

# Productivity Factors and the Right Tail

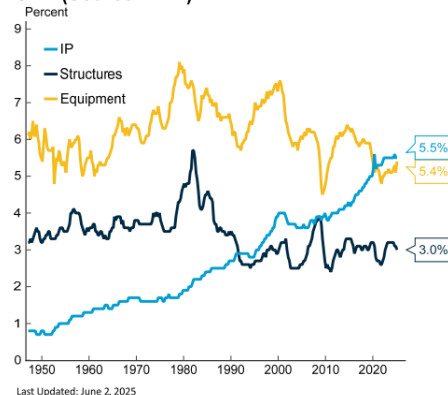
WEEKLY VIEW FROM THE DESK | June 2, 2025

[LINK TO WEEKLY RETURNS TABLE](#)

## MACRO

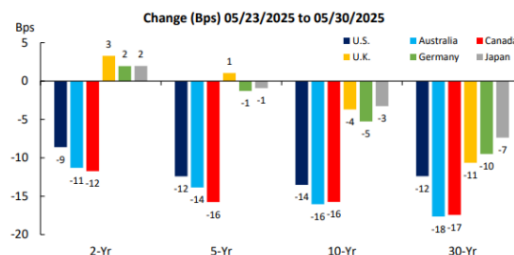
- Despite the relentless macro uncertainties and periodic bouts of market volatility, risk assets have remained largely resilient. Meanwhile, hard economic data in the U.S. also remain stable heading into another potential round of fiscal stimulus. This combination of developments warrants assessing factors that may be affecting the right side of the economic probability distribution. In the long run, growth in the labor force and productivity are the two key factors that can influence the long-term rate of economic growth. Considering recent adjustments to immigration policy, this essentially leaves advances in productivity as the key potential driver when looking ahead.
- Potential productivity enhancements will likely arrive via “general purpose technologies”—including artificial general intelligence, quantum computing, synthetic biology, and nuclear fusion—all of which have the potential to boost the productivity of every sector across the economy on their own or in conjunction with other GPTs. In contrast to marginal tech advances, such as “smart fridges” or enhanced screen images, these GPTs appear to be self-improving assets that could scale relatively fast with broad effect.
- At this point, we only see faint signs of revived productivity amid intellectual property’s rising share of U.S. GDP in contrast to the range bound GDP shares for equipment and structures (see the accompanying chart). In order to capture the prospects for a productivity revival, we’ve updated our economic scenarios over the coming 12 months with a 10% chance of a “productivity revival” consisting of above-trend growth due to public investments and technology diffusion. Within our economic scenarios, productivity revival replaces the “Roaring ‘20s” scenario that was included in our Q1 and [Q2 Outlooks](#).
- In terms of near-term market perspective, we’re cognizant of the effects of a moderate-growth environment enveloped in perceived downside risks. We believe these conditions support a demand for yield/spread compression as hopes for Fed rate cuts persist, management teams remain cautious, and this caution otherwise restrains financial policies.

**Business Investment by Category: Shares of GDP (Source: BEA)**



## DEVELOPED MARKET RATES

- The back end of DM rate markets received a reprieve last week as long bonds rallied, bringing the U.S. 30-year yield back below 5% (see accompanying chart).
- In terms of central bank activity, this week’s ECB meeting will likely bring a 25 bps cut with a similar cut priced in through the end of the year. The latest euro area inflation data show a downtrend in Services inflation since the start of this year. That should give the ECB comfort that rates can come down from the current level of 2.25%. We’ll also be watching whether the council adjusts its policy view as natural (i.e., 2.25%-1.75%) or accommodative (i.e., 1.5% or below).
- Fed policy still appears to be on hold, possibly through September. A cut could still emerge later in the year with more to potentially follow in 2026.
- MBS spreads traded wider last week on overseas selling, uncertainty around the implied guarantee if Fannie/Freddie were to go public, and higher volatility. There was increased bid list activity, but it generally felt like bid list line items were trading reasonably well/improving. Elsewhere, full year 2025 Street net supply estimates are being cut from the \$250B area closer to our \$200B estimate where we started the year amid an elevated rate picture.



