WELLS FARGO
Investment Institute

Market Overview

June 2020

Investment and Insurance Products: ▸ NOT FDIC-Insured ▸ NO Bank Guarantee ▸ MAY Lose Value

U.S. Economic Overview

U.S. economic activity showing signs of life

- Spreading "green shoots" are shifting the conversation from the timing of a return to economic growth to its strength and staying power. Weekly and daily economic data either with increases or decelerating declines from early-April lows pointed toward improvement in monthly data in late May. At the very least, we believe that data are signaling that the worst of the U.S. economy's declines are behind us. At best, investor hopes are building for an early recovery from what could be a record decline in second-quarter economic activity, increasing the odds of an initial burst of activity before an expected shift to more moderate growth.

- The shock from the economy's lockdown to small businesses—key to job growth—and to dominant household spending, was muted by early and aggressive fiscal support from the federal government, along with Federal Reserve (Fed) programs. Signs of life in the small-business sector are coming from scattered improvement in May operating income and hiring. April's record savings rate, a by-product of the spending slump and direct government assistance, has created added "dry powder" for consumer-led growth. Housing's direct contribution to growth is coming from increased home demand and spending on "big-ticket" appliances and home furnishings. Indirect support is coming from steadying home prices, which are supporting household wealth, borrowing capacity, and spending power. Home values are being steadied by a pullback in listings and by the rebound in housing demand captured by a recent surge in weekly mortgage applications for home purchases from an early-April low.

A stunning rebound in housing (residential mortgage) demand from a deep-pandemic-related slump

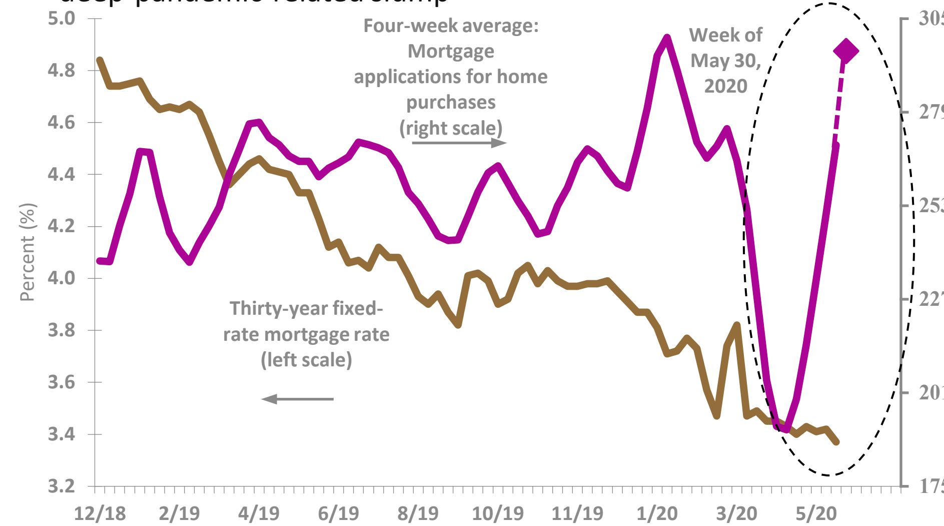
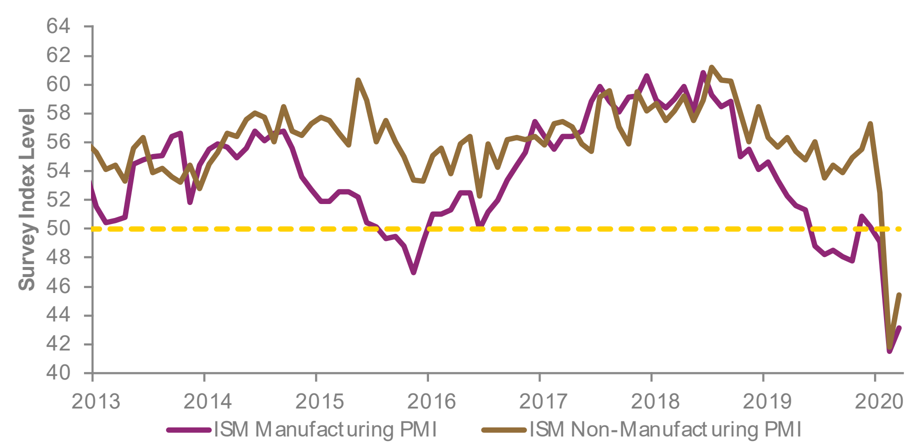


Chart is indexed to 100 as of March 16, 2020.

Sources: Mortgage Bankers' Association, June 2, 2020.

Purchasing Manager Sentiment rises in May



Source: Bloomberg, May 31, 2020. PMI—Purchasing Managers' Index. ISM—Institute for Supply Management, see slide 10 for definition. A reading above 50 indicates expansion, below 50 indicates contraction.

International Economic Overview

Eurozone's economic growth shows encouraging signs but lags against other advanced economies

