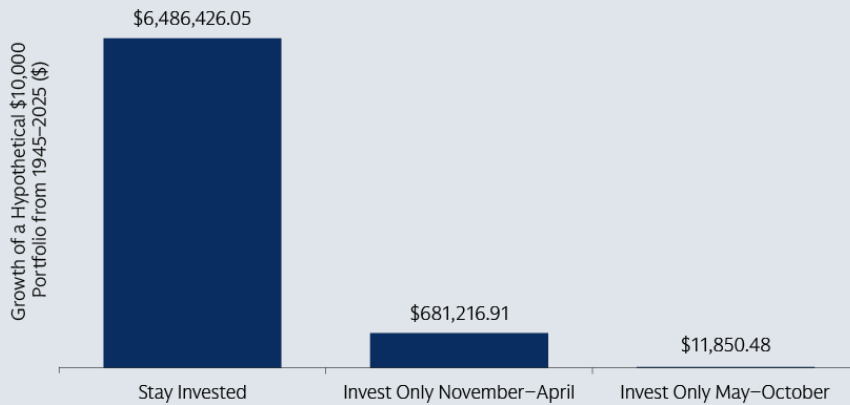


MARKET MONITOR

Chart Of The Week: Investing Through The Seasons



EQUITY

A hypothetical \$10,000 portfolio that stayed invested in the S&P 500 since 1945, even amidst periods of elevated market volatility and heightened geopolitical uncertainty, would have significantly outperformed one that invested only from November to April of every year and one that invested only from May to October. This dynamic underscores the value of sticking to the plan and the power of compounding, even on an intra-year basis.

Source: Bloomberg and Goldman Sachs Asset Management. As of January 6, 2024.

MARKET SUMMARY

GLOBAL EQUITIES: US equities fell last week amidst an unexpected decline in the US unemployment rate in December. The S&P 500 ultimately ended the week -1.91% as a rapid increase in yields following the strong labor market print put pressure on the US equity market. Elsewhere, the STOXX Europe 600 and FTSE 100 rose 0.67% and 0.32% , respectively, with the former rising as inflationary concerns continue to be managed in Europe.

COMMODITIES: Oil prices rose last week after the Biden administration announced additional sanctions on Russia before the transition to the Trump administration occurs on January 20. WTI and Brent crude ultimately ended the week at $\$76.57$ and $\$79.76$ /bbl, respectively. Meanwhile, gold prices rose to $\$2742.60$ /troy oz amid uncertainty surrounding the future policy path under the incoming Trump administration.

FIXED INCOME: US Treasury yields rose sharply last week following above consensus nonfarm payrolls potentially resulting in a reluctance by the Fed to cut interest rates as aggressively as previously believed. The 2-Year and 10-Year US Treasury yields ended the week at 4.40% and 4.77% , respectively, with the yield on the 10-Year reaching a 52-week high. Across the pond, the 10-Year UK Gilt yield and the 10-Year German Bund yield followed suit, ending the week higher at 4.84% and 2.60% , respectively.

FX: The US dollar strengthened against a basket of currencies last week as strong services activity and job openings further supported the notion of a healthy and growing US economy. Ultimately, the US dollar index ended the week up 0.60% . Meanwhile, the Chinese Yuan continued to weaken against the dollar last week despite strong activity data in December, ultimately ending the week at $\yen7.1979$.

ECONOMIC SUMMARY

LABOR: Labor data in the US came in broadly strong for December, closing out a year in which investors had been concerned of potential growth risks stemming from weakness in the labor market. Specifically, nonfarm payrolls rose 256k in December, well above consensus expectations for 164k. In another positive sign for the labor market, the unemployment rate fell by 1pp to 4.1% , below consensus expectations for 4.2% . Lastly, the JOLTS Job Openings report for November rose to 8.098M, above consensus expectations for 7.730M.

