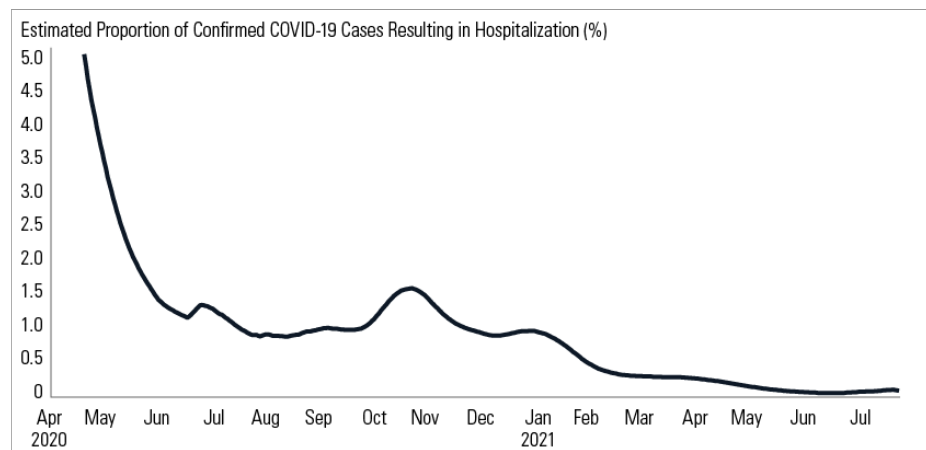


## Perspectives from GSAM Strategic Advisory Solutions

## Chart of the Week: A Flattening Curve



Source: Our World in Data and Goldman Sachs Asset Management



## COVID-19

Delta variant concerns remain top of mind, but we do not expect a significant economic impact in the US or Europe – economies with abundant vaccine supply and substantial reopening progress. Growth sensitivity has lessened relative to earlier waves as widespread vaccine distribution seems to have broken the link between infections, hospitalizations, and fatalities.

## MARKET SUMMARY

**GLOBAL EQUITIES:** Stock markets rose last week as economic data proved resilient to Delta variant concerns. In the US, strong earnings and potential for continued policy support propelled the S&P 500 to record highs, ending up 0.75%. Value equities, which are generally more sensitive to the recovery, continued to outperform with US large cap value stocks now up 264bps more than large cap growth this year. European equities, which also have a high beta to global growth, advanced last week. The STOXX Europe 600 and FTSE 100 ended up 1.33% and 1.72%, respectively.

**COMMODITIES:** Oil prices held steady last week as markets looked through near-term supply and demand concerns to a more constructive longer-term outlook. Even as the IEA downgraded demand forecasts and producers discussed supply increases, Brent and WTI crude finished the week at \$70.59 per barrel and \$68.44 per barrel, respectively.

## ECONOMIC SUMMARY

**GROWTH:** According to preliminary estimates, UK GDP increased by 4.8% QoQ in Q2, in line with expectations. Relative to the pre-pandemic level from 2019 Q4, the shortfall in quarterly GDP stood at 4.4% in Q2. While monthly GDP growth accelerated between May and June, the data confirmed that sequential GDP growth is past its peak.

**JOBS:** Initial jobless claims in the US declined by 12k to 375k, consistent with consensus expectations, for the week ended August 7. The 4-week moving average rose to 396k, still slightly higher than the pre-pandemic average of ~350k per week.

**FIXED INCOME:** US Treasury yields struggled to find direction last week as economic data releases were mixed. While the US CPI print hinted that inflation may have peaked, producer prices saw the largest increase in more than a decade. The 10-Year Treasury yield ended 1bp higher for the week, at 1.30%. Meanwhile, longer-term UK Gilt yields were lifted by a robust preliminary Q2 GDP print, suggesting that the Bank of England may start tightening policy earlier.

**FX:** The US dollar fell -0.26% against a basket of peers last week. Despite US economic data showing improving labor market and firmer prices, which may lead the Fed to start tapering next year, declining consumer sentiment weighed on the greenback. The euro rallied 0.32%, ending at \$1.1795. The pound weakened against the US dollar despite strong UK growth, falling to \$1.3868.

