WELLS FARGO
Investment Institute

Market Overview

Second Quarter 2020

Capital Market Summary
as of 6/30/2020

Equity Market	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Dow Jones Industrial Average	18.5%	-8.4%	-0.5%	9.1%	10.6%	13.0%
NASDAQ Composite	30.9%	12.7%	26.9%	19.1%	16.4%	18.3%
S&P 500	20.5%	-3.1%	7.5%	10.7%	10.7%	14.0%
Russell 1000	21.8%	-2.8%	7.5%	10.6%	10.5%	14.0%
Russell 1000 Growth	27.8%	9.8%	23.3%	19.0%	15.9%	17.2%
Russell 1000 Value	14.3%	-16.3%	-8.8%	1.8%	4.6%	10.4%
Russell MidCap	24.6%	-9.1%	-2.2%	5.8%	6.8%	12.3%
Russell MidCap Growth	30.3%	4.2%	11.9%	14.8%	11.6%	15.1%
Russell MidCap Value	19.9%	-18.1%	-11.8%	-0.5%	3.3%	10.3%
Russell 2000	25.4%	-13.0%	-6.6%	2.0%	4.3%	10.5%
Russell 2000 Growth	30.6%	-3.1%	3.5%	7.9%	6.9%	12.9%
Russell 2000 Value	18.9%	-23.5%	-17.5%	-4.3%	1.3%	7.8%
Russell 3000	22.0%	-3.5%	6.5%	10.0%	10.0%	13.7%
MSCI EAFE (U.S Dollar)	15.1%	-11.1%	-4.7%	1.3%	2.5%	6.2%
MSCI EM (U.S. Dollar)	18.2%	-9.7%	-3.0%	2.3%	3.2%	3.6%
Fixed Income Market	**QTD**	**YTD**	**1 Year**	**3 Year**	**5 Year**	**10 Year**
Bloomberg Barclays U.S. Aggregate	2.9%	6.1%	8.7%	5.3%	4.3%	3.8%
Bloomberg Barclays U.S. Treasury Bill	0.0%	0.5%	1.5%	1.7%	1.1%	0.6%
Bloomberg Barclays U.S Interm-Term Taxable	3.7%	6.5%	8.6%	5.1%	4.0%	3.8%
Bloomberg Barclays U.S Interm Gov/Credit Taxable	2.8%	5.3%	7.1%	4.4%	3.5%	3.1%
Bloomberg Barclays U.S Gov/Credit Taxable	3.7%	7.2%	10.0%	5.9%	4.7%	4.1%
Bloomberg Barclays U.S. Municipal	2.7%	2.1%	4.4%	4.2%	3.9%	4.2%
Bloomberg Barclays U.S. High Yield	10.2%	-3.8%	0.0%	3.3%	4.8%	6.7%
JP Morgan Developed Market (Unhedged)	2.4%	1.2%	1.1%	2.9%	3.4%	3.7%
JP Morgan Emerging Market (U.S. Dollar)	11.2%	-1.9%	1.5%	3.3%	5.1%	5.8%
Real Assets & Hedge Funds	**QTD**	**YTD**	**1 Year**	**3 Year**	**5 Year**	**10 Year**
HFRI Global Hedge Fund	9.0%	-3.5%	-0.6%	2.1%	2.3%	3.7%
FTSE/EPRA NAREIT Developed Markets	10.3%	-20.9%	-15.5%	-0.7%	2.2%	7.2%
Bloomberg Commodities	5.1%	-19.4%	-17.4%	-6.1%	-7.7%	-5.8%
Simple Portfolios	**QTD**	**YTD**	**1 Year**	**3 Year**	**5 Year**	**10 Year**
40% S&P 500/ 60% Bloomberg Barclays U.S Aggregate Bonds	9.8%	2.8%	8.8%	7.8%	7.1%	8.0%
50% S&P 500/ 50% Bloomberg Barclays U.S Aggregate Bonds	11.5%	1.9%	8.7%	8.4%	7.8%	9.1%
60% S&P 500/ 40% Bloomberg Barclays U.S Aggregate Bonds	13.5%	1.6%	9.2%	9.2%	8.5%	10.2%
70% S&P 500/ 30% Bloomberg Barclays U.S Aggregate Bonds	15.1%	0.0%	8.4%	9.4%	9.0%	11.1%

Sources: Bloomberg, Morningstar Direct, FactSet, 6/30/2020. **Hypothetical and past performance is no guarantee of future results.** *Performance results for the Simple Portfolios are for illustrative purposes only.* An index is unmanaged and not available for direct investment.