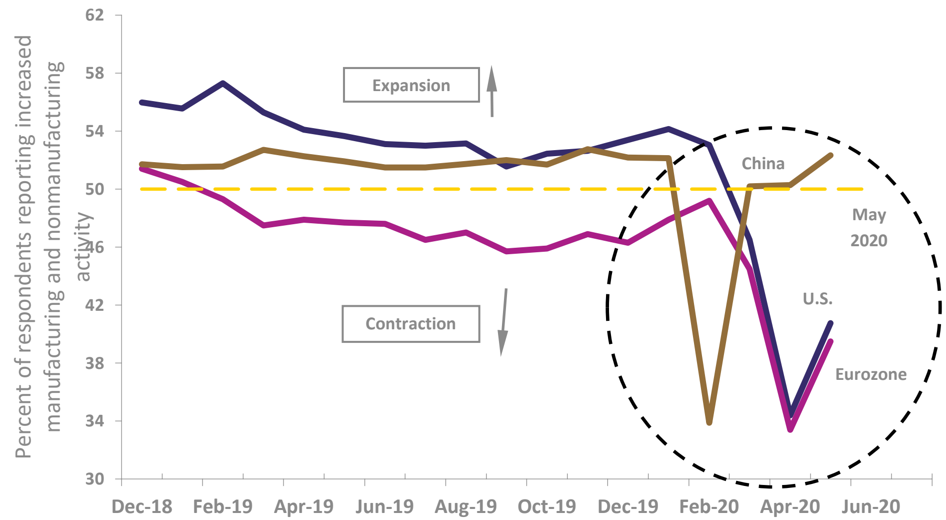
Europe

- Europe's recovery from its deep dive earlier in the spring has been even weaker than the U.S. economic rebound. Improvement has been most noticeable in Germany—after it avoided the worst of the lockdown's economic impact—and in hard-hit Italy. Regional monetary and fiscal stimulus is lagging U.S. policy support, but it is ramping up as pandemic fallout and its longer-term threat to European integration becomes clearer. Significantly, a proposed $826 billion-equivalent rescue package of European Union (EU) grants and loans to hard-pressed countries would be backed collectively by stronger EU countries, signaling greater cohesion within the often-fragmented currency bloc. Italy and other southern European economies are being hit hardest, widening the income divide within the eurozone and underscoring the need for pandemic financial relief set for debate in coming months.

Asia

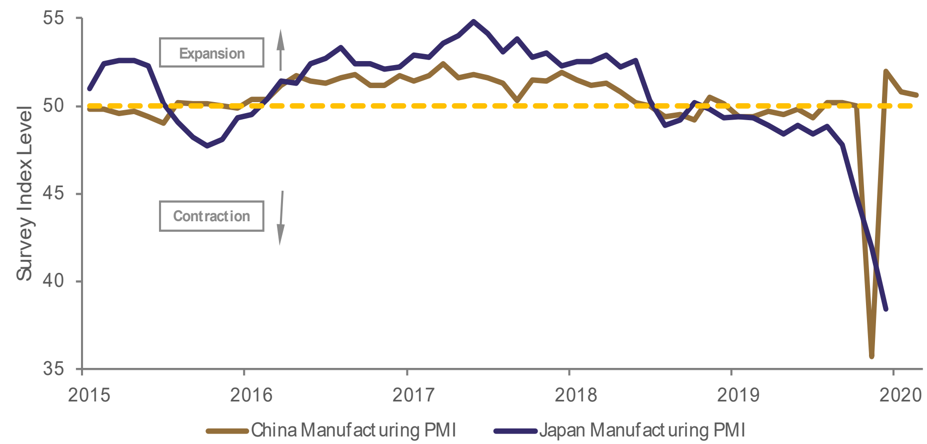
- Asia's two-track recovery from the pandemic's economic fallout continued through May, paced by still-unbalanced growth in China from an early reopening in February. Increased momentum in construction and manufacturing has outpaced Chinese consumer spending that has been restrained by household caution and by a labor market still under pressure. That has left full-year activity in a holding pattern. Japan's more recent recovery has been mild and fragile, despite a decline in the country's coronavirus infection rate and an economic reopening in key metro areas. Employment, financial, and pandemic concerns weigh on an economy headed for a sizable 4%-5% decline this year.

China leads the way toward a modest global growth recovery



Source: Markit, Bloomberg, June 3, 2020. Chart shows Markit purchasing managers' index data for China, the U.S. and the eurozone.

Manufacturing PMIs declined in May



Source: Bloomberg, May 31, 2020. PMI=Purchasing Managers' Index. A reading above 50 indicates expansion, below 50 indicates contraction.

Stock Market Review and Strategy

Global equities rise in May across all indices

U.S. equities:

- U.S. large caps returned 4.8% last month, underperforming both mid caps' and small caps' monthly returns. All large-cap sectors were positive in May. Information Technology's 7.1% return was the largest monthly gain, followed by Communication Services' 6.0% increase. These sectors have benefited from the transition to the virtual business and entertainment environment during the pandemic lockdown. Consumer Staples (+1.5%) was the weakest large-cap sector last month as the economic reopening dampened likely future demand for basic consumer goods.

- Mid- and small-cap equities had strong monthly gains, driven by "risk-on" sentiment. Consumer Discretionary led sector returns for both equity classes, with an 11% gain for mid caps and 17.1% for small caps. The weakest sector performer for mid caps was Real Estate, ending the month unchanged. Energy (-3.3%) has the weakest small-cap sector performance.

International equities:

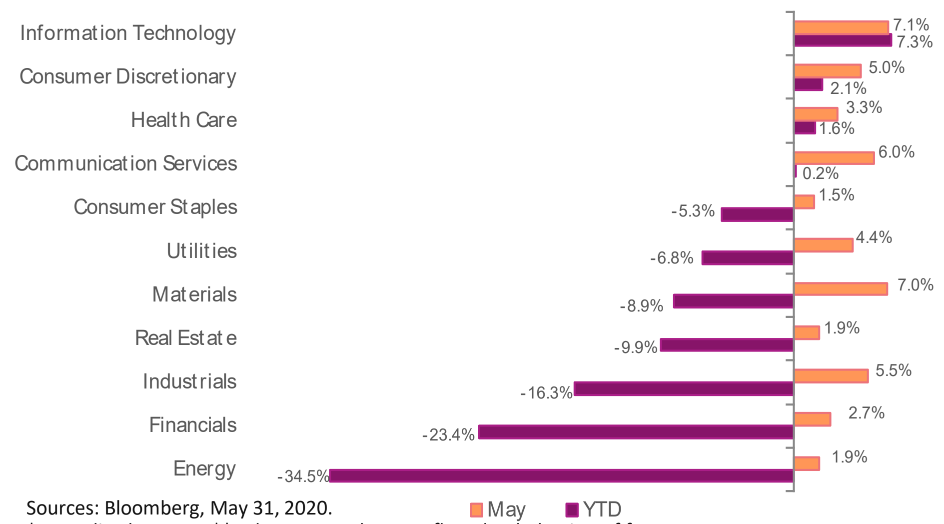
- Developed market (DM) and emerging market (EM) equities underperformed U.S. stocks in May—for the third consecutive month. Dollar-denominated equities continued to outperform their local-currency counterparts as the U.S. dollar depreciated against DM and EM currencies.

