Interest Rates Swaps Product Descriptions

Products

- Fixed for Floating IRS
 - o Colombian IRS
 - o Colombian UVR (Inflation) IRS
 - Colombian Cross Currency IRS
 - Peruvian Cross Currency IRS
 - o Peruvian IRS
 - o Peruvian VAC (Inflation) IRS
 - Argentine Cross Currency IRS
 - o Argentine CER (Inflation) IRS
 - Mexican IRS
 - General Collateral Index Swaps (GCIS)
- Basis Swaps
 - o Colombian Cross-Currency Basis Swaps
 - Cross Currency Mexican Basis
 - US Floating Libor Rate vs Camara Floating Rate Basis Swap
 - Muni Basis Swaps
- Forward Rate Agreements (FRA)
- Overnight Index Swaps (OIS)
 - CLP Fixed vs Camara Floating Rate OIS
 - CLF Fixed vs Camara Floating Rate XCCY OIS
- Non Deliverables Swaps
 - Non Deliverable Swap (NDS)
 - o Non Deliverable IRS (ND IRS)
 - Non Deliverable OIS (ND OIS)
 - Cross Currency Swap (CCS)
- Interest Rate Options
 - Swap Options
 - Inflation Swaps
 - Inflation Rate Options
 - Exotic Options and Swaps
 - Interest Rate Options on the Mexican Peso
 - TIPS Asset Swaps

Product Specifications

Fixed for Floating IRS

A Fixed for Floating IRS is an Interest Rate Swap for which settlement is in the form of periodic fixed interest payments and a stream of periodic floating interest payments based on an interest rate over a term to maturity. The interest rate payments are exchanged for a specified period based on a notional amount.

Currencies		
USD	AUD	HUF
EUR	CHF	RON
JPY	SEK	NZD
GBP	DKK	SAR
CLP	NOK	SGD
COL	ZAR	HKD



Currencies		
ARS	PLN	THB
PEN	TRY	RUB
MXN	CZK	KRW
BRL	ILS	
CAD	AED	

- Trading Conventions
 - Buyer (Payer) pays fixed interest rate and receives floating interest rate.
 - Seller (Receiver) receives fixed interest rate and pays floating interest rate.
- Swap Leg Conventions
 - The terms of Fixed versus Floating Interest Rate Swaps are based on a number of combinations of the criteria below.
 - Fixed Leg
 - Payment Frequency
 - o Monthly, Quarterly, Semi-Annually, or Annually
 - Day Count Convention
 - Actual/360, actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified following with adjustment to period end dates. Business days in this convention must be valid business days for the countries denoted by the currency. If not, it will be the next day that is a business day on both calendars.
 - Fixed Bate
 - The traded interest rate yield or basis points on Trade Date
 - Floating Leg
 - Reset Frequency
 - Monthly, Quarterly, Semi-Annual
 - Day Count Convention
 - Actual/360, actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates. Business days in this convention must be valid business days for the countries denoted by the currency. If not, it will be the next day that is a business day on both calendars.
 - Fixed Rate
 - The traded interest rate yield or basis points on Trade Date
 - Interest Rate Benchmark



 EBOR, BBSW, LIBOR, EURIBOR, CIDOR, PRIBOR, CIBOR2, BUBOR, TELBOR, NIBOR, BKBM, WIBOR, STIBOR, JIBAR, SAIBOR, TIBOR, CZEONIA, TRLIBOR, MOSPRIME

Effective Date

 The first date from which fixed and floating interest amounts accrue. It is also referred to as the Start Date or the Value Date. The Effective Date of the Swap must be a business day subject to the appropriate Business Day Convention.

Trade Start Type

- Spot Starting
 - A swap whose Effective Date is 2 business days from the Trade Date (T+2).
- Forward Starting
 - A swap whose Effective Date is anything after the Effective Date for a Spot Starting swap.
- Same Day Starting
 - A swap whose Effective Date is the same as the Trade Date (T+0)

Maturity Date

The final date until which Fixed and Floating amounts accrue

Tenor

- The duration of time from the Effective Date to the Maturity Date. Tenors of any duration greater than 0 years to 50 years.
 - Listed Tenors, also known as On-the-Run, are whole calendar year Spot Starting Contracts with a Tenor of 1 through 60 years.
 - Other Tenors, also known as Off-the-Run, means any partial year Tenor (Months, Weeks, Days).