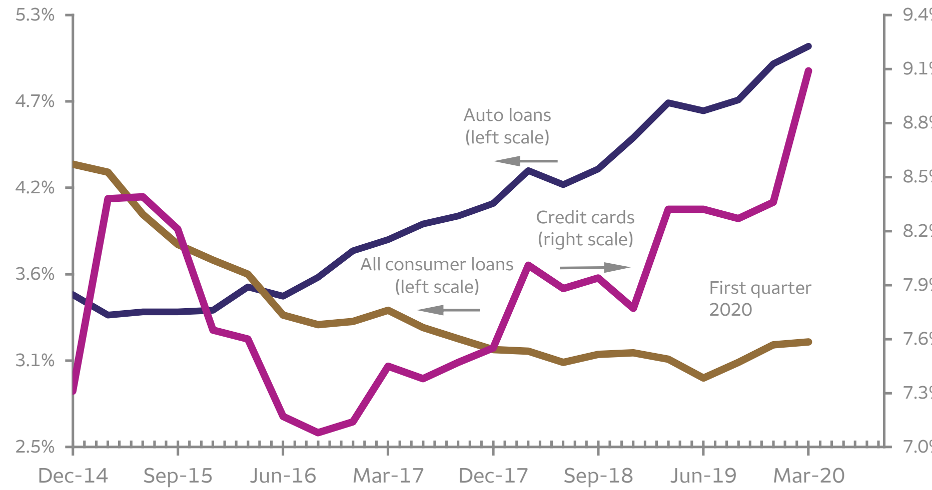
U.S. Economic Overview

U.S. economic activity declined

- Monthly economic data have confirmed a "V"-shaped recovery during much of the second quarter from the economy's free fall early in the spring. Broad-based strength has extended beyond solid job growth to manufacturing, housing, and even to lagging business investment. Stocks fit nicely into their role as a leading indicator by rebounding ahead of the economy's turn in late March—with critical support from government economic policies also underpinning investments. Balanced against good news on the economy and financial markets has been a resurgence in coronavirus cases, disrupting the U.S. economic reopening and weighing on growth.

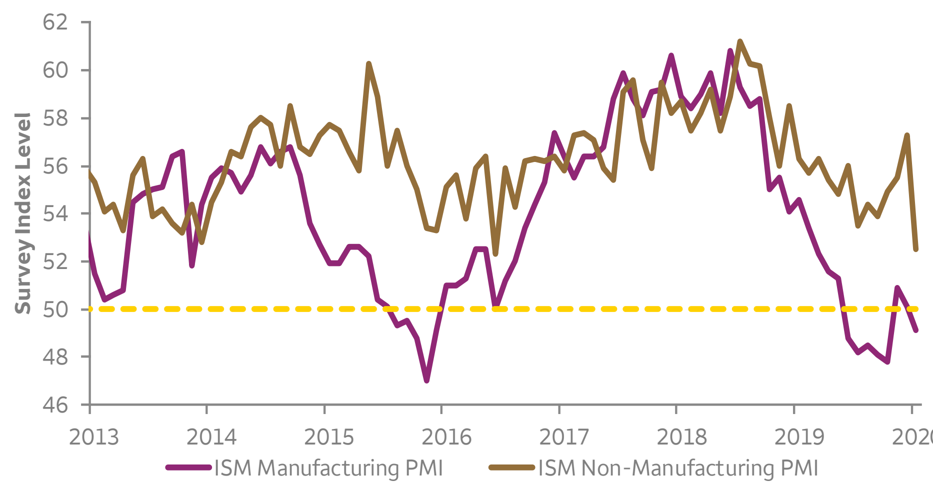
- How the pandemic's "echo effect" plays out will affect the economy's strength and staying power in the weeks and months ahead. Household income, savings, and confidence are strong enough to support solid, consumer-led growth in the third quarter. Job-market confidence and low mortgage rates are keeping housing on the leading edge of the recovery—magnifying its growth impact through its ripple effect on employment and "big-ticket" spending on appliances and home furnishings. The pandemic's initial shock has left scars on the labor market and consumer credit quality, where delinquency rates on auto and credit card loans already have risen noticeably. Economic "fundamentals" supporting spending are intact enough to heal those wounds as part of a recovery from the shortest recession on record. However, the immediate issue is balancing the pandemic's health risks against its economic costs that are capable of dampening or, at worst, reversing growth if uncertainties intensify sufficiently.