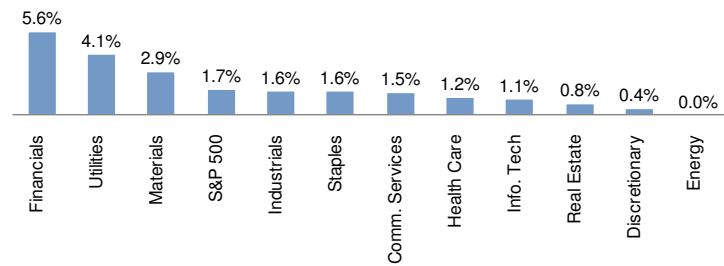
**PRODUCTION:** Euro zone factory output fell by 0.3% MoM in June, largely due to Germany's unexpected decline in output, estimated at -1.0% MoM. This was partly offset by production increases in France and Italy, which recorded a 0.4% and 1.0% rise, respectively.

**INFLATION:** US July core CPI rose by 0.33% MoM and the YoY rate declined to 4.3%, slightly softer than expected. Pandemic-related pressures in used car and travel prices eased, but there were some signs of wage-price pass-through emerging in categories such as restaurants and recreation services.

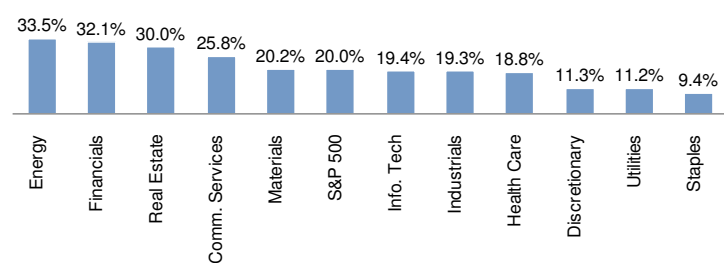
## Market Watch

## S&amp;P 500 Index Sector Returns

Month-to-Date, As of 08/13/21

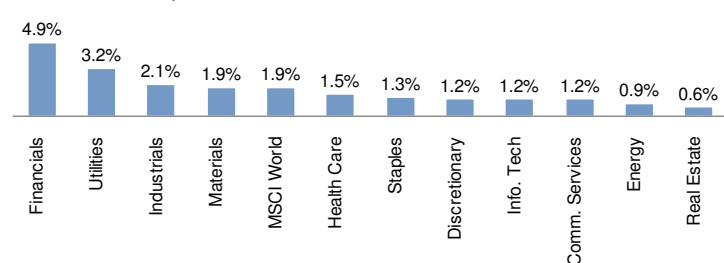


Year-to-Date, As of 08/13/21

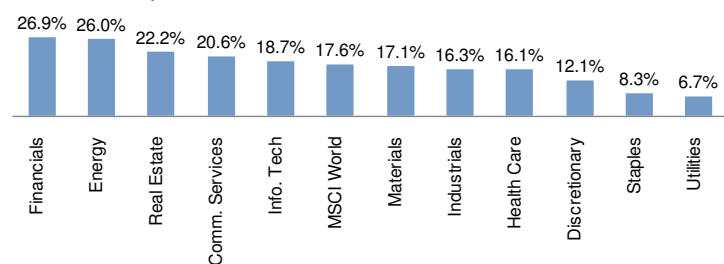


## MSCI World Index Sector Returns

Month-to-Date, As of 08/13/21



Year-to-Date, As of 08/13/21



## Economic Watch

Monday, Aug 16	Tuesday, Aug 17	Wednesday, Aug 18	Thursday, Aug 19	Friday, Aug 20	Critical Future Events
	US Retail Sales (Cons: -0.2%, Prior: 0.6%) US IP (Cons: 0.5%, Prior: 0.4%) Euro area GDP QoQ (Cons: 2.0%, Prior: 2.0%)	UK Core CPI YoY (Cons: 2.1%, Prior: 2.3%)	Philly Fed Bus. Survey (Cons: 24.0 Prior: 21.9) Initial Jobless Claims (Cons: 375k, Prior: 385k)		ECB Meeting – Sep 9 FOMC Meeting – Sep 21-22

## Style Performance

US Equity Size &amp; Style Returns

Month-to-Date			(as of 08/13/21)	Year-to-Date		
Value	Core	Growth		Value	Core	Growth
2.03%	1.56%	1.14%	Large	20.37%	19.18%	18.04%
1.75%	1.28%	0.49%	Medium	22.29%	18.65%	12.13%
0.87%	-0.09%	-1.01%	Small	23.23%	13.19%	3.95%

