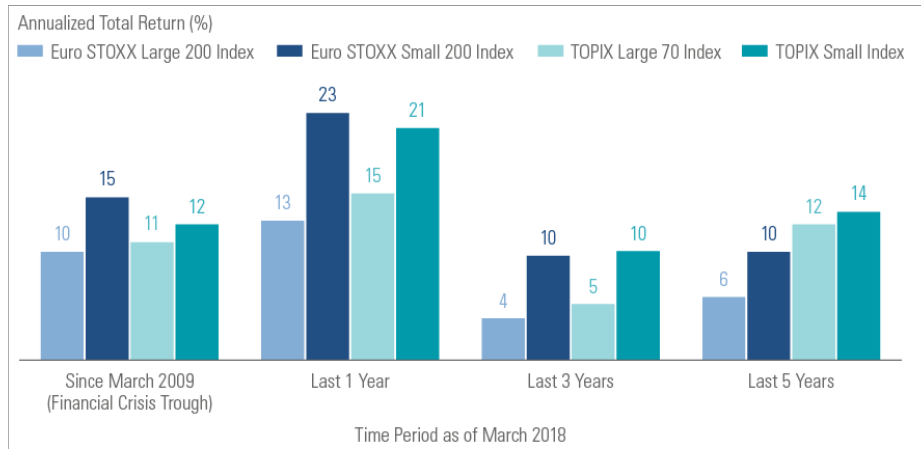


## Perspectives from GSAM Strategic Advisory Solutions

## Chart of the Week: Small is Beautiful



Source: Bloomberg GSAM.



## EQUITIES

We view synchronized global economic recovery as supportive of risk assets – more relative risk could potentially also mean more relative return. The Chart of the Week focuses on this dynamic, ex-US. Over various periods, smaller capitalization equities have outperformed their larger counterparts. In our view, small is beautiful and may be a worthy contributor to strategically designed portfolios.

## MARKET SUMMARY

**GLOBAL EQUITY:** US stocks remained flat this week, as corporate earnings season kicked into full gear with initially mixed reports. Over half of S&P 500 companies posted their results. Meanwhile, major Asian markets rose on optimism that North and South Korean leaders committed to a peace agreement. In Europe, the STOXX 600 index posted gains for its fifth consecutive week, up 0.9%, as pressure from recent Euro strength subsided.

**COMMODITIES:** Despite the strong dollar, oil prices rose as the political risk of US sanctions on Iran heightened. President Trump is expected to decide by mid-May whether to restore the sanctions, which may slash crude exports from the third-largest producer in the Organization of the Petroleum Exporting Countries (OPEC). Brent and WTI crude prices rose to \$74.64 and \$68.10 per barrel, respectively.

## ECONOMIC SUMMARY

**MONETARY POLICY:** The ECB and Bank of Japan (BoJ) kept monetary policy unchanged. ECB President Draghi acknowledged softer Q1 economic data, but noted that growth remains above-trend. The BoJ omitted any mention of a timeline for its 2% inflation target to be reached, which investors appeared to interpret as a sign of further stimulus in the future.

**SENTIMENT:** April German IFO business survey slipped to 102.1, edging lower than consensus expectations of 102.8. This is the indicator's fifth consecutive decline, firming the view that businesses have seen some deterioration in their current situations.

**FIXED INCOME:** Last week, resilient US economic indicators saw the 2-Year Treasury closing at 2.48%, after hitting its highest level since September 2008. The 10-Year Treasury yield also edged up, to 2.96%, regaining February's high. Interest rate management, in our view, should continue to remain top of mind as the Federal Reserve normalizes monetary policy, and rates across the curve potentially head north. In European rate markets, yields on 10-Year German Bunds and UK Gilts dropped 2 basis points (bps) and 3 bps, respectively.

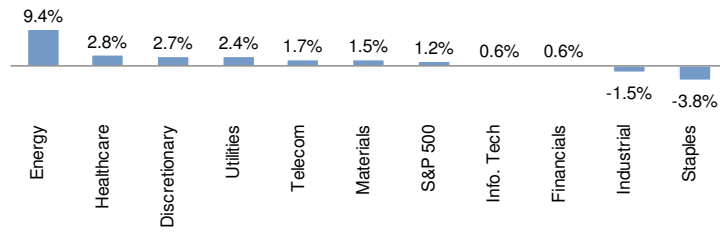
**CURRENCY:** Pound Sterling was under pressure, ended at 1.38 against the US Dollar, following the release of disappointing macro data in the UK. The Euro also weakened, by 1.3% to 1.21 against the USD, ending the week at a three-month low after the European Central Bank (ECB) left rates unchanged and struck a more cautious tone. The Japanese Yen was largely unchanged.