## IG CORPORATES

- In the U.S., IG corporate spreads tightened by 3 bps last week, bringing the Index to 88, a new YTD tight. Meanwhile, the CDX was 3 bps tighter at 56. Macro headlines (e.g., U.S. foreign tax and the overturning of the U.S. Court of International Trade’s ruling) continued to be the primary driver of spread movement, with limited dispersion among spreads over the week. In May, BBBs saw a big rebound led by autos and energy sectors, which had been underperformers.
- Last week, supply totaled \$21B and was well absorbed. Deals were 3.1x oversubscribed and came with no concessions. Notably, bonds with maturities greater than 15 years made up just 2% of supply in May and 9% of supply YTD. The lack of supply, coupled with yields approaching 6%, have kept the long end of the market well bid. Despite expectations of an M&A slowdown and similar headlines, there has been a decent amount of M&A announced since April 2nd, including deals led by private equity.
- In Europe, the EuroAgg Corp Index was 4 bps tighter (OAS+100) last week. The Euro IG market benefited from Trump’s delayed plan to impose a 50% tariff on EU imports on June 1st, as well as a shortened week of issuance due to European holidays. Primary volume dropped to just under €10B whilst books remained well covered as investors have prioritized putting cash to work.

- In May, corporate supply totaled €68B. This is well above May's historical average for the last 10 years of €40B. YTD corporate supply is now around €205B, which is broadly in-line with last year's level. Syndicates are suggesting a steady pace of issuance over next few weeks as issuers seek to take advantage of the favorable market conditions.
- In terms of retail demand, inflows into the Euro IG market have been healthy. After some weakness in April during peak tariff noise, EUR IG Corp inflows have resumed. Despite record issuance in May, net supply is barely sufficient to cover inflows.

## LEVERAGED FINANCE

- HY spreads tightened further last week, as continued inflows, light new issuance, and solid corporate balance sheets outweighed renewed tariff uncertainty. Returns across all HY credit tiers were positive, with CCCs outperforming. All sectors but one gained, with super retail, paper, and air transportation outperforming, while telecom (the only negative sector), metals/mining/steel, and cable were the weakest.
- Inflows were positive for a fifth consecutive week, with \$564M—mostly into ETFs—flowing into the market. Last week's inflow brings the five-week total to \$8.2B, recovering much of the \$12.8B of outflows in the three weeks prior. New issuance continued, with \$2.5B across four deals coming to market during the holiday-shortened week.
- Bank loans resumed their rally last week on lighter new issuance, positive flows, and solid demand. With last week's gains, approximately 30% of the market is now trading above par, and 70% is trading above 99. The technical environment is well positioned with steady inflows adding to the already solid cache of dry powder and strong CLO formation. Meanwhile, new issuance remains active, but light, as only six deals totaling \$3.7B came to market last week.
- European HY bonds and leveraged loans tightened, with bonds continuing to outperform loans YTD. Dispersion continues, with most new money flowing into the asset class seeking preferred issuers. Demand for loans remains solid on CLO primary activity resuming. Although no new issuance came to market last week, investor interest continues with a significant redemption schedule coming up.

## EMERGING MARKETS

- EM sovereign spreads tightened in May and have recovered almost all of the widening since April 2. Away from tariff headlines, there were a few themes impacting EM performance last month, including EM elections (Romania, Poland, Ecuador, Mexico), positive developments around financing to select countries (Ghana, Egypt, Nigeria, Pakistan, Ecuador), and decent supply/demand dynamics. Elsewhere, Argentina issued a \$1.7B ARS bond targeted to U.S. investors with a 29.5% coupon to pay for upcoming maturities and to demonstrate its market access to the IMF. In Mexico, recent trade data indicate that auto-related exports have been impacted by tariff concerns.
- EM hard currency remains attractive in the current global context, with an index yield of 7.8% (or 7% for BBs). Positions down the curve in a mix of select BBBs, BBs, and in idiosyncratic CCCs are positive alpha generators. We will continue to watch the structural and cyclical factors impacting the U.S. dollar. Bottom-up valuations and fundamental developments largely dictate our positioning.
- EMFX declined last week, with Asia and LatAm lagging. U.S. rates fell 10 bps and commodities, such as copper, declined. Outperformers included EGP as the carry trade continues to produce stable returns and the central bank cut rates less than expected. PEN and COP outperformed as well. PLN was also better on a favorable election outcome. Laggards included THB and PHP on no news, as well as THB, which may have been impacted by a worse-than-expected April current account balance. ZAR also lagged likely due to a more dovish than expected SARB. We continue to run relative value (high carry vs. low carry) but at reduced risk levels as well as a marginal USD short.
- EM local rate yields were marginally lower last week, with South Africa outperforming the most driven by a dovish 25 bp rate cut. Polish bonds and swaps also rallied on the back of a lower inflation print and the growing popularity of KO candidate Trzaskowski. Mexican front-end swaps rallied after Banxico minutes came out more dovish than expected. EM corporate spreads were flat on the week, with a number of idiosyncratic movers in high yield. We are marginally raising our long-term outlook on EM corporates due to lower left tail risks, a weaker U.S. dollar environment, and strong corporate fundamentals.

