despite ultra-low unemployment, wage growth, inflation trending higher, record financial asset prices, and a reasonably strong economy, is puzzling. Does anything say “advocate of MMT” more than suppressing the cost of debt, obfuscating price discovery and telegraphing even more interference in the capital markets when there doesn’t seem to be a need? Weren’t all the extraordinary measures taken by the Federal Reserve these past 10 years supposed to make the financial markets more resilient, not more fragile?

Figure 1: Federal Reserve Balance Sheet



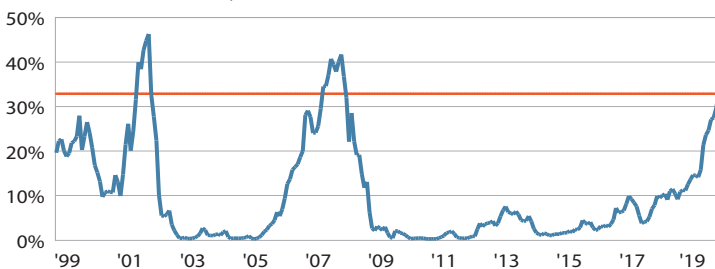
Source: Bloomberg, Data from 12/30/94 - 6/28/19.

Figure 2: Asset Class Returns

	2Q19	1Q19
U.S. Equities	4.30%	13.65%
International Developed	3.68%	9.98%
Emerging Markets	0.61%	9.91%
U.S. Treasury	6.12%	4.72%
Real Estate	1.82%	17.08%
Commodities	-1.19%	6.32%
High Yield Bonds	2.55%	8.08%
U.S. Aggregate Bonds	3.08%	2.94%
Bitcoin	199.91%	10.83%
U.S. Dollar	-1.19%	1.16%

Source: Bloomberg, 6/28/19.

Figure 3: Federal Reserve Bank of New York  
Probability of Recession in U.S. 12 Months Ahead



Source: Bloomberg, Data from 12/31/98 - 6/30/20. Orange line is current level, shown for comparison.

While the U.S. financial markets are not a regulated utility, the uber dovish positioning by the Federal Reserve, the articulated strategy of seeking out even more extraordinary means of supporting the financial markets, the suppressed volatility in stocks, currencies, bonds, and many other financial assets and the continued articulation of the “FED put” by its members and leader, certainly makes it seem that way. Capital markets seem just a bit less capitalistic. What comes next, who really knows? Peak Fed funds rate at 2.50% would have seemed an outlandish statement 2 or 3 years ago. What is clear, is that income seekers will have to take on more risk (either credit or duration) to maintain their income stream and no central bank seems to be willing to risk growth in the name of fiscal discipline or normalization. Speaking of normalization, the Federal Reserve intends to end its balance sheet reduction/normalization in September. Currently the balance sheet stands at just over \$3.8 trillion in assets. (see Figure 1). Ending value will likely be over \$3.5 trillion. That would be almost 4 times the amount held December of 2007.

Almost all the broad asset categories moved higher in the second quarter (commodities and the U.S. dollar being exceptions) as the markets embraced the notion that the trade war with China would be resolved and that the world’s central banks were united in keeping the easy money spigot open for business (see Figure 2). Jerome Powell made it clear that several rate cuts were on the table and Mario Draghi’s successor at the European Central Bank, Christine Lagarde (former head of the IMF), is generally regarded as a staunch fiscal dove and likely to continue or accelerate Draghi’s easy money stance. The New York Federal Reserve’s recession model continued to move higher in the quarter, putting the probability of a recession in the next 12 months at nearly 33% (see Figure 3). The last time the index reached that level was in 2008 where the index was moving down from a previous peak. The last time it reached this level from a substantially lower base, was in 2007.

