Implications from the Nexus of Invasion and Hawkishness

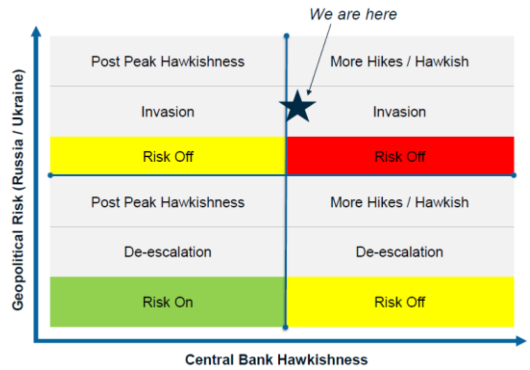
WEEKLY VIEW FROM THE DESK | February 21, 2022

QUICK LINK TO THE RETURNS TABLE

RUSSIA/UKRAINE UNCERTAINTY

- Most of the potential scenarios we've mapped out in the accompanying matrix could be challenging for investors as the double whammy of rising geopolitical risk and central bank hawkishness hits. Indeed, we have quickly found ourselves at the nexus of an invasion and the global withdrawal of central bank accommodation. Furthermore, beneath the mounting uncertainties, there is a modicum of certainty—economic growth is going to slow this year as global monetary and fiscal support wanes. We see this as the ultimate source of the market's recent unease.
- The Russia/Ukraine impact on energy prices is a significant complicating factor as it feeds directly into inflation and may tie the hands of central banks if they sense a need to dial back policy tightening amid slowing growth and escalating geopolitics. The emerging confluence of events points to a low likelihood that policymakers will successfully thread the needle and guide their economies toward soft landings. While the recent selloff in risk assets may seem like a reasonable entry point, valuations in certain asset classes still appear historically rich.
- Other than the energy complex, we are inclined to think the impact of the Russia's invasion will be relatively muted, if price action during Russia's annexation of Crimea in 2014 is any guide. IG corporate spreads tightened gradually during the period amid declining Treasury yields and rising Russian sovereign default risk, showing the broader bond market can still perform well in a positive economic and capital flows environment.

Geopolitical/Central Bank Matrix

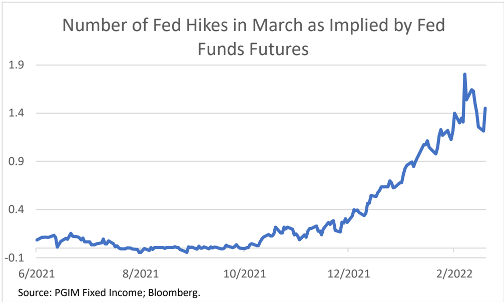


Source: PGIM Fixed Income

- That said, we see the recent developments as potentially just the beginning of more destabilizing conflicts between Russia and the West. Beyond its current incursion and attempts to install a pro-Russia government in Ukraine, we believe there is a significant probability that Russia advances further beyond the separatist regions, and it may even attempt to split Ukraine with a land bridge to aligned districts in Crimea and Transnistria in Moldova. In response to those potential scenarios, the U.S. and European countries will likely impose higher-impact sanctions, targeting technology transfers (chips) and cutting off dollar funding for banks. Although severing Russia's access to SWIFT, the international payment network, is possible, that could eventually push Russia closer to China's sphere of influence.

RATES

- The Russia/Ukraine conflict led sovereign yield curves to modestly bull-steepen last week, a departure from the recent bear flattening while injecting some wild intraday volatility. Treasury auctions held up amid the volatility as the newly reduced 20-year auction resulted in strong demand and minimal reaction in the secondary market leading up to and after the sale.
- The extreme pricing for Fed rate hikes is starting to experience pushback after several Fed officials questioned the necessity for a 50 bp rate hike in March, and the latest Fed minutes opened the possibility for quicker quantitative tightening in place of rate increases. In fed funds futures, we've seen the probability of a double hike in March fall to 40% from 80% just earlier this month. Meanwhile, the five- and two-year Treasury yield spread has flattened dramatically and is potentially bottoming out along with potential stabilization at about 75 bps in the 2- to 30-year curve . The next inflation report on March 10 is a key watchpoint as it could cement policymakers' decision at the March 16 meeting.