Auto and credit-card delinquency rates march higher (percent of each loan type that is outstanding)



Sources: Federal Reserve Bank of New York, and Wells Fargo Investment Institute, monthly data as of May 2020.

Sentiment rebounds in the second quarter of 2020



Sources: Bloomberg, and Wells Fargo Investment Institute June 30, 2020. PMI=Purchasing Managers' Index. ISM - Institute for Supply Management. A reading above 50 indicates expansion, below 50 indicates contraction.

International Economic Overview

Eurozone's economic growth lags other major economies

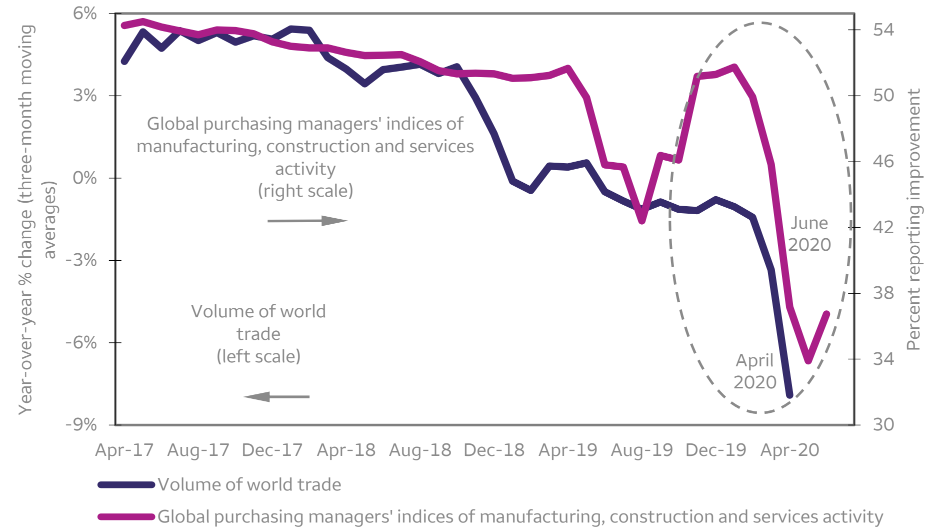
Europe

- Unlike the U.S. and China, Europe's climb out from a deep recession has come from decelerating decline rather than from a return to economic growth. The region's export-intensive economy has been particularly vulnerable to double-digit decreases in world trade rivalling those during the global financial crisis more than a decade ago. The U.K., Italy, and Spain have been among the hardest-hit by the pandemic's economic fallout, joining France as vulnerable to double-digit declines in gross domestic product (GDP) this year. Conditions in the European Union (EU) should brighten into 2021—if the region can avoid disruptions from Britain's EU departure and from the threat of second-wave coronavirus infections.

Asia

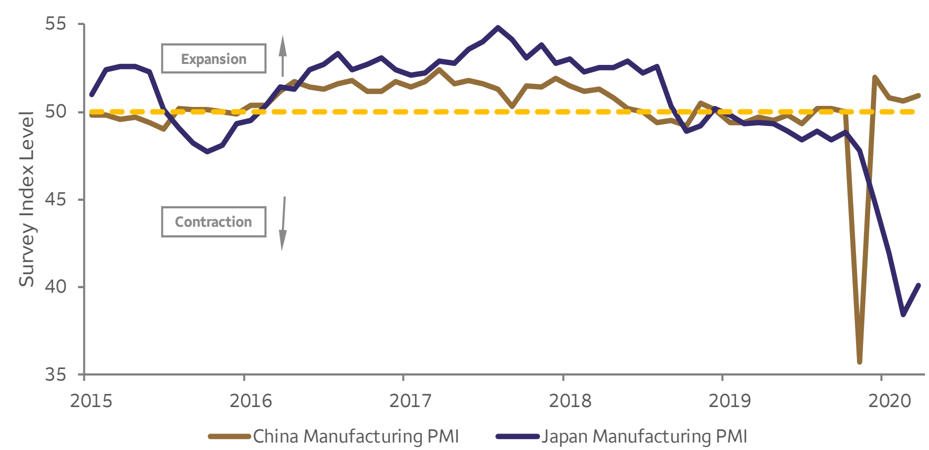
- We expect world-beating growth in Asia, historically the global economy's star performer. The region has been among the most successful in containing the pandemic's economic damage. China's early recovery likely will lead the way, supporting regional growth directly and indirectly. Low interest rates engineered by emerging-market central banks will help support local credit-sensitive industries. Lower interest rates also could boost local-currency revenues among commodity producers if, as expected, they help to weaken emerging-market currencies against the dollar. Japan's export-oriented economy should benefit from any world-trade recovery. Limited scope for added economic stimulus, along with demographic and other structural weaknesses, are expected to hold Japanese growth to a moderate pace.