Roll Day Convention

- The date used for determining all fixed and floating Reset Dates. Roll Days define the beginning and end of Fixed and Floating interest accrual periods.
- For On-the-Run Contracts, the Roll Day is the same date of the month as the Effective Date. For Off-the-Run Contracts, it can be any date of the month, subject to the provisions of the Business Day Convention. Roll Day marks the start of a new interest accrual period, and is the date on which a Reset Rate takes effect.

Floating Reset Dates

 Dates utilized to determine the Floating Rate amounts for each interest accrual period during the Tenor of the contract. Except in the case of a Stub Period, the Reset Date is aligned with the floating rate frequency as determined.

First Period Fixing Date

- For Spot Starting swaps, the Interest Rate for the first interest period is fixed on the Trade Date, for both Floating and Fixed Rates.
- For Forward Starting swaps, the Fixed Rate for the first interest period is fixed on the Trade Date, and the Floating Rate for the first interest period is fixed 2 business days prior to the first floating payment date, taking into account agreed non working days

Stub Period Rate

For swaps with partial year Tenors, an interest period that is shorter than the standard underlying Floating index interest periods may occur between the Effective Date and the first or last Roll Date (knows as a Stub Period). In these cases, the Interest Rate for such Stub Period is determined using linear interpolation based on the two index rates that surround the Stub Period this can be applied either at the start or end of that period: Front or Back.



- Trade Types
 - o The Platform may support the following trade types:
 - Outrights
 - An Outright swap is where one party is the payer of the fixed rate and receiver of the floating rate and the other party is the receiver of the fixed fate and payer of the floating rate.
 - Switches or Spreads
 - Is the simultaneous purchase and sale of two different Tenors of the yield curve (e.g. 2 year by 10 year).
 - Butterflies
 - Butterflies are a combination of two spreads/switches (e.g. 2 year by 5 year by 10 year).
- Contract Size
 - Minimum notional size is dependent on currency and tenor
- Minimum Price Fluctuation
 - Outrights
 - The interest rate yield is quoted in increments of a minimum of .000025 (1/40th of a basis point).
 - Spreads and Butterflies will be quoted in basis points dependent in multiples of the increments of the underlying Outrights
- Final Settlement Price
 - Multiple payments take place during the term of the swap. Settlement price used for the periodic exchange of fixed and floating payments is based on the following factors:
 - Fixed Leg
 - Payment amount on the fixed leg is based on the traded price and notional amounts of the swap on Trade Date. Payment timing on the fixed leg is based on the Payment Frequency, Day Count Convention, Business Day Convention, and Roll Day.
 - Floating Leg
 - Payment on the floating leg is based on the Interest Rate and notional amounts of the swap. Payments on the floating leg are based on the Payment Frequency, Day Count Convention, Business Day Convention, Roll Day Convention and Floating Reset Dates.

Additionally, please see clearable contract definitions at http://www.lchclearnet.com/ and http://www.cmegroup.com/.

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 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 frequency's 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 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 6 Month US Dollar Libor, is quoted with both fixed and floating side payment frequency's 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 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.

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 frequency's 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.



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 frequency's of bullet (or at maturity) for trades of 1 month to 11 months, or quarterly, 1 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: Bullet (1 month to 11 month), Quarterly (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 frequency's 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 frequency's 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 frequency's 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 plain vanilla swap is quoted with both fixed and floating side payment frequencies of 28 days. Since the payment periods are 28 day "months", a one year swap will have 13 payment periods and a maturity of 364 days, a two year swap will have 26 periods, and so on.

- Value: T+1
- Fixed/ Floating Rate Frequency: 28 day rolls
- Fixed/ Floating Rate Day count: ACT/360

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.

Prior to the 1998 inception of the Mexican TIIE IRS market, and in the absence of a viable repo market, forward foreign exchange provided the only opportunity to express bidirectional interest rate views. The interest rate swap market evolved at this time, as an alternative vehicle for both hedgers and speculators to go short or long, and at the same time reducing the credit profile of the trade along the term structure.