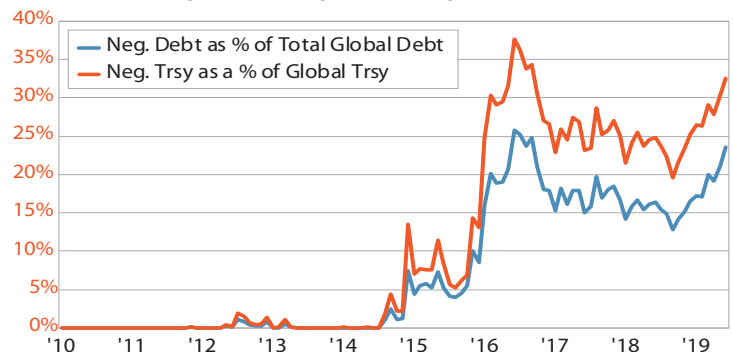
The cryptocurrency sector was red hot in the second quarter (see Figure 4). Bitcoin, the flagship cryptocurrency, gained 199.91%, while the wider universe of cryptocurrencies, as measured by the Bloomberg Galaxy Crypto Index, rose 110.15%. Ethereum was up 118.11%, followed by Litecoin 95.92%. It’s not clear what drove the dramatic second quarter performance though there were suggestions that part of the move was hedging traditional currency devaluation in front of expected future rounds of global easing by central banks. Given that the percentage of global debt with negative yield is spiking again (see Figure 5), a move to uncorrelated, non-traditional currencies

Figure 4: Cryptocurrency Returns

	2Q19	1Q19
BB Galaxy Crypto Index	110.15%	7.96%
Bitcoin	199.91%	10.83%
Ethereum	118.11%	8.03%
Ripple	36.30%	-11.57%
Litecoin	95.92%	106.69%

Source: Bloomberg, 6/28/19.

Figure 5: % of Negative Yielding Global Debt



Source: Bloomberg, Data from 1/29/10 - 6/28/19.

seems plausible. Unfortunately, volatility in the sector remains quite high, regulatory hurdles numerous, and the likely path to a retail friendly investment offering unlikely in the near future. As announced in the first quarter of 2019, the Chicago Board Options Exchange (CBOE) ended trading of its bitcoin futures contract with the expiration of its June 2019 contract. For now, the Chicago Mercantile Exchange (CME) has sole market ownership for bitcoin futures. Bakkt, the startup cryptocurrency trading platform affiliate of the Intercontinental Exchange (ICE), is currently testing a bitcoin futures contract. Unlike the CME's bitcoin contract, which is settled in cash (USD), the Bakkt futures contract would be settled in bitcoin.

Global economic news continued to indicate slowing global economies while domestic economic news was generally positive. The Federal Open Market Committee (FOMC) did not change rates at either the May or June meetings. However, comments outside of the official meeting by both Jerome Powell and other FOMC members have signaled to the market that several rate cuts are likely as a pre-emptive strike on the perceived threat of a slowing global economy. Unemployment, as measured by the U-3 seasonally adjusted rate, ended the quarter at 3.7% after hitting a low of 3.6% in both April and May, (see Figure 6). Consumer sentiment, as measured by the University of Michigan Consumer Sentiment Index, ended the quarter at 98.2, marginally lower than the end of the first quarter after hitting 100 in May. Another sentiment indicator, the Conference Board Consumer Confidence Index, dipped to 121.5 at the end of the quarter after hitting 131.3 in May (see Figure 7). Both measures are at levels that would be considered optimistic and positive. The year-over-year consumer price index (CPI) trended downward during the quarter, settling at 1.6% in June, sharply lower than last year's June reading of 2.9% (see Figure 8).