- The combination of increased market volatility and reduced Fed buying has led Treasury market liquidity to worsen. The deterioration is evident in rising on-the-run premiums amid investors' preference for the most liquid points on the curve.
- Agency MBS spreads continued to widen last week as Fed officials' comments continued to reinforce expectations around balance sheet normalization. We are still looking for at least 10-20 bps of widening in agency MBS OAS as the Fed pulls back from the market. As in the Treasury market, market functioning is beginning to deteriorate as dealers' appetite for intermediation declines with decreased Fed participation.

IG CORPORATES

- Last week's widening in U.S. IG spreads was accompanied by some notable activity among the $27.6B that priced in the primary market. For example, Bristol-Myers Squibb's $6B multi-tranche offering required 10-18 bps of concessions (greater at the back of the curve) only to trade wider upon reaching the secondary market. Mizuho Financial Group entered the market with a three-part offering of four-, eight-, and 20-year securities, and it consequently pulled the 20-year issue due to lack of demand. Although the banks recently reported results and tapped the markets in size, Morgan Stanley, J.P. Morgan, and Citi returned last week—perhaps indicating their view on the potential for further spread volatility—with deals requiring 5-20 bps of concessions.

- As the global stock of negative-yielding debt dropped from a peak of about $18T as of March 2021 to about $3.8T last week, overseas flows into the U.S. market have remained strong given the steep increase in currency hedged yields. That said, we're cognizant that three-month forward FX rates indicate the potential for higher USD hedging costs going forward.
- With European IG spreads continuing to widen into the low 130 bps range last week, it marked a point when spreads have only been wider during three periods since the peak of the peripheral debt crisis in 2013—the pandemic, late 2018, and during volatile periods in 2015. BBB-rated credits underperformed higher-quality bonds last week, and spread curves flattened. Cheap issuance weighed on the front/midpoint of yield curves as last week's primary activity of slightly more than €10B was concentrated in low-beta and / or low-duration transactions. Order books were generally 2.5x subscribed with concessions of 5-15 bps, and most new issues closed wider, reflecting the difficultly of recycling risk with counterparties only willing to provide defensive bids.

HIGH YIELD

- The widening in U.S. high yield spreads put them at the widest levels in 12 months. While credit fundamentals remain sound, last week's mixed technical picture with $3.6B of outflows, but no issuance, contributed to the spreads pressure. YTD issuance of $32.4B is down 57% year-over-year. Although outflows from retail funds have reached nearly $18B, it appears that institutional accounts have ample cash to deploy, particularly for some of the high-quality names that have recently widened significantly.
- Conversely, the technicals in the U.S. loan market remained resilient with inflows of $1.7B and limited issuance of $7.1B. On a relative-value basis across secured high-yield bonds and leveraged loans from the same issuer, secured bond yields appear cheap vs. loans, and we're adding secured bonds in portfolios where applicable.
- Although we don't see a catalyst for spread tightening, the widening in European high-yield spreads is likely creating some value. For example, the 532 bp spread on European "B" issues is 121 bps wide of "B" issues in the U.S., which is the largest divergence in memory. With benchmark spreads of 407 bps, our weighted average probability for spreads is 390 bps by year end, which implies excess return of about 500 bps, indicating the sector's potential to generate returns from carry amid historically low default rates. European loans underperformed bonds, but with a YTD loss of -0.30%, have outperformed bonds by a wide margin thus far in 2022.