General Collateral Index Swaps (GCIS)

Currencies

USD

- Trading Conventions
 - o Buyer A buyer of GCIS will pay the Fixed Rate and receive the Floating Rate
 - Seller A seller of GCIS will pay the Floating Rate and receive the Fixed Rate
- GCIS Terms
 - Effective Date



- Trade Date + 2
- Termination Date
 - End Date (Maturity of trade)
- o Floating Rate
 - DTCC GCF Repo Index
- Day Count Convention
 - o Act/360
- Holiday Calendar Conventions
 - o SIFMA/FICC
- Business Day Conventions
 - Modified Following
- Effective Date
 - The effective date will be a valid business day
- Termination Date
 - o The maturity date will be a valid business day
- Settlement
 - o Two business days after Termination date
- Contract Size
 - o Minimum and Incremental Sizes
 - 50mm minimum
 - 25mm incremental
- Quoting Convention
 - o GCIS are all quoted in percentage or fraction
- Minimum and Incremental Price
 - o GCIS
 - No minimum
 - .00125
- Reporting
 - o All GCIS trades are reported in accordance with NFA and SDR requirements
- Clearing
 - o GCIS traded on ICAP SEF are not cleared

Basis Swaps

A Basis Swap is an Interest Rate Swap for which settlement is in the form of periodic floating interest payments and periodic floating interest payments based on interest rate benchmarks over a term to maturity. The interest rate payments are exchanged for a specified period based on a notional amount.

Currencies		
USD	AUD	HUF
EUR	CHF	RON
JPY	SEK	NZD
GBP	DKK	SAR
CLP	NOK	SGD
COL	ZAR	HKD
ARS	PLN	THB
PEN	TRY	
MXN	CZK	



Currencies		
ISK	ILS	
CAD	RUB	

- Trading Conventions
 - Buyer (Payer) pays floating interest rate plus/minus a spread and receives floating interest rate.
 - Seller (Receiver) receives floating interest rate plus/minus a spread and pays floating interest rate.
- Swap Leg Conventions
 - The terms of Floating vs. Floating Interest Rate Swaps are based on a number of combinations of the criteria below.
 - Floating Leg 1
 - Payment Frequency
 - Monthly, Quarterly, Semi-Annually, or Annually
 - Day Count Convention
 - Money Market Basis (actual/360), actual/365, actual/actual, actual/366, 360/360, 30/360, 30E/360 or AFI/365
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates.
 Business days in this convention must be valid business days on both the calendars. If not, it will be the next day that is a business day on both calendars.
 - Floating Rate
 - The floating interest rate yield or basis points on Trade Date
 - Floating Leg 2
 - Reset Frequency
 - o Monthly, Quarterly, Semi-Annual or Annually
 - Day Count Convention
 - Actual/360 , actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar.
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates
 - Business days in this convention must be valid business days on both calendars
 - If not, it will be the next day that is a business day on calendars.
 - Interest Rate Benchmark
 - LIBOR, EURIBOR, WIBOR, NIBOR, CIBOR, BBSW, STIBOR, PRIBOR, BUBOR, TELBOR, BKBM, MOSPRIME, JIBAR, TIBOR
- Effective Date



- The first date from which floating interest amounts accrue. It is also referred to as the Start Date or the Value Date. The Effective Date of the Swap must be a business day subject to the appropriate Business Day Convention.
- Trade Start Type
 - Spot Starting
 - A swap whose Effective Date is 2 business days from the Trade Date (T+2).
 - Forward Starting
 - A swap whose Effective Date is anything after the Effective Date for a Spot Starting swap.
 - Same Day Starting
 - A swap whose Effective Date is the same as the Trade Date (T+0)

Maturity Date

 The final date until which Floating amounts accrue. The Maturity Date may also be referred to as the Termination Date or End Date.

Tenor

- The duration of time from the Effective Date to the Maturity Date. The Exchange will support Tenors of any duration greater than 0 years to 50 years.
- Listed Tenors, also referred to as On-the-Run, means whole year Spot Starting or Same Day Starting Instruments with a Tenor of 1 through 15, 20, 25, 30, 35, 40,45 and 50 years.
- Other Tenors means any whole year Tenors other than the Listed Tenors and any partial year Tenor.

Roll Day Convention

- The date used for determining all fixed and floating Reset Dates. Roll Days define the beginning and end of Floating interest accrual periods.
- For On-the-Run Instruments, the Roll Day is the same date of the month as the Effective Date. For Off-the-Run Instruments, it can be any date of the month, subject to the provisions of the Business Day Convention. Roll Day marks the start of a new interest accrual period, and is the date on which a Reset Rate takes effect.
 - Note: Subject to good business days as with all instruments, will never roll forward to the following month

Floating Reset Dates

 Dates utilized to determine the Floating Rate amounts for each interest accrual period during the Tenor of the Instrument. Except in the case of a Stub Period, the Reset Date is 2 business days (USD, EUR) or zero business days (GBP) prior to the Roll Date for that interest accrual period.