Figure 6: U.S. Unemployment (U-3)

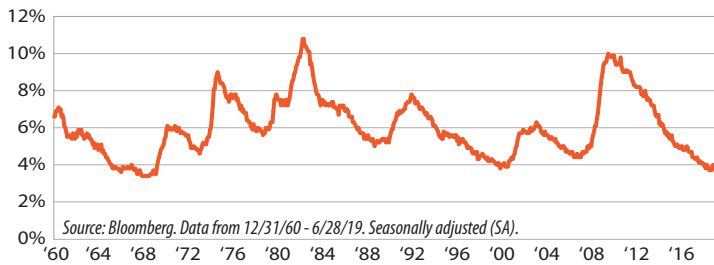


Figure 7: Economic Measures of Sentiment

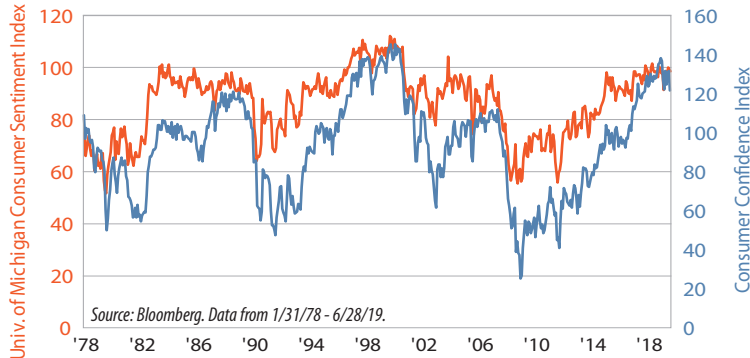
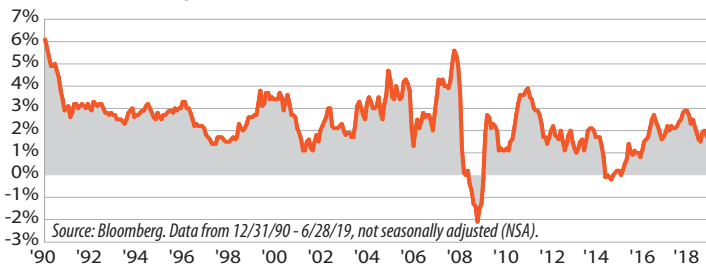


Figure 8: U.S. CPI Urban Consumers YoY NSA



The S&P 500 Index (SPX) was up 4.30% for the second quarter of 2019 and The MSCI EAFE Index rose 3.68% as concerns over the trade war with China receded and central banks offered up a very dovish outlook. Long-term 20+ year U.S. Treasuries gained 6.12% as investors were given dual expectations of significant easing in the U.S. and the tailwind of synchronized dovish central banks from the largest economies. Alternative Investment ("alternatives") returns were positive in 8 of 10 categories (see Figure 9). Managed Futures was the best performing category (+3.46%) followed closely by credit arbitrage (+3.15%) and macro (+2.89%). Equity market neutral (-0.50%), and commodities (-1.19%) were the two categories with negative returns.

Traditionally, managed futures and macro strategies are viewed as having lower correlations to equities because they are generally diversified across a variety of markets and often employ shorting as part of their approach. Two-year correlations vs. the S&P 500 Index at quarter-end have risen significantly compared with two-year correlations as measured a year ago for those alternative categories that tend to have some equity beta (hedged equity, distressed, credit arbitrage). In contrast, correlations have fallen significantly for managed futures, equity market neutral and macro strategies (see Figure 10). Real assets were positive in the second quarter of 2019 in 2 of 3 categories (see Figure 11). Gold was the highest returning category (+9.07%), while real estate cooled (+1.82%) from its torrid Q1 performance (+17.08%) and commodities drifted into negative territory, likely on trade concerns (-1.19%).