MSCI World Size &amp; Style Returns

Month-to-Date			(as of 08/13/21)	Year-to-Date		
Value	Core	Growth		Value	Core	Growth
2.27%	1.90%	1.56%	Large	17.80%	17.55%	17.02%
2.48%	1.82%	1.11%	Medium	19.37%	15.76%	11.38%
1.63%	1.00%	0.37%	Small	19.12%	15.23%	11.14%

US Fixed Income Maturity and Quality Returns

Month-to-Date			(as of 08/13/21)	Year-to-Date		
Short	Intermed.	Long		Short	Intermed.	Long
-0.17%	-0.24%	-0.51%	Government	-0.26%	-0.61%	-5.05%
-0.20%	-0.31%	-0.79%	Corporate	0.26%	-0.05%	-0.99%
-0.21%	-0.34%	-0.49%	High Yield	4.43%	3.43%	6.58%

European Fixed Income Maturity and Quality Returns

Month-to-Date			(as of 08/13/21)	Year-to-Date		
Short	Intermed.	Long		Short	Intermed.	Long
-0.02%	0.07%	0.72%	Government	-0.28%	0.05%	-2.41%
-0.05%	-0.06%	0.12%	Corporate	0.36%	1.06%	0.33%
0.25%			High Yield	3.76%		

Source: Bloomberg and GSAM. For style performance, Large, Mid, and Small for US Equity refer to the Russell 1000, Russell Midcap, and Russell 2000 indices, respectively. Value refers to companies with lower price-to-book ratios and lower expected growth values, and Growth refers to higher price-to-book ratios and higher forecasted growth values. For US Fixed Income, Government, Corporate, and High Yield refer to the Barclays Treasury, Barclays Corporate Credit, and Barclays High Yield indices, respectively. Short, Intermediate, and Long refer to the Short, Intermediate, and Long segments of their respective curves. For European Fixed Income, Government, Corporate, and High Yield refer to the Barclays Euro Treasury Index, the Barclays Euro Corporate Index, and the Barclays Euro High Yield Index, respectively. Quality returns refers to the credit quality of asset classes ranging from Government, highest quality, to High Yield, lowest quality. Since August 24, 2016, the Barclays indices are co-branded "Bloomberg Barclays indices". Please see end disclosures for footnotes. **Past performance does not guarantee future results, which may vary.**

## Weekly Market Recap

Index Returns				
	1 week	MTD	QTD	YTD
<b>Equities</b>				
S&P 500	0.75%	1.72%	4.13%	20.02%
DJ Industrial Average	0.94%	1.74%	3.10%	17.31%
Russell 2000	-1.06%	-0.09%	-3.70%	13.19%
Russell Midcap	0.52%	1.28%	2.06%	18.65%
STOXX Europe 50 (€)	1.34%	3.45%	4.23%	21.51%
STOXX Europe 600 (€)†	1.33%	3.17%	5.29%	21.25%
MSCI EAFE Small Cap	1.34%	1.91%	3.65%	13.29%
FTSE 100 (£)	1.72%	3.15%	3.22%	14.48%
DAX (€)	1.37%	2.79%	2.87%	16.46%
FTSE MIB (€)	2.51%	5.08%	6.58%	22.34%
CAC 40 (€)†	1.16%	4.29%	5.98%	26.03%
SWISS MKT (CHF)	2.37%	2.87%	4.37%	19.67%
TOPIX (¥)	1.40%	2.91%	0.67%	9.62%
Hang Seng (HKD)	0.82%	1.67%	-8.07%	-1.25%
MSCI World	0.93%	1.90%	3.75%	17.58%
MSCI China Free†	0.43%	0.56%	-13.43%	-12.90%
MSCI EAFE	1.56%	2.63%	3.41%	12.90%
MSCI EM	-0.84%	0.33%	-6.36%	0.74%
MSCI Brazil (BRL)	-1.12%	-0.00%	-3.69%	3.01%
MSCI India (INR)	1.36%	3.94%	5.04%	20.26%
MSCI Russia (RUB)	1.86%	2.76%	2.58%	21.79%
<b>Fixed Income</b>				
Barclays Aggregate	0.11%	-0.31%	0.80%	-0.82%
Barclays Euro Aggregate	0.39%	-0.34%	1.21%	-4.15%
Barclays US High Yield	-0.16%	-0.35%	0.03%	3.65%
Barclays Euro High Yield (€)	-0.01%	0.25%	0.65%	3.76%
Barclays Muni Aggregate	-0.18%	-0.31%	0.52%	1.58%
Barclays TIPS	0.29%	-0.41%	2.39%	4.00%
JPM EMBI Gbl. Divers.	-0.22%	-0.06%	0.36%	-0.31%
JPM GBI-EM Gbl. Divers.	0.21%	-0.73%	-1.16%	-4.49%
<b>Other</b>				
DJ US Real Estate	-0.04%	0.32%	5.04%	26.34%
FTSE EPRA/NAREIT Dvlpd. Ex-US	0.66%	1.46%	3.93%	13.70%
S&P GSCI	0.66%	-2.79%	-1.26%	29.75%
Alerian MLP *	4.13%	0.31%	-6.02%	38.94%
US Dollar Index	-0.26%	0.48%	0.14%	2.96%
VIX	-4.33%	-15.30%	-2.40%	-32.09%