First Period Fixing Date.

- For Spot Starting and Same Day Starting swaps, the Interest Rate for the first interest period is fixed on the Trade Date, for both Floating Rates.
- For Forward Starting swaps, the Floating Rate for the first interest period is fixed on the Trade Date, and the Floating Rate for the first interest period is fixed 2 business days prior to the Effective Date

Stub Period Rate

For swaps with partial year Tenors, an interest period that is shorter than the standard underlying Floating index interest periods may occur between the Effective Date and the first or last Roll Date (knows as a Stub Period). In these cases, the Interest Rate for such Stub Period is determined using linear interpolation based on the two index rates that surround the Stub Period this can be applied either at the start or end of that period: Front or Back.

Trade Types

The Platform may support the following trade types:



- Outrights
 - An Outright swap is where one party is the payer of the floating rate 1 plus/minus a spread and receiver of the floating rate 2 and the other party is the receiver of the floating rate 1 plus/minus a spread and payer of the floating rate 2.
- Switches
 - Switches are the simultaneous purchase and sale of two different Tenors of the yield curve (e.g. 2 year by 10 year).
- Butterflies
 - Butterflies are the simultaneous purchase(s) and sale(s) of three different tenors of the yield curve (e.g. 2 year by 5 year by 10 year).
- Instrument minimum and incremental Size.
 - o Minimum notional size is dependent on currency and tenor
 - Block Trades
 - Minimum notional size as stated by the CFTC and increments dependent on currency and tenor.
- Quoting Convention
 - Outrights are quoted in interest rate yield in a minimum 1/10th of a basis point increments.
 - Spreads and Butterflies are quoted in interest rate yield differential in minimum 1/10th basis point increments.
 - Spot Starting
 - Close of business on Trade Date.
 - Forward Starting
 - Close of business three business days prior to the Effective Date of the swap.
 - Block Trades must occur outside the CLOB and in a quantity that meets or exceeds CFTC thresholds.

Additionally, please see clearable contract definitions at http://www.lchclearnet.com/ and http://www.cmegroup.com/.

Colombian Cross-Currency Basis Swaps

The plain vanilla basis swap, 3 month US Dollar Libor versus IBR (which is a Colombian floating overnight lending rate) is quoted with both fixed and floating side payment frequency's of quarterly, 2 year thru 30 year.

- Value: T+2
- Fixed/ Floating Rate Frequency: 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.



Mexican Cross-Currency Basis Swaps

Mexican TIIE/LIBOR basis swaps are quoted 28-day TIIE FLAT and 1 Month USD Libor as a spread over or under.

On the day of trading, market convention is to use that days USD LIBOR fix and the same days TIIE fix for 2 day value, thereafter the TIIE reverts to fixing 1 day prior.

The market is quoted as non mark-to-market cross currency swap with principal exchanged front and back.

Basis swaps trade more infrequently than the IRS market but the same type of players are involved. This is more of a customer based product historically than the IRS and is much less volatile.

US Floating Libor Rate vs Camara Floating Rate Basis Swap

This swap trades the 6 month Libor rate against the Camara Floating rate. Normal Price convention considers the basis spread over the Camara against a flat 6 month Libor.

• Value Date t+2

Rate Day Count ACT/360

Rate Frequency
 Semi-annual from 6 months up to 30 years.

Day Convention Modified FollowingCalendars New York & Santiago

Forward Rate Agreement (FRA)

A Forward Rate Agreement is an Interest Rate Swap for which settlement is in the form of one fixed interest payment and one floating interest payment based on an interest rate benchmark to be paid or received on an obligation beginning at a future start date. The interest rate payments are exchanged based on a notional amount.

