

# The Significance of China's Stimulus Shift

WEEKLY VIEW FROM THE DESK | September 30, 2024

## QUICK LINK TO THE RETURNS TABLE

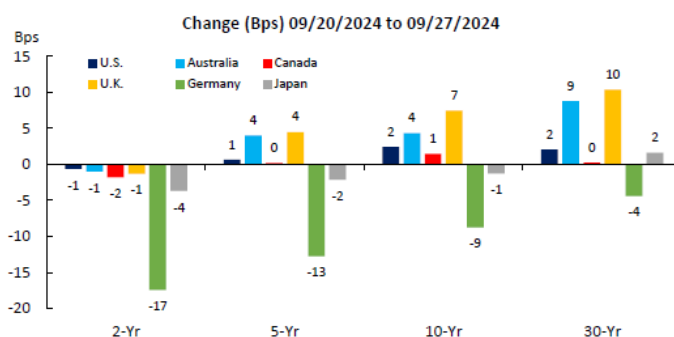
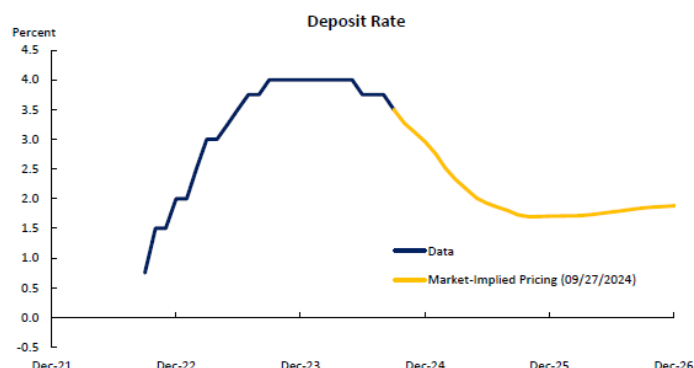
### MACRO

- We regard China's recent stimulus actions as the initial stages of a genuine policy pivot, particularly regarding the way authorities may be thinking about the economy. For example, while the party line that real estate is not for speculation remains, the announced easing in purchase restrictions for second homes demonstrates some willingness to expand pockets of residential real estate investment. However, the intent is unlikely to revive real estate to the point where it drives a domestic wealth effect, rather it is likely aimed at clearing the market from excess inventory in an effort to stop property prices from declining further.
- Another policy shift of note is that recent measures include substantial fiscal stimulus amounting to about 2% of GDP. Indeed, monetary stimulus aimed at easing credit conditions generates little impact if there's minimal demand for credit. Therefore, last week's announced fiscal measures appear targeted towards the demand side of the economy. They consist of early signs of a social safety structure, including unemployment benefits amidst record levels of youth unemployment as well as some child benefit support and pension reform initiatives.
- Prior to last week's announcements, China was growing at about 3% per year, which is solidly below authorities' stated target of 5% annually. We believe the announced measures may place growth closer to that 5% target over the next year.
- On the DM central bank front, Euro Area headline inflation fell below the ECB's 2% inflation target to 1.8% in the flash estimate for September. The drop was broad based across countries as well as in core and services inflation. When combined with the ECB's expectations for easing wage pressures, these developments likely pave the way for more aggressive rate reductions from the ECB. Indeed, we have updated our rate outlook to a 25 bps cut in October, followed by sequential 25 bp cuts until June 2025, which would take the deposit rate to 2.25% (nominal neutral).

### DEVELOPED MARKET RATES

- One of the interesting points about the recent Fed projections is the expectations for a terminal rate on this easing cycle of about 2.9%, and interest-rate forwards have coalesced around that level. However, if that level is presumed to be neutral, the Fed may have to drop the Fed funds rate below neutral to restimulate growth.
- The concept of dropping below neutral gains additional context considering that the economy performed relatively well through more than 500 bps of rate hikes. [If the reaction is similarly muted](#) on during the easing cycle, that may add further impetus to ease beyond neutral. In sum, while long-term rates may consolidate around current levels over the short term, we believe that the bottom of the range may continue to decline once that consolidation phase has run its course.
- Agency MBS closed the week a little tighter, waiting to take cues from the rates market after this Friday's payroll report. Heavy asset manager selling early in the week pushed MBS spreads wider, but inflow-related buying re-tightened spreads late in the week.

