GFI Swaps Exchange LLC

CONTRACT SPECIFICATIONS

CREDIT

Subject to the requirements of the Rules, Swaps in the credit asset class may be effected (i) in the Order Book pursuant to Rule 505, (ii) through a Request for Quote pursuant to Rule 508, (iii) as a voice-executed trade or a Brokered Trade pursuant to Rule 509 or (iv) as a Block Trade pursuant to Rule 601.

Credit Derivative Product Details and Contract Specifications Products

- Credit Default Swap Indices
- Credit Index Swaptions

Overview:

Credit derivatives provide an opportunity to hedge or acquire credit exposure on an underlying reference credit entity. In the event of a credit "event" such as default of the entity, a "buyer" of credit protection will be compensated for losses whilst a "seller" of credit protection will be liable for the compensation amount. The underlying entity can be:

a) a portfolio of single credits assembled as a standardized reference index
b) a single credit (e.g. BMW)
c) a "tranche" of credit risk based on an index portfolio. e.g. exposure to a defined proportion of the loss distribution associated with an index For example exposure to up to the first 3% of losses on an index.

Basic Credit Derivative contracts

Credit exposure to the underlying reference entity can be achieved in two principal ways:

a) via a "Credit Default Swap"

A credit default swap is a contract between two participants - "*Protection Buyer*" and a "*Protection Seller*". Under the contract, the buyer pays a regular "*premium*" to the seller who in exchange agrees to compensate the buyer for losses if a "*Credit Event*" occurs (the definition of a credit event is specified under ISDA 2003 or ISDA 2014 definitions), at which point the contract terminates and a cash "*settlement"* is made to the buyer in accordance with ISDA CDS credit event auction guidelines. Versions of these are **Credit Default Swap Indices** based upon a standard reference index of underlying CDS (see below).

b) via "Credit Default Swap Option (Swaption)"

A credit default swaption gives the gives the buyer of the option, the right but not the obligation to enter into a credit default swap (as in a) above) i.e. "exercise" the option at the specified option "*expiry date*". Option exercise is generally restricted to the expiry date – "*European style*" or less commonly may be executed at any time up to expiry – "*American Style*". The most liquid contract is a Credit Default **Index** Swaption

Credit Default Swap Indices

Product Description:

In 2004, *standardized* credit indices were introduced which are credit default swaps based upon rule-based portfolios of equally-weighted underlying credits from specific market sectors. There are two main index families based on geographical location: a) MARKIT CDX indices : comprising single credits from North America and Emerging Markets, and b) MARKIT ITRAXX indices comprising single credits from Europe, Asia and the Rest of the World. The generic MARKIT CDX and MARKIT ITRAXX indices are subdivided according to the number and credit characteristics of their underlying constituents: both indices are serially issued every 6 months, rolling in Mar and September (generally on the 20th of the Month except for High Yield on 27th) with changes to portfolio constituents determined by polling of a group of investment banks. There is a standard set of tenors depending upon the portfolio (3, 5, 7 & 10yrs). A new series will have an associated *standard coupon rate* (premium) based upon the credit spreads of the underlying constituents – this is generally fixed (and displayed on SEF systems) at either 100bps or 500bps (though can be 25 or 1000bps in exceptional situations) depending upon the credit quality of the underlying entities, with an upfront payment offsetting the difference between this rate and the average spread of the portfolio. On issue date, the new series of an index comprising new portfolio and coupon is published. New series issuance and portfolio characteristics is administered by Markit Partners - see www.Markit.com.and indices adhere to ISDA standard protocols - see www.isda.org. Credit event(s) on single names within a portfolio will result in a proportional erosion of its par value.

TABLE A: ON THE RUN INDICES

Family	Indices	Description*	Tenors (Y)	Cleared Series (as of 2nd Oct 2013)	Swap Convention	Recovery(%)
MARKIT CDX.	NA.IG	125 investment grade	3,5,7,10	3Yr 15 to Current 5Yr 11 to Current 7Yr and 10Yr 8 to Current	Traded on Spread/Coupon 100bps	40
MARKIT CDX.	NA.HY	100 High Yield	5	12 to Current	Traded on Price/Coupon 500bps	30

MARKIT CDX.	NA.HVOL	30 investment grade	3,5,7,10	12 to Current	Traded on Spread/Coupon 100bps	40
MARKIT CDX.	NA.EM	14 (can vary) Emerging Market Sovereign Issuers	5	14 to Current	Traded on Price/Coupon 500bps	25
MARKIT ITRAXX	EUROPE	125 liquid European investment grade names	3,5,7,10	5yr 10 to Current 10yr 7 to Current	Traded on Spread/Coupon 100bps	40
MARKIT ITRAXX	EUROPE CROSSOVER	50 most liquid sub investment grade names	3,5,7,10	5y 10 to Current	Traded on Spread/Coupon 500bps	40
MARKIT ITRAXX	EUROPE HIVOL	30 widest spread non-financial credits	3,5,7,10	5y 10 to Current	Traded on Spread/Coupon 100bps	40
MARKIT ITRAXX	EUROPE SENIOR FINANCIALS	25 European Senior Financial Entities	5, 10yr		Traded on Spread/Coupon 100bps	40
MARKIT ITRAXX	EUROPE SUB FINANCIALS	25 European Subordinated Financial Entities	5, 10yr		Traded on Spread/Coupon 100bps	20
MARKIT ITRAXX	JAPAN	50 Japanese entities	5yr		Traded on Spread/Coupon 100bps	35
MARKIT ITRAXX	ASIA-EX JAPAN	40 Asian - ex Japan entities	5yr		Traded on Spread/Coupon 100bps	40
MARKIT ITRAXX	AUSTRALIA	25 Australian entities	5yr		Traded on Spread/Coupon 100bps	40
MARKIT CDX	LatAm Corp	20 Latin American Corporates	5yr		Traded on Price/Coupon 500bps	25
MARKIT MCDX	MCDX	50 US Municipal Issuers	3,5,10yr		Traded on Spread/Coupon 500bps	80
MARKIT ITRAXX	SOVX	Top 15 Western Europe Sovereign entities	5,10yrs		Traded on Spread/Coupon 100bps	40

MARKIT ITRAXX	SOVX EXEU	10 CEEMEA names ex. Europe	5yr	Current Series 10	Traded on Price/ Coupon100bps	25
MARKIT ITRAXX	CEEMEA CORPX	25 Corporate EM names	5yr	Current Series 20	Traded on Price/ Coupon100bps	25
MARKIT ITRAXX	MSCI ESG Screened Europe	Variable Number of Large and Mid-Cap Entities	5yr		Traded on Price/ Coupon100bps	40
OTHER	OTHER	Any other valid index calculated by a registered Exchange, or established index provider as applicable				
	SUB-INDICES					
MARKIT CDX	NA.HY.BB	Sub-basket MARKIT CDX.NA.HY that are BB rated	5yr		Traded on Price/ Coupon 500bps	30
MARKIT CDX	NA.HY.B	Sub-basket MARKIT CDX.NA.HY that are B rated	5yr		Traded on Price/Coupon 500bps	30
MARKIT CDX	NA.IG.CONS	Sub-basket MARKIT CDX.NA.IG that are Consumer	5yr		Traded on Spread/ Coupon 100bps	40
MARKIT CDX	NA.IG.ENRG	Sub-basket MARKIT CDX.NA.IG that are Energy	5yr		Traded on Spread/Coupon 100bps	40
MARKIT CDX	NA.IG.FIN	Sub-basket MARKIT CDX.NA.IG that are Financials	5yr		Traded on Spread/Coupon 100bps	40
MARKIT CDX	NA.IG.INDU	Sub-basket MARKIT CDX.NA.IG that are Industrials	5yr		Traded on Spread/Coupon 100bps	40
MARKIT CDX	NA.IG.TMT	Sub-basket MARKIT CDX.NA.IG that are Telecoms, Media & Technology	5yr		Traded on Spread/Coupon 100bps	40

* number of constituents can vary according to series.

Terms and Conditions : Credit Default Swap Index

CREDIT DEFAULT SWAP INDEX

Contract Overview	An agreement to buy or sell protection on a basket of (from Table A: Description).
Index	(Name & Series)
Currency	EUR or USD dependent on Index
Quoting Convention & Minimum Increment	As agreed by counterparties.
Minimum Size	As agreed by counterparties.
Trading Conventions	Buyer - the buyer of protection pays a premium to the seller in case of a credit event occurring Seller - the seller of protection receives the premium payments from the protection buyer but is liable to make good losses to buyer in credit event
Swap Conventions	Traded on spread or price (see Table A Swap Convention) Fixed coupon payments calculated at a spread of (X bp - see Table A, Swap Conventions) and exchanged on a quarterly basis
Tenor	(As agreed by the parties—for illustrative tenors See Table A : Tenors)
Maturity Date	20th March or September of tenor years
Coupon Details	*Spread: Xbps spread (see Table A: Swap Conventions) Frequency:* *Quarterly 20 Mar/Jun/Sep/Dec* *Daycount: Act/360* *Business Day Convention: Following* *Calendar : MARKIT ITRAXX: LDN & Target, MARKIT CDX NYC & LDN*
Credit Event	Determined pursuant to 2014 ISDA Definition : Failure to Pay, Government Intervention, Bankruptcy (MARKIT CDX) and also (Modified) Restructuring (MARKIT ITRAXX)
Recovery Rate	Index dependent - as provided in Table A

Settlement	Contingent payment - Payments related to credit event settlement will be determined pursuant to the 2014 ISDA Credit Derivatives Determination Committees and Auction Settlement Supplement, (the "Big Bang Protocol"). Fixed Quarterly cash payments - reflected in basis points and paid by the protection buyer to the protection seller. Upfront fee payment - The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid immediately to the seller
Trade Types	Outright Rolls (a buyer of the roll is a seller of the older series and a buyer of the more newly issued series) Spreads (a buyer of the spread is a seller of the shorter tenor and a buyer of the longer tenor)
Trading Hours and Venue	00:01 -24:00 Sunday-Friday; Eastern Time
Clearing Venue	Where applicable per Index: ICE Clear Credit, CME Clearing, LCH.Clearnet SA and ICE Clear Europe
Block Size	As set forth in Appendix F to Part 43. of the CFTC Regulations

Credit Swap Indices and their construction, issuance and maintenance are administered by a 3rd party, Markit Partners, to ensure full standardization and maximum liquidity in the products. Principal features of the products as outlined by Markit Partners are Trade Efficiency, Liquidity, Transparency and Data Integrity. These features apply to the CDX and ITRAXX families of indices and serve to mitigate issues of price manipulation.

Credit Options and Exotic Options

Swap Specifications Pursuant to Rule 1101

(i) Options that are not subject to mandatory clearing but which are accepted for clearing by a Clearing Organization and which are offered for trading on the SEF as Permitted Transactions may be submitted voluntarily by the parties for clearing.

(ii) Options not accepted by a Clearing Organization for clearing may be listed for trading subject to the Rules of the SEF as Permitted Transactions.

(iii) The terms and conditions of the options offered for trading as Permitted Transactions on the SEF incorporate such credit and other terms as the parties may establish through their pre- existing bi-lateral agreement.

(iv) The options listed for trading by the SEF have the following specifications:

Contract Overview	An agreement to buy or sell protection on a basket of North American based entities with an investment grade or high yield credit rating, as applicable.
Option Trade Date	As agreed by the counterparties.
Option Seller	As agreed by the counterparties.
Option Buyer	As agreed by the counterparties.
Premium	As agreed by the counterparties.
Strike Price	As agreed by the counterparties.
Expiration Date	As agreed by the counterparties.
Underlying Index, Security or Debt, as applicable	iTraxx Asia Ex Japan iTraxx Australia iTraxx Japan iTraxx SovX CDX.NA MCDX Municipal bonds Sovereign debt Corporate debt Structured credit default swaps (contingent CDS, index contingent CDS, first to default, Nth to Default, bespoke tranche)
Quoting Convention and Minimum Increment	As agreed by the counterparties.

Minimum Size	As agreed by the counterparties.
Effective Date	The date on which the counterparties begin calculating accrued obligations such as fixed payments (i.e., start date of the swap).
Maturity Date	The final date on which the obligations no longer accrue and the final payment occurs.
Trade Types	Outrights; roll trades; curve trades.
Settlement	Contingent Payment - Payments related to credit event settlement will be determined pursuant to the 2009 ISDA Credit Derivatives Determination Committees and Auction Settlement Supplement, (i.e., the Big Bang Protocol). Fixed Quarterly cash payments - reflected in basis points and paid by the protection buyer to the seller. Upfront fee payment - The upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid immediately to the seller.
Trading Hours	00:01-24:00 (ET), Sunday-Friday
Clearing Venue	CME or bilateral, as applicable
Block Size	As set forth in Appendix F to Part 43 of the CFTC Regulations.
Speculative Limits	As set in Part 151 of the CFTC Regulations.
Reportable Levels	As set in the CFTC Regulation 15.03.

iBoxx Standardized TRS Indices

The terms and conditions of the iBoxx Standardized Total Return Swap indices incorporate by reference such credit and other terms as the parties may establish through pre-existing bilateral agreements. The iBoxx Standardized Total Return Swap indices have the following characteristics:

Contract Overview	Each contract is a total return swap where the buyer is obliged to pay a predetermined set rate, fixed or variable, to the seller in exchange for the notional-based return performance of one of the Reference Indices listed below.
Reference Index	Markit iBoxx EUR Corporates Markit iBoxx EUR Liquid HY Markit iBoxx GBP Corporates Markit iBoxx USD Domestic Corporates Markit iBoxx USD Liquid HY Markit iBoxx USD Liquid IG Markit iBoxx USD Liquid Leverage Loan
Trade Date	The date on which the parties enter into the contract, which shall be prior to the Termination Date.
Effective Date	The first day of the term of the contract, as agreed by the parties.
Quoting Convention and Minimum Increment	Notional amount, as agreed by the parties.
Minimum Size	Notional amount, as agreed by the parties.
Termination Date	The date on which the contract expires, as agreed by the parties.
Tenor	The duration of time from the Effective Date to the Termination Date.
Settlement Type	Cash settlement.
Settlement Terms	Buyer: The buyer pays (i) a fixed rate of interest plus a differential, as agreed by the parties and (ii) the depreciation of the Reference Index, as applicable. Seller: The seller pays (i) the income of the Reference Index and (ii) the appreciation of the Reference Index, as applicable.
Settlement Currency	EUR, GBP or USD.
Trading Hours	06:00-17:00 (ET), Sunday-Friday.
Speculative Limits	None.
Reportable Levels	None.