Managed futures, commodities, and macro strategies have historically shown low correlation and beta to stocks and bonds over the course of a market cycle, thus they may serve as potentially strong

Figure 9: Performance

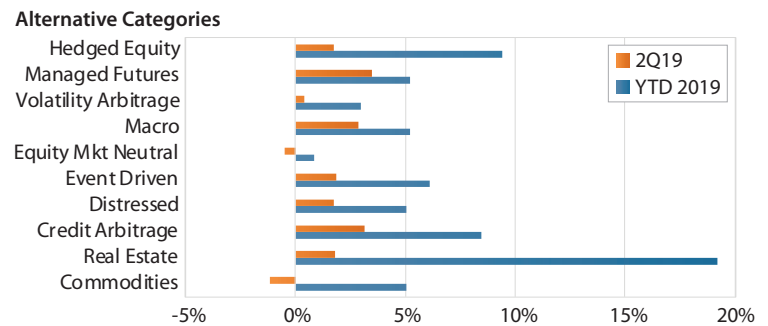


Figure 10: Correlations with the S&P 500 Index

	6/28/19	6/29/18
Hedged Equity	0.94	0.85
Macro	0.59	0.73
Event Driven	0.89	0.65
Managed Futures	0.38	0.57
Equity Market Neutral	0.44	0.61
Volatility Arbitrage	0.81	0.47
Distressed	0.73	0.38
Real Estate	0.60	0.35
Credit Arbitrage	0.78	0.22
Commodities	0.71	0.19

Source: Bloomberg, 6/28/19. Monthly returns over 24 months.

Figure 11: Real Assets

	Q2 2019	Q1 2019	YTD 2019
Real Estate	1.82%	17.08%	19.21%
Commodities	-1.19%	6.32%	5.06%
Gold	9.07%	0.77%	9.90%
<b>Average</b>	<b>3.23%</b>	<b>8.06%</b>	<b>11.39%</b>

Source: Bloomberg, 6/28/19.

portfolio diversifiers. Strategies such as credit arbitrage, event driven, hedged equity, et al., which have historically had higher correlations with equities and bonds, may provide attractive risk/return profiles through lower volatility. These characteristics may allow investors to broaden their investment choices and create more efficient portfolios.

While yields in both the corporate and treasury bond sectors fell over the second quarter, Baa/BBB rated corporate bonds underperformed 10-year U.S. Treasuries as investors rushed to secure duration given the FOMC's indication that several rate cuts were likely forthcoming. Baa/BBB over 10-year U.S. Treasuries yields widened 4 basis points (bps) during the second quarter (see Figure 12). Spreads are now in the 53rd percentile of historical rankings (see Figure 13). The spread between below investment grade corporate bonds (B/CA rated) and BBB rated corporate bonds (investment grade) narrowed 9 bps during the quarter. Both ratings categories saw yields fall significantly, with B/CA rated yields falling slightly more, thus causing the spread narrowing (see Figure 14).

The Federal Reserve did not raise rates at either of the two FOMC meetings in the quarter but shifted their stance to one of pre-emptive easing if economic growth stalls. As a result, the bond markets began pricing in a rather aggressive schedule of rate cuts over the next year. U.S. Treasury

10-year yields fell 40 bps to 2.01%. The long-end of the U.S. Treasury curve (30 yr. maturity) fell 29 bps to a yield of 2.53%. The yield spread between 30-yr. to 10-yr. U.S. Treasuries widened 12 bps to a spread of just under 53 bps. The yield spread between 30-yr. Treasuries and T-bills (3mo maturity) hit a low of just over 20 bps on 6/3/2019 as 30-yr. Treasuries rallied sharply. Since that time, long rates have been stable and T-bill rates have fallen in anticipation of rate cuts. Ending the second quarter, the 30-yr. Treasury to T-bill spread widened 1 bps. The Treasury yield curve has flattened while moving lower in absolute yields year-to-date and is inverted out to 10 years (see Figure 15). Outside of this year, the last time the treasury yield curve was inverted 10-yr Treasuries to T-bills was in 2007 (see Figure 16).

