

Appendix A to Tradition SEF Rulebook U.S. Dollar Interest Rate Swap Product Listing

1. Discussion of contracts; not readily susceptible to manipulation

- The interest rate swap (IRS) market is considered the largest derivative market in the world, with an estimated \$441 trillion in notional principal outstanding as of December 2012 according to the Bank for International Settlements. See BIS Quarterly Review, September 2013 Page A10 Table 4 http://www.bis.org/publ/qtrpdf/r_qs1309.pdf.
- IRS are cash-settled so there is no deliverable supply to be manipulated. IRS are widely used by corporations, insurance companies, banks, and governments to transfer and manage interest rate risk. TradSEF believes that the size and liquidity of the cash market for interest rate linked financial instruments, such as bonds, loans, government interest bearing instruments and volume of trading of swaps and interest rate sensitive instruments creates in each case significant liquidity in interest rate sensitive instruments so as to render IRS not easily susceptible to manipulation. Furthermore, IRS-associated interest rate futures contracts, loans, cleared swaps, cash and futures markets for government debt securities offer a deep liquidity pool to hedge and risk-manage swaps based on such rates indexes.
- TradSEF will monitor trading in these swaps in conjunction with TradSEF's regulatory service provider. TradSEF has a comprehensive surveillance program and rules to prevent TradSEF participants from engaging in manipulative activity and possesses discretion to impose fines and disciplinary sanctions on its participants. Furthermore, TradSEF's predecessor brokers who are involved in the operation of TradSEF have decades of experience in operating platforms and executing trades in these swaps.

2. Discussion of Index Reference Prices

Index Selection: TradSEF limits the indexes underlying its interest rate swap offerings to well-established, publicly available third-party interest rate market benchmarks. Some are published by central banks, [such as the United States Federal Reserve Secured Overnight Financing Rate \(SOFR\) rate](#), others, such as the London Interbank Offered Rate (LIBOR) benchmark, are calculated and published by reliable independent providers such as trade associations, exchanges or other third parties. The interest rate reference prices underlying swaps on TradSEF are the timeliest, most widely recognized and reliable benchmarks for interest rates in their respective markets. The index levels are readily available and commercially acceptable as benchmarks for borrowers, lenders, investors, portfolio managers, governments and public policy makers.

- **London Interbank Offered Rate (LIBOR):**
LIBOR is the average of interest rates estimated by each of the leading banks in London that it would be charged were it to borrow from other banks. As a result of the widely publicized allegations that certain individuals attempted to manipulate LIBOR indexes in particular, Intercontinental Exchange (ICE) Benchmark Administration (IBA) officially took over as the administrator of the the administrator for London Interbank Offered Rate (LIBOR) indexes. from February 1, 2014. IBA is regulated by the UK Financial Conduct Authority (FCA), which has confirmed formal authorization to IBA to administer LIBOR. IBA has built a robust oversight and governance framework that includes an independent board with a majority of Independent Non-Executive Directors. The Oversight Committee, which will administer the LIBOR code of conduct, shall be composed of benchmark users, independent experts, benchmark submitters, the IBA board and other stakeholders. IBA's new surveillance methodology has been designed to adjust to changing market conditions and it will employ sophisticated analytical tools to operate the benchmark price setting process with transparency. ICE-IBA will implement a new post-publication surveillance system and tests designed to assess the credibility of LIBOR submissions and rates. Thomson Reuters will collect data and perform real-time surveillance and calculation services under the oversight of ICE. LIBOR Methodology: Each day major banks submit their cost of borrowing unsecured funds for 15 periods of time in 10 currencies. Thomson

Reuters audits the data submitted by panel banks and creates the rates using the definitions provided by BBA's FX & MM Committee. The LIBOR rate produced by Thomson Reuters is calculated by using a trimmed arithmetic mean. Thomson Reuters receives each bank's submissions, ranks them in descending order and then drops the top and bottom quartiles. The middle two quartiles, reflecting 50% of the quotes, are then averaged to create the LIBOR quote. The bottom and top quartiles are dropped from the calculation in order to increase the accuracy of the LIBOR quotes. Dropping the outliers is done to limit the ability of any one bank to influence the calculation and affect the LIBOR quote. LIBOR reference prices are calculated daily. ~~All of the recent public scrutiny and changes mentioned above to~~ the oversight and administration of LIBOR make it difficult for an attempt by a single market participant or group of market participants to manipulate the LIBOR reference price.

- **Secured Overnight Financing Rate (SOFR):**

The New York Federal Reserve Bank describes the SOFR as a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities. The SOFR includes all trades in the Broad General Collateral Rate plus bilateral Treasury repurchase agreement (repo) transactions cleared through the Delivery-versus-Payment (DVP) service offered by the Fixed Income Clearing Corporation (FICC), which is filtered to remove a portion of transactions considered "specials".

SOFR is calculated as a volume-weighted median of transaction-level tri-party repo data collected from the Bank of New York Mellon (BNYM) as well as GCF Repo transaction data and data on bilateral Treasury repo transactions cleared through FICC's DVP service, which are obtained from DTCC Solutions LLC, an affiliate of the Depository Trust & Clearing Corporation. Each business day, the New York Fed publishes the SOFR on the New York Fed website at approximately 8:00 a.m., along with statistics summarizing the distribution of volumes each day, including the total dollar amount of transactions used to calculate each rate, rounded to the nearest billion, and the volume-weighted 1st, 25th, 75th, and 99th percentiles.

SOFR was identified by the Alternative Reference Rates Committee (ARRC) as its recommended alternative to U.S. dollar LIBOR for use in certain new U.S. dollar derivatives and other financial contracts. The ARRC was convened by the Federal Reserve Bank of New York in June 2017 and tasked to identify best practices for alternative reference rates to those currently used, such as LIBOR, identify best practices for contract robustness, develop, adopt and implement plan with metrics of success and a timeline for introducing alternative reference rates. The New York Fed began publication of the SOFR on April 3, 2018. In the production of the Treasury SOFR repo reference rates, the New York Fed has endeavored to adopt policies and procedures consistent with best practices for financial benchmarks, including the IOSCO Principles for Financial Benchmarks.

- TradSEF believes that the large number of participants in each market, and the calculation of each index by well known, independent third parties further limits the susceptibility of manipulation of these indexes. TradSEF believes that such benchmark indexes, many of which also underlie liquid interest rate futures contracts on major Designated Contract Markets, due to the large number of index participants, ubiquity, and broad-market nature are not readily susceptible to manipulation.

3. Swaps subject to the trade execution requirement, effective February 15, 2014.

MAT by Javelin:

<u>Specification</u>	Fixed-to-Floating Interest Rate Swap		
Currency	U.S. Dollar (USD)	U.S. Dollar (USD)	Euro (EUR)
Floating Rate Indexes	USD LIBOR	USD LIBOR	EURIBOR
Trade Start Type	Spot Starting (T+2)	IMM Start Date (next two quarterly IMM start dates)	Spot Starting (T+2)
Optionality	No	No	No
Dual Currencies	No	No	No
Notional	Fixed Notional	Fixed Notional	Fixed Notional
Tenors	2, 3, 5, 7, 10, 12, 15, 20, 30 years	2, 3, 5, 7, 10, 12, 15, 20, 30 years	2, 3, 5, 7, 10, 15, 20, 30 years

MAT by trueEX LLC:

<u>Specification</u>	Fixed-to-Floating Interest Rate Swap			
Currency	U.S. Dollar (USD)	U.S. Dollar (USD)	U.S. Dollar (USD)	Euro (EUR)
Floating Rate Indexes	USD LIBOR	USD LIBOR	USD LIBOR	EURIBOR
Trade Start Type	Spot Starting (T+2)	IMM Start Date (next two IMM dates)	IMM Start Date (next two IMM dates)	Spot Starting (T+2)
Optionality	No	No	No	No
Fixed Leg:				
Payment Frequency	Semi-Annual, Annual	Semi-Annual, Annual	Semi-Annual	Semi-Annual, Annual
Day Count Convention	30/360, Actual/360	30/360, Actual/360	30/360	30/360, Actual/360
Floating Leg:				
Reset Frequency	Quarterly (3 Month), Semi-Annual	Quarterly (3 Month), Semi-Annual	Quarterly (3 month)	Quarterly (3 Month), Semi-Annual
Day Count Convention	Actual/360	Actual/360	Actual/360	Actual/360
Dual Currencies	No	No	No	No
Notional	Fixed Notional	Fixed Notional	Fixed Notional	Fixed Notional
Fixed Rate	Par	Par	Standard Coupon¹	Par
Tenors	2, 3, 5, 7, 10, 12, 15, 20, 30 years	2, 3, 5, 7, 10, 12, 15, 20, 30 years	1, 2, 3, 5, 7, 10, 15, 20, 30 years	2, 3, 5, 7, 10, 15, 20, 30 years

¹ Standard Coupon refers to the then-current fixed coupon rates for Market Agreed Coupon ("MAC") contracts.