**GROWTH:** US real Gross Domestic Product (GDP) grew at an annual rate of 2.3% in the first quarter, faster than the market expected but slower than the prior quarter's reading of 2.9%. Decelerating increases in consumer spending, at +1.1% which represented the smallest increase in almost five years, offset robust business investment and a rise in US exports. UK Q1 real GDP growth printed at +0.1%, below consensus, and at its slowest pace in over 5 years. The construction component was the main detractor from GDP, while service industries were the largest contributor.

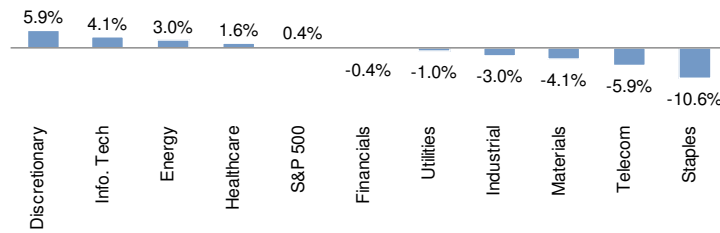
## Market Watch

### S&P 500 Index Sector Returns

Month-to-Date, As of 04/27/18

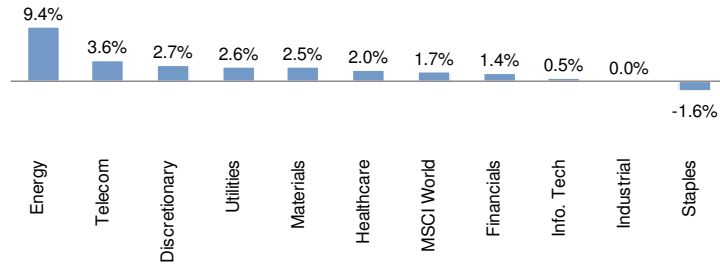


Year-to-Date, As of 04/27/18

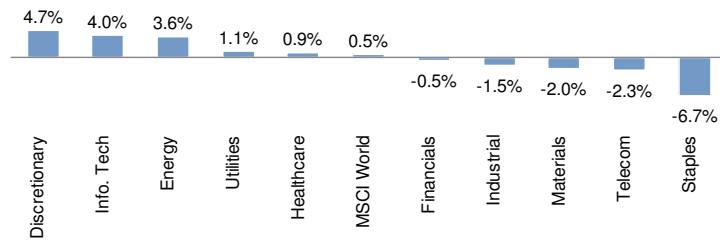


### MSCI World Index Sector Returns

Month-to-Date, As of 04/27/18



Year-to-Date, As of 04/27/18



## Economic Watch

Monday, April 30	Tuesday, May 1	Wednesday, May 2	Thursday, May 3	Friday, May 4	Critical Future Events
Eurozone M3 Supply (Cons: 4.1%, Prior: 4.2%)	ISM Manuf. (Cons: 58.5, Prior: 59.3)	Euroarea GDP (Cons: 0.4%, Prior: 0.6%)		Nonfarm Payroll (Cons: 185k, Prior: 103k) US Unemployment (Cons: 4.0%, Prior: 4.1%) China Manuf. PMI (Cons: 51.3, Prior: 51.5)	Bank of England Meeting - May 10 Colombia Presidential Elections - May 27 G7 Summit - June 8

### Style Performance

US Equity Size & Style Returns

Month-to-Date (as of 04/27/18)			Year-to-Date		
Value	Core	Growth	Value	Core	Growth
1.28%*	1.14%*	1.01%*	-1.59%	0.44%	2.44%
1.38%*	0.67%*	-0.21%*	-1.16%	0.20%	1.96%
2.69%*	1.80%*	1.02%*	-0.02%	1.72%	3.34%

MSCI World Size & Style Returns

Month-to-Date (as of 04/27/18)			Year-to-Date		
Value	Core	Growth	Value	Core	Growth
1.83%	1.64%	1.46%	-1.62%	0.22%	2.17%
2.34%	1.39%	0.75%	0.25%	0.65%	0.93%
2.06%	1.45%	0.87%	-0.35%	0.89%	2.12%

US Fixed Income Maturity and Quality Returns

Month-to-Date (as of 04/27/18)			Year-to-Date		
Short	Intermed.	Long	Short	Intermed.	Long
-0.39%*	-0.64%*	-2.46%*	-0.78%	-1.38%	-5.67%
-0.12%*	-0.51%*	-2.13%*	-0.92%	-2.00%	-6.09%
0.69%*	0.61%*	1.15%*	1.10%	-0.16%	-1.40%