MONETARY POLICY: The FOMC meeting minutes indicated a potentially slower pace of policy rate cuts ahead as participants continued to balance upside risks to inflation and downside risks to growth in the US. Most participants noted that “disinflationary progress continued to be apparent,” though they should take a “careful” approach due to recent strength in inflation and economic activity. Our colleagues in GIR now expect two 25bp cuts in 2025 followed by a single 25bp cut in June 2026, ending at a terminal rate of $3.5\text{--}3.75\%$.

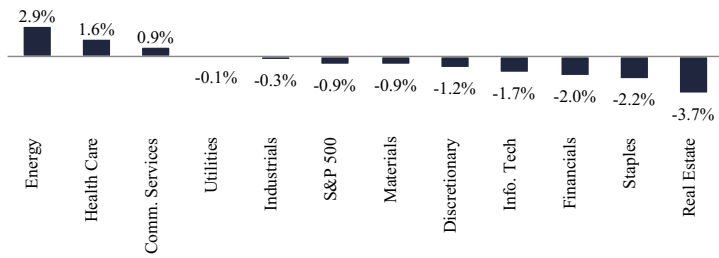
INFLATION: Euro Area headline and core CPI printed at 2.4% and 2.7% year-over-year respectively in December, both in line with consensus expectations. GIR continues to expect core inflation to reach its target sustainably by the end of 2025.

ACTIVITY: US services activity increased by more than consensus expected in December. Ultimately, the ISM Non-Manufacturing PMI rose from 51.5 to 54.1, versus consensus expectations for 53.5. In China, Caixin services PMI surprised to the upside at 52.2 in December, showing continued expansion at a faster pace than November.