4. Swaps effective February 26, 2014:

MAT by TW SEF LLC:

Specification	Fixed-to-Floating Interest Rate Swap (USD)		
Currency	U.S. Dollar (USD)	U.S. Dollar (USD)	U.S. Dollar (USD)
Floating Rate Indexes	USD LIBOR	USD LIBOR	USD LIBOR
Trade Start Type	Spot Starting (T+2)	IMM Start Date (next two IMM dates)	IMM Start Date (next two IMM dates)
Optionality	No	No	No
Fixed Leg			
Payment Frequency	Semi-Annual, Annual	Semi-Annual, Annual	Semi-Annual
Day Count Convention	30/360, Actual/360	30/360, Actual/360	30/360
Floating Leg			
Reset Frequency	Quarterly, Semi-Annual	Quarterly, Semi-Annual	Quarterly
Day Count Convention	Actual/360	Actual/360	Actual/360
Dual Currencies	No	No	No
Notional	Fixed Notional	Fixed Notional	Fixed Notional
Fixed Rate	Par	Par	Standard Coupon ¹
Tenors	2, 3, 4, 5, 6, 7, 10, 12, 15, 20, 30 years	2, 3, 4, 5, 6, 7, 10, 12, 15, 20, 30 years	1, 2, 3, 4, 5, 7, 10, 15, 20, 30 years
Specification	Fixed-to-Floating Interest Rate Swap (Non-USD)		
Currency	Euro (EUR)	Sterling (GBP)	

Floating Rate Indexes	EURIBOR	GBP LIBOR
Trade Start Type	Spot Starting (T+2)	Spot Starting (T+0)
Optionality	No	No
Fixed Leg		
Payment Frequency	Semi-Annual, Annual	Quarterly, Semi-Annual
Day Count Convention	30/360, Actual/360	Actual/365F
Floating Leg		
Reset Frequency	Quarterly, Semi-Annual	Quarterly, Semi-Annual
Day Count Convention	Actual/360	Actual/365F
Dual Currencies	No	No
Notional	Fixed Notional	Fixed Notional
Fixed Rate	Par	Par
Tenors	2, 3, 4, 5, 6, 7, 10, 15, 20, 30 years	2, 3, 4, 5, 6, 7, 10, 15, 20, 30 years

4. PRODUCT LIST – INTEREST RATE SWAPS (Table 1)

Interest Rate Swaps	Cleared?	DCOs*
Forward Rate Agreement (FRA)	yes	LCH.Clearnet / CME
Overnight Index Swap (OIS)	yes	LCH.Clearnet / CME / JSCC
Interest Rate Swap (IRS)	yes	LCH.Clearnet / CME / JSCC
SOFR OIS	yes	LCH.Clearnet / CME**
Market Agreed Coupon (MAC)	yes	LCH.Clearnet / CME
Interest Rate Options (IRO / Swaptions)	no	
Interest Rate Caps	no	
Interest Rate Floors	no	
Inflation Swaps	yes	LCH.Clearnet

Inflation Options	no	
Inflation Asset Swaps	no	
Inflation Fixing	no	
Constant Maturity Swaps (CMS)	no	
Constant Maturity Swaps fixed/float	no	
Cross Currency Basis Swap	no	
Single Currency Basis swaps	yes	LCH.Clearnet / CME
Cross Currency Swap fixed/float	no	
Cross-currency swap fixed/float	no	
Non-Deliverable IRS fixed/float	no	
DTCC GCF Repo Swaps fixed/float	no	

***Tradition SEF Authorized DCOs:**

LCH.Clearnet, Ltd. ("LCH")
Chicago Mercantile Exchange Inc. ("CME")
Japan Securities Clearing Corporation ("JSCC")
ICE Clear Credit LLC ("ICE")

****[Clearing commences July 16, 2018](#)**

5. General Specifications (unless stated otherwise in the relevant product descriptions):

Overview

An IRS is where two parties agree to exchange interest rate cash flows, based on a specified notional amount from a fixed rate to a floating rate (or vice versa) or from one floating rate to another for a predetermined term. There are three types of IRS:

1. Fixed / Floating

One party pays a fixed rate for the term of the IRS at specific intervals such as monthly, quarterly, semi-annually or annually. The other party will make floating rate payments indexed to reference rates such as 3 month LIBOR. Generally fixed and floating rate payments are compounded and paid net on the longer coupon date. Note that fixed rate payments can be made on several different day count conventions. Money Market = No. of Days / 365; Bond Basis = 30 /360 Fixed; Adjusted Bond Basis = Actual No. of Days / 365 or 366.

2. Basis Swap

One party pays a floating rate for the term of the IRS indexed to a floating reference rate. The other party will also pay a floating rate indexed to a reference rate in a different tenor. For example a 2 year term IRS, Party A pays 6m \$ LIBOR, Party B pays 3m \$ LIBOR. Generally payments of the 3m \$LIBOR will be compounded and offset on the coupon dates.

3. Overnight Index Swap

A Fixed / Floating IRS where the floating rate is an overnight rate compounded and offset against the fixed rate payments and dates.

In general, the floating rate can be almost any kind of index fixed asset price, but in the OTC markets, the focus is on interest rate instruments, including but not limited to:

- Deposit indices such as Libor, Euribor etc
- Overnight financing rates such as SOFR and Fed funds
- Constant Maturity indices, e.g., 5Y IRS
- Inflation indices, e.g., UK RPI, French HICP, US CPI

Interest Rate Swaps – product types

The following product types shall be eligible for admission to and capable of being traded on the TradSEF Platform:

General Definitions

Tenors: IRS 1-year to 50 years, prompt or forward start

Swap Transaction

Any transaction which is a rate swap, basis swap, forward rate agreement, currency swap, cross-currency swap or similar transaction (and any combination thereof).

Available Currencies / Price References / Publisher

Table 2

IRS Available Currencies:		
Americas:	Reference Price	Publisher
US Dollar (USD)	USD LIBOR	*Intercontinental Exchange Benchmark Administration Ltd
US Dollar (USD)	SOFR	Federal Reserve Bank of New York
US Dollar (USD)	Fed Funds	Federal Reserve Bank of New York
Canadian Dollar (CAD)	CADLIBOR	*Intercontinental Exchange Benchmark Administration Ltd
Argentine Peso (ARS)	Bandler Rate	Argentina Central Bank
Brazil Real (BRL)	Daily Selic Rate	The Central Bank of Brazil
Brazil Real (BRL)	(CDI rate)	Cetip S.A
Chilean Unidad de Fomento (CLF)	ICP	CLICP index
Chile Peso (CLP)	ICP	CLICP index
Columbian Peso (COP)	Indicador Bancario de Referencia (IBR)	Banco Central de Colombia
Mexican Peso (MXN)	1:30 pm ET 28 day T1IE	Central Bank Mexico
Peru Nuevo Sol (PEN)	Overnight interest swap index	Central Reserve Bank of Peru
EMEA:	Reference Price (s)	Publisher
Euro (EUR)	EURIBOR	*Intercontinental Exchange Benchmark Administration Ltd
Euro (EUR)	EURIBOR365=	European Banking Federation
Euro (EUR)	EONIA	European Central Bank
British Pound (GBP)	GBP LIBOR BBA	*Intercontinental Exchange Benchmark Administration Ltd
British Pound (GBP)	GBP Semi-Annual Swap Rate	IFR
British Pound (GBP)	GBP_WMBA_SONIA_COMPOUND	Wholesale Markets Brokers Association
Czech Koruna (CZK)	Prague Interbank Offered Rate (PRIBOR)	Czech National Bank
Danish Krone (DKK)	CIBOR	NASDAQ OMX

