

Dissecting the Selloff in the U.S. Rates Complex

WEEKLY VIEW FROM THE DESK October 11, 2021

QUICK LINK TO THE RETURNS TABLE

MACRO

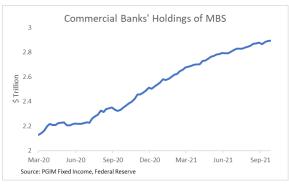
- We think the Federal Reserve's benchmark for beginning tapering next month does not hinge on a single month of data—i.e., the September payroll report of 194,000 vs. forecasts for 500,000—especially given that seasonal adjustments to the data do not work particularly well during COVID. Rather, Fed officials are likely focused on the recent trend of hiring, which has averaged around 692,000 per month, or as much as three times higher than the long-run steady state. We believe the recent jobs data meet the Fed's bar of "significant further progress" in economic conditions for reducing monetary support.
- Meanwhile, the labor force participation rate, which began to rebound quickly last year, has stalled out at around 62%—significantly lower than the pre-COVID levels (see accompanying chart). The 55+ cohort remains a main source of loss in the labor force, and concerns are mounting that older workers may not return. That said, the breadth of labor input in the economy is not limited to headcount: workers, particularly those in service industries, are working longer hours on average and supporting the service sector's rebound.
- Recent economic data are consistent with our view that growth will remain solid but begin to slow down next year. We are already in the throes of a fiscal cliff, given the last big fiscal package aimed directly at consumers and individuals occurred in March, and any future stimulus packages will



likely take years to impact the real economy. Nonetheless, households have accumulated substantial savings throughout the pandemic, and we will likely see continued strong retail sales and consumptions into next year.

RATES

- The environment of high inflation and wage growth is very different than the last tapering and rate hiking cycle between 2013 and 2015, and current conditions may prompt the Fed and other developed-market central banks to act even though labor markets have yet to fully recover. While front-end Treasury yields have risen substantially and market pricing has pulled forward the first rate hike to Q4 2022, we remain unconvinced that the Fed will begin the hiking cycle that early. The relatively minor move in real yields during the recent selloff indicates that market participants may believe that sustained increases in borrowing costs are unlikely.
- Last week's selloff in global rates was mainly driven by inflation breakevens amid rising energy costs. Ten-year TIPS-implied breakevens made up 13 of the 15-basis-point increase in nominal Treasury yields last week, and the 10-year breakeven yield is now at 2.5% and edging toward the 2.59% level reached in May. We think inflation expectations will slowly diminish and long-end rates will eventually revert to a gradual grind lower; but we are mindful of a scenario in which yields manage to break above the multi-year highs set in May, which could precipitate a further bout of heightened volatility and stopouts of long positions.
- The Treasury will release the survey of primary dealers this Friday, which will help debt managers decide on potential cuts to coupon supply at the upcoming quarterly refunding. The Treasury Borrowing Advisory Committee recommended substantive reductions in the 20- and seven-year sectors, i.e., the parts of the curve that we have long viewed as cheap. We continue to favor the 20-year against ultra-bond futures and the 30-year and the seven-year nominal issue against swaps.
- Agency MBS spreads are hovering around the tightest level in three months even in the face of the looming Fed tapering. The market weathered tapering concerns largely due to sizable bank demand, which continue to invest their large and sticky deposit base in MBS (see accompanying chart). While we see prepayment speeds slowing, equity takeouts will likely increase and step in as a source of origination given the pending increase in conforming limits.



IG CORPORATES

Trading in the secondary market was heavy last week, yet U.S. IG spreads only drifted slightly wider. Life insurers outperformed on the steeper yield curve and exploration and production firms outperformed on higher oil prices. While M&A activity remains consistent, including reported transactions from Cigna and Emerson Electric, recent upgrade-to-downgrade ratios show that more than half of the upgrades in Q3 were BBB credits upgraded to A.

- Reports indicate that GlaxoSmithKline may be fielding private equity offers for its consumer arm in what could amount to a recordsetting LBO in the area of \$54B, topping the \$48B LBO of TXU in 2007. Most recent LBOs of size have been in the \$30-\$32B area. An eventual transaction would likely result in significant issuance on both sides of the Atlantic.
- With U.S. banks set to report Q3 results this week, we expect to see weaker fixed income, currencies and commodities results, but strong investment banking performance. Net interest margins will likely remain under pressure, and we'll closely monitor loan growth statistics. While it's likely sizable bank issuance could follow the results (adding some technical pressure to spreads), we continue to see banks as an attractive asset class and generally regard them about 30 bps cheap to similarly rated industrials.
- Although European IG spreads only drifted slightly wider in a volatile week, the primary market offered some notable concessions. Multi-tranche deals from Thermo Fisher Scientific and Swedish property firm Heimstaden Bostad priced with concessions in the 20-25 bps area followed by Pepsi, which priced a euro deal well behind a recent U.S. issue. The concessions quickly evaporated in the secondary market with the transactions trading 10-15 bps inside of their re-offer quotes.

