PGIM FIXED INCOME

Iran Scenarios as Most Markets Tread Water

WEEKLY VIEW FROM THE DESK | June 23, 2025

LINK TO WEEKLY RETURNS TABLE

U.S.-ISRAEL / IRAN CONFLICT

- The U.S. aerial strikes on Iran over the weekend and the latter's response on Monday fall into our base case for the situation as described by Daleep Singh, Vice Chair, Chief Global Economist, and Head of Macroeconomic Research. With a 70% probability, our **"Strategic Patience"** scenario consists of a minimally-viable retaliation from Iran (i.e., likely includes Monday's strikes towards U.S. bases in Qatar and Iraq) and some mild, short-term market relief that eventually leads to a prolonged, attritional standoff. In a scenario without a formal nuclear deal in place, Iran withdraws from the Non-proliferation of Nuclear Weapons Treaty (NPT), exiles the International Atomic Energy Agency (IAEA), and launches a surreptitious sprint towards nuclear breakout with its remaining materials.
- Our tail scenarios for the situation consist of a negative **"Go Big"** retaliation scenario for Iran (20% probability) in an attempt to make the U.S. blink. This scenario could include large scale attacks on U.S. assets in the Middle East, attacks on regional oil assets, cyber attacks on soft U.S. targets, and/or activation of terrorist sleeper cells.
- The other side of the distribution includes our **"Embrace Economic Ambition"** scenario (10% probability) where Iran abandons its nuclear program. We maintain a relatively low probability on this positive, long-term outcome given the likelihood that the Iranian regime sees abandoning the nuclear program as tantamount to giving up its sovereignty. Furthermore, the Islamic Revolutionary Guard Corps still wields firm control over Iran, making the prospect of regime change unlikely in the near term.

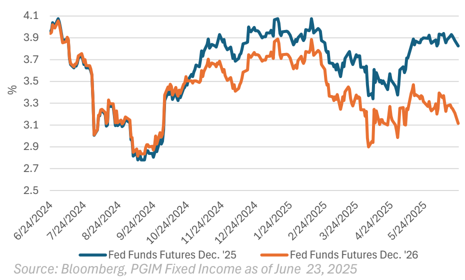
Scenario	Probability (%)	Attributes
Strategic Patience	70	Minimally-viable retaliation; prep for attritional struggle; no formal nuclear deal, withdraw from NPT, banish IAEA, sprint to nuclear breakout.
Go Big	20	Large attacks on U.S. assets; attacks on regional oil assets (e.g., Strait of Hormuz); cyber attacks; activation of sleeper cells.
Embrace Economic Ambition	10	Abandons nuclear program in favor of economic growth.

Source: PGIM Fixed Income

- In terms of global perception, China and Russia may keep their support for Iran to a rhetorical basis. **China** likely wants to preserve its supply of discounted Iranian oil (consisting of about 90% of Iran's exports and 15% of China's oil imports) and may be happy to see U.S. assets repositioned into the Middle East. The situation also provides China with another chance to bolster its perceived role as a global mediator for peace. **Russia** remains bogged down in Ukraine, is still reeling from loss of support in Syria, and likely seeks to avoid direct confrontation with the U.S. However, it is also likely happy to see U.S. assets repositioned into the Middle East.
- While our base case scenario could conceivably place Iran on a similar trajectory as **North Korea**—i.e., a regime equating nuclear capabilities with regime survival and likely receiving some support from China—that future state presents notable challenges for Iran. Indeed, its nuclear facilities are easier to reach militarily than North Korea's, neither China or Russia want Iran to become a nuclear power, and Iran relies on uranium enrichment, which is more detectable and less efficient than plutonium when it comes to a potential nuclear breakout.
- From an **investment perspective**, with the exception of a mild rally in some DM rate complexes, the market reaction was muted on Monday. The reaction prompts three questions, the first of which is whether the series of recent strikes signals a change in the market environment. We do not think it changes conditions, but an eventual outcome with a nuclear Iran might. The second question pertains to forces that are acting as market drivers, and, at this point, fundamentals appear stable with Western economies generally producing middling growth and moderating inflation, which may allow central banks to ease policy as needed. The third question focuses on technicals. The combination of a moderate economic backdrop and a favorable supply / demand technical backdrop in the bond market suggests an ongoing, generally range bound market for both rates and spreads, albeit with bouts of volatility.