## SECURITIZED PRODUCTS

- CMBS conduit spread tightening continued with five-years easing to the low 90s, and 10-years to mid-80s. Subordinate tranches were unchanged. Floating SASB AAAs widened, while fixed-rate AAAs and lower tightened, led by primary issuance. Of the six deals that priced, three were SASB, followed by one conduit, one CRE CLO, and one agency. The SASB pipeline continues to rebound on retracing spreads.
- In RMBS, a firm tone underpinned a quiet week, with non-QM, second-liens, and CRTs all finding support. Primary non-QMs in this week's pipeline are expected price tight of talk given healthy subscription levels. Non-QMs are now the mainstream product in RMBS, accounting for 40% of issuance for YTD 2025 and full-year 2024. We expect 2025 issuance to increase by around \$30B vs. 2024's \$146B.
- In U.S. CLOs, spreads tightened further across the stack. We remain focused on benchmark issuers, as the basis compared to non-benchmark continues to compress. As Euro CLO dealers sought to price transactions prior to the Barcelona conference, demand for mezzanine tranches remained strong. Euro dealers continue to open new warehouses while pricing new issues. In last week's primary market, about \$5.9B across 13 deals in the U.S. and €4.2B from 10 transactions in Europe priced.
- ABS spreads held firm, as sub-sectors have retraced to pre-Liberation Day levels. While lagging the recent rally in corporates overall, ABS' spread to corporates tightened 2 bps to 41 bps. Although the primary market was quieter following the pre-Memorial Day surge, demand remains strong, keeping new issuance pricing at or inside of initial guidance.

## MUNICIPALS

- Munis underperformed Treasuries over the last two weeks as the muni curve steepened. M/T yields ratios on the 5-year, 10-year, and 30-year were 72%, 76%, and 92% (respectively). Issuance is estimated at around \$19B this week and will be the second largest calendar week on record (\$22B, December 11, 2017). This may lead to concessions and weigh on secondary spreads.
- June's net supply is expected to be modestly positive as gross issuance outpaces above-average reinvestment. While demand continues to be delicate, it remains skewed towards ETFs. On the taxable side, issuance has picked up - primarily in university and healthcare credits. That stated, investors are cautious due to pressures in the higher education and healthcare sectors.