- The strongest DM-equity performer was the MSCI Israel Index (+9.0% in U.S.-dollar terms), due to better-than-expected earnings results for major financial firms. The MSCI Hong Kong Index (-8.4% in U.S.-dollar terms) trailed other DM markets as China announced plans to impose a national security law on Hong Kong.

Stock market total returns** Period ending May 31, 2020

Equity Indices	May	QTD	YTD	1 Year	3 Year*	5 Year*
Global Market	4.4%	15.6%	-8.9%	6.0%	5.7%	5.9%
Large Cap	4.8%	18.2%	-5.0%	12.8%	10.2%	9.9%
Large Cap Growth	6.7%	22.5%	5.2%	26.3%	17.2%	14.5%
Large Cap Value	3.4%	15.1%	-15.7%	-1.6%	2.6%	4.4%
Mid Cap	7.0%	22.4%	-10.7%	2.6%	5.5%	5.9%
Small Cap	6.5%	21.1%	-15.9%	-3.4%	2.0%	3.7%
Developed ex.U.S. (USD)	4.4%	11.2%	-14.0%	-2.4%	0.1%	1.3%
Developed Small Cap (USD)	7.2%	18.4%	-14.1%	-0.4%	0.4%	3.6%
Emerging Markets (USD)	0.8%	10.0%	-15.9%	-4.0%	0.2%	1.3%
Frontier Markets (USD)	5.8%	12.9%	-17.1%	-10.5%	-1.9%	-0.2%

S&P 500 Sector returns



Sources: Bloomberg, May 31, 2020.
*Annualized returns **Index returns do not reflect the deduction of fees, expenses or taxes. **Past performance is no guarantee of future results.** Please see disclosures at the end of the report for index definitions.

Bond Market Review and Strategy

Bonds mostly positive in May

U.S. market:

- Treasury-yield volatility decreased further after a few rough months earlier this year; the 10-year Treasury yield fell from 1.91% on January 2 to 0.65% on May 31; it was relatively unchanged in May. This decline helped to fuel the 8.6% year to date (YTD) Treasury gain. Residential mortgage-backed securities (RMBS) and agency securities returned 3.6% and 4.9%, respectively, YTD, after their nominal May gains.
- Credit-focused sectors saw some of the largest May taxable-bond gains after the March coronavirus-fueled market turmoil. Investors continued their move back into risk assets, helping to fuel strong investment-grade (IG) and high yield corporate returns in May (+1.6% and 4.4%, respectively). In fact, IG corporates returned 10.0% for the 12-month period.

Developed markets:

- Small index-level changes for developed market (DM) bonds in May (unhedged, +0.2% hedged, -0.1%) masked diverging country-level performance. Eurozone sovereigns performed best, led by Portugal and Italy, helped by the stronger euro. U.K. gilts and Japanese government bonds declined, as these currencies weakened versus the dollar.

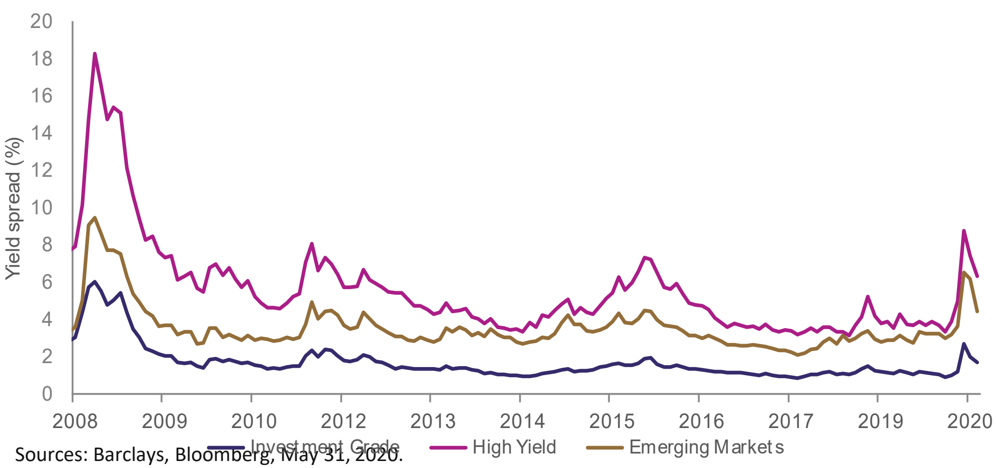
Emerging markets:

- EM bonds recovered strongly in May, aided by dollar weakness; positive risk sentiment; and an oil-price bounce. Many EM currencies had strong gains, leaving local-currency denominated bonds +5.0% last month in dollar terms (still -8.5% YTD). Dollar-denominated sovereigns performed even better, +5.7% in May (-4.6% YTD), with similar outperformance by commodities exporters.