#### ECB Policy Tracker



Source: PGIM Fixed Income

### IG CORPORATES

- IG corporate spreads tightened last week to within striking distance of the YTD tight. The catalyst for the market's strong performance was the PBOC's policy easing package as well as U.S. economic data (e.g., revisions to the savings rate, etc.).
- While most industries were 1-2 bps tighter, including metals & mining (3-5 bps tighter), we note widening in the following industries last week: Energy was 3-5 bps wider due to concerns over additional supply coming online from Saudi Arabia, with BBB Exploration & Production names +10 bps wider; and autos were 5-10 bps wider. BBBs have lagged higher quality portions of the market. The Q3 performance of the cable & satellite, autos, and energy has kept the BBB/A spread wider than it has been in the past.
- Inflows last week totaled \$32B-\$40B, bringing the total for September to \$160B-\$200B (the largest inflows for the month of September on record). Supply for the full year is now estimated to be between \$1.5T and \$1.6T. Deals last week were 3.5x oversubscribed and came with a -1.2 bp concession.
- As the yield curve has steepened, demand for long corporates—particularly amongst insurance companies—has caused this portion of the index to tighten by 7 bps QTD and outperform shorter maturities. We note that the majority of this spread tightening happened in September.

- Euro IG spreads remain firm. Although insurance companies are slower to adjust their yield targets, demand from this segment has also picked up. The macro deteriorated midweek as disappointing EA PMIs and growing concern about French politics, with the 10-year OAT-Bund spread testing recent wides at +80 bps. This pushed spreads wider and French banks underperformed.
- Supply was just shy of €15B last week, the majority of which priced with little to no concessions as issuers took advantage of the “post-Fed glow.” Primary activity should slow as we enter Q3 earnings blackouts which should provide additional technical support to our market. In the auto sector, there have been more profit warnings (e.g., Volkswagen and Stellantis) putting increased widening pressure on auto bonds.

## LEVERAGED FINANCE

- As high yield bonds continued their post-rate-cut tightening last week, issuers took advantage and sold \$9.5B across 18 deals, nearly double the \$4.9B from six deals the prior week. Notably, September saw the highest primary monthly volume in three years. With spreads now back to levels not seen since May 2022, we expect to see more issuers opportunistically coming to market.
- Including last week, HY funds have seen inflows in nine of the past 12 weeks. Counting last week's \$73M of inflows, \$2.5B has flowed into the market in September and \$14.4B so far this year. Performance was mixed across sectors, with Cable (1.13%), Chemical (0.50%), and Paper (0.43%) as the top performers.
- U.S. loan prices softened around 25 bps last week, as a heavy new issuance calendar prompted investor secondary market selling. Over 40 transactions came to market last week, as dealers took advantage of elevated investor cash balances from quarter-end amortizations. That said, the new issuance calendar could be lighter than expected heading into Q4. Meanwhile, at least 26% of the market is still trading at or above par. Also, the \$710M of flows into ETFs last week more than offset the \$410M in outflows from active mutual funds.
- In Europe, risk sentiment was mixed as European PMI data were offset by coordinated stimulus in China. The broad European currency high yield index gained 0.32% last week, while yields eased, and spreads widened. The primary market remains busy, with eight deals pricing this week and another eight facilities expected next week, all of which we expect will be easily absorbed.

## EMERGING MARKETS

- EM hard currency spreads tightened last week, with the HY portion of the index outperforming. The significant spread tightening in CCCs and Bs were name specific and a function of either IMF for other multi-lateral funding. Other themes included the decline in oil prices (which led to GCC underperformance), China stimulus measures (which is likely to put a floor under China growth), the escalation of the Middle East conflict (which may begin to weigh on regional asset prices), and the Fed's recent rate cut (which is helping EM HC fund flows).
- With fundamentals and valuations still fair, there is a scenario that EM returns will do well between now and the end of the year. However, the presence of tail risks argues for a measured approach to risk and taking advantage of new issues in select names.
- EMFX gained last week, with Asia outperforming on the China stimulus and lower oil prices. Against the backdrop of recent price action, we are looking to eliminate the small, long USD bias in our portfolios ahead of the U.S. election but remain focused on relative value positioning.
- In local rates, South Africa, Chile, and Hungary were the largest outperformers while China, Mexico, and Colombia were the largest underperformers. Mexico, Czech, and Hungary cut their base rates by 25 bps. China's fiscal stimulus announcement shocked the local and FX markets, with the local yield curve bear steepening and the currency appreciating. The Brazilian local market remained under pressure despite better-than-expected CPI data as both swap and bond curves bear flattened. Profit taking in Mexico put pressure on the long end.
- EM corporates tightened, with HY outperforming. The real estate sector was tighter driven by the China fiscal support package while oil & gas underperformed. Israel corporates tightened ahead of the events in Lebanon over the weekend.