"Risk Off" assets excluding currencies (includes gold and 20-yr.+ U.S. treasuries) had an average return of 7.60% in the second quarter. This was 417 bps greater than the average return of 3.43% for "Risk On" assets excluding currencies (includes U.S. equities and high yield bonds). This was in sharp contrast to the first quarter of 2019 in which the average return of "Risk Off" assets excluding currencies was 812 bps less than the average return of "Risk On" assets excluding currencies. 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.

Figure 12: BAA Corp Credit Spread over 10-Yr U.S. Treasury (%)

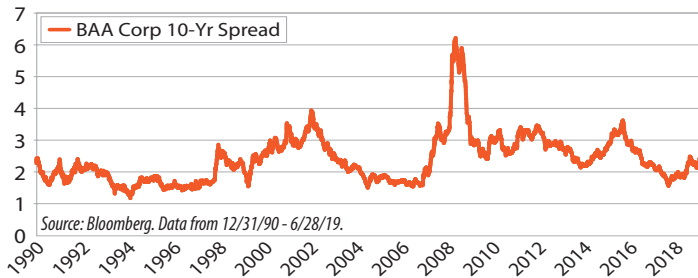


Figure 13: Credit Spread Percentile Rank (%)

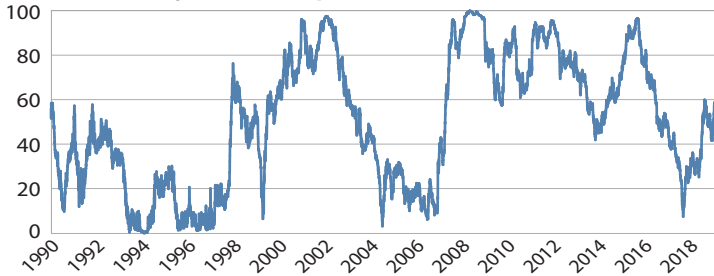


Figure 14: B/CA Credit Spread over BBB (US Corp) (%)

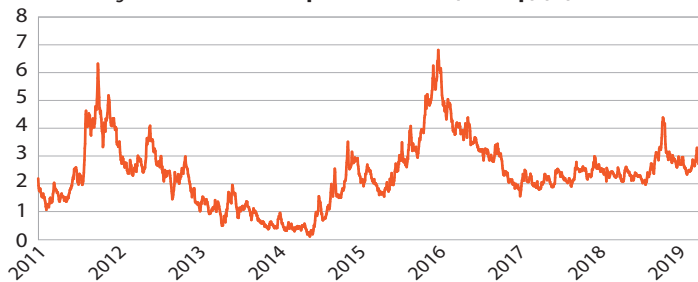


Figure 15: U.S. Treasury Yield Curve

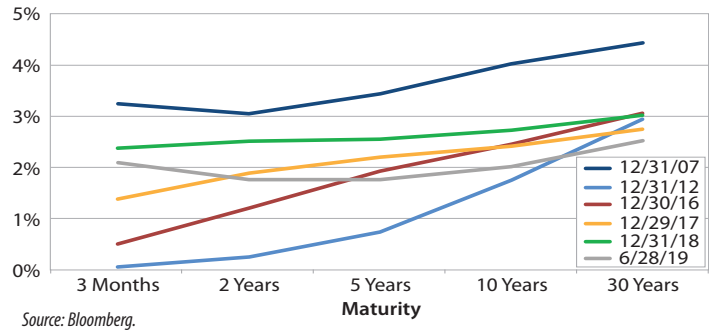


Figure 16: Yield Spread between 10-Yr U.S Treasury and 3-Mo U.S Treasury Bill (%)