Fixed Income market total returns** Period ending May 31, 2020

Fixed Income Indices	May	QTD	YTD	1 Year	3 Year*	5 Year*
Global Multiverse	0.7%	2.7%	1.6%	5.2%	3.4%	3.3%
U.S. Inv Grade Taxable	0.5%	2.3%	5.5%	9.4%	5.1%	3.9%
U.S. Treasury Bills	0.0%	0.0%	0.5%	1.7%	1.7%	1.1%
U.S. Short-Term Taxable	0.2%	0.7%	2.5%	4.4%	2.8%	2.0%
U.S. Interm-Term Taxable	1.1%	3.0%	5.7%	9.0%	4.8%	3.7%
U.S Long-Term Taxable	0.1%	4.6%	11.1%	20.3%	10.1%	7.8%
U.S. Treasury	-0.3%	0.4%	8.6%	11.4%	5.5%	3.9%
U.S. Corporate	1.6%	6.9%	3.0%	10.0%	5.8%	5.0%
U.S. Municipal	3.2%	1.9%	1.2%	4.0%	3.8%	3.7%
U.S. TIPS	0.3%	3.1%	4.8%	8.0%	4.3%	3.3%
U.S. High Yield	4.4%	9.1%	-4.7%	1.3%	3.0%	4.3%
Developed ex.U.S. (unhedged)	0.2%	1.6%	0.4%	3.3%	2.6%	3.3%
Emerging Market (USD)	5.7%	8.1%	-4.6%	1.7%	2.2%	4.2%

Credit spreads to Treasury Securities



Sources: Barclays, Bloomberg, May 31, 2020.
*Annualized return. **Index returns do not reflect the deduction of fees, expenses or taxes. **Past performance is no guarantee of future results.** Please see disclosures at the end of the report for index definitions.

Real Assets Review and Strategy

Commodities return positive for May

Master limited partnerships (MLPs):

- MLPs' 9% May return put it near the top of the monthly stack rank versus other assets. While MLPs rode the "risk-on" rally, they essentially were nudged ahead by oil's surge. West Texas Intermediate (WTI) oil prices rose by nearly 90% in May. From the March 18 low to May 31, the Alerian MLP index delivered a total return of more than 110%. Despite their recently impressive returns, MLPs remain one of the worst-performing assets YTD.

Commodities:

- *Agriculture:* Agriculture commodities underperformed last month as crop reports suggested a potential record output in 2020. Sugar was the best performer of the group, while coffee and wheat were the notable underperformers.
- *Energy:* WTI crude oil's rise of nearly 90% last month led the way for energy commodities as prices bounced from the historically-low negative price on April 20. Strong performance from Brent crude, diesel, and gasoline followed as they all rose by more than 30% last month. Natural-gas prices declined by 5% as seasonal demand waned and storage continued to fill.
- *Metals:* Precious and base metals gained in May, led by silver, platinum, iron ore, and copper. Gold prices rose a modest 2.5%, while silver prices gained by more than 20%. In recent months, gold has benefited from perceived "safe-haven" demand as concern grew over weakening economic growth and the spreading coronavirus. Yet demand waned in May as the "risk-on" market mood took hold. Base metals continued their recovery in May, led by a surge in iron prices.

Real Asset total returns** Period ending May 31, 2020

REIT/Commodity Indices	May	QTD	YTD	1 Year	3 Year*	5 Year*
Public Real Estate	0.3%	7.4%	-23.0%	-16.3%	-1.3%	0.9%
U.S. REITs	1.7%	10.7%	-15.3%	-7.3%	3.4%	5.2%
International REITs	0.8%	6.6%	-22.8%	-15.0%	-1.2%	0.2%
S&P GSCI Commodity	16.4%	5.1%	-39.4%	-34.3%	-10.8%	-13.4%
Bloomberg Commodity	4.3%	2.7%	-21.2%	-17.1%	-6.9%	-7.8%
RICI Commodity	12.6%	5.4%	-28.4%	-23.5%	-6.9%	-8.1%
Global Infrastructure	5.4%	15.3%	-18.3%	-9.0%	-0.5%	1.9%
MLPs	9.0%	63.0%	-30.2%	-34.7%	-14.7%	-12.9%

Crude Oil versus Gold

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Alternatives Review and Strategy

Alternatives post mixed performance in May

Relative Value:

- Structured Credit managers continued to recover from March's extreme market dislocations. In particular, non-agency residential mortgage-backed security (RMBS) and collateralized loan obligation (CLO) exposure drove returns.

Macro:

- Trend Following strategies were subdued in May as returns were hindered by muted fixed-income and currency market trends, along with a strong trend reversal in the Energy sector. Discretionary strategy managers were able to add value through long single-name equity exposure.

Event Driven:

- Activist and Distressed strategies benefited from the sustained equity- and credit-market rebound, while Merger Arbitrage strategies' May returns were restrained as merger spreads were range-bound, following the extreme April spread tightening.

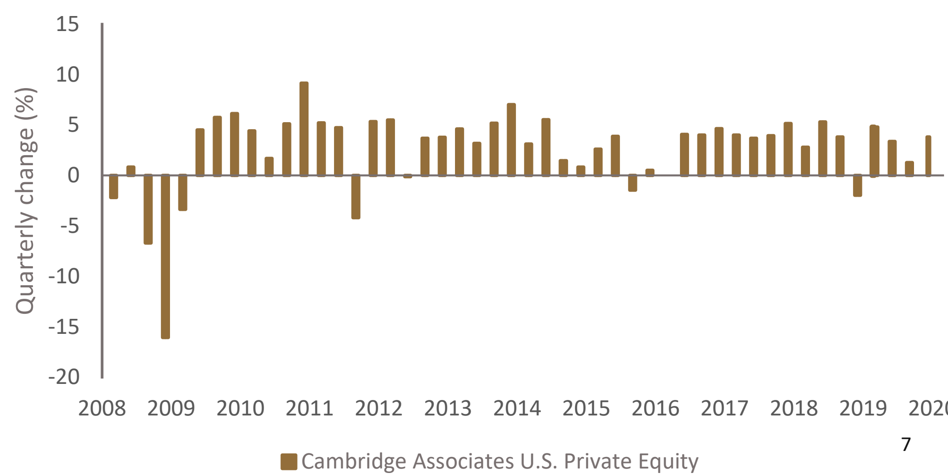
Equity Hedge:

- Long-biased portfolios continued to outperform in May, particularly those with high Information Technology and growth exposure.