# THE RETURNS TABLE As of May 30, 2025

Sovereign Rates	Duration	YTM	OAS	Yield/ OAS Change (BPS)				Total Return (%)			
				WTD	QTD	YTD	Prior Year	WTD	QTD	YTD	Prior Year
U.S. 2-Year	1.90	3.90	---	-9	2	-34	-103	0.19	0.50	2.07	5.52
U.S. 5-Year	4.48	3.96	---	-12	1	-42	-61	0.55	0.54	3.48	6.52
U.S. 10-Year	8.00	4.39	---	-11	20	-17	-14	0.98	-0.65	3.34	5.39
U.S. 10-Year Breakeven	--	2.33	---	-2	-4	-1	-4	---	---	---	---
U.S. 10-Year TIPS	4.29	2.07	---	-10	23	-17	-12	1.11	-0.79	4.39	5.99
U.S. 20-Year	12.52	4.92	---	-11	34	7	17	1.67	-3.35	0.68	1.35
U.S. 30-Year	15.60	4.91	---	-11	36	15	25	2.08	-4.47	-0.27	0.06
U.S. SOFR	---	---	---	9	-6	-14	-98	0.08	0.72	1.82	4.92
UK 10-Year	7.71	4.65	---	-3	-3	8	30	0.35	1.01	0.90	0.90
Germany 10-Year	8.44	2.50	---	-7	-24	14	-15	0.62	2.48	1.38	1.38
Switzerland 10-Year	9.89	0.23	---	-9	-31	-4	-65	0.90	3.18	1.00	7.61
Japan 10-Year	8.51	1.49	---	-4	0	40	43	0.34	-2.23	-2.23	-2.23
Australia 10-Year	8.44	4.26	---	-16	-13	-10	-17	1.48	2.11	3.02	6.41
Canada 10-Year	8.11	3.20	---	-15	23	-3	-50	1.29	-1.36	1.53	4.82
MAJOR FI MS INDICES											
Global Aggregate Unhedged	6.52	3.57	34	-1	-1	-1	-3	0.52	2.57	5.28	7.27
Global Aggregate Hedged	6.52	3.57	34	-1	-1	-1	-3	0.67	0.65	1.83	6.29
U.S. Aggregate	6.08	4.71	34	-2	-1	0	-4	0.88	-0.33	2.45	5.84
Euro-Aggregate (Unhedged)	6.43	2.74	55	-2	0	-7	-4	0.52	1.85	0.93	5.35
Japanese Aggregate	8.48	1.41	1	0	1	1	0	0.68	-0.78	-3.14	-2.99
MAJOR FI CREDIT INDICES											
Mortgage-Backed (Agency)	5.97	5.15	42	-2	5	-1	-8	0.91	-0.63	2.41	6.22
Global IG Corporate Bonds	5.94	4.60	94	-3	-3	6	-1	0.85	2.08	4.97	7.82
U.S. IG Corporate Bonds	6.88	5.21	88	-3	-6	8	3	1.11	-0.04	2.26	6.06
European IG Corporate	4.56	3.07	100	-4	2	-2	-8	0.40	1.54	1.53	6.53
U.S. High Yield Bonds	3.32	7.46	315	-16	-32	28	5	0.74	1.66	2.68	9.54
European High Yield Bonds	2.93	5.65	334	-16	-12	16	0	0.50	1.54	2.09	8.43
U.S. Leveraged Loans	0.3	8.34	472	-6	-26	-3	-24	0.31	1.52	2.14	6.97
European Leveraged Loans	0.3	7.01	458	-8	-36	-14	-17	0.32	1.14	2.14	6.57
EM Hard Currency Sovs.	6.43	7.82	335	3	-15	9	-35	0.58	0.89	3.11	8.20
EM Corporates	4.28	6.94	271	0	6	31	9	0.40	0.18	2.61	7.47
EM Currencies	---	5.82	---	1	-1	-2	-2	-0.28	4.68	7.95	7.17
EM Local Rates	5.29	6.07	6	0	0	0	-1	0.36	1.93	3.58	7.58
CMBS	3.97	4.91	87	-1	-1	7	-8	0.51	0.65	3.23	7.73
ABS	2.64	4.62	60	-1	0	16	6	0.37	0.51	2.05	6.26
CLOs	3.78	5.03	140	0	-4	-1	-6	0.14	1.05	2.14	5.97
Municipal Bonds	6.73	4.04	---	-5	20	30	11	0.28	-0.74	-0.96	2.06

Equity/Volatility	Level	Total Return (%)				Prior Yr	FX/Commodities	Spot	% Change			
		WTD	QTD	YTD					WTD	QTD	YTD	Prior Year
S&P 500 Index	5,912	1.9	5.6	1.1	14.4		EUR/USD	1.1	-0.1	4.9	9.6	4.8
DAX	23,914	1.6	8.3	20.5	29.7		USD/JPY	144.0	1.0	-4.0	-8.4	-8.2
Stoxx 600	548	0.8	4.5	10.7	10.0		GBP/USD	1.3	-0.6	4.2	7.5	5.7
Nikkei 225	37,471	2.2	6.6	-3.9	1.7		EUR/CHF	0.9	0.0	-2.4	-0.7	-4.6
Shanghai Composite	3,347	0.0	0.6	0.4	12.1		USD/CHF	0.8	0.2	-7.0	-9.4	-9.0
MSCI ACWI Index	880	1.3	6.8	5.5	14.8		USD (DXY)	99.3	0.2	-4.7	-8.4	-5.1
FTSE 100	8,783	0.7	3.1	9.4	10.6		Oil	77.0	-2.2	-15.0	-15.2	-22.0
MOVE Index	92	-8.7	-9.1	-6.8	1.1		Gold	3289.3	-2.0	5.3	25.3	40.4
VIX Index	20	-16.7	-16.7	7.0	28.3							