French Franc (FRF)	FRF CPIxT	INSEE, France
Hungarian Forint (HUF)	HUF Budapest Inter-Bank Offered Rate (BUBOR)	Hungarian Forex Association
Israeli Shekel (ILS)	Tel Aviv Inter-Bank Offered Rate (TELBOR)	The Telbor Interest Rate Committee
Norwegian Krone (NOK)	Norwegian Interbank Offered Rate (NIBOR)	Finance Norway
Polish Zloty (PLN)	Warsaw Interbank Offered Rate (WIBOR)	National Bank of Poland
Russian Ruble (RUB)	MOSPRIME	National foreign Exchange Assoc
South African Rand (ZAR)	Johannesburg Interbank Agreed Rate (JIBAR)	South African Futures Exchange
Swedish Krona (SEK)	Stockholm Interbank Offered Rate (STIBOR)	Swedish Bankers' Association
Swiss Franc (CHF)	Swiss franc (CHF) LIBOR	*Intercontinental Exchange Benchmark Administration Ltd
Turkish Lira TRY	TRLIBOR	The Banks Association of Turkey
APAC:	Reference Price (s)	Publisher
Australian Dollar (AUD)	AUD-BBR-BBSW	AFMAdata
Australian Dollar (AUD)	AONIA	Reserve Bank of Australia
China Offshore Spot (CNH)	CNHFIX	The Treasury Markets Association
China Offshore CNH HIBOR	CNHHIBORFIX01	The Treasury Markets Association
Renminbi (CNY) REPO	CNREPOFIX=CFXS	China Foreign Exchange Trade System
Renminbi (CNY) SHIBOR	SHIBOR	China Foreign Exchange Trade System
Renminbi (CNY) DEPOSIT	PBOCB	The People's Bank of China
China Onshore Spot (CNY)	SAEC	The People's Bank of China
Hong Kong Dollar (HKD) HIBOR	HKD HIBOR	Hong Kong Association of Banks
Hong Kong Dollar (HKD) OIS	HONIX	The Hong Kong Brokers Association
Indonesian Rupiah (INR)	JIBOR	Bank Indonesia
Japanese Yen (JPY)	JPY-LIBOR-BBA	*Intercontinental Exchange Benchmark Administration Ltd / British Bankers Association
Japanese Yen (JPY)	JPYTIBOR	Japanese Bankers Association
Japanese Yen (JPY)	JPYTONAR	U.S. Federal Reserve Bank / Bank of Japan
Korea Won (KRW)	KRW-CD-KSDA	Korean Securities Dealers Association
Malaysian Ringgit (MYR)	KLIBOR	Financial Markets Association Malaysia (PPKM)
New Zealand Dollar (NZD)	NZD-BBR-BID	NZ Financial Markets Association
New Zealand Dollar (NZD)	NZD-NZIONA-OIS	Reserve Bank of New Zealand
Philippines Peso (PHP)	PHIREF	Bankers Association of the Philippines

Singapore Dollar (SGD)	Singapore Swap Offer Rate (SOR)	Association of Banks in Singapore
Taiwan Dollar (TWD)	TAIFX1	Taipei Forex Inc
Taiwan Dollar (TWD)	TWCPBA	Reuters
Thailand Bhat (THB)	THBFIX	Bank of Thailand
		*from February 1, 2014, Intercontinental Exchange Benchmark Administration Ltd. Will take over calculation and publication of this index from British Bankers Association (BBA).

Fixed Rate Payer

In respect of a Swap Transaction, a party obligated to make payments calculated by reference to a fixed rate.

Floating Rate Payer

In respect of a Swap Transaction, a party obligated to make payments calculated by reference to a floating rate index.

Floating Rate Index

Dependent on Currency and as agreed between Participants. A comprehensive list of indices can be found here and with calculations in Articles 6 & 7 of the 2006 ISDA Definitions and the 2008 ISDA Inflation Derivatives Definitions.

Quoting Convention and Minimum Increment

Dependent on Currency, Index and Tenor for electronic Central Limit Order Books or as agreed by Participants for Voice Trading Facility trades.

Minimum Size

Dependent on Currency, Index and Tenor for electronic Central Limit Order Books or as agreed by Participants for Voice Trading Facility trades.

Confirmation

Documents or other confirming evidence exchanged between the counterparties which confirm all of the terms of the Swap Transaction.

Business Day

A day on which banks settle payments.

Day Count Convention

The convention used for adjusting any relevant date that would otherwise fall on a non-Business Day. Day count will be specific to the individual product specification.

Holiday Calendar

Applied in accordance for the country currency denoted for the instrument.

Term (Tenor)

The total period of the Swap Transaction, starting on the Effective Date and ending on the Termination Date.

Notional Types

- "Bullet": Notional remains constant over term of swap.

- “Amortizing”: Notional declines over term of swap.
- “Accreting”: Notional increases over term of swap.

Effective (Start) Date

The first date of the Term of the Swap Transaction, Spot or Forward starting, subject to the agreed Date Convention.

Termination Date

The last day of the Term of the Swap Transaction.

Maturity Date

Start Date + Term (Tenor)

First Fixing Date

The first Index Fixing Date is zero, one or two business days (dependent on that Currency's market standard and according to agreed Holiday calendars) prior to the Start Date of the Swap.

Trade Types

The following swap types may be executed: Outright (Spot and Forward starting), Curve (tenor) Spreads, Butterflies, Spreads between different floating Indices, Spreads to Futures, Spreads to Treasuries and combinations thereof.

Trade Start Types**Spot:**

A swap where the Effective Date is T+0 (e.g., GBP), T+1 (e.g., AUD), T+2 (e.g., USD, EUR, CHF, JPL) from the trade date, depending on Currency and floating Index market standard.

Forward:

A swap where the Effective Date is after the Effective Date for a Spot Starting swap of that Currency and floating Index.

Settlement Procedure

As determined by the Clearing Venue, provided above or as agreed between Participants for non-cleared trades

Block Trades

Block Trades may be submitted pursuant to SEF Rule 509.

Position Limits

Parts 150 and 151 of the Commission's regulations, as applicable, set forth the Commission's rules regarding speculative position limits. The CFTC does not require speculative position limits for IRS.

Trading Hours

The operating hours of Tradition SEF as described in the relevant Notice to Participants.

Appendix B

Product Specifications and Terms and Conditions

A. Interest Rate Swap (IRS), Fixed/Float

Contract Definition:

An agreement to exchange a stream of cash flows by applying a fixed and floating interest rate to a specified notional over a term to maturity.

IRS Types

Fixed Rate v Floating Rate (X)ibor Index (e.g., 3m Libor, 6m Euribor).

Trading Conventions

Buy/Pay = Pay Fixed, Receive Floating (X)ibor Index

Sell/Receive = Receive Fixed, Pay Floating (X)ibor Index

Swap Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Specific Trade Types

The following swap types may be executed: Outright (Spot and Forward starting), Curve (tenor) Spreads, Butterflies, Spreads between different floating Indices, Spreads to Futures, Spreads to Treasuries and combinations thereof.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 7 days to 60 years.

Swap Conventions

Fixed Leg Payment:

Annual, Semi-Annual, Quarterly or as agreed by Participants.

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g. 30/360, Act/365 etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards

Floating Leg Index:

As agreed by participants and suitable to the Currency's market standards, e.g., Libor, Euribor , etc.

Payment/Resets:

Semi-Annual, Quarterly, Monthly, Daily or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for the Floating Index, e.g., Act/360, Act/365, etc.

Holiday Calendar: As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement Payment and Resets:**Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

B. Overnight Index Swap (OIS), Fixed/Float**Contract Definition:**

An agreement to exchange a stream of cash flows by applying a fixed and floating interest rate to a specified notional over a term to maturity.

IRS Types

Fixed Rate v Floating Rate OIS Index (e.g., [SOFR](#) Sonia, Ronia, Eonia, FedFunds).

Trading Conventions

Buy/Pay = Pay Fixed, Receive Floating OIS Index

Sell/Receive = Receive Fixed, Pay Floating OIS Index

Swap Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Specific Trade Types

The following swap types may be executed: Outright (Spot and Forward starting), Curve (tenor) Spreads, Butterflies, Spreads between different floating Indices, Spreads to Futures, Spreads to Treasuries and combinations thereof.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 1 day to 60 years.

Swap Conventions**Fixed Leg****Payment:**

Annual or as agreed by Participants.

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g. Act/360, Act/365 etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Floating Leg Index:

As agreed by participants and suitable to the Currency's market standards (e.g., [SOFR](#), Sonia, Ronia, Eonia, FedFunds).

Payment/Resets:

Daily resets, compounded daily and paid on an annualized basis, or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for the Floating Index, e.g., Act/360, Act/365, etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement Payment and Resets:**Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

C. Single Currency Basis Swap, Float/Float**Contract Definition:**

An agreement to exchange two streams of floating cash flows on a specified notional over a term to maturity.

Basis Spread

A spread between two Floating Rate Indices (e.g., 3m Libor, 6m Libor, OIS Index) of the same currency.