Alternatives total returns** Period ending May 31, 2020

Alternative Indices	May	QTD	YTD	1 Year	3 Year*	5 Year*
Global Hedge Funds	2.5%	7.3%	-4.8%	0.3%	1.7%	1.8%
Relative Value	2.5%	4.9%	-5.2%	-2.5%	1.3%	2.1%
Arbitrage	4.3%	5.7%	-7.2%	-3.4%	1.5%	2.5%
Long/Short Credit	3.0%	6.5%	-5.4%	-2.6%	2.0%	3.0%
Struct Credit/Asset Backed	2.6%	3.9%	-8.1%	-5.1%	1.6%	2.7%
Macro	-0.3%	0.7%	-0.7%	3.2%	1.2%	0.3%
Systematic	-1.0%	-1.4%	-1.8%	2.6%	0.3%	-1.1%
Discretionary	1.4%	3.5%	1.1%	4.7%	1.7%	0.7%
Event Driven	2.9%	7.4%	-8.7%	-5.6%	0.0%	1.2%
Activist	4.8%	14.2%	-17.0%	-8.6%	-3.7%	-0.6%
Distressed Credit	2.8%	5.2%	-7.6%	-8.5%	-1.2%	0.6%
Merger Arbitrage	-1.5%	3.5%	-7.8%	-4.1%	1.2%	1.8%
Equity Hedge	3.9%	11.1%	-5.0%	1.9%	2.7%	2.5%
Directional Equity	5.8%	14.9%	-1.7%	5.4%	2.6%	2.3%
Equity Market Neutral	0.3%	1.4%	-2.1%	-0.6%	1.1%	1.7%

Private Capital Index returns



Sources: Morningstar, Cambridge Associates, May 31, 2020. Cambridge data through December 31, 2019.
*Annualized returns **Index returns do not reflect the deduction of fees, expenses or taxes. **Past performance is no guarantee of future results.** Please see disclosures at the end of the report for index definitions.

Disclosures

Asset Class Risks

Alternative Investments, such as hedge funds and private capital funds, are not suitable for all investors. They are speculative and involve a high degree of risk that is suitable only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program.

Hedge funds trade in diverse complex strategies that are affected in different ways and at different times by changing market conditions. Strategies may, at times, be out of market favor for considerable periods with adverse consequences for the investor. Arbitrage strategies expose a fund to the risk that the anticipated arbitrage opportunities will not develop as anticipated, resulting in potentially reduced returns or losses to the fund. Event Driven strategies involve investing in opportunities created by significant transactional events, such as spinoffs, mergers and acquisitions, bankruptcy reorganization, recapitalization and share buybacks. Managers who use such strategies may invest in, and might sell short, the securities of companies where the security's price has been, or is expected to be, affected by a distressed situation. Equity Hedge strategies maintain positions both long and short in primarily equity and equity derivative securities. Investing in Distressed companies is speculative and subject to greater levels of credit, issuer and liquidity risks and the repayment of default obligations contains significant uncertainties such companies may be engaged in restructurings or bankruptcy proceedings. Macro strategies base their investment decisions on the anticipated price movement of stock markets, interest rates, foreign exchange, and physical commodities. These price movements result from many factors including forecasted shifts in world economies. Exchange-traded and over-the-counter derivatives are often used to magnify these price movements. The fixed income securities used in the structured credit relative value strategy may include CMBS, RMBS, ABS CLOs and other debt securities. They are subject to security-specific risks in addition to the risks associated with fluctuations in interest rates, credit/default, liquidity and forced deleveraging. Long/short credit strategies invest in the global credit markets which may be volatile. The risks associated with this strategy include investments in debt securities and the use of short selling and derivatives.

Private capital investments are complex, speculative investment vehicles not suitable for all investors. The funds use complex trading strategies, including hedging and leveraging through derivatives and short selling and other aggressive investment practices. It is possible to lose your entire investment investing in these funds. Leverage can significantly increase return potential but create greater risk of loss. Derivatives generally have implied leverage which can magnify volatility and may entail other risks such as market, interest rate, credit, counterparty and management risks. Short selling involves leverage and theoretically unlimited loss potential since the market price of securities sold short may continuously increase.

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. Investments in equity securities are generally more volatile than other types of securities. Small and Mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks.

Investments in fixed-income securities are subject to interest rate, credit/default, liquidity, inflation and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond’s price. Credit risk is the risk that an issuer will default on payments of interest and/or principal. This risk is heightened in lower rated bonds. If sold prior to maturity, fixed income securities are subject to market risk. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes. These bonds are subject to interest rate and credit/default risk. Quality varies widely depending on the specific issuer. Municipal securities may also be subject to the alternative minimum tax and legislative and regulatory risk which is the risk that a change in the tax code could affect the value of taxable or tax-exempt interest income.

Mortgage- and asset-backed securities are subject to the risks associated with debt securities and to prepayment, extension and call risks. Changes in prepayments may significantly affect yield, average life and expected maturity. Extension risk is the risk that rising interest rates will slow the rate at which mortgages are prepaid. Call risk is the risk that If called prior to maturity, similar yielding investments may not be available for the Fund to purchase. These risks may be heightened for longer maturity and duration securities.

Treasury Inflation-Protected Securities (TIPS) are subject to interest rate risk, especially when real interest rates rise. This may cause the underlying value of the bond to fluctuate more than other fixed income securities.

Disclosures

Asset Class Risks (continued)

Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging and frontier markets.

There are special risks associated with an investment in real estate, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations and the impact of varied economic conditions.

Exposure to the commodities markets may subject an investment to greater share price volatility than an investment in traditional equity or debt securities. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. Investing in precious metals involves special risk considerations such as severe price fluctuations and adverse economic and regulatory developments which could materially and adversely affect an investment.