DEVELOPED MARKET RATES

- Although the Fed indicated that it continues to expect two cuts through the remainder of the year—which some participants have supported recently—we're also cognizant of the expectation for further cuts in '26. Indeed, Fed funds futures for 2025 indicate the possibility of two rate cuts by year end, which would bring the midpoint to 3.875%, and the 2026 contract indicates another potential 75 bps of cuts in 2026 (see accompanying chart).
- MBS posted slightly positive excess returns, around 25 bps for the month, consistent with narrowing OAS levels. We've seen consistent demand for production coupons, particularly in floater products. Higher primary rates have constrained TBA supply, with origination averaging around $2.5B per day. Outright buying of mortgages has increased, partly due to fewer convexity sales and declining interest rates. Mortgages are being added both outright and on a hedged basis versus Treasuries.



Source: Bloomberg, PGIM Fixed Income as of June 23, 2025

IG CORPORATES

- In the U.S., IG corporate spreads tightened by 1 bp to close the week at 85. Notably, spreads have hovered around 85 for more than a week, pointing to a decline in volatility and resilience in the market. Meanwhile, the CDX widened marginally to 56.
- Yields were slightly lower on the week, leading to net customer selling at the back of the curve, previously an outperformer over the last two to three months.
- Nevertheless, demand remains strong. The Street was a net seller of more than $3B, which included retail flows of $2.3B. Transaction flows over the week were estimated at $2.6B—most of which was in the financial sector and in the 0-7 year bucket.

- Last week's issuance was below expectation, totaling $16B. Overall, deals were 4.7x oversubscribed and came with an average concession of 0.1 bp. Three energy deals totaled ~$8B. The 30-year tranches on the deals were priced at flat levels, suggesting that the market is comfortable with energy risk—even at the back end. Issuance this week is estimated to be between $20B-$25B.
- European IG spreads were flat on the week with the long end outperforming as yield buyers took advantage of higher rates. Issuance totaled just over €10B, with 60% in the low to mid BBBs. Despite the recent compression and rich valuations, demand for higher beta remains robust and books were 4x oversubscribed at the peaks. This week, we expect another €10B of supply, split between financials and corporates.
- As expected, the BoE also held rates, striking a slightly more dovish tone that emphasized the deteriorating UK growth backdrop and signs of moderating wage-growth, and looser labor market. Currently, the market is pricing in 50 bps of additional cuts by year end. This week, the global flash PMIs for June will be closely watched to see if the tariff / trade uncertainty is starting to weigh on economic activity.

LEVERAGED FINANCE

- U.S. HY spreads held steady as strong demand greeted an active primary market ahead of the summer lull. Investors shrugged off geopolitical escalations and Fed-speak on when the impact of tariffs would be known and the potential for a July rate cut. All credit tiers were positive, with Bs posting the strongest gains, and CCCs outperforming BBs. Among sectors, cable, consumer products, and telecom were the strongest, while paper, air transportation, and energy were the softest. Primary activity remained elevated during the holiday-shortened week, with $8.9B across 10 deals coming to market. Inflows were positive for an eighth consecutive week, with $356M flowing into the market, bringing the eight-week total to $11.1B, almost fully recouping the post-tariffs announcement outflows in April.
- Bank loans softened modestly against a backdrop of steady inflows and an active primary market. Despite softening, at least 25% of the market is trading at or above par. Retail investors added nearly $300M to the loan market last week, marking the eighth consecutive week of inflows totaling $2.6B. Meanwhile, 18 deals totaling $14.4B sold in the primary market, bringing the YTD volume to $417.5B ($96.2B net).
- European HY bonds and loans widened slightly. The HY bond market absorbed its largest single-day volume ever, with €8B pricing across eight deals, mostly for refinancing. The loan primary market was active with refinancing transactions. Last week's heavy primary volume lacked net-new supply, underscoring a key factor driving the strong technical environment—a shrinking market.

EMERGING MARKETS

- Despite some recent widening, EM hard currency spreads remain near YTD tights, reflecting attractive yields, broader risk-on sentiment, dimming U.S. exceptionalism, and stable global growth. Spreads continue to hold in despite a fair amount of supply pricing, with Hungary issuing $4B across 5s, 10s, and 30s last week. Over the near term, we expect geopolitics will dominate, but the market will try to differentiate how the various EM countries across oil sensitivities and ratings might be impacted. Likewise, as tariff deadlines approach—and then perhaps pass—there could be further dispersion. Country-specific stories are still relevant, with fundamentals having sufficient cushion to withstand the current geopolitical and trade uncertainty. In a cash-rich world, an index yield of 7.72% continues to attract attention
- EMFX saw a light loss last week and saw some further weakness Monday amid developments in the Middle East. Asia was the underperformer last week, followed by LatAm. Europe was slightly higher. The Iran conflict pressured oil higher, leading to underperformance by Asia oil importers, with PHP and THB both losing over 1%. Outperformers last week included COP, BRL, and PEN—currencies that either benefit from higher oil, hawkish central banks, or low volatility. We continue to run mainly relative value with a small USD short. Short-term geopolitical and trade risks notwithstanding, our conviction remains that the USD is likely on a longer-term gradual declining path.
- In EM local rates, yields were slightly lower amid wide dispersion. Colombia was tighter as local issuance and a buyback led to a flattening of the curve led by the long end. Turkey was also tighter as the CBRT kept its one week repo unchanged, which helped the belly and the long end of the curve. In other markets, Brazil's central bank hiked its policy rate to 15% and signaled a higher for longer policy. South Africa extended its rally due to strong demand from local and offshore investors. With the developments in Iran, the outlook for EM local rates is murkier than before due to effects of higher crude prices. A potential unwinding of EMFX carry trades can't be ruled out.
- EM corporate spreads were slightly wider as the market focused on Iran, with HY underperforming. The Israel complex was trading two-way at wider levels. We expect spreads to remain largely rangebound over the next 12 months.