Basis Swap Types

"Fra/Ois" (3m vs daily compounded OIS), 3v1, 3v6 or 6v3, 3v12, 6v12 or other combinations of floating indices as agreed by Participants.

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies.

Trading Conventions

Buy/Pay = Pay Floating (X)ibor Index Index 1 Flat, Receive Floating (X)ibor Index Index 2 +Basis Spread
Sell/Receive = Receive Floating (X)ibor Index Index 1 Flat, Pay Floating (X)ibor Index Index 2 +Basis Spread

Basis Spread Price quoted in increments of fractions or decimals of a basis point. Leg 1 is usually the longer underlying index tenor, e.g., 3v1 rather than 1v3. Thus the 3m index is paid flat and the spread is added to the 1m index. The shorter index can be compounded, i.e. Q/Q = 3m index vs 1 quarterly payment consisting of 3 compounded 1m index settings OR the shorter index can be 3 separate monthly payments.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 3 months to 60 years.

Swap Conventions**Floating Legs 1 & 2:****Index:**

As agreed by participants and suitable to the Currency's market standards (e.g., 3mLibor, 6m Libor, OIS Index, etc).

Payment/Resets:

Annual, Semi-Annual, Quarterly, Monthly, Daily or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for each Index, e.g., Act/360, Act/365 , etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to each Currency's market standards.

Periodic Settlement Payment and Resets:**Floating Legs 1 & 2:**

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

D. Cross-Currency Basis Swap, Float/Float**Contract Definition:**

An agreement to exchange a stream of cash flows by applying a floating interest rate on leg 1 and a floating interest rate on leg 2 to a specified notional over a term to maturity.

Basis Spread

A spread between the Floating Rate Indices (e.g., 3m Libor, 6m Libor, OIS Index of two different currencies.

Basis Swap Types

Floating Rate (X)ibor Index (e.g., 3m Libor) v Floating Rate (X)ibor Index (e.g., 3m Euribor), usually with the same Payment frequency, e.g., Q/Q

Floating Rate OIS Index (e.g., Eonia) v Floating Rate OIS Index (e.g., Fed Funds), usually with the same Payment frequency, e.g., Q/Q

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies

Trading Conventions

Buy/Pay = Pay Floating Index Currency 1 Flat, Receive Floating Index Currency 2 + Basis Spread

Sell/Receive = Receive Floating Index Currency 1 Flat, Pay Floating Index Currency 2 + Basis Spread.

Basis Spread Price quoted in increments of fractions or decimals of a basis point. Notional amount set in Currency 1, e.g., 100m USD, payments Leg 1 in USD, payments Leg 2 in Currency 2.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 3 months to 60 years.

Swap Conventions Floating Legs 1 & 2**Indices:**

As agreed by participants and suitable to each Currency's market standards (e.g., 3mLibor, 6m Libor, OIS Index , etc.)

Payment/Resets:

Semi-Annual, Quarterly, Monthly or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for each Index, e.g., Act/360, Act/365.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to each Currency's market standards.

Periodic Settlement Payment and Resets:**Floating Legs 1 & 2:**

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of either leg 1 or leg 2 as agreed between Participants. Cross Currency Basis Swaps are traded with an exchange of principle FX'd at both start date and maturity and may also be traded with intra-swap FX exchanges as required.

E. Cross-Currency Swap, Fixed/Fixed**Contract Definition:**

An agreement to exchange a stream of cash flows by applying a fixed interest rate on leg 1 and fixed interest rate on leg 2 to a specified notional over a term to maturity.

Spread

A spread between the fixed rates of two different currencies.

Swap Types

Fixed Rate v Fixed Rate, usually with the same Payment frequency, e.g., A/A, S/S, Q/Q

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies

Trading Conventions

Buy/Pay = Pay Fixed Leg Currency 1 Flat, Receive Fixed Leg Currency 2 + Spread

Sell/Receive = Receive Fixed Leg Currency 1 Flat, Pay Fixed Leg Currency 2 + Spread

Spread Price quoted in increments of fractions or decimals of a basis point.

Notional amount set in Currency 1, e.g., 100m USD, payments Leg 1 in USD, payments Leg 2 in Currency 2.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 7 days to 60 years.

Swap Conventions

Fixed Legs 1 & 2:

Payment:

Annual, Semi-Annual, Quarterly or as agreed by Participants

Day Count Conventions:

As agreed by Participants and suitable to each Currency's market standards, e.g., 30/360, Act/365, etc.

Holiday Calendar:

As agreed by Participants and suitable to each Currency's market standards

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to each Currency's market standards.

Periodic Settlement Payment and Resets:

Fixed Legs 1 & 2:

The payment amount of the Fixed Legs are based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate. Payments are settled in accordance with the payment frequency of either leg 1 or leg 2 as agreed between Participants. Cross Currency Swaps may be traded with an exchange of principle FX'd at both start date and maturity and may also be traded with intra-swap FX exchanges as required and as agreed between Participants.

F. Cross-Currency Swap, Fixed/Float

Contract Definition:

An agreement to exchange a stream of cash flows by applying a fixed interest rate on leg 1 and a floating interest rate on leg 2 to a specified notional over a term to maturity.

Spread

A spread between the fixed rate of one currency and the Floating Rate Index (e.g., 3m Libor, 6m Libor, OIS Index of a second currency).

Swap Types

Fixed Rate v Floating Index Rate

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies.

Trading Conventions

Buy/Pay = Pay Fixed Currency 1 Flat, Receive Floating Index Currency 2 + Spread

Sell/Receive = Receive Fixed Currency 1 Flat, Pay Floating Index Currency 2 + Spread

Spread Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Notional amount set in Currency 1, e.g., 100m USD, payments Leg 1 in USD, payments Leg 2 in Currency 2

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 3 months to 60 years.

Swap Conventions

Fixed Leg, Currency 1 Payment:

Annual, Semi-Annual, Quarterly or as agreed by Participants

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g. 30/360, Act/365 etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Floating Leg, Currency 2Index:

As agreed by participants and suitable to the Currency's market standards (e.g., 3mLibor, 6m Libor, OIS Index).

Payment/Resets:

Annual, Semi-Annual, Quarterly, Monthly, Daily or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for the Floating Index, e.g., Act/360,Act/365, etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement Payment and Resets:

Fixed Leg:

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of either leg 1 or leg 2 as agreed between Participants. Cross Currency Swaps may be traded with an exchange of principle FX'd at both start date and maturity and may also be traded with intra-swap FX exchanges as required as agreed between Participants.

G. Non-Deliverable IRS, Fixed/Float

Contract Definition:

As above for Fixed/Float IRS, an agreement to exchange a stream of cash flows by applying a fixed and floating interest rate to a specified notional over a term to maturity but where settlement value of each cash flow is paid in a second Currency (typically USD),converted at the spot FX Fixing rate for the Notional Currency traded. This type of swap is common among Asian and Latin American currencies.

Spread

A spread between a Fixed Rate and a Floating Rate Index (see list) of an off shore non-deliverable currency.

Swap Types

Fixed Rate v Floating Index Rate

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies.

Trading Conventions

Buy/Pay = Pay Fixed Currency 1, Receive Floating Index Currency 1, netted and payable in Currency 2

Sell/Receive = Receive Fixed Currency 1, Pay Floating Index Currency 1, netted and payable in Currency 2

Swap Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Notional amount set in Currency 2, e.g., 100m USD, payments Leg 1 in Currency 2, payments Leg 2 in Currency 2

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 3 months to 60 years.

Swap Conventions**Fixed Leg, Currency 1 Payment:**

Annual, Semi-Annual, Quarterly or as agreed by Participants.

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g. 30/360, Act/365 etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Floating Leg, Currency 2 Index:

As agreed by participants and suitable to the Currency's market standards (e.g., 3mLibor, 6m Libor, OIS).

Payment/Resets:

Annual, Semi-Annual, Quarterly, Monthly, Daily or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for the Floating Index, e.g., Act/360, Act/365, etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement Payment and Resets:**Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of either leg 1 or leg 2 as agreed between Participants. Non-Deliverable IRS are traded with an exchange of principle FX'd at both start date and maturity and may also be traded with intra- swap FX exchanges as required.

H. Inflation Swaps

Inflation Swap, Fixed/Float

Contract Definition:

An agreement to exchange a stream of cash flows by applying a fixed rate and a floating Inflation Index rate to a specified notional over a term to maturity.

IRS Types

Fixed Rate v Floating Inflation Index Rate, e.g., CPI, HICP, RPI etc

Trading Conventions

Buy/Pay = Pay Fixed, Receive Floating Inflation Index

Sell/Receive = Receive Fixed, Pay Floating Inflation Index

Swap Price quoted in increments of fractions of a basis point (percentage rate * 100).