A deep dive in the global economy sends world trade reeling (world trade versus global economic activity)



Sources: IHS Markit, and Wells Fargo Investment Institute, July 6, 2020; Netherlands Bureau for Economic Policy Analysis, May 2020.

Manufacturing PMIs rebound in the second quarter



Sources: Bloomberg, and Wells Fargo Investment Institute, June 30, 2020. PMI=Purchasing Managers' Index. A reading above 50 indicates expansion, below 50 indicates contraction.

Stock Market Review and Strategy

Equities rebounded across the board in the second quarter

U.S. equities:

- U.S. large caps rebounded in the second quarter (+20.5%). The S&P 500 Consumer Discretionary, Information Technology, and Energy Index led the quarter with gains of 32.9%, 30.5%, and 30.5%, respectively. Information Technology was aided by the accelerated transition to a virtual business environment, primarily in the areas of cloud-based services, artificial intelligence, and contactless payment systems. Consumer Discretionary benefited from consumers transitioning away from consumer-staple goods and into discretionary products. The S&P 500 Utilities was the weakest (+2.7%) for the quarter as optimism over future economic growth reduced demand for the sector's defensive characteristics.
- The Russell Midcap and Russell 2000 indices also posted positive returns for the quarter (24.6% and 25.4%), respectively.

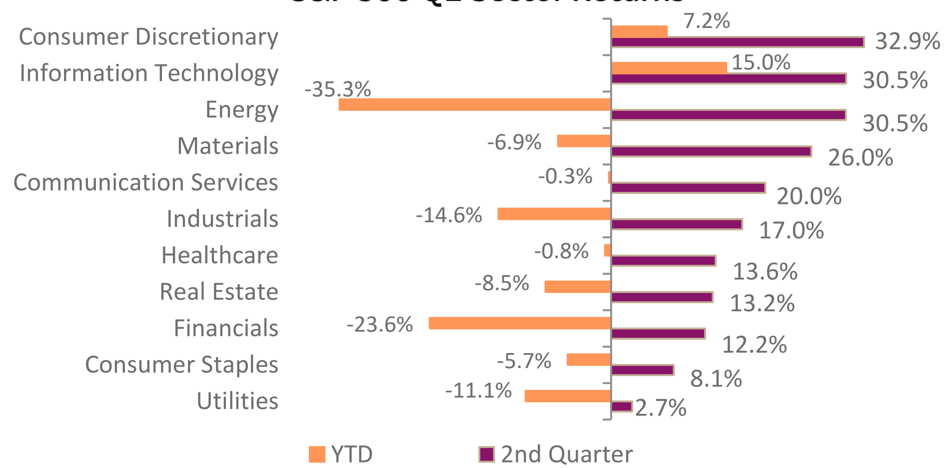
International equities:

- Developed market (DM) and emerging market (EM) equities underperformed U.S. stocks. U.S.-dollar-denominated DM equities returned 15.1%, while U.S.-dollar denominated EM equities gained 18.2% for the quarter. Dollar-denominated equities outperformed their local-currency counterparts for the quarter as the U.S. dollar depreciated against major DM and EM currencies.