## SECURITIZED PRODUCTS

- CMBS spreads were steady overall as demand held strong following the prior week's Fed-cut rally. Notably, mezzanine tranches tightened, with BBB- spreads easing into the +500 bps context. A 10-year deal priced with the last-cash-flow tranche coming in at T+95 and the BBB tranche at T+330. We continue to recommend staying at the top of the capital structure as CRE fundamentals have deteriorated.
- RMBS spreads were unchanged last week. Notably, CRT spreads pushed wider earlier in the period on dealer quarter-end selling, but ultimately finished flat as well. We expect the RMBS market to remain resilient near-term. While home prices posted a paltry 0.10% gain in July, they're still up by a record 4.1% from the previous peak set last October. However, as home prices are up 4.7% YTD, we still expect them to finish 2024 at 3% due to weaker seasonals.
- U.S. CLO spreads were unchanged at the top of the capital structure while mezzanine tranches continued tighter. At \$16.7B across 35 deals, last week was the busiest for new issuance YTD. Of the 35, 14 were new issues, 18 were resets, and three were refinancings. We expect the heavy supply to continue through year-end, as dealer pipelines are nearing capacity.
- ABS spreads were mixed last week, with investment grade senior tranches rangebound but below investment grade tranches edging wider. In the primary market, \$6B in new supply priced last week, most of which came in the context of guidance. At \$256B YTD, issuance is 25% ahead of last year's tally. We remain cautious on consumer fundamentals: U.S., German, Spanish, and UK consumer loan performances are pressured but afloat despite mixed macro-economic outlooks.

## MUNICIPAL BONDS

- Muni rates finished the week unchanged, while Treasuries sold off marginally. This points to the level of demand in the muni market despite China's stimulus package announcement and softening in U.S. economic data. Muni outperformance was particularly notable in the face of a heavy calendar. Last week, inflows totaled \$592M (~\$25B YTD). This marks the second largest supply week (YTD) and the third largest supply week since 2017. Deals ended the week with strong subscription levels while secondary selling was muted (evidencing strong cash positions). This week's calendar is estimated at ~\$11B. Net supply for September and October are expected to be positive (~\$23B).
- Potential Yield Enhancer: AMT spreads have been particularly cheap, with some spreads as wide as 80 bps. This is because passive ETF funds in the muni market are not allowed to buy AMT bonds as they are not included in the indices tracked by these ETFs.
- Given the fallout from Hurricane Helene, we continue to monitor Florida's insurance market in relation to our holdings. Florida's insurance market has already shifted towards public providers and away from private insurance. This could cause strain on local municipality finances.
- Although activity in the taxable muni space has been minimal, we note that Columbia University will be issuing a \$350M index-eligible 10-year bond. This is the first sign of life in the taxable primary market in some time.