Uncleared Credit Default Swaps: Mortgage Indices

Swap Specifications Pursuant to Rule 1101

Contract Overview	An agreement to buy or sell protection on a basket of North American based entities with an investment grade or high yield credit rating, as applicable.
Index Name	ABX HE ABX Tranche CMBX MBX PrimeX TRX PO IOS
Currency	USD
Quoting Convention and Minimum Increment	As agreed by the counterparties.
Minimum Size	As agreed by the counterparties.
Trading Conventions	Buy = Buy Protection, the buyer of protection pays a premium to the seller in case of a credit event occurring. Credit events include Bankruptcy and Failure to Pay. Sell = Sell Protection, the seller of protection receives the premium payments from the protection buyer. The Seller owns the credit risk of the instrument. Investment grade indices are traded on spread
Swap Conventions	Fixed coupon payments are calculated at a spread of 100 bps and exchanged on a quarterly basis.
Swap Tenor	CDX.NA.IG: 3Y, 5Y, 7Y, 10Y CDX.NA.HY: 5Y
Applicable Series	CDX.NA.IG 3Y: Series 15 and all subsequent Series, up to and including the current series. CDX.NA.IG 5Y: Series 11 and all subsequent Series, up to and including the current series. CDX.NA.IG 7Y: Series 8 and all subsequent Series, up to and including the current series. CDX.NA.IG 10Y: Series 8 and all subsequent Series, up to and including the current series. CDX.NA.IG 5Y: Series 11 and all subsequent Series, up to and

	including the current series.
Effective Date	The date on which the counterparties begin calculating accrued obligations such as fixed payments (i.e., start date of the swap).
Maturity Date	The final date on which the obligations no longer accrue and the final payment occurs.
Trade Types	Outrights; roll trades; curve trades.
Settlement	Contingent Payment: payments related to credit event settlement will be determined pursuant to the 2009 ISDA Credit Derivatives Determination Committees and Auction Settlement Supplement, (i.e., the Big Bang Protocol). Fixed Quarterly cash payments: reflected in basis points and paid by the protection buyer to the seller. Upfront fee payment: the upfront fee is a portion of the payments, expressed in percentage points of the notional, which is present valued and paid immediately to the seller.
Trading Hours	00:01-24:00 (ET), Sunday-Friday
Clearing Venue	CME or bilateral, as applicable
Block Size	As set forth in Appendix F to Part 43 of the CFTC Regulations.
Speculative Limits	As set in Part 151 of the CFTC Regulations.
Reportable Levels	As set in the CFTC Regulation 15.03.

ENERGY AND COMMODITIES

Subject to the requirements of the Rules, Swaps in the energy and commodities asset class may be effected (i) in the Order Book pursuant to Rule 505, (ii) as a voice-executed trade or a Brokered Trade pursuant to Rule 509 or (iii) as a Block Trade pursuant to Rule 601.

Agricultural Swaps

The terms and conditions of Agricultural Swaps incorporate by reference such credit and other terms as the parties may establish through pre-existing bilateral agreements. Agricultural Swaps have the following characteristics:

Contract Overview	An Agricultural Swap represents an agreement to exchange a stream of cash flows by reference to the difference between (i) a fixed price agreed by the parties and a floating rate based on a specified notional amount over a specified term to maturity.
Underlying Commodities	Soybean Meal
Trade Date	As agreed by the parties.
Effective Date	The date on which the calculation of accrued obligations begins under the contract.
Notional Amount	As agreed by the parties for each relevant Underlying Commodity.
Settlement Date	As agreed by the parties.
Termination Date	As agreed by the parties.
Settlement Type	Cash.
Price Source	Fixed Price: Soybean Meal: The equivalent futures contract listed for trading on the CBOT using the daily settlement price. Floating Price: Based on the futures contract on specified settlement date as agreed to by the parties.
Fixed Price Payer	Party [A/B]
Floating Price Payer	Party [B/A]
Floating Price	As agreed by the parties.
Minimum Price Fluctuation/Price Tick Size	The minimum price increment is quoted in increments of $0.10 per contract.
Settlement Price	As agreed by the parties, measured in ten cents ($0.10) per contract.
Tenor	The duration of the time from the Effective Date to the Termination Date
Last Trading Day	Trading terminates at the close of business on the last business day of each contract month.
Trade Types	Outrights and Spread and Switch strategies.

Payment Frequency	As agreed by the parties, but either monthly, quarterly, semi-annually or annually.
Holiday Calendar	New York and London.
Business Day Convention	As agreed by the parties, but must be any valid business day on both the New York and London calendars. If not, then it shall be the next day that is a business day on both the New York and London calendars.

ERCOT Ancillary Services Swaps

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Contract Overview	An agreement to exchange cash flows based on the difference between a fixed price agreed to by the parties and a floating rate based on an ancillary service over a specified term to maturity.
Reference Ancillary Services	ERCOT Regulation Down Service ERCOT Regulation Up Service ERCOT Responsive Reserve Service ERCOT Non-Spinning Reserve Service
Trade Date	As determined by the parties.
Effective Date	The date on which the parties begin calculating their accrued obligations under the swap.
Termination Date	As determined by the parties.
Buyer	Party [A/B]
Seller	Party [B/A]
Fixed Price	As determined by the parties.
Floating Price	As determined by ERCOT
Determination Period	Effective Date through Termination Date.
Payment Date	As determined by the parties.

European Power Swaps

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Contract Overview	An agreement to exchange cash flows based on the difference between the fixed price agreed by the parties and the floating price based on delivery of electricity at the applicable delivery point or grid on the specified determination date.
Trade Date	As determined by the parties.
Effective Date	The date on which the parties begin calculating their accrued obligations under the swap.
Termination Date	As determined by the parties.
Buyer	Party [A/B]
Seller	Party [B/A]
Transaction Type	[base load swap] [peak load swap] [off-peak swap]
Delivery Point	As specified by the parties.
Fixed Price	As determined by the parties.
Quantity	As determined by the parties.
Floating Price	The [base load swap] [peak load swap] [off-peak swap] for the applicable delivery point as determined by the relevant system operator.
Determination Period	Effective Date through Termination Date.
Payment Date	As determined by the parties.

Freight Options

If the freight option is accepted for clearing by a clearing organization, the terms and conditions of the freight option incorporate by reference such terms and conditions established by the relevant clearing organization in its rules or bylaws. If the freight option is not submitted for clearing to a clearing organization, the terms and conditions of the freight option incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The freight option has the following characteristics:

Contract Overview	A freight option contract represents an option to assume a short or long position in the underlying freight swap at the strike price.
Underlying Reference Routes	**Dry Timecharter Basket Routes** CTO (Capesize TC Avg 4) PTO (Panamax TC Avg 4) STO (Supramax TC Avg 6) HTO (Handysize TC Avg 6)
Trade Date	The date on which the parties enter into the options contract.
Option Style	**European Style**: A European style option allows the holder to exercise only at the expiration date, i.e. a single pre-defined point in time. **American Style**: An American style option allows the owner to exercise the option at any time before the expiration date.
Option Premium	The premium is paid at the time of purchase.
Currency	USD
Strike Price	The price at which an investor can exercise an option.
Expiration Date	The date on which the option contract expires.
Expiration Time	The time at which the option contract expires.
Settlement Date	The date on which the option settles.
Settlement Type	[Cash settlement] [Physical settlement]

Freight Swaps

If the freight swap is accepted for clearing by a clearing organization, the terms and conditions of the freight swap incorporate by reference such terms and conditions established by the relevant clearing organization in its rules or bylaws. If the freight swap is not submitted for clearing to a clearing organization, the terms and conditions of the freight swap incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The freight swap has the following characteristics:

Contract Overview	A freight swap is an agreement to exchange a stream of cash flows by reference to the difference between a fixed rate and a floating rate based on a specified notional amount over a specified term to maturity.
Trade Date	As agreed by the parties.
Effective Date	The date on which the calculation of accrued obligations begins under the swap.
Reference Routes	**Dry Timecharter Basket Routes** CTC (Capesize TC Avg 4) PTC (Panamax TC Avg 4) STC (Supramax TC Avg 6) HTC (Handysize TC Avg 6) **Dry Voyage Routes** C3E (Tubarao – Qingdao) C4E (Richards Bay – Rotterdam) C5E (W Australia – Qingdao) C7E (Bolivar – Rotterdam) **Day Trip Timecharter Routes** P1A, P1E (Transatlantic RV) P2A, P2E (Cont Trip Far East) P3A, P3E (Transpacif RV) **$ per Tonne Tanker Routes** Baltic TC2 Baltic TC6 Baltic TC14 Baltic TD3 Baltic TD5 Baltic TD7 Baltic TD19
Notional Amount	As agreed by the parties for each relevant commodity.
Settlement Dates	As agreed by the parties.
Termination Date	As agreed by the parties.
Fixed Price Payer	Party [A/B]

Fixed Price	As agreed by the parties.
Floating Price Payer	Party [B/A]
Floating Price	**Dry Timecharter Basket Routes** In respect of daily settlement, the floating price will be the end of day price as supplied by the Baltic Exchange. In respect of final settlement, the floating price will be the mean of the daily Baltic Exchange spot price assessments for every trading day in the expiry month. **Dry Voyage Routes** In respect of daily settlement, the floating price will be the end of day price as supplied by the Baltic Exchange. In respect of final settlement, the floating price will be the mean of the daily Baltic Exchange spot price assessments for every trading day in the expiry month. **Day Trip Timecharter Routes** In respect of daily settlement, the floating price will be the end of day price as supplied by the Baltic Exchange. In respect of final settlement for P1A, P2A & P3A, the floating price will be the mean of the last 7 Baltic Exchange spot price assessments in the expiry month. In respect of final settlement for P1E, P2E & P3E, the floating price will be the mean of the daily Baltic Exchange spot price assessments for every trading day in the expiry month. **$ per Tonne Tanker Routes** In respect of daily settlement, the floating price will be the end of day price (in $/t) as supplied by the Baltic Exchange. In respect of final settlement, the floating price will be a price in US$ per mt calculated as the mean of the Baltic Exchange WS rate spot price assessments multiplied by the Flat Rate divided by 100 for each pricing date in the expiry month.
Price Source	Baltic Exchange.
Pricing Date(s)	If applicable, as agreed by the parties.
Method of Averaging	If applicable, as agreed by the parties.

Iron Ore, Coal and Fuel Oil Swaps

If the swap is accepted for clearing by a clearing organization, the terms and conditions of the freight swap incorporate by reference such terms and conditions established by the relevant clearing organization in its rules or bylaws. If the swap is not submitted for clearing to a clearing organization, the terms and conditions of the swap incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swap has the following characteristics:

Contract Overview	An agreement to exchange a stream of cash flows by reference to the difference between (i) a fixed price agreed by the parties and a floating rate based on a specified notional amount over a specified term to maturity, or (ii) two floating rates based on specified notional amounts over a specified term to maturity.
Trade Date	As agreed by the parties.
Effective Date	The date on which the calculation of accrued obligations begins under the contract.
Reference Commodities	Iron Ore Coal Fuel Oil
Notional Amount	As agreed by the parties for each relevant commodity.
Settlement Dates	As agreed by the parties.
Termination Date	As agreed by the parties.
Fixed Price Payer	Party [A/B], if applicable.
Fixed Price	[currency] [amount in numerals] [per units of commodity], if applicable.
Floating Price Payer	Party [B/A], or both Party A and B, if applicable.
Floating Price	As agreed by the parties.
Pricing Differential	If applicable, as agreed by the parties.
Specified Delivery Point	If applicable, as agreed by the parties.
Pricing Dates	If applicable, as agreed by the parties.
Method of Averaging	If applicable, as agreed by the parties.

Natural Gas Options

The terms and conditions of Natural Gas Options incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. Natural Gas Options have the following characteristics:

Contract Overview	A natural gas option is a derivative financial instrument that gives one party the right, but not the obligation, to buy or sell a specific quantity of natural gas from or to another party at a specified price on a specified date.
Trade Date	As agreed by the parties.
Effective Date	The date on which the calculation of accrued obligations under the contract.
Commodity	Natural Gas
Notional Amount	As agreed by the parties.
Option Style	[American] [European] [Bermuda] [Asia]
Option Type	[Put] [Call]
Buyer	Party [A/B]
Seller	Party [A/B]
Termination Date	As determined by the parties.
Price Source	Natural Gas Intelligence, Canadian Gas Price Reporter, Inside FERC, Gas Daily, Platts/McGraw Hill or NYMEX, as determined by the parties.
Settlement Type	[Cash Settlement] [Physical Settlement]
Specified Delivery Point	If applicable, as agreed by the parties.
Pricing Date(s)	If applicable, as agreed by the parties.
Method of Averaging	If applicable, as agreed by the parties.
Total Premium	The amount payable by the Buyer to the Seller.
Premium Payment Date(s)	The date(s) agreed by the parties.
Expiration Date	The date agreed by the parties.
Expiration Time	The time agreed by the parties.

Natural Gas Swaps

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Contract Overview:	An agreement to exchange a stream of cash flows by reference to the difference between a fixed rate and a floating rate or between two floating rates based on a specified notional amount over a specified term to maturity.
Trade Date:	As agreed by the parties.
Effective Date:	The date on which the calculation of accrued obligations under the contract.
Commodity:	Natural Gas
Notional Amount:	As agreed by the parties for each relevant commodity.
Settlement Dates:	As agreed by the parties.
Termination Date:	As agreed by the parties.
Fixed Price Payer:	Party [A/B], if applicable.
Fixed Price:	[currency] [amount in numerals] [per units of commodity]
Floating Price Payer:	Party [A/B], or both Party A and B, if applicable.
Floating Price:	As agreed by the parties.
Pricing Differential:	If applicable, as agreed by the parties.
Pricing Source:	Natural Gas Intelligence, Canadian Gas Price Report, Inside FERC, or Platts/McGraw Hill, as determined by the parties.
Specified Delivery Point:	If applicable, as agreed by the parties.
Pricing Date(s):	If applicable, as agreed by the parties.
Method of Averaging:	If applicable, as agreed by the parties.

Power Options

The terms and conditions of Power Options incorporate by reference such credit and other terms as the parties may establish through pre-existing bilateral agreement. Power Options have the following characteristics:

Contract Overview	A power option contract represents an option to assume a short or long position in the underlying New York Mercantile Exchange ("NYMEX") contract at the strike price.
Underlying Reference Routes	See NYMEX Contract List below
Trade Date	The date on which the parties enter into the options contract.
Option Style	European Style: Allows the holder to exercise the option only at the expiration date. American Style: Allows the owner to exercise the option at any time before the expiration date.
Option Type	Call Option: The right to buy the underlying NYMEX contract on a fixed date at a fixed price. Put Option: The right to sell the underlying NYMEX contract on a fixed date at a fixed price.
Strike Price	The price agreed upon by the parties at which the buyer can exercise an option.
Expiration Date	The date at which the option contract expires.
Expiration Time	The time on which the option contract expires.
Settlement Date	The date on which the option settles.
Settlement Type	Cash Settlement: Requires the exchange of cash in the amount of the difference between the option strike price and the current value of the underlying NYMEX contract at the exercise date.
Premium Date	The date on which the premium is due.
Quoting Convention and Minimum Increment	Notional amount, agreed by the counterparties.
Minimum Size	Notional amount, agreed by the counterparties.