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies, Spreads between different Inflation Indices.

Swap Term(Tenor)

As agreed by the Participants. A contract can have a Tenor from 7 days to 60 years.

Swap Conventions

Fixed Leg:

Payment:

Zero Coupon (ZC) with payments at Maturity or Annual Year-on-Year (YoY) payments.

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g., 30/360, Act/Act , etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards

Floating Leg Index:

As agreed by participants and suitable to the Currency's market standards, e.g., CPI,HICP, RPI , etc.

Payment/Resets:

Zero Coupon (ZC) with payments at Maturity or Annual Year-on-Year (YoY) payments.

Day Count Conventions:

As dictated by Market Standard for the Floating Index, e.g., 30/360,Act/Act , etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement Payment and Resets:**Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate:

Zero Coupon (ZC) = Notional * $((1 + X\%)^T - 1)$

Year-on-Year (YoY) = Notional * X%

where T is the tenor in Years, X is the Fixed Price.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Inflation Index and Floating Reset Dates:

ZC = Notional * $((\text{Inflation Index at Maturity} / \text{Inflation Index at Start}) - 1)$

YoY = Notional * **DayFrac** * $((\text{Inflation Index}(n) / \text{Inflation Index}(n-1)) - 1)$,

Where **DayFrac** is the Day Fraction for the interval (n-1) to n.

Payments are settled in accordance with the payment frequency of the swap.

Clearing:*

Available – LCH – Available Currencies: USD, EUR, GBP, FRF

I. Constant Maturity Swaps**Constant Maturity Swap (CMS), Float/Float****Contract Definition:**

An agreement to exchange two streams of floating cash flows on a specified notional over a term to maturity. The first floating rate is referred to as a Constant Maturity because the underlying asset is the daily fixing of a medium-term Interest Rate Swap, typically 2Y, 5Y or 10Y. The second floating rate is a deposit index such as Libor.

CMS Spread

The spread between two floating rate indices of the same currency.

CMS Types

Floating ISDA Fix Constant Maturity (e.g., 5y IRS) vs Floating Rate (X)ibor Index (e.g., 3m Libor, 6m Euribor) + spread

Specific Trade Types

The following swap types may be executed: Outrights (Spot and Forward starting), Curve (tenor) Spreads, Butterflies

Trading Conventions

Buy/Pay = Pays Floating (X)ibor Index + Spread, receives Floating CMS Index Flat

Sell/Receive = Receive Floating (X)ibor Index + Spread, pays Floating CMS Index Flat

Basis Spread Price quoted in increments of fractions or decimals of a basis point.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 1 year to 60 years.

Swap Conventions**Floating Leg 1**

CMS Index:

As agreed by participants and suitable to the Currency's market standards, e.g., ISDA Fix CMS Index.

Payment/Resets:

Annual, Semi-Annual, Quarterly or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for each Index, e.g. 30/360, Act/365 etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to each Currency's market standards.

Floating Leg 2**Index:**

As agreed by participants and suitable to the Currency's market standards, e.g., Libor, Euribor , etc.

Payment/Resets:

Semi-Annual, Quarterly, Monthly or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for the Floating Index, e.g., Act/360,Act/365, etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement**Payment and Resets:****Floating Legs 1 & 2:**

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

J. Constant Maturity Swap, Fixed/Float**Contract Definition:**

An agreement to exchange a stream of cash flows by applying a fixed and floating interest rate to a specified notional over a term to maturity. The floating rate in this case is referred to as a Constant Maturity because the underlying asset is the daily fixing of a medium-term Interest Rate Swap, typically 2Y, 5Y or 10Y.

IRS Types

Fixed Rate vs Floating ISDA Fix Constant Maturity (CMS) Rate.

Trading Conventions

Buy/Pay = Pay Fixed, Receive Floating CMS

Sell/Receive = Receive Fixed, Pay Floating CMS

Swap Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Specific Trade Types

The following swap types may be executed: Outright (Spot and Forward starting), Curve (tenor) Spreads, Butterflies.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 1 year to 60 years.

Swap Conventions**Fixed Leg:****Payment:**

Annual, Semi-Annual, Quarterly or as agreed by Participants.

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g. 30/360, Act/365 etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Floating Leg**CMS Index:**

As agreed by participants and suitable to the Currency's market standards, e.g., ISDA Fix CMS Index.

Payment/Resets:

Annual, Semi-Annual, Quarterly or as agreed by Participants.

Day Count Conventions:

As dictated by Market Standard for the Floating Swap Index, e.g., Act/360, Act/365, etc.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards.

Business Day Conventions: Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement**Payment and Resets:****Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, CMS Index Floating Interest Rate and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

K. Forward Rate Agreements (FRA)

Contract Definition:

An agreement to exchange a cash flow by applying a fixed interest rate to a specified notional over a term to maturity and paying/receiving the difference according to valuation of an Index at FRA settlement date.

Trading Conventions

Buy/Pay = Pay Fixed, Receive Floating (X)ibor Index on settlement date, cash settled, i.e. pay [Fixed - Floating]

Sell/Receive = Receive Fixed, Pay Floating (X)ibor Index on settlement date, cash settled, i.e. receive [Fixed - Floating]

FRA Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Specific Trade Types

The following FRA types may be executed: Outrights (Forward starting), Spreads, Butterflies, Spreads between different Floating Indices, Spreads to Futures and combinations thereof.

FRA Term (Tenor)

As agreed by the Participants. A FRA contract can have a forward starting Tenor from 1 month to 36 months.

FRA Conventions:**Start Date (Effective Date):**

Forward Settlement as agreed by the Participants

Maturity Date:

Forward Start Date + FRA Index Tenor

Settlement:

Cash settled on Forward Settlement Date as Traded Rate minus Index Fixing rate [Fixed - Floating]

Day Count Conventions:

as agreed by Participants and suitable to the Currency's market standards, e.g., 30/360, Act/365, etc.

Holiday Calendar:

as agreed by Participants and suitable to the Currency's market standards.

Business Day Conventions:

Modified Following with adjustment to period end dates or as agreed by Participants and suitable to the Currency's market standards.

Periodic Settlement**Payment and Resets:****Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are cash settled on Forward Settlement Date as Traded Rate minus Index Fixing rate.

L. DTCC GCF Repo Swaps, Fixed/Float**Contract Definition:**

An agreement to exchange a stream of cash flows by applying a fixed and floating interest rate to a specified notional over a term to maturity.

IRS Types

Fixed Rate v Depository Trust & Clearing Corp (DTCC) General Collateral Finance (GCF) Repurchase Agreement Index.

Trading Conventions

Buy/Pay = Pay Fixed, Receive DTCC GCF Repo Index

Sell/Receive = Receive Fixed, Pay DTCC GCF Repo Index

Swap Price quoted as an outright percentage rate in increments of fractions or decimals of a basis point.

Specific Trade Types

The following swap types may be executed: Outright (Spot and Forward starting), Curve (tenor) Spreads, Butterflies.

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 7 days to 5 years.

Swap Conventions

Fixed Leg:

Payment:

Annual (or term if < 1 year)

Day Count Conventions:

Act/360

Holiday Calendar:

New York

Business Day Conventions:

Modified Following with adjustment to period end dates, or as agreed between participants for more bespoke swaps

Floating Leg

Index:

DTCC GCF Repo Index, Daily reset

Payment:

Daily

Day Count Conventions:

Act/360

Holiday Calendar:

New York

Fixing Calendar:

New York

Business Day Conventions:

Modified Following with adjustment to period end dates, or as agreed between participants for more bespoke swaps.

Periodic Settlement

Payment and Resets:

Fixed Leg:

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

M. Interest Rate Swaps Specific to Underlying Currency:**USD Interest Rates 1 to 50 years:**

- (a) **USD Spread Over** these are the combination spot dated interest rates swaps 1 to 50 years Semi-Annual bond basis (30/360) on the fixed side versus 3 month LIBOR (reference page LIBOR01) on the floating side dealt with of a hedge of benchmark treasuries of corresponding size; and
- (b) **USD Interest Rate Swaps** 1 to 50 years Semi-Annual bond basis (30/360) on the fixed side versus 3 month LIBOR (reference page LIBOR01) on the floating side;

Euro interest rates swaps 1 to 50 years annual bond basis (30/360) on the fixed side versus 3 month EURIBOR (reference page EURIBOR01) on the floating side;

- (a) Euro interest rates swaps 1 to 50 years annual bond basis (30/360) on the fixed side versus 6 month EURIBOR (reference page EURIBOR01) on the floating side;
- (b) 3month v 6month single currency basis spreads 1 to 50 years (traded as two swaps described above) with the spread between the fixed rates representing the spread dealt;
- (c) BUND, BOBL and SCHATZ spreads are cockdated Euro interest swaps annual bond basis (30/360) on the fixed side versus 6 month EURIBOR (reference page EURIBOR01) dated from the maturity of the futures contract maturing on the maturity of the "Cheapest To Deliver" of the contract ("Stub" at the front) dealt with a futures hedge of corresponding size, quoting the front two contracts.

