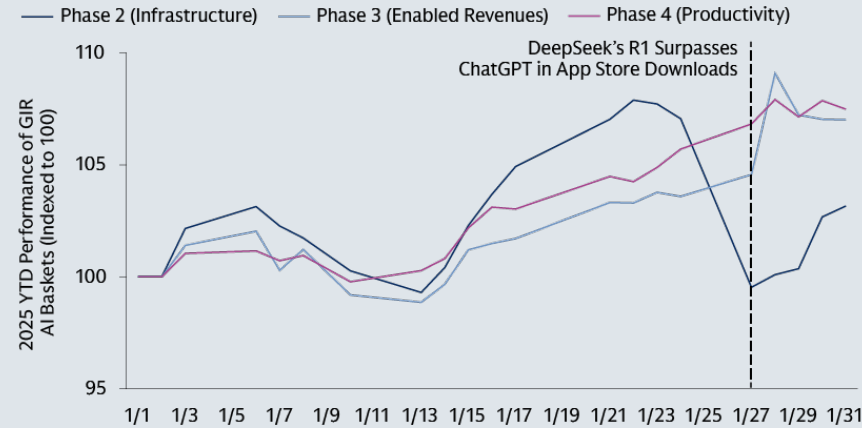


# MARKET MONITOR

## Chart Of The Week: AI Broadening



## ARTIFICIAL INTELLIGENCE

The recent rise in popularity of DeepSeek's AI model, R1, has fueled fresh skepticism around the scale of infrastructure investment necessary to reach widespread AI adoption. While GIR's Phase 2 of the AI trade—the Infrastructure phase—has seen increased volatility in recent weeks, we see momentum building in the latter, Enabled Revenues and Productivity, phases. This suggests that recent advances may increase investor optimism around the future of AI adoption.

Source: GS GIR and GS Asset Management. As of January 31, 2025.

## MARKET SUMMARY

**GLOBAL EQUITIES:** US equities ended last week lower following Chinese AI firm DeepSeek's rise to prominence, which came at odds with recent announcements of significant investment in AI infrastructure from both the Trump administration and the mega-cap tech space. The index ended the week down  $-0.99\%$  after posting its worst day since December 2024 on Monday. Elsewhere, the STOXX Europe 600 and FTSE 100 rose  $1.79\%$  and  $2.02\%$ , respectively, despite growth in the Euro Area coming in softer than expected in the fourth quarter.

**COMMODITIES:** Oil prices fell for the second consecutive week as ongoing policy uncertainty continued to raise questions around the future trajectory of oil production. WTI and Brent Crude ended the week at  $\$72.53$  and  $\$76.76$  / bbl, respectively. Meanwhile, gold prices rose to  $\$2835.00$  / troy oz last week, delivering the best month of performance in dollar terms since August 2011.

**FIXED INCOME:** US Treasury yields fell last week as the FOMC continued to pause on cutting its policy rate further during its January meeting. The 2-Year and 10-Year US Treasury yields ended the week at  $4.24\%$  and  $4.57\%$ , respectively, amid commentary from the central bank indicating that further inflation progress will remain a key focus in 2025. In Europe, the 10-Year German Bund yield followed suit, ending the week lower at  $2.46\%$  after the ECB cut its policy rate for the first time in 2025.

**FX:** The US dollar strengthened against a basket of currencies last week as the market continued to assess the potential implications of increased US tariffs on Canada and Mexico by the Trump administration. The US dollar index ended the week up  $0.79\%$ . Outside the US, the euro depreciated against the dollar, closing the week at  $\$1.0376$ .

## ECONOMIC SUMMARY

**MONETARY POLICY:** The FOMC left the target range for the federal funds unchanged at  $4.25\text{--}4.50\%$  at its January meeting, while updating its statement to note that the unemployment rate had "stabilized at a low level" and the labor market remained "solid." The FOMC also dropped a clause from its statement indicating that inflation had "made progress" toward the Fed's  $2\%$  target and continued to note that inflation "remains somewhat elevated." Elsewhere, the ECB cut its policy rate by 25bp to  $2.75\%$  and sent a steady message on the policy outlook. President Lagarde's language on growth was balanced and the tone on inflation remained confident. We believe the ECB is on track to cut at every meeting this year and potentially past the estimated neutral rate.