NYMEX Contract List:

ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures
ISO New England Mass Hub Day-Ahead Peak Calendar-Day 5 MW Futures
ISO New England Mass Hub Day-Ahead Peak Calendar-Month 2.5 MW Futures
ISO New England Mass Hub Off-Peak LMP Futures
PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures
PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures
PJM AEP Dayton Hub Day-Ahead Peak Calendar-Day 5 MW Futures
PJM AEP Dayton Hub Off-Peak LMP Futures
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Day 5 MW Futures
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures
PJM AEP Dayton Hub Real-Time Peak Calendar-Day 5 MW Futures
PJM AEP Dayton Hub Real-Time Peak Calendar-Month 2.5 MW Futures
PJM APS Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM ATSI Zone 5 MW Off-Peak Calendar-Day Day-Ahead Futures
PJM ATSI Zone 5 MW Off-Peak Calendar-Day Real-Time Futures
PJM ATSI Zone 5 MW Off-Peak Calendar-Month Day-Ahead Futures
PJM ATSI Zone 5 MW Off-Peak Calendar-Month Real-Time Futures
PJM ATSI Zone 5 MW Peak Calendar-Day Day-Ahead Futures
PJM ATSI Zone 5 MW Peak Calendar-Day Real-Time Futures
PJM ATSI Zone 5 MW Peak Calendar-Month Day-Ahead Futures
PJM ATSI Zone 5 MW Peak Calendar-Month Real-Time Futures
PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM BGE Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures
PJM Daily Load Forecast Futures
PJM DOM Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM DOM Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM DPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM DPL Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM Duquesne Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM Duquesne Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures
PJM Eastern Hub Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM Eastern Hub Peak Calendar-Month Day-Ahead LMP Futures
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures

PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures
PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures
PJM Northern Illinois Hub Day-Ahead Peak Calendar-Day 5 MW Futures
PJM Northern Illinois Hub Off-Peak LMP Futures
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Day 5 MW Futures
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures
PJM Northern Illinois Hub Real-Time Peak Calendar-Day 5 MW Futures
PJM Northern Illinois Hub Real-Time Peak Calendar-Month 2.5 MW Futures
PJM Off-Peak Calendar-Month LMP Futures
PJM PECO Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM PECO Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures
PJM PENELEC Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM PENELEC Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM PEPCO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures
PJM PSEG Zone Off-Peak Calendar-Month Day-Ahead LMP Futures
PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures
PJM Western Hub 50 MW Peak Calendar-Month Real-Time LMP Futures
PJM Western Hub Day-Ahead Off-Peak Calendar-Day 5 MW Futures
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures
PJM Western Hub Day-Ahead Peak Calendar-Day 5 MW Futures
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures
PJM Western Hub Peak Calendar-Month Real-Time LMP Futures
PJM Western Hub Real-Time Off-Peak Calendar-Day 5 MW Futures
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures
PJM Western Hub Real-Time Peak Calendar-Day 5 MW Futures
PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures

Power Swaps

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Contract Overview	An agreement to exchange cash flows based on the difference between the fixed price agreed by the parties and the price of electricity or the peak load for a system as determined by the relevant system operator on the specified determination date.
Trade Date	As determined by the parties.
Effective Date	The date on which the parties begin calculating their accrued obligations under the swap.
Termination Date	As determined by the parties.
Buyer	Party [A/B]
Seller	Party [A/B]
Transaction Type	[fixed/floating swap] [peak load swap]
Delivery Point	[zone] [node] [hub] specified by the parties.
Fixed Price	As determined by the parties.
Quantity	[ ] MWhs
Floating Price	The [price] [peak load] for the applicable delivery point as determined by the relevant system operator.
Determination Period	Effective Date through Termination Date.
Payment Date	As determined by the parties.

Precious Metals Options

The terms and conditions of the Precious Metals Options incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The Precious Metals Options have the following characteristics:

Contract Overview	A precious metals option contract represents an option to assume a short or long position in the underlying precious metals contract at the strike price.
Reference Commodities	Gold Silver Palladium Platinum
Contracts on Reference Commodities	NYMEX Palladium NYMEX Platinum COMEX Gold COMEX Silver ICE Gasoil (Monthly)
Trade Date	The date on which the parties enter into the options contract.
Option Style	**European Style**: A European style option allows the holder to exercise only at the expiration date, i.e. a single pre-defined point in time. **American Style**: An American style option allows the owner to exercise the option at any time before the expiration date.
Call Currency	Currency for call option.
Put Currency	Currency for put option.
Strike Price	The price at which an investor can exercise an option.
Expiration Date	The date on which the option contract expires.
Expiration Time	The time at which the option contract expires.
Settlement Date	The date on which the option settles.
Settlement Type	Cash Settlement
Premium	Premium amount expressed in the premium currency.
Premium Currency	Currency in which the option premium is expressed.
Premium Date	The date on which the premium amount is due.
Quoting Convention and Minimum Increment	Notional amount, agreed by the counterparties.
Minimum Size	Notional amount, agreed by the counterparties.
Notional Currency	Currency in which the contract size is expressed.

EQUITY

Subject to the requirements of the Rules, Swaps in the equity asset class may be effected (i) in the Order Book pursuant to Rule 505, (ii) as a voice-executed trade or a Brokered Trade pursuant to Rule 509 or (iii) as a Block Trade pursuant to Rule 601.

Broad Market Index Equity Derivative Product Details and Contract Specifications

Equity Index Swaps

Product Description:

An equity swap is a product which allows the ability to gain exposure to the returns of an equity ("equity leg") in exchange for payment or receipt of regular fixed or floating payments ("floating leg") usually interest based plus a spread**.** Equity index swaps, for example, provide the opportunity to hedge exposure to a cash portfolio of index members without the physical sale of assets.

Example Terms and Conditions

EQUITY INDEX SWAP	
Contract description	A contract to pay or receive regular fixed or floating interest payments on a notional amount in exchange for a notional based return performance of an equity index An Equity Swap may be either a Total Return Swap whereupon the return performance of an equity index includes a dividend stream or Price Return Swap whereupon the return performance of an equity index excludes a dividend stream
Trading Conventions	An equity swap buyer pays a rate of interest plus a spread on a notional amount in return for any appreciation/depreciation of the equity index on the notional amount An equity swap seller receives a rate of interest plus a spread on a notional amount and pay any appreciation/depreciation of the equity index on the notional amount Where the Equity Swap is structured as a Total Return Swap, the appreciation/depreciation includes returns due (e.g. dividends) from the underlying index over the swap period. Where the Equity Swap is structured as a Price Return Swap, the appreciation/depreciation excludes returns due from the underlying index over the swap period.
Currency	USD, EUR, JPY, SGD, HKD, CNH, CNY dependent on underlying Equity
Trade Date	Date which trade terms agreed
Maturity	As agreed by Participants – Any maturity up to 50yrs
Notional	As agreed by Participants – E.G. 5m (USD, EUR or JPY)
Floating Leg	Cashflow: xM LIBOR + Spread or an agreed fixed rate Frequency: Determined by agreed Libor (3m, 6m etc.) or agreed fixed rate frequency DayCount: Act/360

Equity Leg	Notional x (% increase of equity index over floating rate period)
Settlement	Cash settlement as per floating rate schedule
Business Day Convention	As agreed by Participants
Quote Convention	Quoted in bps as a spread or fixed rate
Trade Types	Outright Spread: Equity swap in one index versus an equity swap in another
Tenors	As agreed by Participants, 1 day to 50 Years
Underlying Equity	The available underlying indices are detailed in the table below.

Underlying Equity Indices

Abbr	Name
AEX	Amsterdam Exchange Index
AS51	S&P/ASX 200 (AEJ)
BEL20	BEL20 Index
CAC	Cotation Assistée en Continu 40
DAX	Deutscher Aktien Index
DIA	SPDR Dow Jones Industrial Average ETF Trust
DJINETT	Dow Jones InternetCompTr
DJITR	Dow Jones Industrial Average Total Return
DJUSRE	Dow Jones U.S. Real Estate Index
EWTRGSPC	REUTERS – REU - S&P EW 500 INDEX
FTSE	FTSE 100
FTSEMIB	FTSE MIB Index
FTXIN25	FTSE China 50 Index
GDDLCA	MSCI Canada Index CAD Total Return (Gross Dividends)
GDDUCA	MSCI Canada Index USD Daily Total Return (Gross Dividends)
GDDUEAFE	MSCI EAFE Index Total Return (Gross Dividends)
GDDUNA	MSCI North American Index USD Total Return (Gross Dividends)
GDDUP	MSCI Daily Gross Pacific
GDDUUS HSCEI	MSCI US Index Total Return (Gross Dividends)
HSCEI	Hang Seng China Enterprises Index
HSI	Hang Seng Index
IBOV	BOVESPA Brasil Sao Paulo Stock Exchange Index
IXBTR	S&P 500 Material Select Sector Total Return
IXCPR	Communication Services Select Sector Index
IXCTR	Communication Services Select Sector Index TR
IXETR	S&P 500 Energy Select Sector Total Return
IXITR	S&P 500 Industrials Select Sector Total Return
IXMTR	S&P 500 Financials Select Sector Total Return
IXRTR	S&P 500 Consumer Staples Select Sector Total Return
IXTTR	S&P 500 Technology Select Sector Total Return

IXUTR	S&P 500 Utilities Select Sector Total Return
IXVTR	S&P 500 Health Care Select Sector Total Return
IXYTR	S&P 500 Consumer Discretionary Select Sector Total Return
KOSPI	Korea Composite Stock Price Index
MDCPSPTR	S&P MidCap 400 Total Return
MEXBOL	Mexican IPC index (Indice de Precios y Cotizaciones)
MID	S&P 400
M8CA0EN	MSCI Canada Energy Gross Return Index
M8CA0FN	MSCI Canada Financials Gross Return Index
MSLUELAN	MSCI Emerging Markets Latin America Small Cap Index (USD) (Net Dividends)
NDDLCA	MSCI Canada Index CAD Total Return (Net Dividends)
NDDUHK	MSCI Daily Total Return Net Hong Kong
NDDUNA	MSCI North American Index USD Total Return (Net Dividends)
NDDUSG	MSCI Daily Total Return Net Singapore
NDDUP	MSCI Daily Total Return Net Pacific
NDDUPXJ	MSCI Daily Total Return Net Pacific Ex Japan
NDDUUS	MSCI US Index Total Return (Net Dividends)
NDDUMAF	MSCI Daily Total Return Net Malaysia
NDEUBRAF	MSCI Brazil Index USD Total Return (Net Dividends)
NDEUCHF	MSCI China Index Total Return (Net Dividends)
NDEUSIA	MSCI Emerging Markets India
NDEUMXF	MSCI Mexico Index USD Total Return (Net Dividends)
NDEUPH	MSCI Daily Total Return Net Emerging Markets Philippines
NDEUPR	MSCI Daily Total Return Net Emerging Markets Peru
NDEUSCH	MSCI Chile Index Total Return (Net Dividends)
NDEUSCO	MSCI Colombia Index Total Return (Net Dividends)
NDEUSKO	MSCI Daily Total Return Net Emerging Markets Korea
NDEUTHF	MSCI Daily Total Return Net Emerging Markets Thailand
NDEUSTW	MSCI Daily Total Return Net Emerging Markets Taiwan
NDUEE	MSCI Daily Total Return Net Emerging Markets Asia
NDUEEGFL	MSCI Emerging Markets Latin America USD
NDX	NASDAQ-100
NKY	Nikkei 225
NSEI	S&P CNX Nifty Index
OEXT	S&P 100 Total Return
OMX	Stockholm 30 Index
RGUSFL	Russell 1000 Financial
RTX	Russell 2000
RU10GRTR	Russell 1000 Growth Total Return
RU10INTR	Russell 1000 Total Return
RU10VATR	Russell 1000 Value Total Return
RU20GRTR	Russell 2000 Growth Total Return
RU20INTR	Russell 2000 Total Return
RU20VATR	Russell 2000 Value Total Return
SIMSCI	MSCI Singapore Free Index
SMCPSPTR	S&P SmallCap 600 Total Return
SMI	Swiss Market Index
SP5LVIT	S&P 500 Low Volatility Total Return Index

SPDAUDT	S&P 500 Dividend Aristocrats Total Return Index
SPSIBITR	S&P Biotechnology Select Industry Total Return Index
SPSIOP	S&P Oil & Gas Exploration & Production Select Industry Index
SPTRCOND	S&P 500 Consumer Discretionary Sector Total Return Index
SPTRCONS	S&P 500 Consumer Staples Sector Total Return Index
SPTRENRS	S&P 500 Energy Sector Total Return Index
SPTRFINL	S&P 500 Financials Sector Total Return Index
SPTRHLTH	S&P 500 Health Care Sector Total Return Index
SPTRINDU	S&P 500 Industrials Sector Total Return Index
SPTRINFT	S&P 500 Information Technology Sector Total Return Index
SPTRMATR	S&P 500 Materials Sector Total Return Index
SPTRMDCP	S&P MidCap 400 Total Return
SPTRRLST	S&P 500 Real Estate Sector Total Return Index
SPTRSMCP	S&P SmallCap 600 Total Return
SPTRSVX	S&P 500 Value Total Return Index
SPTRTELS	S&P 500 Communication Services Sector Total Return Index
SPTRUTIL	S&P 500 Utilities Sector Total Return Index
SPX	S&P 500 Index
SPXT	S&P 500 Total Return
STBANKXR	S&P/TSX Composite Banks GICS Level Industry Group Total Return Index
STCHEMR	S&P/TSX Composite Index Chemicals GICS Industry Total Return
STELUTXR	S&P/TSX Composite Index Electric Utilities GICS Industry Total Return Index
STENRS	S&P/TSX Composite Energy Sector GICS Level 1 Index
STENRSR	S&P/TSX Composite Energy Index Total Return Swap
STFINLR	S&P/TSX Composite Financials GICS Level Sector Total Return Index
STINSUR	S&P/TSX Composite Insurance GICS Industry Group Total Return Index
STLIFER	S&P/TSX Composite Life & Health Insurance Total Return Index
STMATRR	S&P/TSX Composite Materials GICS Level Sector Total Return Index
STOGSTR	S&P/TSX Oil & Gas Sector Total Return Index
STOILPR	S&P/TSX Composite Oil & Gas Exploration Total Return Index
STMEDAR	S&P/TSX Composite Media GICS Industry Group Total Return Index
STMUTIXR	S&P/TSX Multiple Utilities & Energy Power Total Return Index
STREITSR	S&P/TSX REIT Total Return Index
STTELSR	S&P/TSX Composite Telecom Services GICS Level Sector Total Return Index

STTELSXR	S&P/TSX Composite Telecom Services GSI Total Return Index
STUTILR	S&P/TSX Composite Utilities GICS Level Sector Total Return Index
SX5E	Eurostoxx 50 Index
TAMSCI	MSCI Taiwan Inde
TSX69	S&P/TSX 60 Index
TX60AR	S&P/TSX 60 Total Return Index
TTENAR	S&P/TSX Capped Energy Total Return Index
TTUTAR	S&P/TSX Capped Utilities Total Return Index
TWII	Taiwan Weighted Exchange Capitalization Weighted Stock Index
UKX	FTSE 100 Index
VIX	CBOE Volatility Index
XNDX	NASDAQ-100 Total Return
XSOX	PHLX Semiconductor Sector Index Total Return
OTHER	Any other valid index calculated by a registered Exchange, or established index provider as applicable

Equity index swaps are based upon highly liquid and transparent underlying indices with well-defined and accepted closing prices for the calculation of the equity leg. The terms of the contract and the payoff profiles are very well defined prior to a transaction so making the product resilient to price manipulation.

Option on Variance Swaps

Product Description:

An option on variance swap allows the ability obtain exposure to the volatility of an underlying equity index via buying or selling the right, but not the obligation to enter a variance swap (see above) on the underlying index at expiration of the option.

Example Terms and Conditions

OPTION ON EQUITY INDEX VARIANCE SWAP	
Contract description	A contract that enables the ability hedge or take a view on the future direction of volatility of an underlying equity index by buying or selling the right, but not the obligation to enter a variance swap (paying or receiving the difference between actual realized variance of an index over the life of the contract and a variance "strike" agreed at contract inception.)