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Sources: Bloomberg except EMD (J.P. Morgan), HY (ICE BofAML), Bank Loans (S&P), and CLOs (Palmer Square). European returns are unhedged in euros unless otherwise indicated. An investment cannot be made directly in an index

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**U.S. Investment Grade Corporate Bonds:** Bloomberg Barclays U.S. Corporate Bond Index: The Bloomberg Barclays U.S. Investment Grade Corporate Bond Index covers U.S.D-denominated, investment-grade, fixed-rate or step up, taxable securities sold by industrial, utility and financial issuers. It includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch.

**European Investment Grade Corporate Bonds:** Bloomberg Barclays European Corporate Bond Index (unhedged): The Bloomberg Barclays Euro-Aggregate: Corporates bond Index is a rules-based benchmark measuring investment grade, EUR denominated, fixed rate, and corporate only. Only bonds with a maturity of 1 year and above are eligible.

**U.S. High Yield Bonds:** ICE BofAML U.S. High Yield Index: The ICE BofAML U.S. High Yield Index covers US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, and at least one year remaining term to final maturity as of the rebalancing date.

**European High Yield Bonds:** ICE BofAML European Currency High Yield Index: This data represents the ICE BofAML Euro High Yield Index value, which tracks the performance of Euro denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P, and Fitch). Qualifying securities must have at least one year remaining term to maturity, a fixed coupon schedule, and a minimum amount outstanding of €100 M. ICE Data Indices, LLC, used with permission. ICE DATA INDICES, LLC IS LICENSING THE ICE DATA INDICES AND RELATED DATA "AS IS," MAKES NO WARRANTIES REGARDING SAME, DOES NOT GUARANTEE THE SUITABILITY, QUALITY, ACCURACY, TIMELINESS, AND/OR COMPLETENESS OF THE ICE DATA INDICES OR ANY DATA INCLUDED IN, RELATED TO, OR DERIVED THEREFROM, ASSUMES NO LIABILITY IN CONNECTION WITH THEIR USE, AND DOES NOT SPONSOR, ENDORSE, OR RECOMMEND PGIM FIXED INCOME OR ANY OF ITS PRODUCTS OR SERVICES.

**U.S. Senior Secured Loans:** The iBoxx USD Leveraged Loan index family represents the main sections of the USD leveraged loan market. Index constituents are derived using selection criteria such as loan type, minimum size, liquidity, credit ratings, initial spreads and minimum time to maturity.

**European Senior Secured Loans:** The index universe of the S&P UBS Western European Leveraged Loan Index is meant to represent assets or activity in Western Europe, and includes loans denominated in EUR, GBP, or USD.

Emerging Markets U.S.D Sovereign Debt: JP Morgan Emerging Markets Bond Index Global Diversified: The Emerging Markets Bond Index Global Diversified (EMBI Global) tracks total returns for U.S.D-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, and Eurobonds. It limits the weights of those index countries with larger debt stocks by only including specified portions of these countries' eligible current face amounts of debt outstanding. To be deemed an emerging market by the EMBI Global Diversified Index, a country must be rated Baa1/BBB+ or below by Moody's/S&P rating agencies. Information has been obtained from sources believed to be reliable, but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright 2021, J.P. Morgan Chase & Co. All rights reserved.

Emerging Markets Local Debt (unhedged): JPMorgan Government Bond Index-Emerging Markets Global Diversified Index: The Government Bond Index-Emerging Markets Global Diversified Index (GBI-EM Global) tracks total returns for local currency bonds issued by emerging market governments.

Emerging Markets Corporate Bonds: JP Morgan Corporate Emerging Markets Bond Index Broad Diversified: The CEMBI tracks total returns of U.S. dollar-denominated debt instruments issued by corporate entities in Emerging Markets countries.

Emerging Markets Currencies: JP Morgan Emerging Local Markets Index Plus: The JP Morgan Emerging Local Markets Index Plus (JPM ELMI+) tracks total returns for local currency-denominated money market instruments.