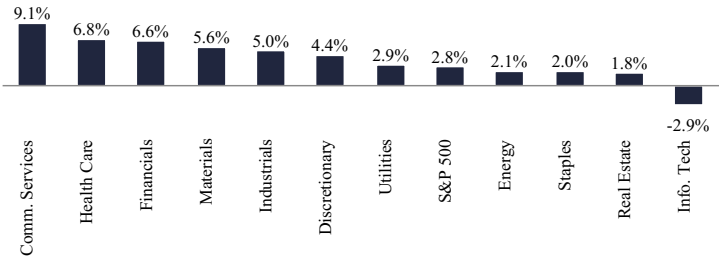
**GROWTH:** In the US, real GDP grew  $2.3\%$  annualized in 4Q 2024, somewhat below consensus expectations. The composition was stronger, however, as consumption grew  $4.2\%$ , well above consensus expectations, while the volatile inventories component delivered a 0.9pp drag on growth this quarter. On another note, Euro area GDP growth came in at  $0\%$  quarter-over-quarter in 4Q 2024, below consensus expectations, resulting in a  $0.9\%$  growth for 2024. Headline quarterly growth missed expectations in Germany, France, and Italy, while it surprised to the upside in Spain. Furthermore, the region's unemployment rate printed at  $6.3\%$ , up 0.1pp from November.

**INFLATION:** The US core PCE index rose  $0.16\%$  month-over-month in December while the year-over-year rate ticked down to  $2.79\%$ , both roughly in line with consensus expectations. Furthermore, headline prices increased  $0.26\%$  month-over-month while the year-over-year rate edged up to  $2.55\%$ .

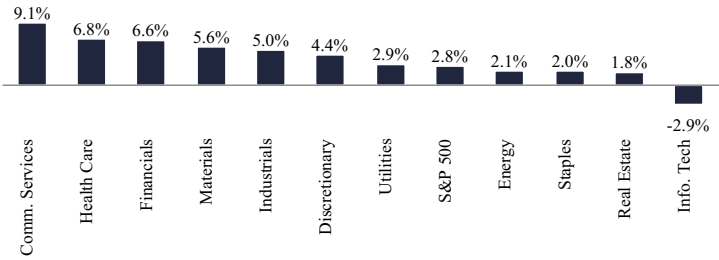
MARKET WATCH

S&P 500 INDEX SECTOR RETURNS

MONTH-TO-DATE, AS OF 01/31/25

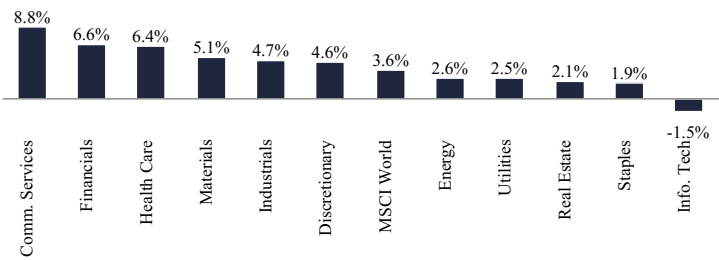


YEAR-TO-DATE, AS OF 01/31/25

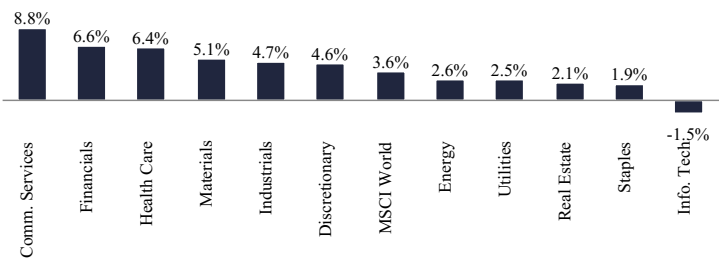


MSCI WORLD INDEX SECTOR RETURNS

MONTH-TO-DATE, AS OF 01/31/25



YEAR-TO-DATE, AS OF 01/31/25



ECONOMIC WATCH

Monday, February 3	Tuesday, February 4	Wednesday, February 5	Thursday, February 6	Friday, February 7	Critical Future Events
US Manufacturing PMI (Cons: 50.1, Prior: 49.4) Euro Area CPI YoY (Cons: 2.4%, Prior: 2.4%)	US Job Openings (Cons: 7.880M, Prior: 8.098M)	US Services PMI (Cons: 53.1, Prior: 56.8)	BoE Rate Decision	US Nonfarm Payrolls (Cons: 154K, Prior: 256K) US Unemployment Rate (Cons: 4.1%, Prior: 4.1%) US Avg Hourly Earnings MoM (Cons: 0.3%, Prior: 0.3%)	ECB Meeting – Mar 6 FOMC Meeting – Mar 19 BoJ Meeting – Mar 19