Trading Conventions	Buyer – The buyer of a variance option pays premium in exchange for the right to exercise the option and enter a variance swap at an agreed strike at expiry Seller -The seller of a variance option receives a premium in exchange for the obligation to fulfill the option buyer's right to exercise at expiry
Currency	USD, EUR or JPY dependent on Underlying Equity
Vega Notional	As agreed by Participants e.g. 100,000 (Note: the exposure (loss or gain in contract currency) per 1% change in volatility)
Reference Vol Strike	As agreed by Participants e.g. 17.90
Ref Var Strike	As agreed by Participants e.g. 320.21
Option Premium	Cents upfront of vega notional
Option Style	European
Option Type	Call or Put
Option Volatility Strike	As agreed by Participants e.g. 40
Option Variance Strike	As agreed by Participants e.g. 40 ^ 2 = 1600
Premium Payment	T + 3
Option Payoff at Final Valuation Date	Call: Variance Units X Max(0, Realized vol ^ 2 - Variance Strike) at (maturity + 3 days) of variance swap Put: Variance Units X Max(0, Variance Strike - Realized vol ^ 2) at (maturity + 3 days) of variance swap
Maturity or Final Valuation Date of Variance Swap	Final Date on which observations are made (contract tenors 0 mths to 50yrs supported)
Observation Frequency	Daily
Number of Observations	n, dependent on contract maturity (NOTE: n is the number of trading days between observation start date and Maturity)

Realized Volatility (RV)	$\sigma_{realized} = \sqrt{252} \cdot \sqrt{\frac{\sum_{i=1}^{m}\left(Ln\left(\frac{C_{i+1}}{C_i}\right)^2\right) \cdot 10000}{n}}$ *m equals n, unless there is a market disruption event* *Ci equals the daily closing price of the Underlying Equity on the ith business day starting on the day following Trade Date (i=2), and Cm shall be equal to the Closing Level of the Underlying Equity on the Final Valuation Date. If the Final Valuation Date is a listed option expiration date, then Cm is equal to the expiration print.* *Business Days per Year = 252*
Business Day Convention	As agreed by Participants
Quote Convention	Variance % points
Trade Types	Outright: Long or short call or put Spreads: e.g. Long a lower strike call, short a higher strike call Straddle: Long a call and a put at same strike
Market Disruption	Refer to ISDA 2002 Equity Definitions
Tenors	As agreed by Participants, 1 day to 10 Years
Underlying Equity	Closing Price of any valid index listed on a registered Exchange E.g. SPX S&P 500, SX5E Eurostoxx 50, RTY Russell 2000, NDX Nasdaq 100, FTSE FTSE 100, DAX Dax 30, NKYNikkei 225, VIX on S&P 500, DIA Dow Jones 30, MIDS&P Mid 400

Options on Variance swaps are based upon highly liquid and transparent underlying indices with well-defined and accepted closing prices for the calculation of volatility and consequently the payoff of volatility/variance swap. The terms of the contract and the calculation algorithm are very well defined prior to a transaction so making the product resilient to price manipulation.

Variance & Volatility Swaps

Product Description:

A variance swap allows the ability take a direct exposure to the volatility of an underlying equity index over the length of the swap. Taking a "long volatility" view entails buying volatility via a variance or volatility swap at a predetermined strike. If the realized vol is greater than the strike, there will be a profit and vice versa. Note that volatility and variance swaps differ simply as the name suggests in exposure to volatility and volatility^2 (variance) respectively. In addition to speculative applications, variance/ volatility swaps serve an

important purpose in providing an opportunity to hedge or protect against times of market crisis when invariably asset volatility rises substantially.

Example Terms and Conditions

EQUITY INDEX VARIANCE SWAP	
Contract description	A contract that enables the ability hedge or take a view on the future direction of volatility of an underlying equity index by paying or receiving the difference between actual realized variance of an index over the life of the contract and a variance "strike" agreed at contract inception.
Trading Conventions	Buyer – The buyer of a variance swap pays a fixed rate (the Variance Strike) in exchange for a payout based on the daily realised variance Seller - The seller of a variance swap receives a fixed rate (the Variance Strike) in exchange for a payout based on the daily realised variance
Currency	USD, EUR or JPY dependent on Underlying Equity
Trade Start	Immediate or forward starting determines when observations for calculation of realized volatility begin
Maturity or Final Valuation Date	Final Date on which observations are made (contract tenors >0 mths to 50yrs supported)
Observation Frequency	Daily
Number of Observations	n, dependent on contract maturity (NOTE: n is the number of trading days between observation start date and Maturity)
Vega Notional	As agreed by Participants e.g. 50,000 (Note: the exposure (loss or gain in contract currency) per 1% change in volatility)
Volatility Strike	As agreed by Participants e.g. 27% (for indicative purposes as payoff is linked to variance and not volatility)
Variance Strike	As agreed by Participants e.g. 729 (volatility strike)^2
Variance (Var) Units	As agreed by Participants e.g. 925.93 Vega Notional / (2x Volatility strike)
Variance Cap	YES/NO if YES e.g. (2.5 x vol strike)^2 (Notes: limits the profit/loss to defined maximum)
Realized Volatility	

(RV)	$\sigma_{realized} = \sqrt{252} \cdot \sqrt{\frac{\sum_{i=1}^{m} \left(Ln\left(\frac{C_{i+1}}{C_i} \right)^2 \right) \cdot 10000}{n}}$ *m equals n, unless there is a market disruption event* *Ci equals the daily closing price of the Underlying Equity on the ith business day starting on the day following Trade Date (i=2), and Cm shall be equal to the Closing Level of the Underlying Equity on the Final Valuation Date. If the Final Valuation Date is a listed option expiration date, then Cm is equal to the expiration print.* *Business Days per Year = 252*
Settlement	Cash settlement of: For Var Buyer: Variance Units X MAX [0, Variance strike – Volatility^2] Var Seller: Variance Units X MAX [0, Volatility^2 - Variance strike] Occurs following the Final Valuation Date in accordance with underlying equity index convention
Business Day Convention	As agreed by Participants
Quote Convention	Volatility % points, Variance % Points
Trade Types	Outright: Long or short variance/volatility of an underlying index from start date to maturity Forward Starting: Long or short variance/volatility over a defined future period Spreads: Take a view on the variance/volatility difference between two indices by buying variance/volatility on one index and selling variance/volatility on the other, either spot or forward starting
Market Disruption	Refer to ISDA 2002 Equity Definitions
Tenors	As agreed by Participants, 1 day to 10 Years
Underlying Equity	The available underlying indices are detailed in the table below.

Underlying Equity Indices

Abbr	Name
AEX	Amsterdam Exchange Index
AS51	S&P/ASX 200 (AEJ)
BEL20	BEL20 Index
CAC	Cotation Assistée en Continu 40
DAX	Deutscher Aktien Index
DIA	SPDR Dow Jones Industrial Average ETF Trust
DJINETT	Dow Jones InternetCompTr
DJITR	Dow Jones Industrial Average Total Return
DJUSRE	Dow Jones U.S. Real Estate Index
EWTRGSPC	REUTERS – REU - S&P EW 500 INDEX
FTSE	FTSE 100
FTSEMIB	FTSE MIB Index
FTXIN25	FTSE China 50 Index
GDDLCA	MSCI Canada Index CAD Total Return (Gross Dividends)
GDDUCA	MSCI Canada Index USD Daily Total Return (Gross Dividends)
GDDUEAFE	MSCI EAFE Index Total Return (Gross Dividends)
GDDUNA	MSCI North American Index USD Total Return (Gross Dividends)
GDDUP	MSCI Daily Gross Pacific
GDDUUS HSCEI	MSCI US Index Total Return (Gross Dividends)
HSCEI	Hang Seng China Enterprises Index
HSI	Hang Seng Index
IBOV	BOVESPA Brasil Sao Paulo Stock Exchange Index
IXBTR	S&P 500 Material Select Sector Total Return
IXCPR	Communication Services Select Sector Index
IXCTR	Communication Services Select Sector Index TR
IXETR	S&P 500 Energy Select Sector Total Return
IXITR	S&P 500 Industrials Select Sector Total Return
IXMTR	S&P 500 Financials Select Sector Total Return
IXRTR	S&P 500 Consumer Staples Select Sector Total Return
IXTTR	S&P 500 Technology Select Sector Total Return
IXUTR	S&P 500 Utilities Select Sector Total Return
IXVTR	S&P 500 Health Care Select Sector Total Return
IXYTR	S&P 500 Consumer Discretionary Select Sector Total Return
KOSPI	Korea Composite Stock Price Index
MDCPSPTR	S&P MidCap 400 Total Return
MEXBOL	Mexican IPC index (Indice de Precios y Cotizaciones)
MID	S&P 400
M8CA0EN	MSCI Canada Energy Gross Return Index
M8CA0FN	MSCI Canada Financials Gross Return Index
MSLUELAN	MSCI Emerging Markets Latin America Small Cap Index (USD) (Net Dividends)
NDDLCA	MSCI Canada Index CAD Total Return (Net Dividends)
NDDUHK	MSCI Daily Total Return Net Hong Kong
NDDUNA	MSCI North American Index USD Total Return (Net Dividends)
NDDUSG	MSCI Daily Total Return Net Singapore
NDDUP	MSCI Daily Total Return Net Pacific
NDDUPXJ	MSCI Daily Total Return Net Pacific Ex Japan
NDDUUS	MSCI US Index Total Return (Net Dividends)
NDDUMAF	MSCI Daily Total Return Net Malaysia

NDEUBRAF	MSCI Brazil Index USD Total Return (Net Dividends)
NDEUCHF	MSCI China Index Total Return (Net Dividends)
NDEUSIA	MSCI Emerging Markets India
NDEUMXF	MSCI Mexico Index USD Total Return (Net Dividends)
NDEUPH	MSCI Daily Total Return Net Emerging Markets Philippines
NDEUPR	MSCI Daily Total Return Net Emerging Markets Peru
NDEUSCH	MSCI Chile Index Total Return (Net Dividends)
NDEUSCO	MSCI Colombia Index Total Return (Net Dividends)
NDEUSKO	MSCI Daily Total Return Net Emerging Markets Korea
NDEUTHF	MSCI Daily Total Return Net Emerging Markets Thailand
NDEUSTW	MSCI Daily Total Return Net Emerging Markets Taiwan
NDUEE	MSCI Daily Total Return Net Emerging Markets Asia
NDUEEGFL	MSCI Emerging Markets Latin America USD
NDX	NASDAQ-100
NKY	Nikkei 225
NSEI	S&P CNX Nifty Index
OEXT	S&P 100 Total Return
OMX	Stockholm 30 Index
RGUSFL	Russell 1000 Financial
RTX	Russell 2000
RU10GRTR	Russell 1000 Growth Total Return
RU10INTR	Russell 1000 Total Return
RU10VATR	Russell 1000 Value Total Return
RU20GRTR	Russell 2000 Growth Total Return
RU20INTR	Russell 2000 Total Return
RU20VATR	Russell 2000 Value Total Return
SIMSCI	MSCI Singapore Free Index
SMCPSPTR	S&P SmallCap 600 Total Return
SMI	Swiss Market Index
SP5LVIT	S&P 500 Low Volatility Total Return Index
SPDAUDT	S&P 500 Dividend Aristocrats Total Return Index
SPSIBITR	S&P Biotechnology Select Industry Total Return Index
SPSIOP	S&P Oil & Gas Exploration & Production Select Industry Index
SPTRCOND	S&P 500 Consumer Discretionary Sector Total Return Index
SPTRCONS	S&P 500 Consumer Staples Sector Total Return Index
SPTRENRS	S&P 500 Energy Sector Total Return Index
SPTRFINL	S&P 500 Financials Sector Total Return Index
SPTRHLTH	S&P 500 Health Care Sector Total Return Index
SPTRINDU	S&P 500 Industrials Sector Total Return Index
SPTRINFT	S&P 500 Information Technology Sector Total Return Index
SPTRMATR	S&P 500 Materials Sector Total Return Index
SPTRMDCP	S&P MidCap 400 Total Return

SPTRRLST	S&P 500 Real Estate Sector Total Return Index
SPTRSMCP	S&P SmallCap 600 Total Return
SPTRSVX	S&P 500 Value Total Return Index
SPTRTELS	S&P 500 Communication Services Sector Total Return Index
SPTRUTIL	S&P 500 Utilities Sector Total Return Index
SPX	S&P 500 Index
SPXT	S&P 500 Total Return
STBANKXR	S&P/TSX Composite Banks GICS Level Industry Group Total Return Index
STCHEMR	S&P/TSX Composite Index Chemicals GICS Industry Total Return
STELUTXR	S&P/TSX Composite Index Electric Utilities GICS Industry Total Return Index
STENRS	S&P/TSX Composite Energy Sector GICS Level 1 Index
STENRSR	S&P/TSX Composite Energy Index Total Return Swap
STFINLR	S&P/TSX Composite Financials GICS Level Sector Total Return Index
STINSUR	S&P/TSX Composite Insurance GICS Industry Group Total Return Index
STLIFER	S&P/TSX Composite Life & Health Insurance Total Return Index
STMATRR	S&P/TSX Composite Materials GICS Level Sector Total Return Index
STOGSTR	S&P/TSX Oil & Gas Sector Total Return Index
STOILPR	S&P/TSX Composite Oil & Gas Exploration Total Return Index
STMEDAR	S&P/TSX Composite Media GICS Industry Group Total Return Index
STMUTIXR	S&P/TSX Multiple Utilities & Energy Power Total Return Index
STREITSR	S&P/TSX REIT Total Return Index
STTELSR	S&P/TSX Composite Telecom Services GICS Level Sector Total Return Index
STTELSXR	S&P/TSX Composite Telecom Services GSI Total Return Index
STUTILR	S&P/TSX Composite Utilities GICS Level Sector Total Return Index
SX5E	Eurostoxx 50 Index
TAMSCI	MSCI Taiwan Inde
TSX69	S&P/TSX 60 Index
TX60AR	S&P/TSX 60 Total Return Index
TTENAR	S&P/TSX Capped Energy Total Return Index
TTUTAR	S&P/TSX Capped Utilities Total Return Index
TWII	Taiwan Weighted Exchange Capitalization Weighted Stock Index
UKX	FTSE 100 Index
VIX	CBOE Volatility Index
XNDX	NASDAQ-100 Total Return

XSOX	PHLX Semiconductor Sector Index Total Return
OTHER	Any other valid index calculated by a registered Exchange, or established index provider as applicable

Volatility and variance swaps are based upon highly liquid and transparent underlying indices with well-defined and accepted closing prices for the calculation of volatility and consequently the payoff of volatility/variance swap. The terms of the contract and the calculation algorithm are very well defined prior to a transaction so making the product resilient to price manipulation.

Index Descriptions

Dow Jones Indices:

SPDR Dow Jones Industrial Average ETF Trust (DIA)

The SPDR Dow Jones Industrial Average ETF Trust (DIA) is an exchange-traded fund (ETF) that aims to replicate the performance of the Dow Jones Industrial Average (DJIA). The DJIA includes 30 of the largest publicly traded companies in the U.S., spanning diverse industries. The ETF allows investors to gain exposure to this index with the liquidity and flexibility of trading like a stock.

Dow Jones Internet Composite Total Return Index

The Dow Jones Internet Composite Total Return Index measures the performance of publicly traded companies that generate the majority of their revenues from the internet. This includes sectors such as e-commerce, social media, and online advertising. The total return version accounts for both capital gains and dividends, providing a comprehensive view of the internet sector's performance.