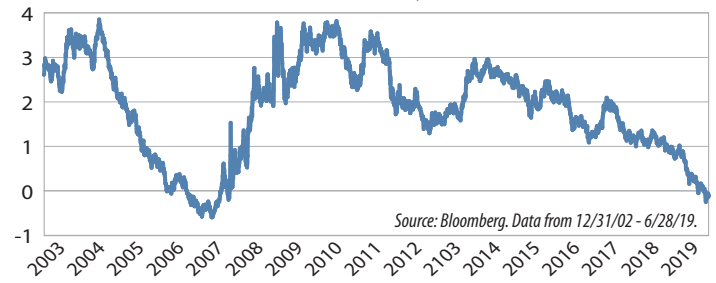
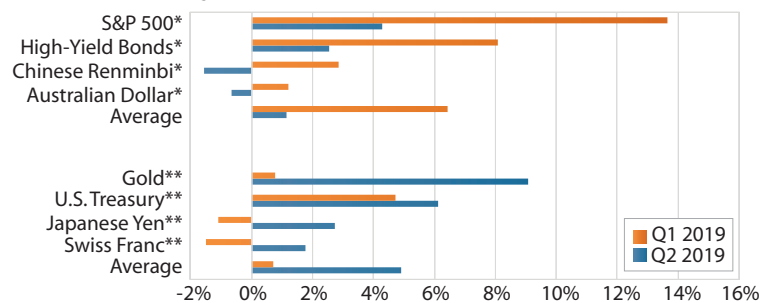


Figure 17: Risk Off vs. Risk On Asset Returns



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.

## Definitions

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

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

**Australian Dollar:** The return from selling the short currency (USD) to buy the long currency (AUD) and earning interest. The return is calculated by adding the spot return to the interest earned from the long currency position. It is designed to measure the performance of the Australian dollar vs. the U.S. dollar.

**BAA Corp:** Moody's Bond Indices Corporate BAA. Moody's Long-Term Corporate Bond Yield Averages are derived from pricing data on a regularly replenished population of corporate bonds in the U.S. market, each with current outstandings over \$100 million. The bonds have maturities as close as possible to 30 years; they are dropped from the list if their remaining life falls below 20 years, if they are susceptible to redemption, or if their ratings change. All yields are yield-to-maturity calculated on a semi-annual basis.

**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 Barclays US Corp B-Ca Capped Index:** The Bloomberg Barclays index measures the performance of the taxable B1 – Ca rated range of the fixed-rate U.S. dollar-denominated corporate bond market. The index is market capitalization weighted and caps individual issuers at 3% of the total market value.

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

**Chinese Renminbi:** The S&P Chinese Renminbi Index is designed as a tradable index that replicates the performance of the Chinese Renminbi versus the U.S. Dollar.

**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.

**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.

**Credit Spread:** The difference in yield between two fixed-income instruments with differing credit profiles.

**Distressed:** 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.

**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.

**Alternative investments may employ complex strategies, have unique investment and risk characteristics that may not be suitable for all investors.**

*The information presented is not intended to constitute an investment recommendation for, or advice to, any specific person. By providing this information, First Trust is not undertaking to give advice in any fiduciary capacity within the meaning of ERISA, the Internal Revenue Code or any other regulatory framework. Financial advisors are responsible for evaluating investment risks independently and for exercising independent judgment in determining whether investments are appropriate for their clients.*

**High-Yield Bonds:** The Bloomberg Barclays 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.

**Japanese Yen:** The return from selling the short currency (USD) to buy the long currency (JPY) and earning interest. The return is calculated by adding the spot return to the interest earned from the long currency position. It is designed to measure the performance of the Japanese yen vs. the U.S. dollar.

**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:** "Long" and "short" are investment terms used to describe ownership of securities. To buy securities is to "go long." The opposite of going long is "selling short." Short selling is an advanced trading strategy that involves selling a borrowed security. Short sellers make a profit if the price of the security goes down and they are able to buy the security at a lower amount than the price at which they sold the security short.

**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.

**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.

**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.

**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.

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

**Swiss Franc:** The return from selling the short currency (USD) to buy the long currency (CHF) and earning interest. The return is calculated by adding the spot return to the interest earned from the long currency position. It is designed to measure the performance of the Swiss franc vs. the U.S. dollar.

**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.

**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.