EMERGING MARKETS

- Despite the mounting tension in the heart of a major EM region, the sector exhibited limited volatility last week as asset class performance was mixed. As of Tuesday morning, Russia's hard currency bonds were quoted 4-8 points lower with a 5-year cash spread at +350 bps (in line with 5-year CDS) and a 25-year issue at +370 bps. Ukraine's 5-year hard currency debt was quoted 5 points lower at a 76 dollar price and a spread of about 1,400 bps. Despite the geopolitical uncertainty, we believe Ukraine has sufficient reserves to pay its short-dated debt through 2022 and 2023. In addition, the country clearly has the support of the west should conditions deteriorate from here. EM corporate spreads widened with the overall market weakness, and we have minimal corporate exposure in Ukraine. In general, quarterly results remain solid with Brazil banks reporting strong loan growth.
- LatAm EMFX continued to outperform amid higher carry, rising commodity prices, and light investor positioning while Europe underperformed. The resiliency of EMFX has stood out relative to global risk indicators (spreads, equities, volatility etc.) as well as geopolitics. However, the recent gains may be unsustainable in a context where the Fed tightens into the weakening momentum for global growth, and we're maintaining relative-value positioning with a short EMFX bias.
- In local rates, some of the outperformance in countries, such as Colombia, Czech, and Poland, occurred in the belly and the back of the curves. China focused bond funds recorded an outflow of $ 837M, while EM ex-China bond funds recorded saw inflows of $270M. Sentiment in local markets seems to be shifting from accelerating inflation to decelerating growth. We have started to cover underweights in tenors of five-years and longer and are maintaining an underweight in three-year curve segments.

SECURITIZED PRODUCTS

- U.S. conduit AAA CMBS spreads were 3 bps wider last week amid a silent primary market. There are two top tier deals in the market this week with price talk at SOFR Swap+115 bps. SASB floater spreads widened last week with AAA +5bps and BBB +15 bps.
- U.S. CLO spreads widened last week. Given the lag in primary markets, we have not seen the recent widening fully reflected in pricing. At this point, we believe AAA/AA spreads for benchmark issuers would be ~5 and 15 bps wider, respectively, with spreads across the capital structure at ~3m SOFR+135/190/250/365/700 for AAA/AA/A/BBB/BB, respectively. European spreads were also wider, and we believe AAA spreads are now in the mid-high ~3E+90s.
- ABS spreads were wider last week with prime auto widening by 5-10 bps and unsecured consumer loans widened by 10 bps. Senior securities struggled to print at initial guidance and widened by 5-10 bps. Mezzanine paper (AA/A/BBB) held in well and priced in the context of guidance. Junior classes (below investment grade) widened by 30-40 bps vs. initial guidance depending upon the transaction. New issue to secondary basis remains flat to negative, making secondary security spreads more attractive, albeit less scalable. Total new issue supply reached $37B YTD, on pace with 2021's issuance.

MUNICIPAL BONDS

- Last week's muni technicals remained relatively weak with $1.3B of outflows (sixth consecutive week for a total of $8.2B) and $5.8B of supply, which was 115% of the five-year average (however, negative net supply in February estimated at $8B). Muni rates were little changed on the week, in line with long-end Treasuries, but underperforming by as much as 12 bps on the shorter end of the curve. In general, municipal bonds started the week on wobbly footing, but then rallied back by 7 bps by the end of the week.