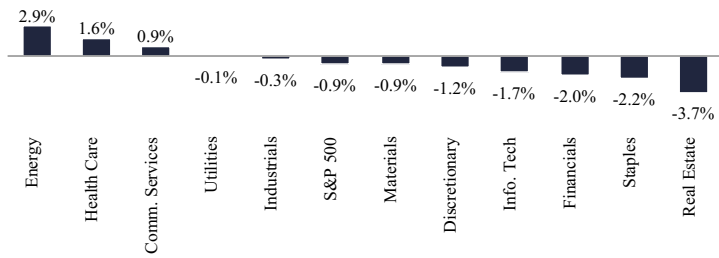
MARKET WATCH

S&P 500 INDEX SECTOR RETURNS

MONTH-TO-DATE, AS OF 01/10/25

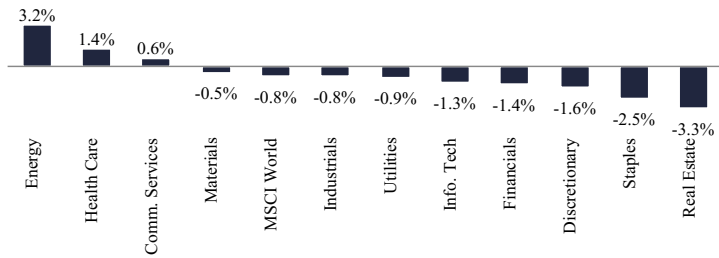


YEAR-TO-DATE, AS OF 01/10/25

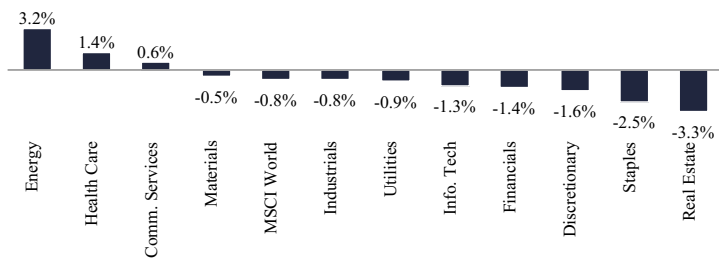


MSCI WORLD INDEX SECTOR RETURNS

MONTH-TO-DATE, AS OF 01/10/25



YEAR-TO-DATE, AS OF 01/10/25



ECONOMIC WATCH

Monday, January 13	Tuesday, January 14	Wednesday, January 15	Thursday, January 16	Friday, January 17	Critical Future Events
	US PPI MoM (Cons: 0.3%, Prior: 0.4%)	US CPI MoM (Cons: 0.3%, Prior: 0.3%) US Core CPI MoM (Cons: -0.1%, Prior: 0.3%)	US Retail Sales MoM (Cons: 0.5%, Prior: 0.7%) UK GDP MoM (Cons: n/a, Prior: -0.1%) China GDP 4Q 2024 YoY (Cons: 5.1%, Prior: 4.6%)	Euro Area CPI YoY (Cons: 2.4%, Prior: 2.4%)	BoJ Meeting – Jan 24 FOMC Meeting – Jan 29 ECB Meeting – Jan 30 BoE Meeting – Feb 6

Source: MSCI, Bloomberg, and Goldman Sachs Asset Management. 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 Bloomberg Treasury, Bloomberg Corporate Credit, and Bloomberg 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 Bloomberg Euro Treasury Index, the Bloomberg Euro Corporate Index, and the Bloomberg 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, 2021, the Barclays indices are branded "Bloomberg indices". Please see end disclosures for footnotes. **Past performance does not guarantee future results, which may vary.**

Style Performance

US EQUITY SIZE & STYLE RETURNS

Month-to-Date (as of 01/10/25)				Year-to-Date		
Value	Core	Growth		Value	Core	Growth
-0.77%	-0.78%	-0.79%	Large	-0.77%	-0.78%	-0.79%
-1.21%	-0.83%	0.26%	Medium	-1.21%	-0.83%	0.26%
-2.69%	-1.82%	-1.00%	Small	-2.69%	-1.82%	-1.00%

MSCI WORLD SIZE & STYLE RETURNS

Month-to-Date (as of 01/10/25)				Year-to-Date		
Value	Core	Growth		Value	Core	Growth
-0.90%	-0.72%	-0.57%	Large	-0.90%	-0.72%	-0.57%
-1.44%	-1.07%	-0.31%	Medium	-1.44%	-1.07%	-0.31%
-2.24%	-1.45%	-0.66%	Small	-2.24%	-1.45%	-0.66%

US FIXED INCOME MATURITY AND QUALITY RETURNS

Month-to-Date (as of 01/10/25)				Year-to-Date		
Short	Intermed.	Long		Short	Intermed.	Long
-0.30%	-0.51%	-2.31%	Government	-0.30%	-0.51%	-2.31%
-0.28%	-0.63%	-2.07%	Corporate	-0.28%	-0.63%	-2.07%
0.06%	0.03%	0.17%	High Yield	0.06%	0.03%	0.17%

EUROPEAN FIXED INCOME MATURITY AND QUALITY RETURNS

Month-to-Date (as of 01/10/25)				Year-to-Date		
Short	Intermed.	Long		Short	Intermed.	Long
-0.32%	-1.25%	-3.08%	Government	-0.32%	-1.25%	-3.08%
-0.25%	-1.04%	-2.09%	Corporate	-0.25%	-1.04%	-2.09%
-0.39%			High Yield	-0.39%		