European Fixed Income Maturity and Quality Returns

Month-to-Date (as of 04/27/18)			Year-to-Date		
Short	Intermed.	Long	Short	Intermed.	Long
-0.08%*	-0.17%*	-0.63%*	-0.04%	0.49%	2.90%
0.03%*	-0.02%*	-0.11%*	0.07%	-0.43%	-1.02%
	0.58%*			0.07%	

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	-0.00%	1.18%	1.18%	0.27%
DJ Industrial Average	-0.62%	0.93%	0.93%	-1.21%
Russell 2000	-0.49%	1.80%	1.80%	1.72%
Russell Midcap	-0.08%	0.67%	0.67%	0.20%
STOXX Europe 50 (€)	0.98%	5.23%	5.23%	1.23%
STOXX Europe 600 (€)	0.93%	4.27%	4.27%	-0.06%
MSCI EAFE Small Cap	-0.80%	1.43%	1.43%	1.67%
FTSE 100 (£)	1.92%	6.73%	6.73%	-0.98%
DAX (€)	0.32%	4.00%	4.00%	-2.61%
FTSE MIB (€)	0.78%	7.15%	7.15%	10.20%
CAC 40 (€)	1.43%	6.40%	6.40%	3.66%
SWISS MKT (CHF)	0.67%	2.64%	2.64%	-3.05%
TOPIX (¥)	1.49%	3.55%	3.55%	-1.28%
Hang Seng Composite (HKD)	-0.42%	0.77%	0.77%	1.69%
MSCI World	-0.12%	1.60%	1.60%	0.30%
MSCI China Free	0.36%	-0.46%	-0.46%	-2.08%
MSCI EAFE	-0.25%	2.22%	2.22%	0.65%
MSCI EM	-1.01%	-1.15%	-1.15%	0.25%
MSCI Brazil (BRL)	1.18%	1.12%	1.12%	13.84%
MSCI India (INR)	1.42%	6.18%	6.18%	0.96%
MSCI Russia (RUB)	3.28%	0.05%	0.05%	9.35%
<b>Fixed Income</b>				
Barclays Aggregate	0.01%	-0.84%	-0.84%	-2.29%
Barclays Euro Aggregate	-1.29%	-1.83%	-1.83%	1.28%
Barclays US High Yield	-0.39%	0.63%	0.63%	-0.23%
Barclays Euro High Yield (€)	-0.05%	0.58%	0.58%	0.07%
Barclays Muni Aggregate	-0.35%	-0.45%	-0.45%	-1.56%
Barclays TIPS	0.09%	-0.30%	-0.30%	-1.15%
JPM EMBI Gbl. Divers.	-0.75%	-1.36%	-1.36%	-3.08%
JPM GBI-EM Gbl. Divers.	-1.35%	-2.52%	-2.52%	1.81%
<b>Other</b>				
DJ US Real Estate	2.63%	0.57%	0.57%	-5.37%
FTSE EPRA/NAREIT Dvlpd. Ex-US *	-0.41%	1.04%	1.04%	0.51%
S&P GSCI	-0.09%	4.45%	4.45%	6.73%
Alerian MLP *	0.53%	7.61%	7.61%	-4.35%
US Dollar Index	1.47%	1.83%	1.83%	-0.54%
VIX	-8.71%	-22.83%	-22.83%	39.58%

Commodities				
	04/27/18	03/31/18	01/31/18	12/31/17
WTI Oil (\$/barrel)	\$68.10	\$64.94	\$64.73	\$60.42
Brent Oil (\$/barrel)	\$74.64	\$70.27	\$69.05	\$66.87
Gold (\$/oz)	\$1329.70	\$1327.30	\$1343.10	\$1314.00
Natural Gas (\$/mmBtu)	\$2.77	\$2.73	\$3.00	\$2.95

Currencies				
	04/27/18	03/31/18	01/31/18	12/31/17
Euro (\$/€)	1.2122	1.2290	1.2411	1.2022
Pound (\$/£)	1.3788	1.4015	1.4176	1.3524
Japanese Yen (¥/\$)	109.03	106.42	109.10	112.60
Swiss Franc (CHF/€)	1.1976	1.1763	1.1558	1.1704
Chinese Yuan Renminbi (CNY/\$)	6.3260	6.2840	6.3040	6.5100