Commodities				
	08/13/21	07/31/21	06/30/21	12/31/20
WTI Oil (\$/barrel)	\$68.44	\$73.95	\$73.47	\$48.52
Brent Oil (\$/barrel)	\$70.59	\$76.33	\$75.13	\$51.80
Gold (\$/oz)	\$1778.20	\$1817.20	\$1775.80	\$1899.60
Natural Gas (\$/mmBtu)	\$3.86	\$3.91	\$3.65	\$2.54

Currencies				
	08/13/21	07/31/21	06/30/21	12/31/20
Euro (\$/€)	1.1795	1.1856	1.1847	1.2226
Pound (\$/£)	1.3868	1.3892	1.3803	1.3653
Japanese Yen (¥/\$)	109.60	109.76	111.09	103.29
Swiss Franc (CHF/€)	1.0795	1.0745	1.0972	1.0821
Chinese Yuan Renminbi (CNY/\$)	6.4740	6.4575	6.4645	6.5140

Rates & Spreads				
	08/13/21	07/31/21	06/30/21	12/31/20
<b>Rates</b>				
Fed Funds Target	0.25%	0.25%	0.25%	0.25%
Secured Overnight Financing Rate *	0.05%	0.05%	0.05%	0.07%
ECB Depo Rate	-0.50%	-0.50%	-0.40%	-0.40%
3-Month US Dollar Libor	0.12%	0.12%	0.15%	0.24%
US Treasuries 2-Year	0.22%	0.19%	0.25%	0.12%
US Treasuries 10-Year	1.30%	1.24%	1.44%	0.91%
US Treasury 2-10 Slope	1.08%	1.05%	1.19%	0.79%
German Bunds 2-Year	-0.74%	-0.76%	-0.66%	-0.70%
German Bunds 10-Year	-0.47%	-0.46%	-0.21%	-0.57%
Japanese Govt Bonds 10-Year	0.03%	0.02%	0.06%	0.02%
UK Gilts 10-Year	0.57%	0.56%	0.72%	0.20%
Swiss Govt Bonds 10-Year	-0.39%	-0.37%	-0.22%	-0.55%
French OATs 10-Year	-0.13%	-0.10%	0.13%	-0.34%
Italian BTPs 10-Year	0.55%	0.62%	0.82%	0.54%
Spanish Bonos 10-Year	0.22%	0.27%	0.41%	0.05%
<b>Spreads</b>				
HY Corp. Spread (bps)	306	293	267	359
Bank Loan Spread (bps) *	453	453	443	486
IG Corp. Spread (bps)	88	85	80	96
EMD Spread (bps)	363	363	353	359

## Global Equity Valuations

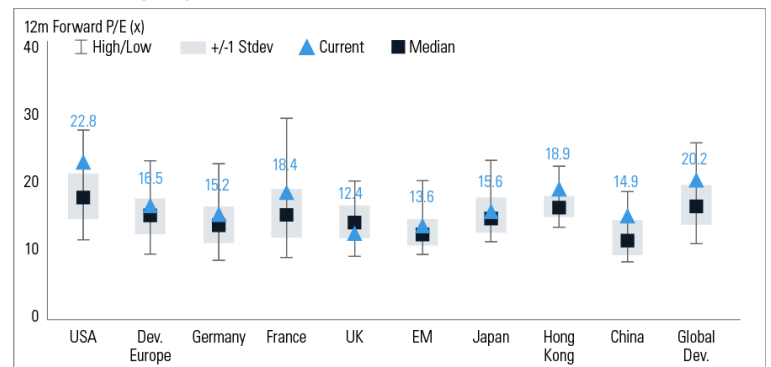


Chart Source: GSAM and Bloomberg as of close of trading on July 31, 2021. Chart data shows next 12 month P/E ratio from August 2011 to the current period. 12m forward P/E(x) refers to price-to-earnings ratio for the next 12 months, which is a valuation measure applied to respective broad equity indices. Please see additional disclosures at the end of this presentation.