Dow Jones Industrial Average Total Return

The Dow Jones Industrial Average Total Return Index tracks the performance of 30 major U.S. companies and includes both price appreciation and dividends paid. This index is often used as a benchmark for the overall U.S. stock market and reflects the performance of various sectors, such as technology, healthcare, and consumer goods.

Dow Jones U.S. Real Estate Index

The Dow Jones U.S. Real Estate Index represents publicly traded real estate companies and Real Estate Investment Trusts (REITs) in the U.S. market. It provides investors with exposure to the real estate sector and reflects trends in property values and rental income. The index is weighted by market capitalization and includes various subsectors like residential, commercial, and industrial real estate.

S&P & S&P-Based Indices:

S&P/ASX 200 (AEJ)

The S&P/ASX 200 Index represents the top 200 companies listed on the Australian Securities Exchange (ASX) by market capitalization. It serves as a key benchmark for Australian equity performance and includes a diverse range of sectors such as financials, materials, and healthcare. The index is widely used by investors to gauge the overall health of the Australian economy and as a basis for various financial products.

S&P 500 Materials Select Sector Total Return

The S&P 500 Materials Select Sector Total Return Index focuses specifically on the materials sector of the S&P 500, which includes companies involved in the production of materials such as metals, chemicals, and paper. This total return index accounts for both price appreciation and dividends, providing investors with insights into the performance of the materials sector within the broader U.S. market.

S&P 500 Energy Select Sector Total Return

The S&P 500 Energy Select Sector Total Return Index focuses specifically on the energy sector of the S&P 500, which includes companies involved in oil, gas, and energy-related services. This total return index accounts for both price appreciation and dividends, providing a comprehensive view of the performance of energy companies within the broader U.S. market.

S&P 500 Industrials Select Sector Total Return

The S&P 500 Industrials Select Sector Total Return Index tracks the performance of companies within the industrials sector of the S&P 500. This includes firms involved in manufacturing, transportation, and aerospace, among others. The total return version includes both capital gains and dividends, making it a useful benchmark for investors focused on the industrial sector's performance.

S&P 500 Financials Select Sector Total Return

The S&P 500 Financials Select Sector Total Return Index measures the performance of financial companies within the S&P 500, including banks, insurance companies, and investment firms. This index reflects both price changes and dividends, providing a thorough perspective on the financial sector's performance in the U.S. economy.

S&P 500 Consumer Staples Select Sector Total Return

The S&P 500 Consumer Staples Select Sector Total Return Index represents companies in the consumer staples sector, which includes firms that produce essential goods such as food, beverages, and household products. The total return index accounts for price movements and dividends, making it a key benchmark for investors interested in stable and essential consumer products.

S&P 500 Technology Select Sector Total Return

The S&P 500 Technology Select Sector Total Return Index focuses on technology companies within the S&P 500, covering sectors like software, hardware, and IT services. This index reflects both price appreciation and reinvested dividends, providing insights into the performance of the tech sector, which is a significant driver of market growth.

S&P 500 Utilities Select Sector Total Return

The S&P 500 Utilities Select Sector Total Return Index tracks the performance of companies in the utilities sector, including those providing electricity, gas, and water. This index includes both capital gains and dividends, offering a comprehensive measure of the utilities sector's performance, which is often characterized by stable earnings and dividends.

S&P 500 Health Care Select Sector Total Return

The S&P 500 Health Care Select Sector Total Return Index includes companies in the healthcare sector, such as pharmaceuticals, biotechnology, and medical devices. This index accounts for price changes and dividends, making it a useful benchmark for investors interested in the health and performance of the healthcare industry.

S&P 500 Consumer Discretionary Select Sector Total Return

The S&P 500 Consumer Discretionary Select Sector Total Return Index represents companies in the consumer discretionary sector, which includes goods and services that are non-essential, such as automobiles, entertainment, and retail. The total return version includes both price appreciation and dividends, reflecting the performance dynamics of consumer spending trends.

S&P CNX Nifty Index

The S&P CNX Nifty Index, commonly referred to as the Nifty 50, is a benchmark Indian stock market index that includes 50 of the largest and most liquid companies on the National Stock Exchange of India. It reflects the performance of various sectors and serves as a gauge for the overall health of the Indian economy.

S&P 100 Total Return

The S&P 100 Total Return Index tracks the performance of 100 major U.S. companies, including those from various sectors such as technology, finance, and healthcare. This index accounts for both capital gains and dividends, providing a comprehensive view of the performance of large-cap stocks in the U.S. market.

S&P SmallCap 600 Total Return

The S&P SmallCap 600 Total Return Index tracks the performance of 600 small-cap U.S. companies, accounting for both price changes and dividends. This index serves as a key benchmark for small-cap stocks and reflects the performance of companies that are often more volatile than their larger counterparts.

S&P 500 Low Volatility Total Return Index

The S&P 500 Low Volatility Total Return Index focuses on the least volatile stocks within the S&P 500. It seeks to provide exposure to companies that have historically shown lower price fluctuations, while accounting for price changes and reinvested dividends. This index is often used by investors looking for more stable returns.

S&P 500 Dividend Aristocrats Total Return Index

The S&P 500 Dividend Aristocrats Total Return Index includes companies in the S&P 500 that have consistently increased their dividends for at least 25 consecutive years. This total return index accounts for price changes and reinvested dividends, making it a benchmark for investors seeking reliable income through dividends.

S&P Biotechnology Select Industry Total Return Index

The S&P Biotechnology Select Industry Total Return Index measures the performance of biotechnology companies within the broader S&P market. It accounts for both price appreciation and reinvested dividends, providing insights into the biotechnology sector, which is known for innovation and growth potential.

S&P Oil & Gas Exploration & Production Select Industry Index

The S&P Oil & Gas Exploration & Production Select Industry Index tracks the performance of companies engaged in the exploration and production of oil and gas. This index reflects price changes and dividends, offering insights into the dynamics of the energy sector, particularly related to upstream activities.

S&P 500 Consumer Discretionary Sector Total Return Index

The S&P 500 Consumer Discretionary Sector Total Return Index focuses on companies within the consumer discretionary sector of the S&P 500, including retail, automobiles, and leisure. It accounts for both price movements and reinvested dividends, serving as a benchmark for consumer spending trends.

S&P 500 Consumer Staples Sector Total Return Index

The S&P 500 Consumer Staples Sector Total Return Index measures the performance of consumer staples companies in the S&P 500, which produce essential goods such as food and household products. This index reflects price changes and dividends, providing insights into the stability and growth of essential consumer goods.

S&P 500 Energy Sector Total Return Index

The S&P 500 Energy Sector Total Return Index tracks the performance of energy companies within the S&P 500, including oil, gas, and renewable energy firms. It includes price changes and reinvested dividends, reflecting the performance of the energy sector.

S&P 500 Financials Sector Total Return Index

The S&P 500 Financials Sector Total Return Index measures the performance of financial companies in the S&P 500, such as banks, insurance firms, and investment companies. This index accounts for both capital gains and dividends, providing insights into the financial sector's performance.

S&P 500 Health Care Sector Total Return Index

The S&P 500 Health Care Sector Total Return Index tracks the performance of healthcare companies within the S&P 500, including pharmaceuticals, biotechnology, and healthcare providers. It accounts for price changes and reinvested dividends, serving as a benchmark for the healthcare industry.

S&P 500 Industrials Sector Total Return Index

The S&P 500 Industrials Sector Total Return Index focuses on companies within the industrials sector of the S&P 500, covering manufacturing, transportation, and infrastructure. This index accounts for price movements and dividends, reflecting the performance of a critical sector in the economy.

S&P 500 Information Technology Sector Total Return Index

The S&P 500 Information Technology Sector Total Return Index measures the performance of technology companies within the S&P 500. It includes firms in software, hardware, and IT services, accounting for both price changes and reinvested dividends, highlighting the tech sector's influence on market performance.

S&P 500 Materials Sector Total Return Index

The S&P 500 Materials Sector Total Return Index tracks the performance of companies in the materials sector, including those involved in mining, chemicals, and construction. This index reflects price changes and dividends, offering insights into the performance of materials-focused companies.

S&P MidCap 400 Total Return

The S&P MidCap 400 Total Return Index measures the performance of mid-cap U.S. companies, accounting for price changes and reinvested dividends. It serves as a benchmark for mid-cap stocks, which are often seen as a barometer for economic growth.

S&P 500 Real Estate Sector Total Return Index

The S&P 500 Real Estate Sector Total Return Index tracks the performance of real estate companies in the S&P 500, including REITs and property management firms. This index includes both price appreciation and reinvested dividends, providing insights into the real estate sector's performance.

S&P SmallCap 600 Total Return

The S&P SmallCap 600 Total Return Index measures the performance of 600 small-cap U.S. companies, accounting for both price changes and dividends. This index serves as a key benchmark for small-cap stocks and reflects their performance in the market.

S&P 500 Value Total Return Index

The S&P 500 Value Total Return Index focuses on value-oriented companies within the S&P 500, which are considered undervalued relative to their fundamentals. This index accounts for both capital gains and reinvested dividends, providing insights into the performance of value stocks.

S&P 500 Communication Services Sector Total Return Index

The S&P 500 Communication Services Sector Total Return Index tracks the performance of communication services companies in the S&P 500, including telecommunications, media, and entertainment firms. This index reflects price changes and dividends, providing insights into the evolving communication landscape.

S&P 500 Utilities Sector Total Return Index

The S&P 500 Utilities Sector Total Return Index measures the performance of utility companies in the S&P 500, which provide essential services like electricity, water, and gas. This index accounts for both price changes and reinvested dividends, highlighting the stability and performance of the utilities sector.

S&P 500 Index

The S&P 500 Index is a widely followed benchmark that tracks the performance of 500 of the largest publicly traded companies in the U.S. It represents a diverse range of sectors and is market-capitalization weighted, serving as a key indicator of the overall health of the U.S. stock market.

S&P 500 Total Return

The S&P 500 Total Return Index reflects the performance of 500 of the largest publicly traded companies in the U.S., accounting for both price changes and reinvested dividends. This index provides a comprehensive view of the overall performance of the U.S. equity market, making it a key benchmark for investors.

S&P/TSX Composite Banks GICS Level Industry Group Total Return Index

This index tracks the performance of banks within the S&P/TSX Composite Index, following the Global Industry Classification Standard (GICS). It accounts for price changes and dividends, providing insights into the performance of the banking sector in Canada.

S&P/TSX Composite Index Chemicals GICS Industry Total Return

The S&P/TSX Composite Index Chemicals GICS Industry Total Return Index measures the performance of chemical companies within the S&P/TSX Composite Index. This index reflects price movements and reinvested dividends, offering insights into the chemicals sector in the Canadian market.

S&P/TSX Composite Index Electric Utilities GICS Industry Total Return Index

The S&P/TSX Composite Index Electric Utilities GICS Industry Total Return Index measures the performance of electric utility companies in Canada. It includes both price changes and dividends, providing insights into the performance of this essential sector.

S&P/TSX Composite Energy Sector GICS Level 1 Index

This index tracks the overall performance of the energy sector within the S&P/TSX Composite Index. It includes companies involved in oil, gas, and renewable energy, and reflects price changes and dividends, serving as a benchmark for the Canadian energy market.

S&P/TSX Composite Energy Index Total Return Swap

The S&P/TSX Composite Energy Index Total Return Swap represents the performance of the Canadian energy sector through a total return swap mechanism. This index accounts for price changes and dividends, offering a synthetic way to gain exposure to energy companies in Canada.

S&P/TSX Composite Financials GICS Level Sector Total Return Index

This index measures the performance of financial companies within the S&P/TSX Composite Index, following the GICS classification. It accounts for both price changes and reinvested dividends, providing insights into the Canadian financial sector's performance.

S&P/TSX Composite Insurance GICS Industry Group Total Return Index

The S&P/TSX Composite Insurance GICS Industry Group Total Return Index tracks the performance of insurance companies in the S&P/TSX Composite Index. It reflects price changes and dividends, serving as a benchmark for the Canadian insurance market.

S&P/TSX Composite Life & Health Insurance Total Return Index

The S&P/TSX Composite Life & Health Insurance Total Return Index tracks the performance of life and health insurance companies in Canada. This index includes price movements and dividends, providing insights into this specific segment of the insurance market.

S&P/TSX Composite Materials GICS Level Sector Total Return Index

This index measures the performance of materials companies within the S&P/TSX Composite Index. It accounts for price changes and reinvested dividends, serving as a benchmark for sectors involved in mining, metals, and other materials.

S&P/TSX Oil & Gas Sector Total Return Index

The S&P/TSX Oil & Gas Sector Total Return Index tracks the performance of oil and gas companies within the S&P/TSX Composite Index, incorporating price changes and reinvested dividends. It provides insights into the performance of this critical sector in Canada.

S&P/TSX Composite Oil & Gas Exploration Total Return Index

The S&P/TSX Composite Oil & Gas Exploration Total Return Index tracks companies involved in oil and gas exploration in Canada. This index accounts for price changes and reinvested dividends, providing insights into exploration activities within the sector.

S&P/TSX Composite Media GICS Industry Group Total Return Index

This index measures the performance of media companies in the S&P/TSX Composite Index, accounting for price changes and reinvested dividends. It serves as a benchmark for the media sector in Canada.

S&P/TSX Multiple Utilities & Energy Power Total Return Index

The S&P/TSX Multiple Utilities & Energy Power Total Return Index tracks the performance of companies involved in utilities and energy generation. It includes price changes and reinvested dividends, providing insights into this combined sector.

S&P/TSX REIT Total Return Index

This index measures the performance of Real Estate Investment Trusts (REITs) in the S&P/TSX Composite Index, accounting for price changes and reinvested dividends. It provides insights into the Canadian real estate market through the performance of publicly traded REITs.

S&P/TSX Composite Telecom Services GICS Level Sector Total Return Index

The S&P/TSX Composite Telecom Services GICS Level Sector Total Return Index tracks the performance of telecommunications companies within the S&P/TSX Composite Index. It accounts for both price changes and reinvested dividends, providing a benchmark for the telecom sector.

S&P/TSX Composite Telecom Services GSI Total Return Index

This index measures the performance of telecom services companies in the S&P/TSX Composite Index, accounting for price changes and dividends. It offers insights into the performance of telecommunications in the Canadian market.

S&P/TSX Composite Utilities GICS Level Sector Total Return Index

The S&P/TSX Composite Utilities GICS Level Sector Total Return Index tracks the performance of utility companies in Canada, incorporating price changes and reinvested dividends. This index provides a benchmark for the utility sector's performance.

S&P/TSX 60 Index

The S&P/TSX 60 Index comprises 60 of the largest and most liquid companies listed on the Toronto Stock Exchange. It serves as a key benchmark for the Canadian equity market, reflecting the performance of major sectors.

S&P/TSX 60 Total Return Index

The S&P/TSX 60 Total Return Index tracks the performance of the S&P/TSX 60 Index, incorporating price changes and reinvested dividends. This total return version provides a comprehensive view of the returns from investing in the largest Canadian companies.

S&P/TSX Capped Energy Total Return Index

This index measures the performance of energy companies within the S&P/TSX Composite Index, applying a cap on individual stock weightings to limit concentration. It accounts for both price changes and reinvested dividends.

S&P/TSX Capped Utilities Total Return Index

The S&P/TSX Capped Utilities Total Return Index tracks the performance of utility companies in Canada, with a cap on individual stock weightings. This index incorporates price changes and reinvested dividends, providing insights into the utilities sector.