SECURITIZED PRODUCTS

- CMBS AAA conduit, SASB, and CRE CLO spreads were all flat last week, as were subordinate tranches. Of the five transactions that priced, three were SASB, one conduit, and one agency. The SASB and CRE pipelines continue to build as spreads retrace from April widening. In RMBS, non-QM widened across the capital stack on supply-related pressures while CRTs were stable amid a lack of new issuance. Non-QM issuance remains heavy, with $2.2B across seven deals pricing last week, bringing non-QM YTD issuance to $74B. Home prices are up by about 1.34% YTD through March, and we expect HPA to be around 3% in 2025, with an uneven performance in some regions.
- U.S. CLO issuance reached approximately $8B across 17 deals, including four new issues, 12 resets, and one refinancing. Supply is expected to increase this week, with around 60 active deals being marketed. In Europe, issuance reached approximately €1.1 billion across three deals-two new issues and one reset-with no refinancings priced. Secondary market trading resumed in the U.S., with investors returning from the Barcelona conference, but remained muted in Europe. Spreads were firm in both markets despite geopolitical tensions.
- ABS spreads held firm as the market absorbed heavy new supply. Most sub-sectors are trading through their late-March levels and the spread to corporates tightened 2 bps to 38 bps. Last week's $10B in new supply-which included auto, credit, and unsecured consumer transactions, was met with enough demand that pricing levels broke at or inside of guidance.

MUNICIPALS

- YTD, the tax-exempt muni index has underperformed Treasuries by over 7% amid heavy supply, which is currently ~20% above last year's $500B record. M/T yields ratios on the 5-year, 10-year, and 30-year ended last week at 68%, 75%, and 92% (respectively). In addition, the steepness of the muni curve has become more attractive YTD, with a +120 bps differential in 10s30s.
- Muni fundamentals remain strong. Tax collections grew 4.5% in 2024. This is expected to grow 1.9% in 2025, in line with GDP. In addition, upgrades continue to outpace downgrades by 1.4x. While fundamentals are resilient there are a handful of sectors we are watching, e.g., local governments, healthcare, and higher education. The technical outlook remains mixed, with increased reinvestment and positive flows since early April partially offsetting heavy supply. Outflows tied to April 2nd (-$6.4B) quickly reversed into five straight weeks of positive flows (+$4.7B). YTD, inflows into the munis has been positive, totaling $9.3B.