HIGH YIELD

- U.S. high yield posted a negative return last week as a steady flow of new supply weighed on the market. The market priced 16 deals for \$7.6B last week, with most deals moderately oversubscribed and trading flat to modestly higher on the break. By industry, all sectors posted negative returns, with food/beverage/tobacco (-0.51%), super retail (-0.57%), and consumer products (-0.57%) underperforming. Air Transportation (-0.11%) and energy (-0.06%) outperformed.
- While we remain constructive over the long term, we have modestly reduced our short-term outlook on the high yield bond market amid expectations of heavy new supply and a combination of macro risks that include slowing growth in China, political risks in the U.S., and higher energy prices, which could weigh on global growth.
- U.S. leveraged loans posted positive returns last week as the market was once again focused on primary issuance. In all, nearly 30 deals allocated last week. Looking forward, we expect \$10B worth of loans to allocate this week with another \$20B in the forward calendar, but we do not expect the market to have any difficulty absorbing the new supply.
- Last week saw the first U.S. loan that relies solely on Term SOFR as its base rate, beginning the market's transition away from LIBOR. Notably, the loan included a credit spread adjustment (CSA) of +10 bps, intended to reflect the embedded credit spread (bank funding component) in LIBOR that doesn't exist in SOFR. The issue also contains a 50 bps floor. Over time, we expect the market to stop requiring a CSA and simply add the basis to the all-in spread.
- In Europe, high yield bond returns were negative last week while loan returns were flat. High yield issuance totaled €6.5B, making it the busiest week of the year, high yield issuance is on pace to hit a new annual record.

EMERGING MARKETS

- Emerging market sovereign spreads stabilized last week, with the high yield portion of the index outperforming versus the
 investment grade portion. Still, hard currency assets posted negative returns as retail outflows continued. EM corporates also
 posted negative returns as the China property selloff continued amid defaults by developers Fantasia and Modern Land.
- Emerging market local debt also posted negative returns last week. Chile, Poland, and South Africa were the biggest underperformers, while Peru and Brazil outperformed. Poland's central bank unexpectedly raised rates for the first time since 2012, while Peru tightened monetary policy for the third straight month after inflation rose to its highest rate in 12 years. We modestly lowered our short-term outlook on local rates to reflect the ongoing inflationary pressure. However, we raised our long-term outlook given the attractive valuations in local markets, such as those in Brazil, Russia, Mexico, and Peru.
- EMFX returns were also negative, with the currencies of oil exporting countries leading for a second straight week and Latin American currencies and the currencies of several Asian energy importers lagging. As the U.S. Fed moves closer to tapering and China's growth outlook slows, we continue to believe the macro backdrop favors USD over broad EMFX.

SECURITIZED PRODUCTS

- U.S. conduit AAA CMBS spreads were unchanged as secondary demand remains strong. There are several large SASB deals in the market resulting in softer spreads from the increased supply.
- U.S. CLOs were unchanged at the top of the capital structure as middle mezzanine tranches moved marginally wider on elevated supply and waning demand from U.S. insurers. European spreads continued to have a firm tone as demand at the top of the capital structure remains strong. U.S. CLO primary spreads for higher quality portfolios are ~3L+113/160/205/320/625 for AAA/AA/A/BBB/BBs, respectively for 5-year reinvestment period deals.
- ABS spreads remain range bound, with most sectors at/near YTD tights. New issuance of \$202B YTD, 8% ahead of 2019's pace. From the standpoint of downside risk, we believe favorable liquidity positions by most major issuers will allow for reduction in issuance in the case of any market back-up.

MUNICIPAL BONDS

- Tax-exempt municipal bonds outperformed Treasuries across the curve last week. However, the selloff in Treasuries led to
 increased bid wanted activity and several high-grade deals cheapening. The 5, 10-, and 30-year portions of the AAA-rated muni
 curve ended at 48.9% (down from 54.8% the prior week), 73.1% (down from 77.9%), and 78.0% (down from 82.2%), respectively.
- While muni funds continued to experience net inflows, at \$37M, long term and high yield funds experienced outflows of \$344M and \$460M, respectively. For high yield funds, this was the second consecutive week of outflows. For the year, net inflows total \$89B.
- This week, the calendar is estimated at \$8B, including \$2B in taxables. We continue to expect the technical backdrop to improve later this month, with expectations of negative net supply toward year end, which should be supportive of tax-exempts.

For Professional Investors only. All investments involve risk, including possible loss of capital.