S&P MidCap 400 Total Return

The S&P MidCap 400 Total Return Index tracks the performance of 400 mid-cap companies in the U.S. market. This index includes both price changes and reinvested dividends, providing insights into the mid-cap segment, which is often viewed as a barometer for economic growth and corporate performance in the middle market.

S&P 400

The S&P 400 Index, also known as the S&P MidCap 400, measures the performance of mid-cap companies in the U.S. It serves as a benchmark for the mid-cap segment of the equity market and includes a diverse range of sectors, providing insights into the performance of medium-sized companies that are often seen as a driver of economic growth.

MSCI Indices:

MSCI Canada Energy Gross Return Index

The MSCI Canada Energy Gross Return Index measures the performance of companies in the energy sector within the Canadian equity market. This index includes price changes and gross dividends, offering a comprehensive view of how energy companies—such as those involved in oil, gas, and renewable energy—perform in Canada.

MSCI Canada Financials Gross Return Index

The MSCI Canada Financials Gross Return Index tracks the performance of the financial sector in Canada, including banks, insurance companies, and investment firms. The index reflects both price movements and gross dividends, providing a detailed perspective on the performance of financial institutions in the Canadian economy.

MSCI Emerging Markets Latin America Small Cap Index (USD) (Net Dividends)

The MSCI Emerging Markets Latin America Small Cap Index measures the performance of small-cap companies in Latin American emerging markets. It accounts for price changes and net dividends, allowing investors to gauge the performance of smaller companies in the region, which can offer growth potential and diversification.

MSCI Canada Index CAD Total Return (Net Dividends)

The MSCI Canada Index CAD Total Return (Net Dividends) reflects the performance of large and mid-cap Canadian companies, accounting for price changes and net dividends in Canadian dollars. This index provides a comprehensive view of the Canadian equity market's performance, including the impact of dividend distributions.

MSCI Daily Total Return Net Hong Kong

The MSCI Daily Total Return Net Hong Kong Index tracks the performance of large and mid-cap companies listed in Hong Kong, reflecting daily price changes and net dividends. This index provides insights into the performance of the Hong Kong equity market, which is a significant financial hub in Asia.

MSCI North American Index USD Total Return (Net Dividends)

The MSCI North American Index USD Total Return measures the performance of large and mid-cap companies in the U.S. and Canada, accounting for price changes and net dividends in U.S. dollars. This index offers a comprehensive view of North American equities and their performance dynamics.

MSCI Daily Total Return Net Singapore

The MSCI Daily Total Return Net Singapore Index tracks the performance of large and mid-cap companies listed on the Singapore Exchange. This index accounts for daily price movements and net dividends, providing a snapshot of the Singapore equity market's performance.

MSCI Daily Total Return Net Pacific

The MSCI Daily Total Return Net Pacific Index measures the performance of large and mid-cap companies across the Pacific region, including countries like Australia, New Zealand, and select Asian markets. The index accounts for price changes and net dividends, offering insights into the equity markets of this dynamic region.

MSCI Daily Total Return Net Pacific Ex Japan

The MSCI Daily Total Return Net Pacific Ex Japan Index focuses on large and mid-cap companies in the Pacific region, excluding Japan. This index reflects daily price changes and net dividends, providing insights into the performance of Pacific equities outside of the Japanese market.

MSCI US Index Total Return (Net Dividends)

The MSCI US Index Total Return (Net Dividends) tracks the performance of large and mid-cap U.S. companies, incorporating both price changes and net dividends. This index serves as a comprehensive benchmark for the U.S. equity market, reflecting its performance across various sectors.

MSCI Daily Total Return Net Malaysia

The MSCI Daily Total Return Net Malaysia Index measures the performance of large and mid-cap companies listed in Malaysia. The index accounts for daily price movements and net dividends, offering insights into the Malaysian equity market's performance.

MSCI Brazil Index USD Total Return (Net Dividends)

The MSCI Brazil Index USD Total Return (Net Dividends) tracks the performance of large and mid-cap Brazilian companies, accounting for price changes and net dividends in U.S. dollars. This index provides a comprehensive view of the Brazilian equity market, reflecting its dynamics and investment opportunities.

MSCI China Index Total Return (Net Dividends)

The MSCI China Index Total Return (Net Dividends) measures the performance of large and mid-cap companies in China, incorporating both price changes and net dividends. This index reflects the performance of the Chinese equity market, providing insights into the rapidly growing economy.

MSCI Emerging Markets India

The MSCI Emerging Markets India Index tracks the performance of large and mid-cap companies in India. This index reflects the growth potential of the Indian market, accounting for price changes and serving as a benchmark for investors interested in Indian equities.

MSCI Mexico Index USD Total Return (Net Dividends)

The MSCI Mexico Index USD Total Return (Net Dividends) measures the performance of large and mid-cap Mexican companies, incorporating price changes and net dividends in U.S. dollars. This index provides insights into the Mexican equity market and its investment landscape.

MSCI Daily Total Return Net Emerging Markets Philippines

The MSCI Daily Total Return Net Emerging Markets Philippines Index tracks the performance of large and mid-cap companies in the Philippines, accounting for daily price movements and net dividends. This index offers a view of the Philippine equity market's performance.

MSCI Daily Total Return Net Emerging Markets Peru

The MSCI Daily Total Return Net Emerging Markets Peru Index measures the performance of large and mid-cap companies in Peru, incorporating daily price changes and net dividends. This index provides insights into the Peruvian equity market.

MSCI Chile Index Total Return (Net Dividends)

The MSCI Chile Index Total Return (Net Dividends) tracks the performance of large and mid-cap Chilean companies, accounting for both price changes and net dividends. This index offers a comprehensive view of the Chilean equity market's dynamics.

MSCI Colombia Index Total Return (Net Dividends)

The MSCI Colombia Index Total Return (Net Dividends) measures the performance of large and mid-cap companies in Colombia, incorporating price changes and net dividends. This index provides insights into the Colombian equity market.

MSCI Daily Total Return Net Emerging Markets Korea

The MSCI Daily Total Return Net Emerging Markets Korea Index tracks the performance of large and mid-cap companies in South Korea, reflecting daily price changes and net dividends. This index provides insights into the

South Korean equity market.

MSCI Daily Total Return Net Emerging Markets Thailand

The MSCI Daily Total Return Net Emerging Markets Thailand Index measures the performance of large and mid-cap companies in Thailand, accounting for daily price movements and net dividends. This index offers a view of the Thai equity market.

MSCI Daily Total Return Net Emerging Markets Taiwan

The MSCI Daily Total Return Net Emerging Markets Taiwan Index tracks the performance of large and mid-cap companies in Taiwan, reflecting daily price changes and net dividends. This index provides insights into the Taiwanese equity market.

MSCI Daily Total Return Net Emerging Markets Asia

The MSCI Daily Total Return Net Emerging Markets Asia Index measures the performance of large and mid-cap companies across various Asian emerging markets, accounting for daily price movements and net dividends. This index offers a broad perspective on the Asian equity landscape.

MSCI Emerging Markets Latin America USD

The MSCI Emerging Markets Latin America Index tracks the performance of large and mid-cap companies in Latin American emerging markets, reflecting price changes and net dividends in U.S. dollars. This index provides a comprehensive view of investment opportunities across the region.

MSCI Singapore Free Index

The MSCI Singapore Free Index represents the performance of large and mid-cap companies in Singapore, focusing on those that are freely tradable in the market. This index provides a comprehensive view of the Singapore equity market and is widely used as a benchmark for investment in Singaporean stocks.

MSCI Canada Index CAD Total Return (Gross Dividends)

The MSCI Canada Index CAD Total Return measures the performance of large and mid-cap companies in Canada, accounting for price changes and reinvested dividends in Canadian dollars. This index covers various sectors, such as energy, financials, and materials, providing a comprehensive view of the Canadian equity market.

MSCI Canada Index USD Daily Total Return (Gross Dividends)

Similar to its CAD counterpart, the MSCI Canada Index USD Daily Total Return measures the performance of large and mid-cap Canadian companies, but it is expressed in U.S. dollars. This index also includes reinvested dividends, allowing U.S.-based investors to assess the performance of Canadian equities while accounting for currency fluctuations.

MSCI EAFE Index Total Return (Gross Dividends)

The MSCI EAFE Index Total Return tracks the performance of large and mid-cap companies across developed markets outside of North America, including Europe, Australasia, and the Far East. This index incorporates price movements and reinvested dividends, providing a comprehensive measure of international equity performance.

MSCI North American Index USD Total Return (Gross Dividends)

The MSCI North American Index USD Total Return measures the performance of large and mid-cap companies in the U.S. and Canada, reflecting price changes and reinvested dividends in U.S. dollars. This index provides investors with a broad view of the North American equity market and its performance dynamics.

MSCI Daily Gross Pacific

The MSCI Daily Gross Pacific Index focuses on the performance of large and mid-cap companies in the Pacific region, including Australia, New Zealand, and several Asian markets. This index accounts for price appreciation and reinvested dividends, providing investors with insights into the performance of the Pacific equity markets.

MSCI US Index Total Return (Gross Dividends)

The MSCI US Index Total Return tracks the performance of large and mid-cap U.S. companies, incorporating both price changes and reinvested dividends. This index serves as a comprehensive benchmark for the U.S. equity market, reflecting various sectors and industries.

FTSE Russell and Russell-Based Indices:

FTSE 100

The FTSE 100 Index consists of the 100 largest companies listed on the London Stock Exchange by market capitalization. It serves as a key indicator of the performance of the UK stock market and includes a diverse range of sectors, such as finance, energy, and consumer goods. The FTSE 100 is commonly used by investors to gauge the economic health of the UK and is a benchmark for various investment products.

FTSE 100 Index

The FTSE 100 Index represents the 100 largest companies listed on the London Stock Exchange. It is a market-capitalization weighted index and serves as a key indicator of the performance of the UK stock market.

FTSE MIB Index

The FTSE MIB Index is the primary benchmark for the Italian stock market, comprising the 40 largest and most liquid companies listed on the Borsa Italiana. It includes major sectors such as finance, industrials, and consumer goods. The index is weighted by market capitalization and serves as a key indicator of the Italian economy, reflecting the performance of its largest companies.

FTSE China 50 Index

The FTSE China 50 Index represents the 50 largest and most liquid Chinese stocks listed on the Hong Kong Stock Exchange. It provides exposure to major sectors of the Chinese economy, including finance, technology, and consumer goods. The index is designed to reflect the performance of large-cap Chinese companies and serves as a benchmark for investors looking to access Chinese equities.

Russell 1000 Financial

The Russell 1000 Financial Index tracks the performance of financial sector companies within the Russell 1000 Index, which includes the largest U.S. companies by market capitalization. This index focuses on banks, insurance companies, and other financial institutions, providing insights into the health of the financial sector.

Russell 2000

The Russell 2000 Index represents the performance of the smallest 2,000 companies in the Russell 3000 Index, capturing the small-cap segment of the U.S. equity market. This index is widely used as a benchmark for small-cap performance and reflects the dynamics of smaller companies.

Russell 1000 Growth Total Return

The Russell 1000 Growth Total Return Index measures the performance of growth-oriented companies within the Russell 1000 Index, focusing on those expected to grow at an above-average rate. This total return version includes price appreciation and reinvested dividends.

Russell 1000 Total Return

The Russell 1000 Total Return Index tracks the performance of the largest 1,000 U.S. companies by market capitalization, incorporating both price changes and dividends. This index serves as a comprehensive benchmark for large-cap U.S. stocks.

Russell 1000 Value Total Return

The Russell 1000 Value Total Return Index focuses on value-oriented companies within the Russell 1000 Index, which are perceived to be undervalued relative to their fundamentals. This total return version includes capital gains and reinvested dividends.

Russell 2000 Growth Total Return

The Russell 2000 Growth Total Return Index measures the performance of growth-oriented companies within the Russell 2000 Index. This index accounts for price changes and reinvested dividends, reflecting the dynamics of small-cap growth stocks.

Russell 2000 Total Return

The Russell 2000 Total Return Index tracks the performance of the smallest 2,000 companies in the Russell 3000 Index, including price changes and dividends. It provides insights into the overall performance of small-cap stocks.

Russell 2000 Value Total Return

The Russell 2000 Value Total Return Index measures the performance of small-cap value stocks within the Russell 2000 Index. It includes both capital gains and reinvested dividends, reflecting the characteristics of small-cap companies perceived as undervalued.

Other US-Based Indices:

CBOE Volatility Index

The CBOE Volatility Index (VIX) measures the market's expectations of future volatility based on S&P 500 index options. Often referred to as the "fear index," it reflects investor sentiment and market uncertainty.

Communication Services Select Sector Index

The Communication Services Select Sector Index is a subset of the S&P 500, representing companies involved in telecommunications, media, and entertainment. This index provides exposure to key players in the communication sector, reflecting the evolving landscape of media consumption and communication technologies.

Communication Services Select Sector Index TR

The Communication Services Select Sector Index Total Return incorporates both price movements and dividends of the constituent companies within the communication services sector of the S&P 500. This index provides a comprehensive measure of the sector's performance, useful for investors looking for income and growth potential.

PHLX Semiconductor Sector Index Total Return

The PHLX Semiconductor Sector Index Total Return tracks the performance of companies involved in the semiconductor industry. It includes price changes and reinvested dividends, providing insights into the performance of semiconductor firms.

NASDAQ-100

The NASDAQ-100 Index comprises 100 of the largest non-financial companies listed on the NASDAQ stock exchange. It includes major sectors like technology, consumer services, and healthcare. This index is widely followed as a benchmark for growth-oriented stocks and is known for its significant representation of tech giants.

NASDAQ-100 Total Return

The NASDAQ-100 Total Return Index measures the performance of the largest non-financial companies listed on the NASDAQ, accounting for price changes and reinvested dividends. This index provides a comprehensive view of growth-oriented stocks.

REUTERS – REU - S&P EW 500 INDEX

The REUTERS S&P Equal Weight 500 Index is designed to measure the performance of 500 large-cap U.S. companies, with each company having an equal weight in the index. This approach differs from traditional market-cap weighted indices, allowing for greater representation of smaller companies within the index. The equal weight methodology can lead to different performance characteristics compared to traditional indices.

Foreign-Based Indices:

Amsterdam Exchange Index (AEX)

The Amsterdam Exchange Index (AEX) is a stock index made up of the 25 most actively traded securities on the exchange. The index is made up of Dutch companies and is one of the main national indices in Europe promoting a more reliable market that offers increased opportunities by bringing together buyers and sellers.

BEL20 Index

The BEL20 Index is a stock market index that includes the 20 largest and most liquid companies listed on the Euronext Brussels exchange in Belgium. It is considered a key indicator of the performance of the Belgian stock market and reflects the overall economic health of the country. The index covers various sectors, including consumer goods, financial services, and industrials.

BOVESPA Brasil Sao Paulo Stock Exchange Index

The BOVESPA Index, or Ibovespa, is the main stock market index in Brazil, tracking the performance of the most traded stocks on the B3 exchange in São Paulo. It includes a diverse range of sectors such as financials, energy, and consumer goods. The index is market-capitalization weighted and is often used as a benchmark for the Brazilian equity market.