Investing in physical commodities, such as gold, silver, palladium and other precious metals, exposes a portfolio to material risk considerations such as potentially severe price fluctuations over short periods of time and storage costs that exceed the custodial and/or brokerage costs associated with a portfolio's other holdings.

Investment in securities of Master Limited Partnerships (MLPs) involves certain risks which differ from an investment in the securities of a corporation. MLPs may be sensitive to price changes in oil, natural gas, etc., regulatory risk, and rising interest rates. A change in the current tax law regarding MLPs could result in the MLP being treated as a corporation for federal income tax purposes which would reduce the amount of cash flows distributed by the MLP. Other risks include the volatility associated with the use of leverage; volatility of the commodities markets; market risks; supply and demand; natural and man-made catastrophes; competition; liquidity; market price discount from Net Asset Value and other material risks.

Sector Risks

Sector investing can be more volatile than investments that are broadly diversified over numerous sectors of the economy and will increase a portfolio's vulnerability to any single economic, political, or regulatory development affecting the sector. This can result in greater price volatility. Risks associated with the **Consumer Discretionary** sector include, among others, apparel price deflation due to low-cost entries, high inventory levels and pressure from e-commerce players; reduction in traditional advertising dollars, increasing household debt levels that could limit consumer appetite for discretionary purchases, declining consumer acceptance of new product introductions, and geopolitical uncertainty that could affect consumer sentiment. **Consumer Staples** industries can be significantly affected by competitive pricing particularly with respect to the growth of low-cost emerging market production, regulation, the performance of the overall economy, interest rates, and consumer confidence. The **Communication services** companies are vulnerable to their products and services becoming outdated because of technological advancement and the innovation of competitors. Companies in the communication services sector may also be affected by rapid technology changes; pricing competition, large equipment upgrades, substantial capital requirements and government regulation and approval of products and services. In addition, companies within the industry may invest heavily in research and development which is not guaranteed to lead to successful implementation of the proposed product. **Energy** sector may be adversely affected by changes in worldwide energy prices, exploration, production spending, government regulation, and changes in exchange rates, depletion of natural resources, and risks that arise from extreme weather conditions. Investing in the **Financial** services companies will subject an investment to adverse economic or regulatory occurrences affecting the sector. Some of the risks associated with investment in the **Health Care** sector include competition on branded products, sales erosion due to cheaper alternatives, research and development risk, government regulations and government approval of products anticipated to enter the market. There is increased risk investing in the **Industrials** sector. The industries within the sector can be significantly affected by general market and economic conditions, competition, technological innovation, legislation and government regulations, among other things, all of which can significantly affect a portfolio's performance. **Materials** industries can be significantly affected by the volatility of commodity prices, the exchange rate between foreign currency and the dollar, export/import concerns, worldwide competition, procurement and manufacturing and cost containment issues. **Real estate** investments have special risks, including possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions. Risks associated with the **Technology** sector include increased competition from domestic and international companies, unexpected changes in demand, regulatory actions, technical problems with key products, and the departure of key members of management. Technology and Internet-related stocks, especially smaller, less-seasoned companies, tend to be more volatile than the overall market. **Utilities** are sensitive to changes in interest rates, and the securities within the sector can be volatile and may underperform in a slow economy.

Index Definitions

An index is unmanaged and not available for direct investment.

Economic Indices (Slides 2-3)

The Institute of Supply Management (ISM) **Manufacturing Index®** is a composite index based on the diffusion indexes of five of the indexes with equal weights: New Orders (seasonally adjusted), Production (seasonally adjusted), Employment (seasonally adjusted), Supplier Deliveries (seasonally adjusted), and Inventories. An Index values over 50 indicate expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

The Institute of Supply Management (ISM) **Non-Manufacturing Index®** is a composite index based on the diffusion indexes for four of the indicators with equal weights: Business Activity (seasonally adjusted), New Orders (seasonally adjusted), Employment (seasonally adjusted) and Supplier Deliveries. An Index values over 50 indicate expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

PMI Surveys, such as the **Eurozone Manufacturing PMI**, track sentiment among purchasing managers at manufacturing, construction and/or services firms. An overall sentiment index is generally calculated from the results of queries on production, orders, inventories, employment, prices, etc.

Equities (Slide 4)

Global Market Equity: **MSCI AC World Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed and 23 emerging markets.

Large Cap Equity: **S&P 500 Index** is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the US stock market. Returns assume reinvestment of dividends and capital gain distributions.

Large Cap Growth Equity: **Russell 1000® Growth Index** measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Large Cap Value Equity: **Russell 1000® Value Index** measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 1000 Index measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index. The Russell 3000 Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

Mid Cap Equity**: Russell Midcap® Index** measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000® Index.

Small Cap Equity: **Russell 2000® Index** measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Index Definitions (continued)

Developed Market ex. U.S. Equity: **MSCI EAFE Index** is a free float-adjusted market capitalization index that is designed to measure the equity market performance of 21 developed markets, excluding the US & Canada.

Developed Small Cap Equities: The **MSCI EAFE Small Cap Index** is an equity index which captures small cap representation across Developed Markets countries* around the world, excluding the US and Canada. With 2,282 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in each country.

Emerging Markets: **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of 23 emerging market countries.

Frontier Market Equity: **MSCI Frontier Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of frontier markets. The MSCI Frontier Markets Index consists of 24 frontier market country indexes.

The MSCI Israel Index is designed to measure the performance of the large and mid cap segments of the Israel market. With 12 constituents, the index covers about 85% of the free float-adjusted market capitalization in Israel.

The MSCI Hong Kong Index is designed to measure the performance of the large and mid cap segments of the Hong Kong market. With 43 constituents, the index covers about 85% of the free float-adjusted market capitalization of the Hong Kong equity universe.