Equity Market Total Returns Period Ending June 30, 2020**

Equity Indexes	QTD	YTD	1 Year	3 Year*	5 Year*
Global Market	19.4%	-6.0%	2.6%	6.7%	7.0%
Large Cap	20.5%	-3.1%	7.5%	10.7%	10.7%
Large Cap Growth	27.8%	9.8%	23.3%	19.0%	15.9%
Large Cap Value	14.3%	-16.3%	-8.8%	1.8%	4.6%
Mid Cap	24.6%	-9.1%	-2.2%	5.8%	6.8%
Small Cap	25.4%	-13.0%	-6.6%	2.0%	4.3%
Developed ex-U.S. (USD)	15.1%	-11.1%	-4.7%	1.3%	2.5%
Developed Small Cap (USD)	20.0%	-12.9%	-3.2%	0.9%	4.2%
Emerging Markets (USD)	18.2%	-9.7%	-3.0%	2.3%	3.2%
Frontier Markets (USD)	14.8%	-15.7%	-11.0%	-1.5%	0.2%

S&P 500 Q2 Sector Returns



Sources: Bloomberg, and Wells Fargo Investment Institute, June 30, 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

Fixed income returned positive across the board for the second quarter

U.S. market:

- Treasury-yield volatility continued to decrease after some rough months earlier this year; the 10-year Treasury yield fell from 1.91% on January 2 to 0.65% in June. This decline helped to fuel an 8.7% YTD Treasury gain. Residential mortgage-backed securities (RMBS) and agency securities returned 3.5% and 5.1% YTD
- Credit-focused sectors gained this quarter, recovering from the March coronavirus-fueled market turmoil. Investors continued their return to risk assets, resulting in strong second quarter investment-grade (IG) and high yield (HY) corporate bond returns (+9.0% and 10.2%, respectively). Year to date, IG corporates returned 5.0%, while HY corporates gained by -3.8%.

Developed markets:

- Unhedged DM bonds returned 2.4% for the quarter and hedged bonds returned a positive 1.1%. Australian and New Zealand markets outperformed, buoyed by currency gains. Continued optimism over Europe's COVID-19 led to eurozone issues performing well. Only Japanese Government Bonds and U.K. Gilts underperformed U.S. Treasury securities.

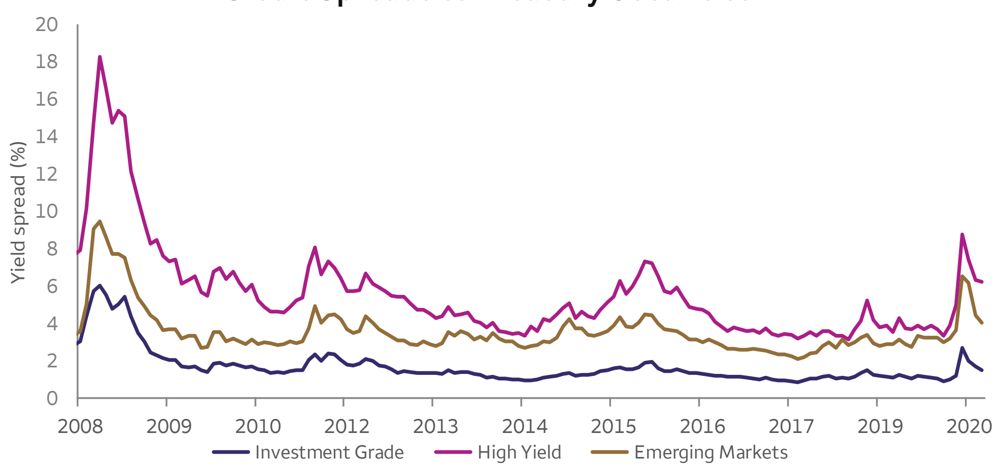
Emerging markets:

- EM bonds extended their gains this quarter from March's selloff, but U.S.-dollar-denominated sovereign credit (+11.2% last quarter, -1.9% YTD) continued to outstrip local currency returns in dollar terms (+9.4% QTD, -8.0% YTD). Sovereign credit gains were broad-based, but for local currency bonds, regional COVID-19 responses were clear differentiators of returns, with Asian countries leading, and Latin America and Russia conspicuous underperformers.

Fixed Income Market Total Returns Period Ending June 30, 2020**

Fixed Income Indexes	QTD	YTD	1 Year	3 Year*	5 Year*
Global Multiverse	3.7%	2.5%	3.8%	3.7%	3.7%
U.S. Inv Grade Taxable	2.9%	6.1%	8.7%	5.3%	2.9%
U.S. Treasury Bills	0.0%	0.5%	1.5%	1.7%	0.0%
U.S. Short-Term Taxable	0.9%	2.7%	4.0%	2.8%	0.9%
U.S. Interm-Term Taxable	3.7%	6.5%	8.6%	5.1%	3.7%
U.S Long-Term Taxable	6.2%	12.8%	18.9%	10.4%	6.2%
U.S. Treasury	0.5%	8.7%	10.4%	5.6%	0.5%
U.S. Corporate	9.0%	5.0%	9.5%	6.3%	9.0%
U.S. Municipal	2.7%	2.1%	4.4%	4.2%	2.7%
U.S. TIPS	4.2%	6.0%	8.3%	5.0%	4.2%
U.S. High Yield	10.2%	-3.8%	0.0%	3.3%	10.2%
Developed ex. U.S. (unhedged)	2.4%	1.2%	1.1%	2.9%	2.4%
Emerging Market (USD)	11.2%	-1.9%	1.5%	3.3%	11.2%