Cotation Assistée en Continu 40 (CAC 40)

The Cotation Assistée en Continu 40, or CAC 40, is a benchmark French stock market index that comprises 40 of the largest and most actively traded companies listed on Euronext Paris. It serves as a barometer for the French economy and includes major firms from sectors like finance, technology, and consumer products. The index is weighted by free-float market capitalization.

Deutscher Aktien Index (DAX)

The Deutscher Aktien Index, commonly known as the DAX, is a stock market index that tracks the 30 largest and most liquid German companies listed on the Frankfurt Stock Exchange. It is one of the most important indices in Europe and represents key sectors of the German economy, such as automotive, manufacturing, and technology. The DAX is a total return index, meaning it accounts for dividends paid by the constituent companies.

Eurostoxx 50 Index

The Eurostoxx 50 Index is a stock market index that represents 50 of the largest and most liquid companies in the Eurozone. It covers multiple sectors and serves as a key benchmark for European equities, reflecting the performance of major companies in the region.

Hang Seng China Enterprises Index

The Hang Seng China Enterprises Index (HSCEI) measures the performance of large Chinese companies listed on the Hong Kong Stock Exchange, specifically those incorporated in mainland China. This index provides exposure to the Chinese market and is often used by investors to assess the performance of state-owned enterprises and other large corporations in China.

Hang Seng Index

The Hang Seng Index is a key benchmark for the Hong Kong stock market, consisting of the 50 largest and most liquid companies listed on the Hong Kong Stock Exchange. It reflects the performance of various sectors, including finance, utilities, and consumer goods, and is widely regarded as a barometer for the overall health of the Hong Kong economy.

Korea Composite Stock Price Index (KOSPI)

The Korea Composite Stock Price Index, or KOSPI, is the main stock market index in South Korea, representing all common stocks traded on the Korea Exchange. The index is market-capitalization weighted and includes a diverse range of sectors, reflecting the overall performance of the South Korean economy.

Mexican IPC Index (Índice de Precios y Cotizaciones)

The Mexican IPC Index, or Índice de Precios y Cotizaciones, is the primary benchmark for the Mexican stock market, consisting of the 35 most liquid and largest companies listed on the Mexican Stock Exchange (BMV). It includes various sectors such as finance, telecommunications, and consumer goods, reflecting the overall performance of the Mexican economy.

Nikkei 225

The Nikkei 225 is a stock market index for the Tokyo Stock Exchange, representing 225 of the largest and most liquid companies in Japan. It is price-weighted, meaning that companies with higher stock prices have a greater impact on the index's movement. The Nikkei 225 is a key indicator of the Japanese economy and investor sentiment.

Stockholm 30 Index

The Stockholm 30 Index, also known as the OMX Stockholm 30 Index, measures the performance of the 30 most traded stocks on the Stockholm Stock Exchange. It includes companies from various sectors, serving as a key indicator of the Swedish equity market.

Swiss Market Index

The Swiss Market Index (SMI) is the primary stock market index in Switzerland, consisting of the 20 largest and most liquid companies listed on the SIX Swiss Exchange. The index is market-capitalization weighted and provides a gauge for the performance of the Swiss equity market.

Taiwan Weighted Exchange Capitalization Weighted Stock Index

This index measures the performance of stocks listed on the Taiwan Stock Exchange, weighted by market capitalization. It reflects the overall performance of the Taiwanese equity market, capturing large, mid, and small-cap companies.

FOREIGN EXCHANGE

Subject to the requirements of the Rules, Swaps in the foreign exchange asset class may be effected (i) in the Order Book pursuant to Rule 505, (ii) as a voice-executed trade or a Brokered Trade pursuant to Rule 509 or (iii) as a Block Trade pursuant to Rule 601.

Exotic FX Options

The terms and conditions of the F/X options incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The F/X options have the following characteristics:

Contract Overview	An exotic foreign-exchange option (or F/X option) is a derivative financial instrument that gives one party the right, but not the obligation, to buy or sell a specific quantity of one currency in exchange for another currency at a pre-arranged exchange rate on a specified date, with additional features to determine price, exercisability, termination or value that may be based on any number of factors, averages, indices or time periods. A listing of major F/X options appears below.
Trade Date	The date on which the parties enter into the options contract.
Option Style	European Style: A European style option allows the holder to exercise only at the expiration date, i.e. a single pre-defined point in time. American Style: An American style option allows the owner to exercise the option at any time before the expiration date.
Call Currency	Currency for call option.
Put Currency	Currency for put option.
Strike Price	The price at which an investor can exercise an option.
Rebate	A feature of some exotic options where the premium of the option is refunded if at the time the option expires it has no value.
Expiration Date	The date at which the option contract expires.
Expiration Time	The time on which the option contract expires.
Settlement Date	The date on which the option settles.
Premium	Premium amount expressed in the premium currency.
Premium Currency	Currency in which the option premium is expressed.
Premium Date	The date on which the premium amount is due.
Quoting Convention and Minimum Increment	Notional amount, agreed by the counterparties.
Minimum Size	Notional amount, agreed by the counterparties.
Notional Currency	Currency in which the contract size is expressed.

Binary Options

A Binary (or Digital) Option is an option that has a fixed payment at expiration if the option is in the money or nothing at all if the option expires out of the money. Binary options are usually European Style options. Below is a list of the Binary Option styles that may be listed for trading on GFI's Trading System:

- **One Touch**. A one touch option is a type of option that gives the holder a payout one the price of the underlying reaches a certain price level, similar to the Barrier Option below. However, with the One Touch Binary Option, once the barrier is reached or surpassed a predetermined fixed payout is achieved. Whereas, with the Barrier Option, it is the optionality that is triggered by the barrier being reached.
- **Double One Touch**. A double one touch is similar to the one touch option, however in this case two predetermined price levels are set which can be above and below the current price of the underlying, giving a type of straddle position. The option pays out the fixed payment if one of the predetermined price levels are reached or surpassed.
- **No Touch/Double No Touch**. The no touch and double no touch options are similar to a one touch and double one touch. With these, the payment is achieved if the underlying does not reach either a single predetermined price level or if the underlying stays within a range that is set by two price points for the underlying (the double no touch).

Bermuda Options

Bermuda Options are a hybrid between an American and European style option. Unlike American style options, which can be exercised anytime and European style options, which can be exercised only upon expiration, Bermuda Options can be exercised prior to maturity, but only on certain dates.

Barrier Options

Barrier Options are options that are either activated or deactivated when the price of the underlying passes through some predefined value referred to as the barrier. Below is a list of Barrier Options styles that may be listed for trading on GFI's Trading System. Any of these styles may be put or call options and may be combined to contain additional features.

- **Knock Out**. A knock out option has an additional price barrier for the underlying that, if reached, causes the option to expire with no value. This sets a limit or cap on the potential profit for the option buyer and sets a limit on the potential loss for the option writer.
- **Double Knock Out**. A double knock out option is similar to a knock out option, however with the double knock out two price barriers are set on the underlying. If either barrier is reached, the option is terminated with no value.
- **Knock In**. A knock in option is an option contact that is latent until a certain price level for the underlying is reached. The price level, or barrier, can only be reached if the option is moving out of the money. Until that price level is reached, the option is not

exercisable.

- **Double Knock In**. Similar to a knock in, where two price levels for the underlying are set. If either of these price levels or barriers are reached, the option becomes exercisable.
- **Reverse Knock In**. A reverse knock in option is a European style option that becomes exercisable once a predetermined price barrier of the underlying is reached. The barrier can only be reached if the option is moving into the money (gaining value). If the price level or barrier is hit the payout is based on the underlying vanilla option.
- **Reverse Knock Out**. Similar to the reverse knock in except in this case if the price barrier is hit the option is knocked out and there is no payout. If the price barrier is not reached, the option value is based on the underlying vanilla option.
- **Knock in Knock out**. With this type of option the predetermined price barrier of the underlying must be hit to activate the underlying option. One that first barrier is hit and the option is activated, there is a second price barrier that can cause the option to be knocked out or terminated prior to expiration. If this second barrier is hit before expiration, the option is extinguished. An additional form of this type of option may be written that is based on which price barrier is hit first. If the knock in barrier is hit, the option value is based on the underlying vanilla option and the knock out barrier is no longer valid. If the knock out barrier is hit first, the option is extinguished.
- **Spot Knock Out**. A spot knock out option is one where the barrier price for the underlying is the spot price. If the barrier is hit before expiration, the option is knocked out.
- **European Knock out/Knock In**. Similar to the knock out and knock in except the barrier set on this option is only applicable at expiration. If the barrier is hit at expiration the option is either knocked out or becomes exercisable.

Non-deliverable Forwards

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Contract Overview	An NDF is a forward contract in which the counterparties settle the difference between the NDF price or rate and the prevailing spot price or rate on an agreed upon notional amount.
Reference Currency	Non-deliverable currency: • CNY Chinese Renminbi • IDR Indonesian Rupiah • INR Indian Rupee • KRW South Korean Won • MYR Malaysian Ringgit • PHO Philippine Peso • TWD Taiwan Dollar • VND Vietnamese Dong • EGP Egyptian Pound • RUB Russian Ruble • KZT Kazakh Tenge • ARS Argentine Peso • BRL Brazilian Real • CLP Chilean Peso • COP Colombian Peso • GTQ Guatemalan Quetzal • PEN Peruvian Nuevo Sol • UYU Uruguayan Peso • VEB Venezuelan Bolivar
Settlement Currency	See list below.
Notional Currency	Currency in which the contract size is expressed.
Trade Date	The date on which the parties enter into the contract.
Quoting Convention and Minimum Increment	Notional amount, agreed by the counterparties.
Minimum Size	Notional amount, agreed by the counterparties.
Trading Conventions	Buy or Sell which refers to the contract size expressed in notional currency.

Forward Rate	Currency Exchange Rate expressed as the amount of Reference Currency per unit of Settlement Currency.
Settlement Date	The date on which the option settles.
Fixing Date	The date on which the difference between the prevailing market exchange rate and the agreed forward exchange rate is calculated.
Settlement Procedure	Bilateral settlement performed in settlement currency.

List of currencies:

AED UAE Dirham
AFN Afghanistan Afghani
ALL Albanian Lek
AMD Armenia Dram
ANG Neth. Ant. Guilder
AOA Angolan Kwanza
ARS Argentine Peso (NDF)
Argentine Peso
Australian Dollar
AWG Aruban Guilder
BAM Bosnia-Herze Convrt Mrka
BBD Barbados Dollar
BDT Bangladesh Taka
Bulgarian Lev
BHD Bahraini Dinar
BIF Burundi Franc
BMD Bermudian Dollar
BND Brunei Dollar
BOB Bolivian Boliviano
Brazilian Real (NDF)
BSD Bahamas Dollar
BWP Botswana Pula
BYR Belarus Ruble
BZD Belize Dollar
CAD Canadian Dollar
CDF Congolese Franc
CHF Swiss Franc
Chilean UF
CLP Chilean Peso
China Renminbi (NDF)
COP Colombian Peso
CRC Costa Rican Colon

IDR Indonesian Rupiah (NDF)
ILS Israeli Shekel
INR Indian Rupee (NDF)
ISK Iceland Krona
JMD Jamaica Dollar
JOD Jordanian Dinar
JPY Japanese Yen
KES Kenyan Shilling
KGS Kyrgyzstan Som
KHR Cambodia Riel
KMF Comoros Franc
KRW South Korean Won (NDF)
KWD Kuwaiti Dinar
KYD Cayman Islands Dollar
KZT Kazakhstan Tenge
LAK Laos Kip
LBP Lebanese Pound
LKR Sri Lankan Rupee
LTL Lithuanian Litas
LVL Latvian Lats
MAD Moroccan Dirham
MDL Moldova Leu
MGA Malagascy Ariary
MKD Macedonia Denar
MMK Myanmar Kyat
MNT Mongolian Togrog
MOP Macau Pataca
MRO Mauritania Ouguiya
MUR Mauritius Rupee
MVR Maldives Rufiyaa
MWK Malawi Kwacha
MXN Mexican Peso

RON New Romanian Leu
RSD Serbian Dinar
RUB Russian Ruble (NDF)
RWF Rwanda Franc
SAR Saudi Riyal
SBD Solomon Is. Dollar
SCR Seychelles Rupee ARS
SDD Sudanese Dinar AUD
SDG New Sudanese Pound
SDP Old Sudanese Pound
SEK Swedish Krona
SGD Singapore Dollar
SIT Slovenia Tolar BGN
SKK Slovakia Koruna
SLL Sierra Leone Leone
SOS Somali Shilling
SRD Suriname Dollar
SSP South Sudanese Pound
STD Sao Tome Dobra BRL
SVC El Salvador Colon
THB Thai Baht
THO Thai Baht Onshore
TJS Tajikistan Somoni
TND Tunisian Dinar
TOP Tonga Pa'Anga
TRY Turkish Lira
TTD Trinidad/Tobago Dol CLF
TWD Taiwan Dollar (NDF)
TZS Tanzanian Shilling CNY
UAH Ukraine Hryvnia (NDF)
UDI Mexican UDI
UGX Ugandan Shilling

CVE Cape Verde Escudo

CZK Czech Koruna
DJF Djibouti Franc

DKK Danish Krone

DOP Dominican Repb.
DZD Algerian Dinar

EGP Egyptian Pound (NDF)
ERN Eritrean Nakfa
EUR Euro
FJD Fiji Dollar
GBP British Pound
GEL Georgia Lari
GMD Gambian Dalasi
GNF Guinea Franc
GTQ Guatemala Quetzal
GYD GuySettlementana Dollar
HKD Hong Kong Dollar
HNL Honduras Lempira

HRK Croatia Kuna
HTG Haiti Gourde HUF Hungarian Forint

MYR Malaysian Ringgit (NDF)

MZM Mozambique Metical
MZN New Mozambique Metical
NGN Nigeria Naira (NDF)

NID New Iraqi Dinar
NIO Nicaragua Cordoba

NLG Dutch Guilder
NOK Norwegian Krone
NPR Nepalese Rupee
NZD New Zealand Dollar
OMR Omani Rial
PAB Panamanian Balboa
PEN Peruvian New Sol
PGK Papua N.G. Kina
PHP Philippines Peso (NDF)
PKR Pakistani Rupee

PLN Polish Zloty
PTE Portuguese Escudo

PYG Paraguay Guarani
QAR Qatari Riyal ROL Romanian Leu

USD US Dollar

UYU Uruguay Peso
UZS Uzbekistan Sum

VEE Venezuela Essential Rate
VEF Venezuelan Bolivar
VND Vietnamese Dong (NDF)
VUV Vanuatu Vatu
WST Samoa (West) Tala
XAF CFA Franc Beac
XCD East Caribbean Dollar
XDR Special Drawing Rights
XOF CFA Franc Bceao
XPF Pacific Island Franc
XSU Sucre
YER Yemeni Rial
ZAR S. African Rand

ZMK Zambian Kwacha
ZMW Zambian Kwacha (NDF)
ZWR Zimbabwe Dollar

Vanilla FX Options

The terms and conditions of the F/X options incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The F/X options have the following characteristics:

Contract Overview	A vanilla F/X option is a derivative financial instrument that gives one party the right, but not the obligation, to exchange money denominated in one currency into another currency at a pre-arranged exchange rate on a specified date.
Trade Date	The date on which the parties enter into the options contract.
Option Style	European Style: A European style option allows the holder to exercise only at the expiration date, i.e. a single pre-defined point in time. American Style: An American style option allows the owner to exercise the option at any time before the expiration date.
Call Currency	Currency for call option.
Put Currency	Currency for put option.
Strike Price	The price at which an investor can exercise an option.
Rebate	A feature of some exotic options where the premium of the option is refunded if at the time the option expires it has no value.
Expiration Date	The date at which the option contract expires.
Expiration Time	The time on which the option contract expires.
Settlement Date	The date on which the option settles.
Premium	Premium amount expressed in the premium currency.
Premium Currency	Currency in which the option premium is expressed.
Premium Date	The date on which the premium amount is due.
Quoting Convention and Minimum Increment	Notional amount, agreed by the counterparties.
Minimum Size	Notional amount, agreed by the counterparties.
Notional Currency	Currency in which the contract size is expressed.