THE RETURNS TABLE As of October 8, 2021

		YTM	OAS	Yield/ OAS Change (BPS)				Total Return (%)			
Sovereign Rates	Duration			WTD	QTD	YTD	Prior Year	WTD	QTD	YTD	Prior Year
U.S. 2-Year	2.0	0.32		6	4	20	17	-0.10	-0.05	-0.06	0.04
U.S. 5-Year	4.8	1.05		13	10	70	72	-0.54	-0.22	-2.16	-2.12
U.S. 10-Year	9.2	1.60		15	13	70	83	-1.23	-0.66	-5.03	-6.06
U.S. 10-Year Breakeven		2.51		13	13	52	78				
U.S. 10-Year TIPS	4.9	-0.90		2	-1	19	5	-0.05	0.40	3.10	4.70
U.S. 20-Year	16.5	2.11		14	12	67	76	-2.05	-1.15	-9.68	-11.05
U.S. 30-Year	22.1	2.16		14	12	52	58	-2.62	-1.50	-10.54	-11.93
UK 10-Year	9.6	1.16		16	14	96	87	-1.47	-1.27	-7.84	-5.93
Germany 10-Year	9.9	-0.15		7	5	42	37	-0.72	-0.48	-0.55	-0.55
Japan 10-Year	9.9	0.08		3	2	7	5	-0.03	-0.03	-0.03	-0.03
Australia 10-Year	9.5	1.64		15	15	67	77	-1.37	-1.36	-4.68	-5.55
Canada 10-Year	8.9	1.62		16	12	95	101	-1.35	-1.00	0.49	0.49
MAJOR FI MS INDICES											
Global Aggregate Unhedged	7.5	1.22	33	0	0	-4	-14	-0.66	-0.36	-4.41	-1.23
Global Aggregate Hedged	7.5	1.22	33	0	0	-4	-14	-0.59	-0.41	-1.84	-0.89
U.S. Aggregate	6.7	1.63	33	0	0	-9	-23	-0.77	-0.50	-2.05	-1.19
Euro-Aggregate (Unhedged)	7.7	0.11	49	0	1	2	-7	-0.44	-0.27	-2.55	-1.57
Japanese Aggregate	9.6	0.12	1	0	0	0	0	-0.23	-0.09	-0.16	-0.05
MAJOR FI CREDIT INDICES											
Mortgage-Backed (Agency)	5.0	1.89	25	-2	-2	-14	-31	-0.43	-0.25	-0.92	-0.67
Global IG Corporate Bonds	7.3	1.73	90	2	2	-9	-39	-0.84	-0.53	-2.96	0.95
U.S. IG Corporate Bonds	8.6	2.22	86	2	2	-10	-41	-1.16	-0.77	-2.03	0.86
European IG Corporate	5.3	0.36	86	1	2	-6	-26	-0.31	-0.22	-0.53	0.98
U.S. High Yield Bonds	4.0	4.16	295	3	6	-65	-178	-0.33	-0.33	4.19	9.60
European High Yield Bonds	3.6	2.93	319	10	19	-39	-125	-0.26	-0.33	3.86	8.40
U.S. Leveraged Loans	0.3	5.12	438	-2	-7	-59	-146	0.11	0.12	4.77	8.16
European Leveraged Loans	0.3	3.74	404	-2	-2	-55	-155	0.05	0.08	4.34	7.75
EM Hard Currency Sovs.	7.9	5.22	360	-3	3	8	-51	-0.54	-0.63	-1.98	2.51
EM Corporates	4.9	4.51	304	-1	4	-23	-87	-0.50	-0.46	1.06	4.93
EM Currencies		3.40	360	-3	3	8	-51	-0.37	-0.21	-2.38	2.68
EM Local Rates	5.1	5.42	5	0	0	1	1	-0.59	-0.59	-4.38	-2.29
CMBS	5.1	1.64	60	-1	0	-20	-44	-0.53	-0.31	-0.84	0.41
ABS	2.3	0.66	28	-1	-1	-5	-13	-0.13	-0.08	0.15	0.55
CLOs		1.01	101	-1	-1	-15	-36	0.05	0.03	0.14	0.73
Municipal Bonds	4.9	1.16		3	4	9	-25	-0.15	-0.16	0.63	2.89

Total Return (%)						% Change					
Equity/Volatility	Level	WTD	QTD	YTD	Prior Yr	FX/Commodities	Spot	WTD	QTD	YTD	Prior Year
S&P 500 Index	9174	0.8	2.0	18.2	29.3	EUR/USD	1.2	-0.2	-0.1	-5.3	-1.6
DAX	15114	0.3	-0.4	10.8	16.6	USD/JPY	112.2	1.1	0.9	8.7	5.9
Stoxx 600	242	0.7	0.2	15.8	25.8	GBP/USD	1.4	0.5	1.0	-0.4	5.2
Nikkei 225	28498	-2.5	-4.8	3.6	20.4	USD/CHF	0.9	-0.4	-0.5	4.8	1.1
Shanghai Comp.	3592	0.7	0.7	5.6	14.0	USD (DXY)	94.1	0.0	-0.2	4.6	0.5
MSCI ACWI	369	0.7	1.2	12.4	25.6	Oil	79.4	4.6	5.8	63.5	92.6
FTSE 100	7109	1.0	0.1	13.2	23.0	Gold	1757.1	-0.2	0.0	-7.4	-7.2
MOVE Index	60	4.0	-2.3	21.8	4.1						
VIX Index	20	-11.3	-18.9	-17.5	-28.8						

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Source(s) of data (unless otherwise noted): PGIM Fixed Income as of October 2021

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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 SONSOR, ENDORSE, OR RECOMMEND PGIM FIXED INCOME OR ANY OF IS 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/BB+ or below by Moody's/S&P rating agencies. Information has been obtained from sources believed to be reliable, but 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 twentyfour 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, fixedrate 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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