THE RETURNS TABLE As of June 20, 2025

				Yield/ OAS Change (BPS)				Total Return (%)			
Sovereign Rates	**Duration**	**YTM**	**OAS**	**WTD**	**QTD**	**YTD**	**Prior Year**	**WTD**	**QTD**	**YTD**	**Prior Year**
U.S. 2-Year	1.84	3.91	---	-4	2	-33	-83	0.16	0.70	2.27	5.06
U.S. 5-Year	4.43	3.96	---	-4	1	-42	-31	0.29	0.76	3.70	5.11
U.S. 10-Year	7.97	4.38	---	-2	17	-19	12	0.33	-0.34	3.65	3.04
U.S. 10-Year Breakeven	--	2.34	---	5	-3	0	9	---	---	---	---
U.S. 10-Year TIPS	4.27	2.03	---	-8	19	-21	2	0.84	-0.36	4.84	4.34
U.S. 20-Year	12.53	4.90	---	-1	30	4	40	0.28	-2.97	1.07	-1.86
U.S. 30-Year	15.70	4.89	---	0	32	11	49	0.22	-3.98	0.25	-4.24
U.S. SOFR	---	---	---	1	-12	-20	-103	0.08	0.98	2.08	4.86
UK 10-Year	7.67	4.54	---	-1	-14	-3	48	0.19	2.13	2.02	2.02
Germany 10-Year	8.39	2.52	---	-2	-22	15	9	0.20	2.48	1.38	1.38
Switzerland 10-Year	9.85	0.37		12	-17	10	-26	-1.09	1.81	-0.35	3.28
Japan 10-Year	8.53	1.39	---	-1	-9	31	45	0.14	-1.29	-1.29	-1.29
Australia 10-Year	8.52	4.18	---	3	-20	-18	-2	-0.16	3.01	3.93	4.85
Canada 10-Year	8.06	3.30	---	-7	34	8	-4	0.61	-2.00	0.88	4.14
MAJOR FI MS INDICES											
Global Aggregate Unhedged	6.55	3.56	33	0	-1	-2	-7	-0.09	3.24	5.96	6.94
Global Aggregate Hedged	6.55	3.56	33	0	-1	-2	-7	0.20	1.09	2.27	5.19
U.S. Aggregate	6.10	4.68	33	-1	-2	-1	-6	0.26	0.16	2.95	4.32
Euro-Aggregate (Unhedged)	6.43	2.79	56	1	0	-6	-17	0.06	1.81	0.89	4.47
Japanese Aggregate	8.65	1.37	0	0	0	0	0	0.00	-0.16	-2.53	-3.14
MAJOR FI CREDIT INDICES											
Mortgage-Backed (Agency)	5.97	5.10	39	0	3	-4	-6	0.27	0.00	3.05	4.44
Global IG Corporate Bonds	5.98	4.57	91	-1	-6	2	-13	0.10	3.00	5.92	7.59
U.S. IG Corporate Bonds	6.92	5.16	85	-1	-9	5	-9	0.28	0.66	2.99	5.01
European IG Corporate	4.60	3.08	97	0	-1	-5	-24	0.13	1.72	1.71	5.99
U.S. High Yield Bonds	3.33	7.30	299	-9	-48	12	-16	0.29	2.44	3.47	9.20
European High Yield Bonds	2.97	5.66	332	8	-14	14	-37	-0.06	1.66	2.21	8.10
U.S. Leveraged Loans	0.3	8.32	471	0	-27	-4	-34	0.16	1.82	2.45	7.08
European Leveraged Loans	0.3	7.02	455	3	-39	-17	-25	-0.06	1.39	2.39	6.58
EM Hard Currency Sovs.	6.42	7.72	326	5	-23	1	-69	0.08	1.94	4.33	8.15
EM Corporates	4.25	6.87	267	3	2	26	-5	0.19	0.89	3.34	7.07
EM Currencies	---	5.75	---	0	-1	-2	-2	-0.14	5.69	9.00	9.45
EM Local Rates	5.27	6.06	6	0	0	0	-1	0.22	2.25	3.90	7.27
CMBS	3.94	4.88	85	1	-3	5	-11	0.23	1.03	3.62	6.52
ABS	2.64	4.58	57	1	-3	13	0	0.17	0.86	2.40	5.74
CLOs	3.73	5.01	138	0	-5	-2	-9	0.12	1.40	2.50	5.98
Municipal Bonds	6.71	4.00	---	-2	15	26	34	0.16	-0.42	-0.64	0.58

			Total Return (%)		
Equity/Volatility	Level	WTD	QTD	YTD	Prior Yr
S&P 500 Index	5,968	-0.1	6.7	2.1	10.5
DAX	23,351	-0.7	5.4	17.3	27.9
Stoxx 600	537	-1.5	2.3	8.4	7.0
Nikkei 225	38,403	1.5	7.8	-2.8	1.3
Shanghai Composite	3,360	-0.3	1.3	1.2	15.4
MSCI ACWI Index	886	-0.4	7.7	6.4	12.3
FTSE 100	8,775	-0.8	3.2	9.6	9.9
MOVE Index	90	-5.5	-11.1	-8.8	-4.3
VIX Index	21	-1.0	-7.5	18.8	55.3

		% Change			
FX/Commodities	Spot	WTD	QTD	YTD	Prior Year
EUR/USD	1.2	-0.2	6.5	11.3	7.7
USD/JPY	146.1	1.4	-2.6	-7.1	-8.1
GBP/USD	1.3	-0.9	4.1	7.5	6.3
EUR/CHF	0.9	0.6	-1.4	0.3	-1.2
USD/CHF	0.8	0.8	-7.5	-9.9	-8.3
USD (DXY)	98.7	0.5	-5.3	-9.0	-6.5
Oil	74.9	2.7	4.8	4.5	-8.8
Gold	3368.4	-1.9	7.8	28.3	42.7

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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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Source(s) of data (unless otherwise noted): PGIM Fixed Income as of June 2025.

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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.

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