WEEKLY MARKET RECAP

INDEX RETURNS				
	1 WEEK	MTD	QTD	YTD
EQUITIES				
S&P 500	-1.91%	-0.89%	-0.89%	-0.89%
DJ Industrial Average	-1.83%	-1.38%	-1.38%	-1.38%
Russell 2000	-3.49%	-1.82%	-1.82%	-1.82%
Russell Midcap	-2.04%	-0.83%	-0.83%	-0.83%
STOXX Europe 50 (€)	2.21%	1.75%	1.75%	1.75%
STOXX Europe 600 (€)†	0.67%	0.80%	0.80%	0.80%
MSCI EAFE Small Cap	-2.17%	-2.21%	-2.21%	-2.21%
FTSE 100 (£)	0.32%	0.96%	0.96%	0.96%
FTSE MIB (€)	2.82%	2.64%	2.64%	2.64%
CAC 40 (€)†	2.04%	0.76%	0.76%	0.76%
SWISS MKT (CHF)	1.44%	1.65%	1.65%	1.65%
TOPIX (¥)	-2.54%	-2.54%	-2.54%	-2.54%
Hang Seng (HKD)	-3.52%	-4.70%	-4.70%	-4.70%
MSCI World	-1.56%	-0.76%	-0.76%	-0.76%
MSCI China Free†	-4.06%	-5.79%	-5.79%	-5.79%
MSCI EAFE	-0.43%	-0.72%	-0.72%	-0.72%
MSCI EM	-1.49%	-1.62%	-1.62%	-1.62%
MSCI Brazil (BRL)	0.09%	-0.44%	-0.44%	-0.44%
MSCI India (INR)	-3.57%	-1.94%	-1.94%	-1.94%
FIXED INCOME				
Bloomberg Aggregate	-0.87%	-1.00%	-1.00%	-1.00%
Bloomberg Euro Aggregate	-1.16%	-2.28%	-2.28%	-2.28%
Bloomberg US High Yield	-0.28%	0.04%	0.04%	0.04%
Bloomberg Euro High Yield (€)	-0.42%	-0.39%	-0.39%	-0.39%
Bloomberg Muni Aggregate	-0.95%	-0.66%	-0.66%	-0.66%
Bloomberg TIPS	-0.30%	-0.48%	-0.48%	-0.48%
JPM EMBI Gbl. Divers.	-0.70%	-0.43%	-0.43%	-0.43%
JPM GBI-EM Gbl. Divers.	-0.40%	-0.39%	-0.39%	-0.39%
OTHER				
DJ US Real Estate	-4.19%	-3.76%	-3.76%	-3.76%
FTSE EPRA/NAREIT Dvlpd. Ex-US	-2.43%	-2.13%	-2.13%	-2.13%
S&P GSCI	3.58%	4.37%	4.37%	4.37%
Alerian MLP	0.67%	2.51%	2.51%	2.51%
US Dollar Index	0.60%	1.09%	1.09%	1.09%
VIX	21.14%	12.62%	12.62%	12.62%

COMMODITIES				
	01/10/25	12/31/24	09/30/24	12/31/23
WTI Oil (\$/barrel)	\$76.57	\$71.72	\$68.17	\$71.65
Brent Oil (\$/barrel)	\$79.76	\$74.64	\$71.77	\$77.04
Gold (\$/oz)	\$2742.60	\$2666.00	\$2681.30	\$2091.80
Natural Gas (\$/mmBtu)	\$3.99	\$3.63	\$2.92	\$2.51

CURRENCIES				
	01/10/25	12/31/24	09/30/24	12/31/23
Euro (\$/€)	1.0245	1.0354	1.1133	1.1041
Pound (\$/£)	1.2210	1.2510	1.3376	1.2746
Japanese Yen (¥/\$)	157.87	157.31	143.68	141.02
Swiss Franc (CHF/€)	0.9397	0.9401	0.9426	0.9289
Chinese Yuan Renminbi (CNY/\$)	7.1979	7.1874	7.0206	7.0842

RATES & SPREADS				
	01/10/25	12/31/24	09/30/24	12/31/23
RATES				
Secured Overnight Financing Rate *	4.30%	4.49%	4.96%	5.38%
US Treasuries 2-Year	4.40%	4.25%	3.65%	4.25%
ECB Depo Rate	4.00%	3.75%	3.50%	2.00%
US Treasuries 10-Year	4.77%	4.58%	3.80%	3.86%
US Treasury 2-10 Slope	0.38%	0.33%	0.15%	-0.39%
German Bunds 2-Year	2.28%	2.08%	2.07%	2.40%
German Bunds 10-Year	2.60%	2.37%	2.12%	2.02%
Japanese Govt Bonds 10-Year	1.20%	1.10%	0.86%	0.61%
UK Gilts 10-Year	4.84%	4.57%	4.00%	3.54%
Swiss Govt Bonds 10-Year	0.50%	0.33%	0.41%	0.70%
French OATs 10-Year	3.43%	3.19%	2.92%	2.56%
Italian BTPs 10-Year	3.77%	3.52%	3.45%	3.70%
Spanish Bonos 10-Year	3.26%	3.06%	2.93%	2.99%
SPREADS				
HY Corp. Spread (bps)	274	287	300	323
IG Corp. Spread (bps)	80	80	88	98
EMD Spread (bps)	378	384	420	438