UK GBP Interest Rate Swaps – product types

- (a) GBP 1y to 50y Semi/Semi and all combinations of spreads and 'flies;
- (b) GBP 1y to 50y 6v3s basis and all combinations of spreads and 'flies (done as a single basis (floating/floating) swap); and
- (c) GBP matched maturities of all liquid UK government gilts.

UK GBP Interest Rate Swaps - Trading Days and timings

Trading on the Platform for Sterling Interest Rate Swaps shall take place on each Business Day, other than such days when NYSE Liffe or the Clearing House is closed for business. Tradition reserves the right to determine additional Trading Days after prior announcement thereof to the Participants. For the purposes of this rule, "**Business Day**" means every weekday that is not a holiday in New York.

Brazil CDI Swap

A Brazilian CDI Swap is a swap where the floating rate is calculated using an average rate and has only one payment, which occurs at maturity.

The average rate used for the Floating Leg is the Average One-Day Interbank Deposit (aka CDI rate, or overnight DI rate) which is an annual rate and is calculated daily by the Central of Custody and Financial Settlement of Securities, Brazil, (CETIP). It represents the average rate of all inter-bank overnight transactions in Brazil.

IN USD SETTLEMENT :

ON THE SETTLEMENT DATE THE FOLLOWING PAYMENT WILL BE NETTED:

CDI PAYER PAYS :

BRL NOTIONAL CUMULATIVE ACCRUAL CDI / SPOT FX FIXING

FIXED RATE PAYER PAYS :

BRL NOTIONAL

BUSINESS DAYS FROM AND INCLUDING THE EFFECTIVE DATE UP TO AND EXCLUDING THE MATURITY DATE.

SPOT FX FIXING:

THE PTAX-800 OPTION 5 OFFERED SIDE AS SPECIFIED IN ISDA 1998 FX AND CURRENCY OPTIONS DEFINITIONS- SETTLEMENT RATE

Settlement date: (T+1 from Maturity) subject to: BRBD + USNY business days.

BRBD = Brazil Business Day - a business day in any of Sao Paulo (BRSP), Rio de Janeiro (BRRJ) or Brasilia Fed Dist. (BRBR).

Colombian Interest Rate Swaps

The plain vanilla swap, fixed Colombian versus IBR (which is a Colombian floating overnight lending rate) is quoted with both fixed and floating side payment frequency's-frequencies of bullet (or at maturity) for trades of 1 month to 18 months, or quarterly, 2 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Bullet (1 month to 18 month), Quarterly (2 year to 30 year)
- Fixed/ Floating Rate Day count: ACT/360

This market is subject to modified NY and Bogota business days. When a swap matures on a NY or Bogota holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Colombian UVR (Inflation) Interest Rate Swaps

The plain vanilla swap, fixed UVR (which is a Colombian floating inflation index) versus floating 6 Month US Dollar Libor, is quoted with both fixed and floating side payment frequencies' of semi-annually, 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Bullet (1 month to 18 months). Quarterly (2 year to 30 years)
- - Fixed/ Floating Rate Day count: ACT/360

This market is subject to modified NY and Bogota business days. When a swap matures on a NY or Bogota holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Colombian Cross Currency Interest Rate Swaps

The plain vanilla swap, fixed Colombian versus floating 3 Month US Dollar Libor, is quoted with both fixed and floating side payment ~~frequencies~~frequency's of semi-annually, 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Quarterly (6months to 1 year)
- Fixed/ Floating Rate Day count: ACT/360

This market is subject to modified NY and Bogota business days. When a swap matures on a NY or Bogota holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Columbia COP/IBR fixed COP rate against floating COP rate (IBR):

- <2yr bullet payment (1 payment at maturity)equal to CLP IRS (O/N IBR rate compound to maturity)
- 2yr out coupon payments quarterly (O/N IBR rate compound quarterly)
- All non-delivery
- All dates (payment, fixing, , etc.) USNY and COP business calendars
- ACT/360 (normal Calendar)
- Ref Page: BBG COOVIBR INDEX or http://www.banrep.gov.co/series-estadisticas/see_tas_inter_ibr.htm

Peruvian Cross Currency Interest Rate Swaps

The plain vanilla swap, fixed Peruvian versus floating 6 Month US Dollar Libor, is quoted with both fixed and floating side payment frequencies of semi-annually, 1 year thru 20 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Semi-Annually (1 year to 20 year)
- Fixed/ Floating Rate Day count: ACT/360

This market is subject to modified NY and Lima business days. When a swap matures on a NY or Lima holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Peruvian Interest Rate Swaps

The plain vanilla swap, fixed Peru versus TIS (which is a Peruvian floating overnight lending rate) is quoted with both fixed and floating side payment frequencies of bullet (or at maturity) for trades of 1 month to 11 months, or semi-annually , 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Bullet (1 month to 11 month), Semi-annually (1 year to 30 year)
- Fixed/ Floating Rate Day count: ACT/360

This market is subject to modified NY and Lima business days. When a swap matures on a NY or Lima holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Peruvian VAC (Inflation) Interest Rate Swaps

The plain vanilla swap, fixed VAC (which is a Peruvian floating inflation index) versus floating 6 Month US Dollar Libor, is quoted with both fixed and floating side payment frequencies of semi-annually, 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Semi-Annually (1 year to 30 year)
- Fixed/ Floating Rate Day count: ACT/360

This market is subject to modified NY and Lima business days. When a swap matures on a NY or Lima holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Argentine Cross Currency Interest Rate Swaps

The plain vanilla swap, fixed Argentine versus floating 6 Month US Dollar Libor, is quoted with both fixed and floating side payment frequencies of semi-annually, 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Semi-Annually (1 year to 30 year)
- Fixed/ Floating Rate Day count: 30/360

This market is subject to modified NY and Buenos Aires business days. When a swap matures on a NY or Buenos Aires holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Argentine CER (Inflation) Interest Rate Swaps

The plain vanilla swap, fixed CER (which is a Argentine floating inflation index) versus floating 6 Month US Dollar Libor, is quoted with both fixed and floating side payment frequencies of semi-annually, 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Semi-Annually (1 year to 30 year)
- Fixed/ Floating Rate Day count: 30/360

This market is subject to modified NY and Buenos Aires business days. When a swap matures on a NY or Buenos Aires holiday, we will roll forward to the next good business day, unless month end, in which case we will roll back to the first good business day.

Mexican Interest Rates Swaps

The basic fixed-for-floating interest swap in Mexico is the so-called TIIE swap, an OTC and exchange traded contract that settles in MXN and follows the ISDA guidelines.

CASH FLOWS EXCHANGED EVERY 28 DAYS

DAY COUNT: ACT/360 FOR FIXED AND FLOATING LEGS

Regulatory: ISDA DOCUMENTATION

Trading	TIIE swaps trade OTC. They settle in Pesos in Mexico (i.e. through domestic correspondents). The daily trading session is 8.00am to 2.00pm Mex Time.
Settlement	Settlement is T+1.
Fixed/floating leg conventions	Both the fixed and the floating legs on the swap are calculated according to an Actual/360 day-basis and are paid on a 28-day adjusted (succeeding) roll basis.
Reference rate	Interest rate swaps reference rate is 28-days TIIE rate.
Daily turnover	Typical turnover is anything from MXN 500m to MXN 20bn notional per day, depending on liquidity.
Typical bid offer	The typical bid/offer is in the range of 3 bps.
Spread trades	Quotes are available for DV01 neutral trades (spread trades).
Liquidity	Trading is from 3 months out to 20 years, with decent liquidity along the curve
Secondary market liquidity	Swaps only trade OTC. This market is subject to Mexico following business day convention. When a 28 day period ends in a Mexican holiday, it is rolled forward to the next good business day in

Mexico.

TIIE-LIBOR BASIS SWAP (MEXICO)

A basis swap in the Mexican market is a floating/floating swap where banks can exchange 1m Libor+ spread vs the 28 day TIIE flat.

Trading: Basis Swaps trade in USD.