# THE RETURNS TABLE As of September 27, 2024

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	1.91	3.56	---	-3.3	-119.5	-69.1	-149.9	0.1	3.0	4.1	6.7
U.S. 5-Year	4.55	3.51	---	0.6	-87.1	-34.2	-111.8	0.1	4.7	4.3	9.0
U.S. 10-Year	8.11	3.75	---	1.0	-64.5	-12.8	-82.4	-0.1	6.1	4.0	10.9
U.S. 10-Year Breakeven	--	2.16	---	0.5	-13.4	-1.5	-21.8	---	---	---	---
U.S. 10-Year TIPS	4.45	1.59	---	0.5	-51.5	-11.5	-60.5	-0.1	5.0	4.5	10.6
U.S. 20-Year	13.39	4.15	---	2.5	-50.9	-4.1	-75.0	-0.3	7.6	3.5	14.0
U.S. 30-Year	16.92	4.10	---	2.0	-45.4	7.6	-60.0	-0.3	8.5	2.1	14.6
U.S. SOFR	---	---	---	1.0	-49.0	-54.0	-47.0	0.1	1.3	4.1	5.5
UK 10-Year	7.90	3.98	---	7.5	-19.5	44.7	-50.6	-0.5	2.9	2.7	2.7
Germany 10-Year	8.62	2.13	---	-7.4	-36.5	11.1	-79.6	0.7	4.6	4.6	4.6
Switzerland 10-Year	9.70	0.37	---	-9.9	-15.7	-28.0	-79.2	1.1	2.0	3.4	9.3
Japan 10-Year	8.94	0.85	---	0.6	-20.4	23.7	9.0	0.0	2.5	2.5	2.5
Australia 10-Year	7.89	3.96	---	4.0	-35.2	0.3	-49.8	-0.2	3.9	3.1	8.8
Canada 10-Year	8.26	2.96	---	0.5	-54.6	-15.3	-111.4	0.0	5.5	3.8	3.4
<b>MAJOR FI MS INDICES</b>											
Global Aggregate Unhedged	6.68	3.30	37.6	-0.7	-3.4	-5.4	-12.1	0.5	7.2	3.8	12.5
Global Aggregate Hedged	6.68	3.30	37.6	-0.7	-3.4	-5.4	-12.1	0.1	4.4	4.5	11.0
U.S. Aggregate	6.20	4.17	35.3	-1.2	-4.0	-6.3	-15.6	0.0	5.4	4.7	11.8
Euro-Aggregate (Unhedged)	6.53	2.75	67.7	0.9	-6.4	-8.1	-17.2	0.6	3.7	2.4	10.1
Japanese Aggregate	9.02	0.84	0.4	-0.2	0.3	-0.3	-0.6	0.3	1.6	-1.6	-0.8
<b>MAJOR FI CREDIT INDICES</b>											
Mortgage-Backed (Agency)	5.44	4.47	39.5	-1.6	-8.2	-7.0	-21.1	0.0	5.9	4.8	12.3
Global IG Corporate Bonds	6.25	4.30	100.3	-0.8	-3.5	-14.6	-34.0	0.3	6.5	5.5	15.1
U.S. IG Corporate Bonds	7.31	4.68	89.3	-1.4	-4.6	-9.4	-30.9	0.0	6.0	5.5	14.4
European IG Corporate	4.57	3.20	116.9	2.0	-2.6	-20.8	-37.1	0.5	3.2	3.7	10.2
U.S. High Yield Bonds	3.43	6.98	298.8	-2.2	-10.3	-24.5	-98.7	0.1	5.3	8.0	15.9
European High Yield Bonds	3.07	6.03	354.9	-7.9	-14.8	-43.8	-87.4	0.3	3.6	7.0	13.2
U.S. Leveraged Loans	0.3	8.34	507	-3	-4	-39	-57	0.1	2.0	6.5	9.6
European Leveraged Loans	0.3	8.37	484	2	-10	-50	-66	0.1	1.9	7.0	8.7
EM Hard Currency Sovs.	6.80	7.52	367.5	-1.8	-23.8	-16.5	-71.3	0.1	6.1	8.6	18.9
EM Corporates	4.34	6.35	270.2	-3.2	3.7	-41.8	-62.6	0.3	4.5	8.5	14.6
EM Currencies	---	5.98	---	-0.4	-1.8	-3.0	-2.5	0.7	5.3	3.8	9.8
EM Local Rates	5.16	6.11	6.1	0.0	-0.5	-0.1	-0.7	0.1	3.8	4.6	9.3
CMBS	4.21	4.53	93.0	-1.0	-3.9	-33.0	-37.9	0.1	4.9	6.5	12.1
ABS	2.79	4.29	64.6	0.2	7.5	-3.6	-1.6	0.1	3.5	5.2	8.9
CLOs	3.20	1.47	147.3	0.0	-1.7	-11.6	-25.6	0.1	1.6	5.3	7.6
Municipal Bonds	5.75	3.33	---	-0.6	-39.5	10.7	-105.0	0.1	2.7	2.2	10.8

Equity/Volatility	Level	Total Return (%)				Prior Yr	FX/Commodities	Spot	WTD	% Change		
		WTD	QTD	YTD						QTD	YTD	Prior Year
S&P 500 Index	5,738	0.6	5.4	21.6	35.4		EUR/USD	1.1	0.0	4.2	1.1	5.6
DAX	19,326	4.0	6.8	16.2	27.1		USD/JPY	142.2	-1.1	-11.6	0.8	-4.8
Stoxx 600	318	2.5	3.4	13.6	21.6		GBP/USD	1.3	0.4	5.8	5.1	9.6
Nikkei 225	37,920	6.2	1.3	20.8	27.1		EUR/CHF	0.9	-1.1	-2.5	1.0	-2.9
Shanghai Composite	3,336	12.8	5.7	6.7	2.2		USD/CHF	0.8	-1.1	-6.5	-0.1	-8.1
MSCI ACWI Index	461	1.9	6.7	18.8	31.9		USD (DXY)	100.4	-0.3	-5.2	-0.9	-5.5
FTSE 100	8,275	1.2	2.8	10.9	13.6		Oil	77.0	-5.2	-16.4	-4.8	-25.7
MOVE Index	93	1.7	-6.1	-19.3	-19.7		Gold	2658.2	1.4	14.2	28.9	42.5
VIX Index	17	5.0	36.3	36.2	-2.2							

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

## NOTICE: IMPORTANT INFORMATION

Source(s) of data (unless otherwise noted): PGIM Fixed Income as of October 2024.

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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:** Credit Suisse Leveraged Loan Index: The Credit Suisse Leveraged Loan Index is a representative, unmanaged index of tradable, U.S. dollar denominated floating rate senior secured loans and is designed to mirror the investable universe of the U.S. dollar denominated leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

**European Senior Secured Loans:** Credit Suisse Western European Leveraged Loan Index: All Denominations EUR hedged. The Index is a representative, unmanaged index of tradable, floating rate senior secured loans designed to mirror the investable universe of the European leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

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.