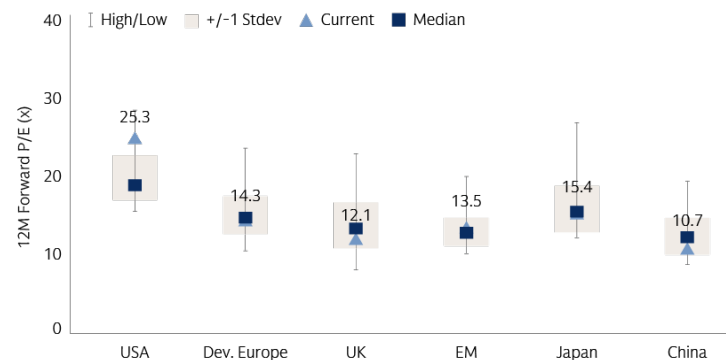
Global Equity Valuations


Chart Source: Goldman Sachs Asset Management and Bloomberg as of close of trading on December 31, 2024. Chart data shows next 12-month P/E ratio from January 2015 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: MSCI and Goldman Sachs Asset Management. **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: Source: Bloomberg and Goldman Sachs Asset Management as of January 6, 2025. Chart shows growth of three hypothetical \$10,000 portfolios from 1945-2025, one that stays invested for the entirety of each year throughout the period, one that invests only from November to April (the period of best performance) of each year, and one that invests only from May to October (the period of worst performance) of each year. The illustrative results are for informational purposes only and no representation is made that an investor will achieve similar results. The result will vary based on market conditions. **Past performance does not predict future returns and does not guarantee future results, which may vary.** For Illustrative Purposes Only.

Page 1 Market Summary Notes: "WTI" refers to West Texas Intermediate crude oil, a common US benchmark for oil prices. "Brent" refers to a global benchmark for oil prices worldwide. "Bbl" refers to barrel. "Oz" refers to ounce.

Page 1 Economic Summary Notes: "pp" refers to percentage point. "JOLTS" refers to Job Openings and Labor Turnover Survey. "FOMC" refers to Federal Open Market Committee. "GIR" refers to Goldman Sachs Global Investment Research. "bp" refers to basis point. "CPI" refers to Consumer Price Index. "ISM" refers to the Institute for Supply Management. "PMI" refers to Purchasing Managers' Index.

Page 2 Style Performance Notes: For US Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg US Treasury, the Bloomberg US Corporate Credit, and the Bloomberg US High Yield indices, respectively. For European Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg Euro Treasury Index, the Bloomberg Euro Corporate Index, and the Bloomberg 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: "PPI" refers to Producer Price Index. "MoM" refers to month-over-month. "CPI" refers to Consumer Price Index. "Core CPI" refers to Consumer Price Index, less food and energy. "GDP" refers to Gross Domestic Product. "YoY" refers to Year-over-Year. "BoJ" refers to Bank of Japan. "FOMC" refers to Federal Open Market Committee. "ECB" refers to European Central Bank. "BoE" refers to Bank of England.

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.

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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 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 24 Emerging Markets (EM) 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. **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. The **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. The **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. 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 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 US High-Yield Index** covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. The **Bloomberg 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 **J.P. Morgan Emerging Markets Bond Index (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 Euro Aggregate Index** refers to the Bloomberg 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 Euro High Yield Index** refers to the Bloomberg 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 **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. It is not possible to invest in an unmanaged index. **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. **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 **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 **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 Bloomberg US Corporate High Yield Average Option Adjusted Spread (OAS), which measures the spread between the US Treasury yield curve and the Bloomberg 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 Bloomberg US Aggregate Corporate Average OAS, which measures the spread between the US Treasury yield curve and the Bloomberg 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.

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