Municipal Bonds: Bloomberg Barclays Municipal Bond Indices: The index covers the U.S.D-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The bonds must be fixed-rate or step ups, have a dated date after Dec. 13, 1990, and must be at least 1 year from their maturity date. Non-credit enhanced bonds (municipal debt without a guarantee) must be rated investment grade (Baa3/BBB-/BBB- or better) by the middle rating of Moody's, S&P, and Fitch.

U.S. Treasury Bonds: Bloomberg Barclays U.S. Treasury Bond Index: The Bloomberg Barclays U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index.

Mortgage Backed Securities: Bloomberg Barclays U.S. MBS - Agency Fixed Rate Index: The Bloomberg Barclays U.S. Mortgage Backed Securities (MBS) Index tracks agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon and vintage.

Commercial Mortgage-Backed Securities: Bloomberg Barclays CMBS: ERISA Eligible Index: The index measures the performance of investment-grade commercial mortgage-backed securities, which are classes of securities that represent interests in pools of commercial mortgages. The index includes only CMBS that are Employee Retirement Income Security Act of 1974, which will deem ERISA eligible the certificates with the first priority of principal repayment, as long as certain conditions are met, including the requirement that the certificates be rated in one of the three highest rating categories by Fitch, Inc., Moody's Investors Services or Standard & Poor's.

Palmer Square AAA CLO DM Index represents the discount margin of CLO AAA rated tranches in the Palmer Square CLO Senior Index, which is designed to reflect the investable universe of U.S CLO senior original rated AAA and AA debt issued after Jan 1, 2011.

Global Aggregate Bond Index is a measure of global investment grade debt from twenty four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

U.S. Aggregate Bond Index: Bloomberg Barclays U.S. Aggregate Bond Index: The Bloomberg Barclays U.S. Aggregate Index covers the U.S.D-denominated, investment-grade, fixed-rate or step up, taxable bond market of SEC-registered securities and includes bonds from the Treasury, Government-Related, Corporate, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS sectors. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/ BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch.

Euro Aggregate Bond Index is a broad-based flagship benchmark that measures the 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.

Japanese Aggregate Bond Index The Japanese Aggregate Index contains fixed-rate investment-grade securities denominated in Japanese yen and registered as domestic bonds. The index is composed primarily of local currency sovereign debt but also includes government-related, corporate, and securitized bonds.

The S&P 500® is widely regarded as the best single gauge of large-cap U.S. equities. There is over U.S.D 9.9 trillion indexed or benchmarked to the index, with indexed assets comprising approximately U.S.D 3.4 trillion of this total. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

The DAX Index is a total return index of 30 selected German blue chip stocks traded on the Frankfurt Stock Exchange. The equities use free float shares in the index calculation. The DAX has a base value of 1,000 as of December 31, 1987. As of June 18, 1999 only XETRA equity prices are used to calculate all DAX indices.

The STOXX 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 17 countries of the European region.

The Nikkei 225 Index is a price-weighted average of 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange. The Nikkei Stock Average was first published on May 16, 1949.

Shanghai Composite Index is a capitalization-weighted index. The index tracks the daily price performance of all A-shares and B-shares listed on the Shanghai Stock Exchange. The index was developed on December 19, 1990.

MSCI ACWI is a free-float weighted equity index. It was developed with a base value of 100 as of December 31 1987. MXWD includes both emerging and developed world markets.

FTSE 100 is a capitalization-weighted index of the 100 most highly capitalized companies traded on the London Stock Exchange. The equities use an investibility weighting in the index calculation. The index was developed with a base level of 1000 as of December 30, 1983.

MOVE Index is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options. It is the weighted average of volatilities on the CT2, CT5, CT10, and CT30. (weighted average of 1m2y, 1m5y, 1m10y and 1m30y Treasury implied vols with weights 0.2/0.2/0.4/0.2, respectively).

VIX Index is a financial benchmark designed to be an up-to-the-minute market estimate of the expected volatility of the S&P 500® Index, and is calculated by using the midpoint of real-time S&P 500 Index (SPX) option bid/ask quotes.

Bloomberg Commodity Index Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

The U.S. Dollar Index indicates the general international value of the USD. The USDx does this by averaging the exchange rates between the USD and major world currencies. The ICE US computes this by using the rates supplied by some 500 banks.