The daily trading session is 8.00am to 2.00pm Mexico Time

Settlement is T+2

Reference rate: Interest rate swaps reference rate is 28-days TIIE rate and the 1M Libor

Clearing:* Available - CME

INFLATION-LINKED INTEREST RATE SWAPS MEXICO

1. UDI – Libor cross currency swap

In the OTC inflation-linked swap market the most standardized contract is a fixed real rate (UDI rate) for floating USD Libor flat. In this contract one counterparty agrees to pay/receive a fixed real coupon (UDI rate) every six months and receive/pay a floating USD rate (6-month Libor). Principals are exchanged at the start and end of the swap contract.

UDI – Libor swap key characteristics

Floating leg: 6-month USD Libor

Fixed leg: UDI rate (a real rate)

Documentation: ISDA guidelines

Coupon frequency: Semi - annual

Coupon basis: Act / 360 on both legs

Settlement is T+2

USD Libor reference:

Telerate Page 3750; Libor set 2 London business days prior to each calculation period

Payments (both legs):

Payments subject to NY and Mexico City Modified Following Business Day Convention

2. Fixed real rate for floating nominal rate (UDI vs TIIE) swap

This is a fixed rate (UDI rate) for floating rate (TIIE) swap contract. In this swap, both parties agree at the beginning of the contract to exchange at maturity a MXN-denominated notional for a UDI-denominated notional. This is based on the value of the UDI index prevailing on the initial date.

UDI – TIIE swap contract key characteristics

TIIE rate

(Floating leg: 28-day TIIE

Fixed leg: UDI rate (a real rate)

Documentation: ISDA guidelines

Settlement is T+1

Coupon frequency (fixed leg):

182-days (ACT/360) subject to Mexico City "Following Business Day" convention

Coupon frequency (floating leg):

28-days (ACT/360) subject to Mexico City "Following Business Day" convention

TIIE determination convention:

Set 1 Mexico City business day prior to each calculation period

Principal exchanges: Just at maturity; no initial exchange

Chile IRS

IRS CLP & IRS UF

DAY COUNT: ACT/360 FOR FIXED AND FLOATING LEGS

Regulatory: ISDA DOCUMENTATION

Start date	T+2
Maturity date	If the trade was closed to 1.5Y is zero Coupon. If the trade is above 1,5 Year the netting will be semiannual.
Fixed/floating leg conventions	Both the fixed and the floating legs on the swap are calculated according to an Actual/360 days
Reference rate	Stated in the contract
Typical bid offer	The typical bid/offer is in the range of 5 bps.
Spread trades	Quotes are available for DV01 neutral trades (spread trades).
Liquidity	Trading is from 3 months out to 20 years.

Secondary Swaps only trade OTC.
market liquidity

CROSS-CURRENCY UF Peso Swap

These contracts are bilateral clearing where the payment of compensation is only at the maturity date.
Regulatory: ISDA DOCUMENTATION

Start date	T+2
Maturity date	Zero Coupon.
Fixed/floating leg conventions	Both the fixed and the floating legs on the swap are calculated according to an annually ACT/360
Reference rate	Stated in the contract UF Fwd Rate.
Reference rate	0
Typical bid offer	The typical bid/offer is in the range of 15pesos.
Liquidity	Trading is from 1 months to 1.5 years.
Secondary market liquidity	Swaps only trade OTC.

PAYMENT CALENDAR

New York and Santiago, Chile

Chile Currency Basis Swap

These contracts are with bilateral netting, where payment derived from the difference between Libor stated in the contract and in effect on the date of the end of the operation variable is calculated.

DAY COUNT: ACT/360 FOR FIXED AND FLOATING LEGS

Regulatory: ISDA DOCUMENTATION

Start date	T+2
Maturity date	If the trade was closed to 1.5Y is zero Coupon. If the trade is above 1,5 Year the netting will be semiannual.
Fixed/floating leg conventions	Both the fixed and the floating legs on the swap are calculated according to an Actual/360 days
Reference	Stated in the contract
Reference	Libor
Typical bid offer	The typical bid/offer is in the range of 10 bps.
Spread trades	Quotes are available for DV01 neutral trades (spread trades).
Liquidity	Trading is from 1 year out to 20 years.
Secondary market liquidity	Swaps only trade OTC.

Chile Peso Fixed vs Camara Floating Rate OIS

“Camara” is an overnight index calculated on a daily basis by an official entity (ABIF) based on the overnight lending rate published by the Chilean Central Bank. The swap is quoted with both fixed and floating side payment frequency of bullet (at maturity) for trades of 1 month to 18 months or semi-annual from 2 years and longer (up to 30 years).

- Value Date: t+2
- Rate Day Count: ACT/360
- Rate Frequency: Zero Coupon from 1 month to 18 months and s/a from 2 years and longer.
- Day Convention: Modified Following
- Calendars: New York & Santiago

CLF Fixed vs Camara Floating Rate XCCY OIS

CLF is an Inflation currency derived from the Inflation Index called UF. This swap can be called UF vs Camara or CLF vs Camara. Both (UF & CLF) names are synonymous. This swap can be considered as Cross Currency Swap because the floating rate is CLP TNA against the Inflation Index currency on the fixed side. This swap trades from 1 month up to 18 months zero coupon (at maturity) with maturity on the day 9th of the correspondent month, So can be long stub at the beginning of the month and short stub at the end of the month. Example. Today is 2013 October 1st, the Value Date is Oct 3rd (t+2), 1 year tenor will be for Oct 9th 2014 (371 days for 1 year trade), Now if today is October 22nd, Value Date Oct 24th then the 1 year trade will be for Oct 9th 2014(350 days for 1 year trade). From 2 years and longer, semi-annual frequency on regular swap dates conventions.

- Value Date t+2
- Rate Day Count ACT/360
- Rate Frequency Zero Coupon from 1 month to 18 months and s/a from 2 years+
- Day Convention Modified Following
- Calendars New York & Santiago

Asian IRS Conventions:

Australian Dollar (AUD)

Business Days – Sydney

Reference Rate – AUD-BBR-BBSW published daily on Reuters ‘BBSW’

Business Days – Sydney

Reference Rate – AONIA published daily by the Reserve Bank of Australia on Reuters ‘RBA30’

Hong Kong Dollar (HKD)

Business Days – Hong Kong

Reference Rate – HKDHIBOR published daily on Reuters 'HIBOR2=R'

Japan Yen (JPY)

Business Days – London, New York & Tokyo

Reference Rate – JPY-LIBOR-BBA published on Reuters 'Page 3750'

Business Days – Tokyo

Reference Rate – JPYTIBOR published on Reuters 'TIBM'

Business Days – Tokyo

Reference Rate – JPYTONAR published on Reuters 'TONAR'

Korean Won (KRW)

Business Days – Seoul

Reference Rate – KRW-CD-KSDA published daily on Bloomberg 'KSDA4'

New Zealand Dollar (NZD)

Business Days – Wellington

Reference Rate – NZD-BBR-BID published daily on Reuters 'BKBM'

Reference Rate – NZD-NZIONA-OIS published daily by the Reserve Bank of New Zealand on Reuters 'RBNZ02'

Singapore Dollar (SGD)

Business Days – London, New York & Singapore

Reference Rate – SOR published daily on Reuters 'ABSFIX01'

Thailand Baht (THB)

Business Days – Bangkok, London & New York

Reference Rate – THBFIX published daily on Reuters 'THBFI'

N. Interest Rate Options**Overview**

An interest rate option grants the buyer the right, but not the obligation, to either enter into an underlying instrument (payers or receivers swaption - usually cash settled at expiry) or a series of pay-offs based upon future index fixings (cap/floor). Exercise of this option is dependent upon the strike price agreed at the time of the original contract being "in the money" at expiry, i.e. higher than the fixing rate for a receivers swaption or floor (puts), lower for a payers swaption or cap (calls).

Swap Options**Interest Rate Swaption****Contract Overview**

An option to enter into an Interest Rate Swap contract ('Underlying Swap') at pre-defined time(s), typically a Fixed/Float IRS with its Fixed Rate equal to the Strike.

Type

Payer = Correspond to paying the fixed rate in the Underlying Swap.

Receiver = Correspond to receiving the fixed rate in the Underlying Swap.

Trade Convention

Buy = Buy the right to exercise the option.

Sell = Sell the right to exercise the option.

Trade Currency

Available currencies as defined in this Product Listing.

Trade Date

Date on which the trade is conducted.

Price Quote Convention

Spot or Forward Option Premium quoted in increments of fractions or decimals of a basis point.