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 01/31/25)	Year-to-Date		
Value	Core	Growth		Value	Core	Growth
4.63%	3.18%	1.98%	Large	4.63%	3.18%	1.98%
3.51%	4.25%	6.38%	Medium	3.51%	4.25%	6.38%
2.05%	2.62%	3.16%	Small	2.05%	2.62%	3.16%

MSCI WORLD SIZE & STYLE RETURNS

Month-to-Date			(as of 01/31/25)	Year-to-Date		
Value	Core	Growth		Value	Core	Growth
4.75%	3.42%	2.36%	Large	4.75%	3.42%	2.36%
3.53%	4.16%	5.45%	Medium	3.53%	4.16%	5.45%
3.14%	3.47%	3.78%	Small	3.14%	3.47%	3.78%

US FIXED INCOME MATURITY AND QUALITY RETURNS

Month-to-Date			(as of 01/31/25)	Year-to-Date		
Short	Intermed.	Long		Short	Intermed.	Long
0.50%	0.54%	0.42%	Government	0.50%	0.54%	0.42%
0.58%	0.62%	0.41%	Corporate	0.58%	0.62%	0.41%
1.28%	1.36%	1.58%	High Yield	1.28%	1.36%	1.58%

EUROPEAN FIXED INCOME MATURITY AND QUALITY RETURNS

Month-to-Date			(as of 01/31/25)	Year-to-Date		
Short	Intermed.	Long		Short	Intermed.	Long
0.14%	0.01%	-0.92%	Government	0.14%	0.01%	-0.92%
0.37%	0.49%	0.41%	Corporate	0.37%	0.49%	0.41%
0.63%			High Yield	0.63%		

WEEKLY MARKET RECAP

INDEX RETURNS				
	1 WEEK	MTD	QTD	YTD
EQUITIES				
S&P 500	-0.99%	2.78%	2.78%	2.78%
DJ Industrial Average	0.27%	4.78%	4.78%	4.78%
Russell 2000	-0.86%	2.62%	2.62%	2.62%
Russell Midcap	-0.56%	4.25%	4.25%	4.25%
STOXX Europe 50 (€)	1.29%	8.14%	8.14%	8.14%
STOXX Europe 600 (€)†	1.79%	6.35%	6.35%	6.35%
MSCI EAFE Small Cap	1.24%	3.45%	3.45%	3.45%
FTSE 100 (£)	2.02%	6.20%	6.20%	6.20%
FTSE MIB (€)	0.75%	7.07%	7.07%	7.07%
CAC 40 (€)†	0.28%	7.81%	7.81%	7.81%
SWISS MKT (CHF)	2.52%	8.59%	8.59%	8.59%
TOPIX (¥)	1.37%	0.14%	0.14%	0.14%
MSCI World	-0.51%	3.55%	3.55%	3.55%
MSCI China Free†	1.43%	0.44%	0.44%	0.44%
MSCI EAFE	0.80%	5.26%	5.26%	5.26%
MSCI EM	0.32%	1.81%	1.81%	1.81%
MSCI Brazil (BRL)	3.28%	7.10%	7.10%	7.10%
MSCI India (INR)	1.56%	-2.40%	-2.40%	-2.40%
FIXED INCOME				
Bloomberg Aggregate	0.44%	0.53%	0.53%	0.53%
Bloomberg Euro Aggregate	-0.37%	0.37%	0.37%	0.37%
Bloomberg US High Yield	0.20%	1.37%	1.37%	1.37%
Bloomberg Euro High Yield (€)	0.50%	0.63%	0.63%	0.63%
Bloomberg Muni Aggregate	0.55%	0.50%	0.50%	0.50%
Bloomberg TIPS	0.58%	1.30%	1.30%	1.30%
JPM EMBI Gbl. Divers.	0.52%	1.44%	1.44%	1.44%
JPM GBI-EM Gbl. Divers. *	-0.17%	2.62%	2.62%	2.62%
OTHER				
DJ US Real Estate	-0.12%	2.01%	2.01%	2.01%
FTSE EPRA/NAREIT Dvlpd. Ex-US	1.64%	3.25%	3.25%	3.25%
S&P GSCI	-1.53%	3.32%	3.32%	3.32%
Alerian MLP	-0.82%	8.79%	8.79%	8.79%
US Dollar Index	0.79%	-0.35%	-0.35%	-0.35%
VIX	10.64%	-5.30%	-5.30%	-5.30%

COMMODITIES				
	01/31/25	12/31/24	09/30/24	12/31/23
WTI Oil (\$/barrel)	\$72.53	\$71.72	\$68.17	\$71.65
Brent Oil (\$/barrel)	\$76.76	\$74.64	\$71.77	\$77.04
Gold (\$/oz)	\$2835.00	\$2666.00	\$2681.30	\$2091.80
Natural Gas (\$/mmBtu)	\$3.04	\$3.63	\$2.92	\$2.51