Rates & Spreads				
	04/27/18	03/31/18	01/31/18	12/31/17
<b>Rates</b>				
Fed Funds Target *	1.75%	1.75%	1.50%	1.50%
3-Month US Dollar Libor	2.36%	2.31%	1.78%	1.69%
ECB Depo Rate	-0.40%	-0.40%	-0.40%	-0.30%
US Treasuries 2-Year	2.48%	2.27%	2.14%	1.89%
US Treasuries 10-Year	2.96%	2.74%	2.72%	2.41%
US Treasury 2-10 Slope	0.48%	0.47%	0.57%	0.52%
German Bunds 2-Year	-0.58%	-0.60%	-0.53%	-0.63%
German Bunds 10-Year	0.57%	0.50%	0.70%	0.43%
Japanese Govt Bonds 10-Year	0.06%	0.05%	0.09%	0.05%
UK Gilts 10-Year	1.45%	1.35%	1.51%	1.19%
Swiss Govt Bonds 10-Year	0.09%	0.03%	0.11%	-0.15%
French OATs 10-Year	0.80%	0.72%	0.97%	0.79%
Italian BTPs 10-Year	1.74%	1.79%	2.03%	2.02%
Spanish Bonos 10-Year	1.26%	1.16%	1.43%	1.57%
<b>Spreads</b>				
TED Spread (bps)	56	61	33	32
HY Corp. Spread (bps)	333	354	319	343
Bank Loan Spread (bps) *	381	396	391	416
IG Corp. Spread (bps)	108	109	86	93
EMD Spread (bps)	306	299	262	287

## Global Equity Valuations

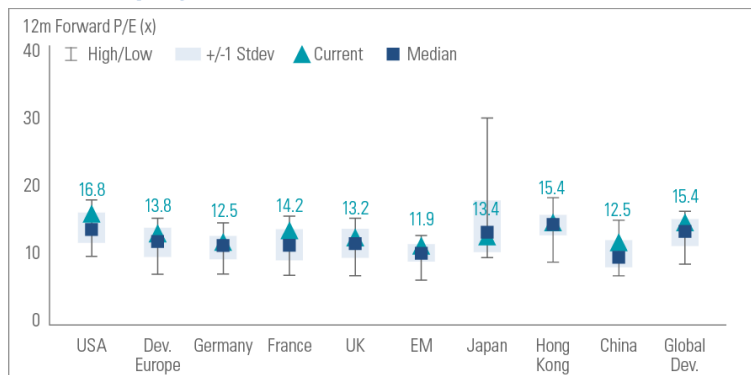


Chart Source: GSAM and Bloomberg as of close of trading on April 6, 2018. Chart data shows next 12 month P/E ratio from April 2008 to the current period. 12m forward P/E(x) refers to price-to-earnings ratio for the next 12 months, which is a valuation measure applied to respective broad equity indices. 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 Notes:

'Trough' refers to the lowest point of the S&P 500 Index since the Financial Crisis. The STOXX Europe Large 200 Index is a fixed component index designed to provide a representation of large capitalization companies in Europe. The STOXX Europe Small 200 Index is a fixed component index designed to provide a representation of small capitalization companies in Europe. The TOPIX Large 70 Index is a capitalization-weighted index designed to measure the performance of the next 70 most liquid and highly capitalized shares, after the 30 most liquid stocks in the Core 30, that are members of the TOPIX Index. The TOPIX Small Index is a capitalization-weighted index designed to measure the performance of the stocks listed on the First Section of the Tokyo Stock Exchange, excluding the TOPIX 500 stocks and non-eligible stocks. **Past performance does not guarantee future results, which may vary.**

### Page 1 Market Summary Notes:

"WTI crude oil" stands for West Texas Intermediate crude oil, a common US benchmark for oil prices. "Brent crude oil" is a common global benchmark for oil prices.

### Page 2 Style Performance Notes:

For US Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg Barclays US Treasury, the Bloomberg Barclays US Corporate Credit, and the Bloomberg Barclays US High Yield indices, respectively. For European Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg Barclays Euro Treasury Index, the Bloomberg Barclays Euro Corporate Index, and the Bloomberg 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:

"Eurozone M3 Supply" refers to the YoY change in the Eurozone's M3 Money Stock. "ISM Manuf." refers to the ISM Manufacturing Index. "Euro GDP" refers to the Euro Area's Gross Domestic Product. "Nonfarm Payroll" refers to US Nonfarm Payrolls. "US Unemployment" refers to the US Unemployment Rate. "China Manuf. PMI" refers to the official China Manufacturing PMI.

### 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. The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Such transactions are considered suitable only for investors who are experienced in transactions of that kind. Currency fluctuations will also affect the value of an investment.

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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 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 an 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. The **TED Spread** is the difference between the interest rates for three-month US Treasury contracts and the three-month Eurodollars contract as represented by the LIBOR.

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.

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