INTEREST RATES

Subject to the requirements of the Rules, Swaps in the credit asset class may be effected (i) in the Order Book pursuant to Rule 505, (ii) through a Request for Quote pursuant to Rule 508, (iii) as a voice-executed trade or a Brokered Trade pursuant to Rule 509 or (iv) as a Block Trade pursuant to Rule 601.

Overview:

An instrument in which two parties agree to exchange cash flows in the same or two different currencies, based on a notional amount, from fixed to floating or from one floating rate to another. The fixed rate is typically reset monthly, quarterly, semi-annually or annually though in some cases such as zero-coupon Inflation Swaps, there is only one exchange of cash flows at maturity. The fixed rate may also be an off-market level whereupon payer and receiver agree an upfront payment to accommodate such, such as in ISDA Market Agreed Coupon swaps. In general, the floating rate can be almost any kind of index fixed asset price, but in the OTC markets we focus on interest rate instruments only, including but not limited to:

- Deposit indices such as Euribor, LIBOR[1], SOFR etc.
- Constant Maturity indices, e.g. 5Y IRS
- Inflation indices, e.g. UK RPI, French HICP, US CPI

[1] As we transition away from LIBOR, all the swaps that reference the USD LIBOR are permitted. Listing USD LIBOR in the contract specifications allows for the settlement of pending contracts with future expiration dates. The anticipated date for LIBOR to end is September 30, 2024 which is when all the trading activity regarding LIBOR would cease.

Overnight Index Swaps: SOFR and SONIA

Soecification	Overnight Index Swaps tOIS)			Ovem1ght Index Swaps'10IS)	
Currency	U.S. Dollar (USO)	U.S. Dollar (USO)	U.S. Do1Lar (USO)	Sterling (GBP}	Sterlling ,(GBP)
Floating Rate Indices	Secured Ovem.1ght F1nancing Rate ,!SOFR)	Secured Ovem.1ght F1nancing Rate (SOFR)	Secured O·em.1ght F1nancing Rate ,!SOFR)	Sterling O·emight Index Average (SONIA),	Sterlling Ovem.1ght Index Ave:rage (SOMA)
Trade tart Type	Spot Stariting (T+2)	IMM Start Date (next two ruM dates)	IMM Start Date (next t\vo ruM dates)	Spot Starting (T+0),	IMM Start Date (next two IMM dates}
Optionality	No	No	No	No	No
Fixed Leg					
Payment Frequency	Annual	Annual	Annual	Annual	Annual
Day Count Convention	ACT/360	ACT/360	ACT/360	ACT/ 365.FJXED	kCT/ 365.FIXED
Bu iness Calendars	tew Yorik/USNY	tew Yorik/USNY	,ew Yorik/USNY	London/GBLO	London/GBLO
Pavment Lal!	2 Days	2 Davs	2 Days	0 Dav	0Day
Floating Leg					
Payment/ Reset Frequency	Annual	Annual	Annual	Annual	Annual
Day Count Convention	ACT/360	ACT/360	ACT/360	ACT/ 365.FJXED	kCT/ 365.FIXED
Business Calendars	New Yorik/USNY	New Yorik/USNY	New Yorik/USNY	Loodon/GBLO	London/GBLO
Payment Lag	2 Days	2 Days	2 Days	0Days	0Days
Fixing Calendars	us Government Securities/ USGS	us Government Securities/ USGS	us Government Securities/ USGS	London/GBLO	London/GBLO
Fixing Offset	Oday	0Days	0Days	0Days	0Days
Dual Currenci.es	No	No	No	No	t0
Notjonal	Fixed Notional	Fixed Notional	Fixed Notional	Fixed Notjonal	Fixed otional
Fixed Rate	Par	Par	tandard Coupon	Par	**Par**
Tenors	2 3,4,5 6, 7, lo. 12, 15, 20 30 Years	2,3,4 5,6, 7 10 12 15 20 30 Years (Standard and IMM end/roll date convention	l, 2, 3 4, 5, 7 IO, 15 20 30 Years (Standard end/roll date conventions)	**1,** 2 3 4,5 6 7,8 9 10 12 15,20,25 30 Years	1, 2, 3, **4** 5, 6, 7, 8, 9, JO, 12, 15 20 25,30 Years ,(Standard and IMM end/roll date oonve:ntion)

Brazilian Real Interest Rate Swap: Basis

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Brazilian Real (BRL)
Floating Rate Indexes	CETIP CDI Rate
Stated Termination Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Brazilian Real Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Brazilian Real (BRL)
Floating Rate Indexes	CETIP CDI Rate
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Brazilian Real Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Brazilian Real (BRL)
Floating Rate Indexes	CETIP CDI Rate
Stated Termination Date Range	As negotiated between the parties
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Canadian Dollar Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Canadian Dollar (CAD)
Floating Rate Indexes	Canadian Overnight Repo Rate Average (CORRA)
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Canadian Dollar Interest Rate Swap: Overnight Index

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Canadian Dollar (CAD)
Floating Rate Indexes	Canadian Overnight Repo Rate Average (CORRA)
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Canadian Dollar Interest Rate Swap: Basis

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Canadian Dollar (CAD)
Floating Rate Indexes	Canadian Overnight Repo Rate Average (CORRA)
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Chilean Peso Inflation-Protected Interest Rate Forward

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Chilean Peso (CLP)
Floating Rate Indexes	Unidad de Fomento (UF)
Settlement Currency	U.S. Dollar (USD)
Stated Termination Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Chilean Peso Inflation-Protected Interest Rate Swap

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Chilean Peso (CLP)
Floating Rate Indexes	Unidad de Fomento (UF)
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Chilean Peso Interest Rate Swap: Basis

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Chilean Peso (CLP)
Floating Rate Indexes	SOFR/Indice Camara Promedio
Stated Termination Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Chilean Peso Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Chilean Peso (CLP)
Floating Rate Indexes	Indice Camara Promedio
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Chilean Peso Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Chilean Peso (CLP)
Floating Rate Indexes	Indice Camara Promedio
Stated Termination Date Range	As negotiated between the parties
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Colombian Peso Inflation-Protected Interest Rate Forward

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Colombian Peso
Floating Rate Indexes	Unidad de valor real
Settlement Currency	U.S. Dollar (USD)
Stated Termination Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Colombian Peso Inflation-Protected Interest Rate Swap

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Colombian Peso (COP)
Floating Rate Indexes	Unidad de valor real (UVR)
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Colombian Peso Interest Rate Swap: Basis

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Colombian Peso (COP)
Floating Rate Indexes	Tasa de cambio del peso colombiano (TRM)
Stated Termination Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Colombian Peso Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Colombian Peso (COP)
Floating Rate Indexes	Tasa de cambio del pero colombiano (TRM)
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Colombian Peso Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Colombian Peso (COP)
Floating Rate Indexes	Tasa de Cambio del peso colombiano (TRM)
Stated Termination Date Range	As negotiated between the parties
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Euro EURIBOR Interest Rate Swap: Basis

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Euro (EUR)
Floating Rate Indexes	EURIBOR/EURIBOR EURIBOR/SONIAS
Stated Termination Date Range	28 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Euro EURIBOR Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Euro (EUR)
Floating Rate Indexes	EURIBOR
Stated Start Date Range	28 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Euro EURIBOR Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Euro (EUR)
Floating Rate Indexes	EURIBOR
Stated Termination Date Range	3 days to 3 years
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Euro EURIBOR Interest Rate Swap: Market Agreed Coupon

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Euro
Fixed Coupon	http://www.sifma.org/services/standard-forms-and-documentation/swaps/
Floating Rate Indexes	EURIBOR
Tenors	1y, 2yrs, 3yrs, 5yrs, 7yrs, 10yrs, 15yrs, 20yrs, 30yrs
Effective Dates	IMM dates (3rd Weds of March, June, September, December)

Euro EURIBOR Interest Rate Swap: Overnight Index

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Euro (EUR) ("EONIAS")
Floating Rate Indexes	EURIBOR
Stated Termination Date Range	7 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

GBP SOFR Interest Rate Swap: Basis

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Sterling (GBP)
Floating Rate Indexes	SOFR/SOFR SOFR/SONIAS
Stated Termination Date Range	28 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

GBP SOFR Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Sterling (GBP)
Floating Rate Indexes	SOFR
Stated Start Date Range	28 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

GBP SOFR Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Sterling (GBP)
Floating Rate Indexes	SOFR
Stated Termination Date Range	3 days to 3 years
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

GBP SOFR Interest Rate Swap: Market Agreed Coupon

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Sterling
Fixed Coupon	http://www.sifma.org/services/standard-forms-and-documentation/swaps/
Floating Rate Indexes	SOFR
Tenors	1y, 2yrs, 3yrs, 5yrs, 7yrs, 10yrs, 15yrs, 20yrs, 30yrs
Effective Dates	IMM dates (3rd Weds of March, June, September, December)

GBP SOFR Interest Rate Swap: Overnight Index

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Sterling (GBP) ("SONIAS")
Floating Rate Indexes	SOFR
Stated Termination Date Range	7 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

JPY SOFR Interest Rate Swap: Basis

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Yen (JPY)
Floating Rate Indexes	SOFR
Stated Start Date Range	28 days to 30 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

JPY SOFR Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Yen (JPY)
Floating Rate Indexes	SOFR
Stated Start Date Range	28 days to 30 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

JPY SOFR Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	Yen (JPY)
Floating Rate Indexes	SOFR
Stated Termination Date Range	3 days to 3 years
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Mexican Peso Interest Rate Swap: Basis

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Mexican Peso (MXN)
Floating Rate Indexes	SOFR/28 day MXN-TIIE-Banxico Index MXN-TIIE ON-OIS Compound
Stated Termination Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Mexican Peso Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Mexican Peso (MXN)
Floating Rate Indexes	MXN-TIIE ON-OIS Compound
Stated Start Date Range	As negotiated between the parties Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Mexican Peso Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Mexican Peso (MXN)
Floating Rate Indexes	MXN-TIIE ON-OIS Compound
Stated Termination Date Range	As negotiated between the parties
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Mexican Peso Unidades de Inversion Rate Swap

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Mexican Peso (MXN)
Floating Rate Indexes	Unidades de Inversion (UDI)
Stated Start Date Range	As negotiated between the years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

Mexican Peso Interest Rate Swap: Overnight Index

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	Mexican Peso (MXN)
Floating Rate Indexes	MXN-TIIE ON-OIS Compound
Stated Start Date Range	As negotiated between the years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

South African Rand Interest Rate Swap: Basis

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	South African Rand (ZAR)
Floating Rate Indexes	South African Rand Overnight Index Average (ZARONIA)[1]
Stated Start Date Range	As negotiated between the years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

[1] As of December 31, 2026, JIBAR will cease to exist as a designated benchmark and will be replaced by ZARONIA.

South African Rand Interest Rate Swap: Fixed-to-Float

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	South African Rand (ZAR)
Floating Rate Indexes	South African Rand Overnight Index Average (ZARONIA)[2]
Stated Start Date Range	As negotiated between the years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

[2] As of December 31, 2026, JIBAR will cease to exist as a designated benchmark and will be replaced by ZARONIA.

South African Rand Interest Rate Swap: Overnight Index

The terms and conditions of the swaps incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaps have the following characteristics:

Currency	South African Rand (ZAR)
Floating Rate Indexes	South African Rand Overnight Index Average (ZARONIA)[3]
Stated Start Date Range	As negotiated between the years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

[3] As of December 31, 2026, JIBAR will cease to exist as a designated benchmark and will be replaced by ZARONIA.

Swaptions

The terms and conditions of the swaptions incorporate by reference such credit and other terms as the parties may establish through their pre-existing bilateral agreement. The swaptions have the following characteristics:

Contract Overview	A **swaption** is a derivative financial instrument that gives the owner the right but not the obligation to enter into the underlying interest rate swap
Trade Date	The date on which parties enter into the contract
Swaption Type	A **payer swaption** gives the owner of the swaption the right to enter into a swap where they pay the fixed leg and receive the floating leg A **receiver swaption** gives the owner of the swaption the right to enter into a swap in which they will receive the fixed leg, and pay the floating rate leg
Payer Currency	Currency for payer swaption
Receiver Currency	Currency for receiver swaption
Strike Price	The asset price at which the investor can exercise an option
Expiration Date	Date at which swaption contract expires
Expiration Time	Time at which swaption contract expires
Settlement Date	Settlement date of the swaption contract
Premium	Premium amount expressed in premium currency
Premium Currency	Currency in which swaption premium is expressed
Premium Date	Date on which premium amount is due
Quoting Convention and Minimum Increment	Notional amount, as agreed by counterparties
Minimum Size	Notional amount, as agreed by counterparties
Notional Currency	Currency in which contract size is expressed
Settlement Procedure	Bilateral settlement performed in settlement currency
Trading Hours	00:01 - 24:00 Sunday-Friday Eastern Time
Clearing Venue	Bilateral

USD LIBOR[1]/SOFR Interest Rate Swap: Basis

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	U.S. Dollar
Floating Rate Indexes	LIBOR[1]/SOFR/LIBOR/SOFR LIBOR[1]/SOFR/Fed Funds LIBOR/SOFR/OI S Including Spread over Treasuries LIBOR[1]/SOFR/MXN-TIIE-Banxico (MXN IRS Benchmark)LIBOR[1]/SOFR/ICP (CLP IRS Benchmark)
Stated Termination Date Range	28 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

USD LIBOR[1]/SOFR Interest Rate Swap: Fixed-to-Floating

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	U.S. Dollar (USD)
Floating Rate Indexes	LIBOR[1]/SOFR
Stated Start Date Range	28 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

USD LIBOR[1]/SOFR Interest Rate Swap: Forward Rate Agreement

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	U.S. Dollar
Floating Rate Indexes	LIBOR[1]/SOFR
Stated Termination Date Range	3 days to 3 years
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No

USD LIBOR[1]/SOFR Interest Rate Swap: Market Agreed Coupon

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	U.S. Dollar
Fixed Coupon	http://www.sifma.org/services/standard-forms-and-documentation/swaps/
Floating Rate Indexes	LIBOR[1]/SOFR
Tenors	1y, 2yrs, 3yrs, 5yrs, 7yrs, 10yrs, 15yrs, 20yrs, 30yrs
Effective Dates	IMM dates (3rd Weds of March, June, September, December)

USD LIBOR[1]/SOFR Interest Rate Swap: Overnight Index

The terms and conditions of the swap as established by the DCO in its rules or bylaws are incorporated by reference herein and are the terms and conditions of the swap. The swaps have the following characteristics:

Currency	U.S. Dollar (USD) ("OIS")
Floating Rate Indexes	LIBOR[1]/SOFR
Stated Termination Date Range	7 days to 50 years Spot & Forward starting, and broken dates (bespoke tenors)
Optionality	No
Dual Currencies	No
Conditional Notional Amounts	No