Credit Spreads to Treasury Securities



Sources: Barclays, Bloomberg, and Wells Fargo Investment Institute, June 30, 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

MLPs surged in the second quarter

Master limited partnerships (MLPs):

- MLPs had a massive rebound of 50.2% for the quarter following the March lows but ended the month down 7.9%. The oil-price bounce hit a ceiling and the equity rally faded as concerns over a spike in coronavirus cases clouded the market outlook.

Commodities:

- *Agriculture:* Agriculture commodities have underperformed other commodities as crop reports suggest a potential record output in 2020. In general, elevated supply for most agriculture commodities and demand uncertainties should limit upside potential.
- *Energy:* Energy commodities rose 9.8% in the second quarter as increases in oil and refined-energy products offset the natural-gas price decline. Oil prices rebounded further from April's historic lows, but the rally has moderated as investors have shown concerns over rising U.S. coronavirus cases. Natural-gas prices fell by 5.3% in June as seasonal demand waned and storage filled.
- *Metals:* Precious metals rebounded to the upside with gold being the clear winner. Gold prices had risen due to the perceived "safe-haven" demand as worries had grown over weakening economic growth and the spreading coronavirus. Base-metal prices continued to gain for the second quarter, led by copper as pandemic issues drove slowing production in Chile.

Real Asset Total Returns** **Period ending June 30, 2020**

REIT/Commodity Indices	QTD	YTD	1 Year	3 Year*	5 Year*
Public Real Estate	10.3%	-20.9%	-15.5%	-0.7%	2.2%
U.S. REITs	13.2%	-13.3%	-6.5%	3.5%	6.6%
International REITs	8.8%	-21.2%	-15.4%	-0.3%	1.3%
S&P GSCI Commodity	10.5%	-36.3%	-33.9%	-8.7%	-12.5%
Bloomberg Commodity	5.1%	-19.4%	-17.4%	-6.1%	-7.7%
RICI Commodity	9.6%	-25.6%	-22.9%	-5.6%	-7.7%
Global Infrastructure	13.9%	-19.4%	-14.8%	-0.9%	2.6%
MLPs	50.2%	-35.7%	-41.4%	-16.8%	-12.9%

Crude Oil versus Gold

Sources: Barclays, Bloomberg, and Wells Fargo Investment Institute, June 30, 2020. REITs=real estate investment trusts. *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.

Alternatives Review and Strategy

Hedge funds mostly positive second-quarter returns

Relative Value:

- Gains were experienced across residential and commercial mortgage-backed securities (RMBS and CMBS), asset-backed securities (ABS), and collateralized loan obligations (CLOs). CLOs again generated outsized gains.

Macro:

- Trend Following strategies' returns remained subdued as muted trends in fixed-income and currency markets hindered performance. Discretionary managers' long Emerging Market credit exposure drove June returns, along with long equity exposure (the latter to a lesser extent).

Event Driven:

- Merger Arbitrage strategies had a quiet month as merger spreads were range-bound. Distressed and Activist strategies generated gains as broader credit and equity markets rebounded from the first quarter's extreme sell-off.

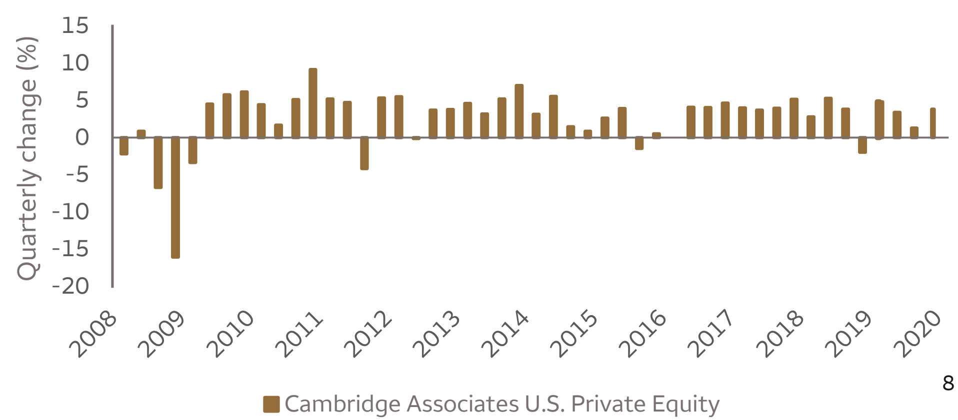
Equity Hedge:

- Equity Hedge managers with long-biased portfolios and an overweight to the Information Technology (IT) sector outperformed more diversified strategies with lower-net exposure.

Alternatives Total Returns   Period Ending June 30, 2020**

Alternative Indexes	QTD	YTD	1 Year	3 Year*	5 Year*
Global Hedge Funds	9.0%	-3.5%	-0.6%	2.1%	2.3%
Relative Value	6.5%	-4.1%	-2.3%	1.6%	2.4%
Arbitrage	7.7%	-5.4%	-3.9%	2.1%	3.0%
Long/Short Credit	10.3%	-2.0%	-0.2%	3.2%	3.9%
Struct Credit/Asset Backed	6.1%	-6.2%	-3.5%	2.1%	3.1%
Macro	0.5%	-1.1%	0.4%	1.3%	0.7%
Systematic	-2.4%	-2.9%	-1.6%	0.6%	-0.6%
Discretionary	5.0%	2.6%	4.2%	2.2%	1.2%
Event Driven	9.6%	-6.8%	-5.0%	0.5%	1.9%
Activist	18.2%	-14.0%	-8.6%	-3.0%	0.2%
Distressed Credit	6.9%	-5.6%	-7.3%	-0.5%	1.3%
Merger Arbitrage	5.0%	-6.5%	-3.2%	1.3%	2.3%
Equity Hedge	13.6%	-2.9%	1.1%	3.1%	3.2%
Directional Equity	14.8%	-1.9%	2.3%	2.3%	2.5%
Equity Market Neutral	2.2%	-1.3%	-0.4%	1.3%	1.8%

Private Capital Index Returns



Sources: Morningstar, Cambridge Associates, and Wells Fargo Investment Institute, June 30, 2020. Cambridge data through December 31, 2019.
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Disclosures

Asset Class Risk Information

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. **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. **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.

Stocks offer long-term growth potential but may fluctuate more and provide less current income than other investments. An investment in the stock market should be made with an understanding of the risks associated with common stocks, including market fluctuations. 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. 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.

Mortgage-backed and asset-backed securities are subject to prepayment risk. Changes in prepayments may significantly affect yield, average life and expected maturity of the portfolio. Commercial Mortgage Backed Securities (CMBS) are a type of mortgage-backed security backed by commercial mortgages rather than residential real estate. CMBS tend to be more complex and volatile than residential mortgage-backed securities due to the unique nature of the underlying property assets.

Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes. Municipal bonds are subject to credit risk and potentially the Alternative Minimum Tax (AMT). Quality varies widely depending on the specific issuer. Municipal securities are also subject to 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.

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.

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.

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.

Disclosures

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. **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. 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, government regulation, the performance of the overall economy, interest rates, and consumer confidence. The **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

Broad-based Indices are unmanaged and not available for direct investment.

Equities (Slide 2)
Dow Jones Industrial Average is an unweighted index of 30 "blue-chip" industrial U.S. stocks.
NASDAQ Composite measures the market value of all domestic and foreign common stocks, representing a wide array of more than 5,000 companies.
S&P 500 is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the US stock market.
Russell 1000 measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 90% of the total market capitalization of the Russell 3000 Index.
Russell 1000 Growth measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.
Russell 1000 Value measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.
Russell MidCap measures the performance of the 800 smallest companies in the Russell 1000 Index.
Russell MidCap Growth measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values.
Russell MidCap Value measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values.
Russell 2000 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.
Russell 2000 Growth measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.
Russell 2000 Value measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.
Russell 3000 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.
MSCI EAFE (U.S Dollar) 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.
MSCI EM (U.S. Dollar) is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