## Weekly Market Recap Notes:

All data is denominated in USD unless noted otherwise.

† Data is released weekly, as of Monday.

If data displays an asterisk:

\* Data is lagged by 1 day.

\*\* Data is lagged by 2 days.

Source: GSAM. **Past performance does not guarantee future results, which may vary. Please see end disclosures for footnotes.**

## Important Information

### Page 1 Chart of the Week Notes:

As of August 12, 2021. Chart shows the average hospitalization rate divided by the average new case rate lagged by 14 days, for Canada, France, Germany, Italy, Israel, Portugal, Spain, the US, and the UK.

### Page 1 Market Summary Notes:

"Bps" refers to basis points, measured by one-tenth of a percent (0.01%). "Fed" refers to the Federal Reserve. "GDP" refers to gross domestic product. "CPI" refers to the consumer price index. "WTI" stands for West Texas Intermediate crude oil, a common US benchmark for oil prices. "Brent" is a global benchmark for oil prices worldwide. "IEA" refers to the International Energy Agency.

### Page 1 Economic Summary Notes:

"MoM" refers to month-over-month. "YoY" refers to year-over-year. "QoQ" refers to quarter-over-quarter. "GDP" refers to gross domestic product. "CPI" refers to the consumer price index.

### Page 2 Style Performance Notes:

For US Fixed Income, Government, Corporate, and High Yield refer to the Barclays US Treasury, the Barclays US Corporate Credit, and the Barclays US High Yield indices, respectively. For European Fixed Income, Government, Corporate, and High Yield refer to the Barclays Euro Treasury Index, the Barclays Euro Corporate Index, and the Barclays Euro High Yield Index, respectively. Short, Intermediate, and Long refer to the Short, Intermediate, and Long segments of their respective curves. Quality returns refers to the credit quality of asset classes ranging from Government, highest quality, to High Yield, lowest quality. Since August 24, 2016, the Barclays indices are co-branded "Bloomberg Barclays indices".

### Page 2 Economic Watch Notes:

"US IP" refers to US Industrial Production, month over month. "GDP QoQ" refers to gross domestic product, quarter over quarter. "UK Core CPI YoY" refers to UK core consumer price index, year over year. "Philly Fed Bus. Survey" refers to the Philadelphia Federal Reserve business outlook survey.

### Page 3 Global Equity Valuations Chart Notes:

Earnings are forward looking Bloomberg estimates of operating earnings per share over the next four quarters, which may exclude one-time extraordinary gains and losses. Please see index disclosures for additional definitions on the indices.

USA is represented by the MSCI USA Index, Dev. Europe is represented by MSCI Europe Index, Germany is represented by MSCI Germany Index, France is represented by MSCI France Index, UK is represented by MSCI UK Index, EM is represented by MSCI EM Index, Japan is represented by MSCI Japan Index, Hong Kong is represented by MSCI Hong Kong Index, China is represented by MSCI China Index, Global Dev. is represented by MSCI World Index.

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Equity securities are more volatile than bonds and subject to greater risks. Small and mid-sized company stocks involve greater risks than those customarily associated with larger companies. Bonds are subject to interest rate, price and credit risks. Prices tend to be inversely affected by changes in interest rates. Unlike stocks and bonds, U.S. Treasuries securities are guaranteed as to payment of principal and interest if held to maturity. High yield fixed income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment grade fixed income securities. Income from municipal securities is generally free from federal taxes and state taxes for residents of the issuing state. While the interest income is tax-free, capital gains, if any, will be subject to taxes. Income for some investors may be subject to the federal Alternative Minimum Tax (AMT). Investments in foreign securities entail special risks such as currency, political, economic, and market risks. These risks are heightened in emerging markets. 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.