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<u>**Fixed Income (Slide 5)**</u>

Global Multiverse Fixed Income*:* **Bloomberg Barclays Multiverse Index** provides a broad-based measure of the global fixed-income bond market. The index represents the union of the Global Aggregate Index and the Global High-Yield Index and captures investment grade and high yield securities in all eligible currencies.

U.S. Inv Grade Taxable Fixed Income*:* **Bloomberg Barclays U.S. Aggregate Bond Index** is composed of the Bloomberg Barclays Capital U.S. Government/Credit Index and the Bloomberg Barclays Capital U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities.

U.S. Treasury Bills Fixed Income: **Bloomberg Barclays U.S. Treasury Bills Index** includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have $250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non convertible.

Short, Intermediate and Long Term Fixed Income: **Bloomberg Barclays U.S. Aggregate Bond Index** is made up of the Bloomberg Barclays U.S. Government/Corporate Bond Index, Mortgage-Backed Securities Index, and Asset-Backed Securities Index, including securities that are of investment grade quality or better, have at least one year to maturity, and have an outstanding par value of at least $100 million.

U.S. Treasury Fixed Income*:* **Bloomberg Barclays U.S. Treasury Index** includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.

U.S. Investment Grade Corporate Fixed Income: **Bloomberg Barclays U.S. Corporate Bond Index** includes publicly issued U.S. corporate and Yankee debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

U.S. Municipal Fixed Income: **Bloomberg Barclays U.S. Municipal Bond Index** represents municipal bonds with a minimum credit rating of at least Baa, an outstanding par value of at least $3 million, and a remaining maturity of at least one year. The Index excludes taxable municipal bonds, bonds with floating rates, derivatives, and certificates of participation.

Index Definitions (continued)

U.S. TIPS Fixed Income: **Bloomberg Barclays Treasury Inflation Protected Securities (TIPS) Index** includes all publically issued, investment-grade U.S. TIPS with an outstanding face value of more than $250 million and that have at least one year to maturity.

U.S. High Yield Fixed Income: **Bloomberg Barclays U.S. High Yield Bond Index** is an unmanaged index that tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market.

Developed ex. U.S. Fixed Income (Unhedged): **JPMorgan GBI Global ex-U.S. (Unhedged)** in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

Developed ex. U.S. Fixed Income (Hedged): **JPMorgan GBI Global ex-U.S. (Hedged)** is an unmanaged index market representative of the total return performance, on a hedged basis, of major non-U.S. bond markets. It is calculated in U.S. dollars.

***Emerging Market Fixed Income*: JP Morgan Emerging Markets Bond Index Global (EMBI Global),** which currently covers 27 emerging market countries. Included in the EMBI Global are U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

Emerging Market Fixed Income (Local Currency): **J.P. Morgan Government Bond Index-Emerging Markets Global (USD Unhedged)** is a comprehensive global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds.

Emerging Market Spread: **Bloomberg Barclays EM USD Aggregate Index** is a flagship hard currency Emerging Markets debt benchmark that includes USD denominated debt from sovereign, quasi-sovereign, and corporate EM issuers. The index is broad-based in its coverage by sector and by country, and reflects the evolution of EM benchmarking from traditional sovereign bond indices to Aggregate-style benchmarks that are more representative of the EM investment choice set. Country eligibility and classification as an Emerging Market is rules-based and reviewed on an annual basis using World Bank income group and International Monetary Fund (IMF) country classifications. This index was previously called the Bloomberg Barclays US EM Index and history is available back to 1993.

Securitized. **Bloomberg Barclays US Mortgage Backed Securities (MBS) Index** includes agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

<u>Real Assets (Slide 6)</u>

Public Real Estate: **FTSE/EPRA NAREIT Developed Index** is designed to track the performance of listed real estate companies and REITs worldwide.

***U.S. REITs*: FTSE NAREIT U.S. All Equity REITs Index** is designed to track the performance of REITs representing equity interests in (as opposed to mortgages) on properties. It represents all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets, other than mortgages secured by real property that also meet minimum size and liquidity criteria.

International REITs: **FTSE EPRA/NAREIT Developed ex U.S. Index** is designed to track the performance of listed real estate companies in developed countries worldwide other than the U.S.

S&P Goldman Sachs Commodity Index (GSCI) is a composite index of commodity sector returns representing unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The index is includes futures contracts on 24 physical commodities of which Energy represents nearly 70%.

Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements.

Commodities (RICI): **The Rogers International Commodity Index** is a U.S. dollar based index representing the value of a basket of commodities consumed in the global economy. Representing futures contracts on 37 physical commodities, it is designed to track prices of raw materials not just in the U.S. but around the world.

***Global Infrastructure*: S&P Global Infrastructure Index** provides liquid and tradable exposure to 75 companies from around the world that represent the listed infrastructure universe. To create diversified exposure, the index includes three distinct infrastructure clusters: utilities, transportation and energy.

Index Definitions (continued)

***MLPs:* Alerian MLP Index** is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for this emerging asset class. The index, which is calculated using a float-adjusted, capitalization-weighted methodology, is disseminated real-time on a price-return basis and on a total-return basis.

Alternative Assets (Slide 7) – Hedge Fund Strategy Definitions

***Global Hedge Funds:* The HFRI Fund Weighted Composite Index** is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net-of-all-fees performance in U.S. dollars and have a minimum of $50 million under management or a 12-month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

***Relative Value:* The HFRI Relative Value Index:** maintains positions in which the investment thesis is predicated on 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 range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

***Arbitrage:* The HFRI Relative Value Fixed Income Sovereign Index:** Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a sovereign fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple sovereign bonds or between a corporate and risk free government bond. Fixed Income Sovereign typically employ multiple investment processes including both quantitative and fundamental discretionary approaches and relative to other Relative Value Arbitrage sub-strategies, these have the most significant top-down macro influences, relative to the more idiosyncratic fundamental approaches employed.