Fixed Income (Slide 2)
Bloomberg Barclays U.S. Aggregate is a broad-based measure of the investment grade, US dollar-denominated, fixed-rate taxable bond market.
Bloomberg Barclays U.S. Treasury Bill includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.
Bloomberg Barclays U.S Interm-Term Taxable is composed of the Barclays U.S. Government/Credit Index and the Barclays U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 5-7 years.
Bloomberg Barclays U.S Interm Gov/Credit Taxable is the intermediate component of the Barclays U.S. Government/Credit Index which is generally representative of government and investment grade corporate debt securities.
Bloomberg Barclays U.S Gov/Credit Taxable is a market-weighted index generally representative of intermediate and long-term government and investment grade corporate debt securities having maturities of greater than one year.
Bloomberg Barclays U.S. Municipal is an unmanaged index composed of long-term tax-exempt bonds with a minimum credit rating of Baa.
Bloomberg Barclays U.S. High Yield covers the universe of fixed-rate, noninvestment-grade debt.
JP Morgan Developed Market (Unhedged) in USD is a representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.
JP Morgan Emerging Market (U.S. Dollar) 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.

Real Assets & Hedge Funds (Slide 2)
HFRI Global Hedge Fund is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage. The strategies are asset weighted based on the distribution of assets in the hedge fund industry.
FTSE/EPRA NAREIT Developed Markets is designed to track the performance of listed real-estate companies and REITs in developed countries worldwide.
Bloomberg Commodities is comprised of 23 exchange-traded futures on physical commodities weighted to account for economic significance and market liquidity.

Index definitions

Economic Indices (Slides 3-4)
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, China, and Japan Manufacturing PMIs** 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 5)
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. **Russell 1000® Index** measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 90% 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.

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.

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.

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.

Index definitions (continued)

S&P 500 Communication Services Index (Comm Svc): The S&P 500® Communication Services Index comprises those companies included in the S&P 500 that are classified as members of the GICS® communication services sector.

S&P 500 Consumer Discretionary Index (Cons Disc): The S&P 500® Consumer Discretionary Index comprises those companies included in the S&P 500 that are classified as members of the GICS® consumer discretionary sector.

S&P 500 Consumer Staples Index (Cons Stap): The S&P 500® Consumer Staples Index comprises those companies included in the S&P 500 that are classified as members of the GICS® consumer staples sector.

S&P 500 Energy Index: The S&P 500® Energy Index comprises those companies included in the S&P 500 that are classified as members of the GICS® energy sector.

S&P 500 Financials Index (Fncls): The S&P 500® Financials Index comprises those companies included in the S&P 500 that are classified as members of the GICS® financials sector.

S&P 500 Health Care Index (HC): The S&P 500® Health Care Index comprises those companies included in the S&P 500 that are classified as members of the GICS® health care sector.

S&P 500 Industrials Index (Indust): The S&P 500® Industrials Index comprises those companies included in the S&P 500 that are classified as members of the GICS® industrials sector.

S&P 500 Information Technology Index (IT): The S&P 500® Information Technology Index comprises those companies included in the S&P 500 that are classified as members of the GICS® information technology sector.

S&P 500 Materials Index (Matrls): The S&P 500® Materials Index comprises those companies included in the S&P 500 that are classified as members of the GICS® materials sector.

S&P 500 Utilities Index (Utils): The S&P 500® Utilities Index comprises those companies included in the S&P 500 that are classified as members of the GICS® utilities sector.

S&P 500 Real Estate Index: The S&P 500® Real Estate Index comprises those companies included in the S&P 500 that are classified as members of the GICS® real estate sector.

Index definitions (continued)

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.

Fixed Income (Slide 6)

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. 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.

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: **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.

Index definitions (continued)

***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 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.

Real Assets (Slide 7)

***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 comprised of 23 exchange-traded futures on physical commodities weighted to account for economic significance and market liquidity.

***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.

***MLPs:* Alerian MLP Index** is the leading gauge of energy infrastructure Master Limited Partnerships (MLPs). The capped, float-adjusted, capitalization-weighted index, whose constituents earn the majority of their cash flow from midstream activities involving energy commodities, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis (AMZX).

Alternative Assets (Slide 8)

Unlike most asset class indices, HFR Index returns reflect deduction for fees. Because the HFR indices are calculated based on information that is voluntarily provided actual returns may be lower than those reported. 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.

***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.

Index definitions (continued)

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.

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.

Index definitions (continued)

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.

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 **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 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 and 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.

General disclosures