Premium Amount

(Notional * Price)

Premium Payment Date

Date on which the Premium is paid by the Buyer to the Seller.

Spot – Premium paid agreed number of business days after the Trade Date.

Forward – Premium paid agreed number of business days after the Expiry Date.

Strike

Rate that will be used for the Underlying Swap on its inception.

Minimum Notional

As agreed by the participants, depending upon Currency, Expiry Date and Tenor.

Exercise Type

European

American

Bermudan

Expiry Date

Exercise date(s) of the option.

1 day to 50 years from Trade Date.

European

Exercise only on the Expiry Date and Time specified.

American

Exercise is allowed at any time up to the Expiry Date specified.

Bermudan

One or more pre-defined exercise times within a range of dates agreed between participants.

Tenor

Term of the underlying swap, 3 months to 50 years from Expiry Date.

Settlement Type

Cash

Physical

Cleared Physical

Dates and conventions as defined by 'ISDA 2006 Definitions'.

Payment Amount

As defined by 'ISDA 2006 Definitions' according to Settlement Type.

Underlying Swap Effective Date

Number of business days after the option is exercised, as agreed by the participants.

Definition of Underlying Swap**Fixed/Floating Interest Rate Swap**

Trade Strategies

Payers/Receivers

ISDA OTC Taxonomy**Asset Class**

Interest Rate

Base Product

IR Swap

Sub-Product

Swaption

Included Definitions

2006 ISDA Definitions, [as amended](#).

Cancellable Swap Contract Overview

An option to exit an Interest Rate Swap contract ('Underlying Swap') at pre-defined time(s), typically a [Fixed/Float IRS](#) with its Fixed Rate equal to the Strike.

Type

Payer = Correspond to paying the fixed rate in the Underlying Swap.

Receiver = Correspond to receiving the fixed rate in the Underlying Swap.

Trade Convention

Buy = Buy the right to exercise the option.

Sell = Sell the right to exercise the option.

Trade Currency

Available currencies as defined in this Product Listing

Trade Date

Date on which the trade is conducted.

Price Quote Convention

Spot or Forward Option Premium quoted in increments of fractions or decimals of a basis point.

Premium Amount

(Notional * Price)

Premium Payment Date

Date on which the Premium is paid by the Buyer to the Seller.

Spot – Premium paid agreed number of business days after the Trade Date.

Forward – Premium paid agreed number of business days after the Expiry Date.

Strike

Rate that will be used for the Underlying Swap on its inception.

Minimum Notional

As agreed by the participants, depending upon Currency, Expiry Date and Tenor

Exercise Type

European

American

Bermudan

Expiry Date

Exercise date(s) of the option.

1 day to 50 years from Trade Date.

European

Exercise only on the Expiry Date and Time specified.

American

Exercise is allowed at any time up to the Expiry Date specified.

Bermudan

One or more pre-defined exercise times within a range of dates agreed between participants.

Tenor Term of the underlying swap, 3 months to 50 years from Expiry Date.

Settlement Type Cash

Physical

Cleared Physical

Dates and conventions as defined by 'ISDA 2006 Definitions'.

Payment Amount

As defined by 'ISDA 2006 Definitions' according to Settlement Type.

Underlying Swap Effective Date

As agreed by the participants.

Underlying Swap Termination/Maturity Date

Number of business days after the option is exercised.

Fixed/Floating Interest Rate Swap

Trade Strategies

Payers/Receivers

ISDA OTC Taxonomy

Asset Class

Interest Rate

Base Product

IR Swap

Sub-Product

Swaption

Included Definitions

2006 ISDA Definitions

Other Options:

Interest Rate Option

Contract Definition

An agreement to exchange a stream of cash flows of an option leg and either a fixed or floating interest rate leg to a specified notional over a term to maturity.

Trading Conventions

Buy = Receive option leg, pay fix/floating interest rate leg

Sell = Pay option leg, receive fix/floating interest rate leg

Trade Currency

Available currencies as defined herein.

Trade Date

Date on which the trade is conducted.

Price Quote Convention

Quoted in BP
Spot or Forward.

Specific Option Types

Cap, Floor, CMS Spread Option, Exotic

Swap Term (Tenor)

As agreed by the Participants. A contract can have a Tenor from 7 days to 60 years

Swap Conventions

Option Leg:

Index:

As agreed by participants and suitable to the Currency's market standards { Interest Rate Indices (as per ISDA 2006 or agreed by Participants), Inflation Indices (as per ISDA2008), and spreads of the aforementioned }

Rate:

A function of the index including caps and floors

Payment/Resets:

As per ISDA 2006

Day Count Conventions:

As per convention for the trade Currency.

Holiday Calendar:

As agreed by Participants and suitable to the Currency's market standards.

Fixing Calendar:

As agreed by Participants and suitable to the Currency's market standards.

Business Day Conventions:

As agreed by Participants

Floating / Fixed Leg Index or Fixed Rate:

As agreed by Participants

Payment/Resets:

As per ISDA 2006

Day Count Conventions:

As per Interest Swap convention for the trade Currency by default.

Holiday Calendar:

As agreed by participants and suitable to the Currency's market standards

Fixing Calendar:

As agreed by participants and suitable to the Currency's market standards

Business Day Conventions:

As agreed by Participants

Periodic Settlement

Payment and Resets:**Fixed Leg:**

The payment amount of the Fixed Leg is based on: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg:

The payment amount of the Floating Leg is based on: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates. Payments are settled in accordance with the payment frequency of the swap.

Interest Rate Option - IR/Inflation Cap/Floor**Price Quote Convention**

Quoted in BP Spot – Value of option leg to be paid upfront. Basis Points Running – Premium divided into a spread paid each period of the option leg.

Swap Conventions**Option Leg (only leg of structure):****Index:**

IR = Interest Rate Indices as per ISDA 2006 or as agreed by participants.

Inflation = Inflation Indices as per ISDA 2008 or as agreed by participants, expressed as an annualized rate.

Rate:

$Cap = \text{Max}(\text{Index}(T_i) - \text{Strike}, 0)$

$Floor = \text{Max}(\text{Strike} - \text{Index}(T_i), 0)$

Tenors

1 day to 60 years

Strategies

Straddle, Strangle, Collar

O. Market Agreed Coupon (MAC) Swaps**Overview**

MAC (Market Agreed Coupon) swaps allow increased efficiency in clearing, hence lowering the cost of trading. MAC swaps will be listed with standard terms to facilitate portfolio compression. One type of compression is the process of removing positions which have the same economic terms. In a cleared market, if all economic terms are the same but opposite, the line items can be removed completely leaving just the present value P&L as a cash balance without the clearing commitment of an annuity based P&L.

Contract Definition:

An agreement to exchange a stream of cash flows by applying a fixed and floating interest rate to a specified notional over a term to maturity.

Trad-x Identifier: Swap vs 3M MAC [tenor], [LCH.Clearent or CME], example identifiers:

CME instrument - USD.MAC-275.C:M15-27

LCH instrument - USD.MAC-275.L:M15-27

Available Currency: USD

Floating Rate Index: 3 Month USD LIBOR

Quoting Convention /

Minimum Increments: As agreed by counterparties.

Contract Size / Notional: Fixed notional; as agreed by counterparties.

Minimum Size: As agreed by counterparties.

Trading Conventions: Buy = Pay Fixed, Receive Float. Sell = Receive Fixed, Pay Float.

Tenors: 1, 2, 3, 4, 5, 7, 10, 15, 20 and 30 years.

Effective Date: The date on which parties begin calculating accrued obligations such as fixed and floating interest rate payments. Also known as the start date of the swap.

Maturity Date: The final date on which the obligations no longer accrue and the final payment occurs.

Periodic Settlement

Payment and Resets: Fixed Leg: The payment amount of the Fixed Leg is based on the following: Notional, Payment Frequency, Day Count Convention and Fixed Interest Rate.

Floating Leg: The payment amount of the Floating Leg is based on the following: Notional, Payment Frequency, Day Count Convention, Floating Interest Rate Index and Floating Reset Dates.

Payments are settled in accordance with payment frequency of the swap.

First Fixing Date: The first Fixing Date is 2 London business days prior to the Effective Date.

Trade Start Types: International Money Market ("IMM") (next two IMM dates).

Fixed Rate: Standard Coupon: the then-current rates for Market Agreed Coupon ("MAC") contracts

Settlement Procedure: As determined by the Clearing Venue.

Trading Hours: The operating hours of Tradition SEF as described in the relevant Product Supplement or Notice to Participants.

Clearing: LCH.Clearnet or CME

Block Size: As set forth in Appendix F to Part 43 of the CFTC Regulations.