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## Index Benchmarks

### Equities

The **S&P 500 Index** is the Standard & Poor's 500 Composite Stock Prices Index of 500 stocks, an unmanaged index of common stock prices. The **Dow Jones Industrial Average Index** is a price-weighted average of 30 actively traded blue-chip stocks. The **Russell 1000 Index** is a market-cap weighted index that measures the performance of the 1,000 largest companies in the Russell 3000 Index. The **Russell Mid Cap Index** measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 30% of the total market capitalization of the Russell 1000 Index. The **Russell 2000 Index** is an unmanaged index of common stock prices that measures the performance of the 2000 smallest companies in the Russell 3000 Index. The **MSCI EAFE Index** is a free-float weighted equity index, which covers developed markets countries in Europe, Australasia, Israel, and the Far East. The **MSCI Emerging Markets (EM) Index** is a free float-adjusted market capitalization index that captures large and mid-cap representation across five EM countries in Latin America. The **MSCI Frontier Markets Index** is a free float-adjusted market capitalization index that captures large and mid-cap representation across 22 frontier markets countries. The **STOXX Europe 600 Index** is derived from the STOXX Europe Total Market Index (TMI) and is a subset of the STOXX Global 1800 Index. With a fixed number of 600 components, the STOXX Europe 600 Index represents large, mid and small capitalization companies across 18 countries of the European region. The **Japan TOPIX Index** is a capitalization-weighted index of the largest companies and corporations that are found in the First Section of the Tokyo Stock Exchange. The **German DAX** is a capitalization-weighted blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.

The **Shanghai Composite** is a market capitalization weighted index of all A-shares and B-shares that trade on the Shanghai Stock Exchange. **Euro Stoxx 50 Index**, Europe's leading Blue-chip index for the Eurozone, provides a Blue-chip representation of supersector leaders in the Eurozone. The **Financial Times Stock Exchange (FTSE) 100 Index** is an index of the 100 companies listed on the London Stock Exchange with the highest market capitalization. **FTSE MIB Index** is composed of 40 Italian equities and seeks to replicate the broad sector weights of the Italian stock market. **CAC 40 Index** is composed of the 40 largest equities listed in France. **SWISS Market Index** is composed of the largest and most liquid stocks traded on the Geneva, Zurich, and Basel Stock Exchanges. **Hang Seng Composite Index** covers about 95% of the total market capitalization of companies listed on the Main Board of the Hong Kong Stock Exchange. **MSCI World Index**, is a broad global equity index that represents large and mid-cap equity performance across 23 developed markets countries. It covers approximately 85% of the free float-adjusted market capitalization in each country. **CSI 300 Index** covers 300 stocks traded in the Shanghai and Shenzhen stock exchanges. **MSCI China Index** captures large and mid cap representation across China H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). With 461 constituents, the index covers about 85% of this China equity universe. Currently, the index also includes Large Cap A shares represented at 5% of their free float adjusted market capitalization. **MSCI Brazil Index** covers about 85% of the total market capitalization of the Brazilian equity universe. **MSCI India Index** covers about 85% of the total market capitalization of the Indian equity universe. **MSCI Russia Index** covers about 85% of the free float-adjusted market capitalization in Russia.

The **CBOE Volatility Index (VIX)** is a leading measure of market expectations of near-term volatility conveyed by S&P 500 Index option prices.

#### Fixed Income

The **Bloomberg Barclays US Aggregate Bond Index** represents an unmanaged diversified portfolio of fixed-income securities, including US Treasuries, investment-grade corporate bonds, and mortgage-backed and asset-backed securities. The **Bloomberg Barclays US High-Yield Index** covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. The **Bloomberg Barclays US Aggregate Municipal Bond Index** is an unmanaged broad-based total return index composed of approximately 8,000 investment grade, fixed rate, and tax-exempt issues, with a remaining maturity of at least one year. The **Bloomberg Barclays US High Yield Municipal Bond Index** (formerly the Lehman Brothers High Yield Municipal Bond Index) is an unmanaged index made up of bonds that are noninvestment grade, unrated, or rated below Ba1 by Moody's Investors Service with a remaining maturity of at least one year. The **J.P. Morgan Emerging Markets Bond Index-Global (EMBI Global Index)** is an unmanaged market capitalization Index that tracks total returns for USD-denominated debt instruments issued by emerging market sovereign and quasi-sovereign issuers. The **J.P. Morgan Government Bond Index-Emerging Markets Global Diversified (GBI-EM Global Index)** is a market capitalization Index that tracks the performance of local currency debt issued by emerging market governments. **Bloomberg Barclays Euro Aggregate Index** refers to the Bloomberg Barclays EuroAgg Index. The index measures the market of investment grade, euro-denominated, fixed-rate bond market, including treasuries, government-related, corporate and securitized issues. Inclusion is based on currency denomination of a bond and not country of risk of the issuer. **Bloomberg Barclays Euro High Yield Index** refers to the Bloomberg Barclays Euro High Yield 3% Issuer Capped Index. The index measures the of non-investment grade, fixed-rate corporate bonds denominated in USD. Inclusion is based on the currency of issue, and not the domicile of the issuer. The index excludes emerging market debt.