THE RETURNS TABLE As of February 18, 2022

Sovereign Rates	Duration	YTM	OAS	Yield/ OAS Change (BPS) WTD	QTD	YTD	Prior Year	Total Return (%) WTD	QTD	YTD	Prior Year
U.S. 2-Year	1.9	1.47	---	-4	74	74	136	0.12	-1.25	-1.25	-1.80
U.S. 5-Year	4.7	1.82	---	-4	56	56	127	0.23	-2.45	-2.45	-4.43
U.S. 10-Year	9.1	1.94	---	-1	42	42	64	0.19	-3.71	-3.71	-4.21
U.S. 10-Year Breakeven	--	2.44	---	-4	-16	-16	26	---	---	---	---
U.S. 10-Year TIPS	4.9	-0.51	---	3	59	59	37	-0.12	-4.19	-4.19	3.20
U.S. 20-Year	15.8	2.33	---	0	37	37	38	-0.11	-6.31	-6.31	-5.17
U.S. 30-Year	21.7	2.27	---	0	34	34	16	0.06	-7.86	-7.86	-2.94
UK 10-Year	9.3	1.38	---	-17	41	41	76	1.58	-3.58	-3.58	-5.21
Germany 10-Year	10.0	0.19	---	-10	37	37	54	1.06	-2.73	-2.73	-2.73
Japan 10-Year	9.6	0.21	---	-2	15	15	12	0.15	-0.87	-0.87	-0.87
Australia 10-Year	9.5	2.25	---	4	58	58	88	-0.31	-4.92	-4.92	-5.76
Canada 10-Year	8.6	1.88	---	2	45	45	73	-0.17	-3.62	-3.62	-1.08
MAJOR FI MS INDICES											
Global Aggregate Unhedged	7.4	1.77	42	2	7	7	10	0.00	-3.03	-3.03	-5.75
Global Aggregate Hedged	7.4	1.77	42	2	7	7	10	0.02	-2.99	-2.99	-2.96
U.S. Aggregate	6.8	2.38	42	3	6	6	9	-0.24	-3.68	-3.68	-3.73
Euro-Aggregate (Unhedged)	7.5	0.65	72	2	16	16	25	0.40	-3.29	-3.29	-4.59
Japanese Aggregate	9.4	0.27	1	0	0	0	0	-0.29	-1.69	-1.69	-1.32
MAJOR FI CREDIT INDICES											
Mortgage-Backed (Agency)	5.4	2.55	28	3	-3	-3	11	-0.12	-2.89	-2.89	-3.70
Global IG Corporate Bonds	7.1	2.58	122	8	25	25	30	-0.58	-4.77	-4.77	-5.92
U.S. IG Corporate Bonds	8.3	3.11	118	10	26	26	30	-0.88	-5.71	-5.71	-4.72
European IG Corporate	5.1	1.11	126	7	31	31	40	0.22	-3.17	-3.17	-3.71
U.S. High Yield Bonds	4.7	5.74	365	-3	82	82	44	-0.25	-4.27	-4.27	-0.50
European High Yield Bonds	3.8	4.15	397	18	79	79	84	-0.13	-3.20	-3.20	-0.91
U.S. Leveraged Loans	0.3	6.11	442	13	13	13	-6	-0.32	0.01	0.01	3.53
European Leveraged Loans	0.3	3.89	447	18	18	18	29	-0.41	-0.29	-0.29	3.06
EM Hard Currency Sovs.	4.7	5.21	330	10	19	19	23	-0.40	-2.78	-2.78	-2.32
EM Corporates	---	4.04	---	21	-29	-29	156	0.18	1.26	1.26	-1.73
EM Currencies	5.1	5.94	6	0	0	0	1	0.25	-0.69	-0.69	-5.13
EM Local Rates	5.0	2.55	76	4	8	8	4	-0.16	-2.87	-2.87	-3.31
CMBS	2.3	1.84	37	3	-1	-1	9	0.02	-1.19	-1.19	-1.61
ABS	---	1.16	116	4	8	8	13	-0.10	-0.18	-0.18	-0.29
CLOs	4.9	1.91	---	5	80	80	91	-0.18	-3.33	-3.33	-2.33
Municipal Bonds	4.7	5.21	330	10	19	19	23	-0.40	-2.78	-2.78	-2.32

Equity/Volatility	Level	Total Return (%) WTD	QTD	YTD	Prior Yr
S&P 500 Index	9131	-1.5	-8.6	-8.6	12.7
DAX	14729	-2.5	-5.3	-5.3	8.3
Stoxx 600	245	-2.0	-5.1	-5.1	13.8
Nikkei 225	26911	-2.1	-5.8	-5.8	-8.8
Shanghai Comp.	3491	0.8	-4.1	-4.1	-3.0
MSCI ACWI	363	-1.7	-6.7	-6.7	5.2
FTSE 100	7460	-1.8	1.9	1.9	17.6
MOVE Index	94	0.4	22.4	22.4	68.1
VIX Index	28	1.4	61.1	61.1	23.4

FX/Commodities	Spot	% Change WTD	QTD	YTD	Prior Year
EUR/USD	1.1	-0.2	-0.4	-0.4	-6.4
USD/JPY	115.0	-0.4	-0.1	-0.1	8.8
GBP/USD	1.4	0.2	0.4	0.4	-2.8
USD/CHF	0.9	-0.5	0.9	0.9	2.9
USD (DXY)	96.0	0.0	0.4	0.4	6.0
Oil	77.0	-2.2	18.3	18.3	50.5
Gold	1898.4	2.1	3.8	3.8	6.9

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Source(s) of data (unless otherwise noted): PGIM Fixed Income as of February 2022

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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: 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.

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