***Long/Short Credit:* HFRI Relative Value Fixed Income—Corporate Index.** Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed-income instrument. Strategies are designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk free government bond. They typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.

Structured Credit/Asset Backed: HFRI Relative Value Fixed Income-Asset Backed Index includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed-income instrument backed by physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. Strategies are designed to isolate attractive opportunities between a variety of fixed income instruments specifically securitized by collateral commitments, which frequently include loans, pools and portfolios of loans, receivables, real estate, machinery or other tangible financial commitments. Investment thesis may be predicated on an attractive spread given the nature and quality of the collateral, the liquidity characteristics of the underlying instruments and on issuance and trends in collateralized fixed-income instruments, broadly speaking. In many cases, investment managers hedge, limit, or offset interest-rate exposure in the interest of isolating the risk of the position to strictly the disparity between the yield of the instrument and that of the lower-risk instruments.

***Macro:* HFRI Macro 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. 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. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposes to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis.

Index Definitions (continued)

Systematic Macro: **HFRI Macro Systematic Diversified Index**: Diversified strategies employing mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies are designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ quantitative processes which focus on statistically robust or technical patterns in the return series of the asset, and they typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean-reverting strategies. Although some strategies seek to employ counter-trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Typically have no greater than 35 percent of portfolio in either dedicated currency or commodity exposures over a given market cycle.

Discretionary Macro: **HFRI Macro Discretionary Thematic Index**: Strategies primarily rely on the evaluation of market data, relationships and influences, as interpreted by individuals who make decisions on portfolio positions; strategies employ an investment process most heavily influenced by top-down analysis of macroeconomic variables. Investment Managers may trade actively in developed and emerging markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency and commodity markets; they frequently employ spread trades to isolate a differential between instrument identified by the Investment Manager as being inconsistent with expected value. Portfolio positions typically are predicated on the evolution of investment themes the Manager expects to develop over a relevant time frame, which in many cases contain contrarian or volatility-focused components.

Event Driven: **HFRI Event Driven 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. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

Activist: **HFRI Event Driven Activist Index**: Strategies may obtain or attempt to obtain representation on the company's board of directors in an effort to impact the firm's policies or strategic direction and in some cases may advocate activities such as division or asset sales, partial or complete corporate divestiture, dividends or share buybacks, and changes in management. Strategies employ an investment process primarily focused on opportunities in equity and equity-related instruments of companies that are currently or prospectively engaged in a corporate transaction, security issuance/repurchase, asset sales, division spin-off or other catalyst-oriented situation. These involve both announced transactions and situations in which no formal announcement is expected to occur. Activist strategies would expect to have greater than 50 percent of the portfolio in activist positions, as described.

Distressed Credit: **HFRI Event Driven Distressed/Restructuring Index**: Strategies focus on corporate fixed-income instruments, primarily 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 proceedings or financial-market perception of near-term proceedings. Managers are typically actively involved with the management of these companies; they are frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments that are publicly traded, in some cases actively and in others under reduced liquidity but in general for which a reasonable public market exists. Strategies employ primarily debt (greater than 60 percent) but also may maintain related equity exposure.

Merger Arbitrage: **HFRI Event Driven Merger Arbitrage Index:** Strategies primarily focus on opportunities in equity and equity-related instruments of companies that are currently engaged in a corporate transaction. Merger Arbitrage involves primarily announced transactions, typically with limited or no exposure to situations in which no formal announcement is expected to occur. Opportunities are frequently presented in cross-border, collared, and international transactions that incorporate multiple geographic regulatory institutions, typically with minimal exposure to corporate credits. Strategies typically have over 75 percent of positions in announced transactions over a given market cycle.

Index Definitions (continued)

Equity Hedge: **HFRI Equity Hedge (Total) Index**: Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50 percent exposure to, and may in some cases be entirely invested in, equities, both long and short.

Directional Equity: **HFRX Equity Hedge Multi-Strategy Index**: Managers maintain positions both long and short in primarily equity and equity-derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage, holding period, concentrations of market capitalizations, and valuation ranges of typical portfolios. Managers typically do not maintain more than 50 percent exposure to any one Equity Hedge sub-strategy.

Equity Market Neutral: **HFRI Equity Hedge Equity Market Neutral Index:** Strategies employ sophisticated quantitative techniques to analyze price data to ascertain information about future price movement and relationships between securities. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies predicated on the systematic analysis of common relationships between securities. In many cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high-frequency techniques may be employed; trading strategies may also be based on technical analysis or designed opportunistically to exploit new information that the investment manager believes has not been fully, completely, or accurately discounted into current security prices. Strategies typically maintain characteristic net equity market exposure no greater than 10 percent long or short.

The HFRI Indices are based on information self-reported by hedge fund managers that decide, on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, LLC (HFR). Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways.

Alternative Assets (Page 7) - Private Capital Strategy Definitions

Cambridge Associates LLC U.S. Private Equity Index® uses a horizon calculation based on data compiled from more than 1,400 institutional-quality buyout, growth equity, private equity energy, and subordinated capital funds formed between 1986 and 2017. The index utilizes a modified private market equivalent (mPME) calculation as a way to replicate private investment performance under public market conditions. While traditional public market indices calculate an average annual compounded return (time weighted over specified time periods), private indexes measure performance using internal rates of return and multiples based on cash flows (money-weighted returns). The funds included in the index report their performance voluntarily and therefore the index may reflect a bias towards funds with records of success. Funds report unaudited quarterly data to Cambridge Associates when calculating the index. The index is not transparent and cannot be independently verified because Cambridge Associates does not identify the funds included in the index. Because Cambridge Associates recalculates the index each time a new fund is added, the historical performance of the index is not fixed, can't be replicated and will differ over time from the day presented. The returns shown are net of fees, expenses and carried interest. *Index returns do not represent fund performance.*