#### Other

The **S&P 500 Utilities Sector** comprises those companies included in the S&P 500 that are classified as members of the GICS® utilities sector. The **FTSE EPRA/NAREIT Developed ex US Index** is a subset of the FTSE EPRA/NAREIT Developed Index and is designed to track the performance of listed real estate companies and REITS.

The **S&P GSCI Commodity Index** is a composite index of commodity sector returns, representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. 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. The **USD Index** tracks the value of the USD relative to 6 major foreign currencies. It is not possible to invest directly in an unmanaged index. The **Housing Starts** refers to US Housing Starts.

#### Commodities

**WTI Oil** refers to West Texas Intermediate (WTI) Crude Oil, a land-locked crude, delivered via pipeline into Cushing, Oklahoma. **Brent Oil** refers to Brent crude oil, a waterborne crude oil produced in the North Sea. **OPEC** refers to the Organization of the Petroleum Exporting Countries. The **Gold Spot** price is quoted as US Dollars per Troy Ounce.

#### Currencies

**Euro (\$/€)** refers to the Euro's exchange rate with the Dollar. **Pound (\$/£)** refers to the British Pound's exchange rate with the US Dollar. **Japanese Yen (¥/\$)** refers to the US Dollar's exchange rate with the Japanese Yen. **Swiss Franc (CHF/€)** refers the Euro's exchange rate with the Swiss Franc. **Chinese Yuan Renminbi (CNY/\$)** refers to the US Dollar's exchange rate with the Chinese Yuan Renminbi.

#### Rates

The **federal funds rate** is the interest rate at which depository institutions lend balances at the Federal Reserve to other depository institutions overnight. The **LIBOR** is the USD-denominated London Interbank Offered Rate, and is the average of interest rates estimated by each of the leading banks in London that it would be charged were it to borrow from other banks. The **2-Year Treasury** is a US Treasury debt obligation that has a maturity of 2 years. The **10-Year Treasury** is a US Treasury debt obligation that has a maturity of 10 years. The **2-10 Treasury Slope** is the difference between the 10-Year Treasury and the 2-Year Treasury. The **Core-Periphery spreads** refers to the spread between sovereign debt yields of core European countries and peripheral European countries. The **German Bunds 2-Year** is a German debt obligation that has a maturity of 2 years. The **German Bunds 10-Year** is a German debt obligation that has a maturity of 10 years. The Japanese Govt Bonds 2-Year is a Japanese debt obligation that has a maturity of 2 years. The **Japanese Govt Bonds 10-Year** is a Japanese debt obligation that has a maturity of 10 years. The **UK Gilts 10-Year** is a UK debt obligation that has a maturity of 10 years. The **Swiss Govt Bonds 10-Year** is a Swiss debt obligation that has a maturity of 10 years. The **French OATs 10-Year** is a French debt obligation that has a maturity of 10 years. The **Italian BTPs 10-Year** is a Italian debt obligation that has a maturity of 10 years. The **Spanish Bonos 10-Year** is a Spanish debt obligation that has a maturity of 10 years.

#### Spreads

**High Yield (HY) Corporate Spread** is the Barclays US Corporate High Yield Average Option Adjusted Spread (OAS), which measures the spread between the US Treasury yield curve and the Barclays US Corporate High Yield curve. The **Bank Loan Spread** is the daily discount margin (3-year life) of the Credit Suisse Leveraged Loan Index, which is designed to mirror the investable universe of the USD-denominated leveraged loan market. The **Investment Grade (IG) Corporate Spread** is the Barclays US Aggregate Corporate Average OAS, which measures the spread between the US Treasury yield curve and the Barclays US Corporate Average curve. The **EMD Spread** is the J.P. Morgan EMBI Global Diversified Sovereign Spread, which measures the spread between the US Treasury yield curve and the J.P. Morgan EMBI Global Diversified Sovereign curve.

It is not possible to invest in an unmanaged index.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