CURRENCIES				
	01/31/25	12/31/24	09/30/24	12/31/23
Euro (\$/€)	1.0376	1.0354	1.1133	1.1041
Pound (\$/£)	1.2401	1.2510	1.3376	1.2746
Japanese Yen (¥/\$)	155.14	157.31	143.68	141.02
Swiss Franc (CHF/€)	0.9448	0.9401	0.9426	0.9289
Chinese Yuan Renminbi (CNY/\$)	7.1929	7.1874	7.0206	7.0842

RATES & SPREADS				
	01/31/25	12/31/24	09/30/24	12/31/23
RATES				
Secured Overnight Financing Rate *	4.36%	4.49%	4.96%	5.38%
US Treasuries 2-Year	4.24%	4.25%	3.65%	4.25%
ECB Depo Rate	4.00%	3.75%	3.50%	2.00%
US Treasuries 10-Year	4.57%	4.58%	3.80%	3.86%
US Treasury 2-10 Slope	0.33%	0.33%	0.15%	-0.39%
German Bunds 2-Year	2.12%	2.08%	2.07%	2.40%
German Bunds 10-Year	2.46%	2.37%	2.12%	2.02%
Japanese Govt Bonds 10-Year	1.25%	1.10%	0.86%	0.61%
UK Gilts 10-Year	4.54%	4.57%	4.00%	3.54%
Swiss Govt Bonds 10-Year	0.43%	0.33%	0.41%	0.70%
French OATs 10-Year	3.21%	3.19%	2.92%	2.56%
Italian BTPs 10-Year	3.55%	3.52%	3.45%	3.70%
Spanish Bonos 10-Year	3.07%	3.06%	2.93%	2.99%
SPREADS				
HY Corp. Spread (bps)	261	287	300	323
IG Corp. Spread (bps)	78	80	88	98
EMD Spread (bps)	372	384	420	438

Global Equity Valuations

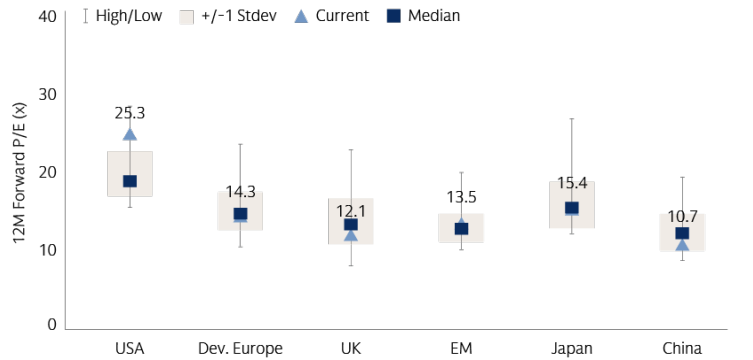


Chart Source: Goldman Sachs Asset Management and Bloomberg as of close of trading on December 31, 2024. Chart data shows next 12-month P/E ratio from January 2015 to the current period. 12m forward P/E(x) refers to price-to-earnings ratio for the next 12 months, which is a valuation measure applied to 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: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of January 31, 2025. Chart shows performance, indexed to 100 on January 1, 2025, of three Goldman Sachs Global Investment Research AI baskets. **Past performance does not predict future returns and does not guarantee future results, which may vary.** For illustrative purposes only. There is no guarantee that objectives will be met.

**Page 1 Market Summary Notes:** “AI” refers to artificial intelligence. “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. “FOMC” refers to Federal Open Market Committee. “ECB” refers to European Central Bank.

**Page 1 Economic Summary Notes:** “FOMC” refers to Federal Open Market Committee. “Fed” refers to the Federal Reserve. “ECB” refers to European Central Bank. “bp” refers to basis point. “GDP” refers to Gross Domestic Product. “pp” refers to percentage point. “Core PCE” refers to Personal Consumption Expenditure excluding food and energy.

**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:** “PMI” refers to Purchasing Manager’s Index. “CPI” refers to Consumer Price Index. “YoY” refers to year over year. “BoE” refers to Bank of England. “MoM” refers to month-over-month. “ECB” refers to European Central Bank. “FOMC” refers to Federal Open Market Committee. “BOJ” refers to Bank of Japan.

**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. Neither MSCI nor any other party involved in or related to compiling, computing, or creating the MSCI data makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such data. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in or related to compiling, computing or creating the data have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages. No further distribution or dissemination of the MSCI data is permitted without written consent.

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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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