Currencies	
USD	CZK
EUR	ILS
JPY	AED
GBP	HUF
AUD	RUB
CHF	NZD
SEK	SAR
DKK	
NOK	
ZAR	
PLN	

Specifications

Trading Conventions

- Buyer (Payer) pays fixed interest rate and receives floating interest rate.
- Seller (Receiver) receives fixed interest rate and pays floating interest rate.
- Swap Leg Conventions
 - The terms of FRAs are based on a number of combinations of the criteria below.
 - Fixed Leg
 - Payment Frequency
 - Once
 - Day Count Convention
 - Money Market Basis (actual/360), or actual/365, 30/360, 30E/360, AFI/360, 360/360
 - Holiday Calendar
 - Applied in accordance with the country relating to the currency of the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates. Business days in this convention must be valid business days on both the holiday calendars of that country. If not, it will be the next day that is a business day on both calendars.
 - Fixed Rate
 - The traded interest rate yield or basis points on Trade Date
 - Floating Leg
 - Reset Frequency
 - Once
 - Day Count Convention
 - Money Market Basis (actual/360), or actual/365, 30/360, 30E/360, AFI/360, 360/360
 - Holiday Calendar
 - Applied in accordance with the country relating to the currency of the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates. Business days in this convention must be valid business days on both the calendars for each country. If not, it will be the next day that is a business day on both respective country holiday calendars.
 - Interest Rate Benchmark
 - EBOR, BBSW, LIBOR, EURIBOR, CDOR, PRIBOR, CIBOR2, BUBOR, TELBOR, NIBOR, BKBM, WIBOR, STIBOR, JIBAR, SAIBOR, TIBOR, MOSPRIME
- Effective Date
 - The first date from which fixed and floating interest amounts accrue. It is also referred to as the Start Date or the Value Date. The Effective Date of the Swap must be a business day subject to the appropriate Business Day Convention.
- Trade Start Type
- Maturity Date
 - The final date until which Fixed and Floating amounts accrue. The Maturity Date may also be referred to as the Termination Date or End Date.
- Tenor
 - The duration of time from the Effective Date to the Maturity Date Tenors will be support for any duration greater than 0 month to 12 months.



- Listed Tenors, also referred to as On-the-Run, means whole year Spot Starting or Same Day Starting Instruments with a Tenor of an integer number of months.
- o Other Tenors means any Tenors other than the Listed Tenors.
- Floating Reset Dates
 - Dates utilized to determine the Floating Rate amount for the interest accrual period during the Tenor of the Instrument. Except in the case of a Stub Period, the Reset Date is adjusted business days dependent on the currency prior to the Roll Date for that interest accrual period.
- First Period Fixing Date
 - The Fixed Rate for the first interest period is fixed on the Trade Date, and the Floating Rate for the first interest period is fixed 2 business days prior to the Effective Date
- Trade Types
 - The Platform may support the following trade types:
 - Outrights
 - An Outright swap is where one party is the payer of the fixed rate and receiver of the floating rate and the other party is the receiver of the fixed rate and payer of the floating rate.
 - Switches also known as Spreads
 - These are the simultaneous purchase and sale of two different Tenors of the yield curve (e.g.3x6 by 9x12).
- Instrument minimum and incremental Size.
 - o Minimum notional size is dependent on currency and tenor
 - Block Trades. Minimum notional size as stated by the CFTC and increments
 Dependent on currency and tenor
- Quoting Convention
 - Outrights are quoted in interest rate yield in minimum of 1/40th of a basis point increments.
 - Spreads/Switches will be quoted in basis points dependent in multiples of the increments of the underlying Outrights
- Last Trading Day.
 - Spot Starting
 - Close of business on Trade Date.
 - Forward Starting
 - Close of business three business days prior to the Effective Date of the swap.
- Block Trades must occur outside the CLOB and in a quantity that meets or exceeds CFTC thresholds.

Overnight Index Swaps (OIS)

An Overnight Index Swap is an Interest Rate Swap for which settlement is in the form of periodic fixed interest payments and periodic floating interest payments based on an overnight rate being exchanged for a fixed interest rate over a term to maturity. The interest rate payments are exchanged for a specified period based on a notional amount.

Overnight index swaps are popular amongst financial institutions for the reason that the overnight index is considered to be a good indicator of the interbank credit markets, and less



risky than other traditional interest rate spreads. The interest rate cash flows are net settled in a major currency on fixing date.

Currencies	
USD	CZK
EUR	HUF
JPY	NZD
GBP	RUB
CAD	
AUD	
CHF	
SEK	
DKK	
PLN	
ILS	

- Trading Conventions
 - Buyer (Payer) pays fixed interest rate and receives floating interest rate.
 - o Seller (Receiver) receives fixed interest rate and pays floating interest rate.
- Swap Leg Conventions
 - The terms of Fixed vs. Floating Interest Rate Swaps are based on a number of combinations of the criteria below.
 - Fixed Leg
 - Payment Frequency
 - At Maturity Date, Annually, semi-annual, Quarterly, or monthly.
 - Day Count Convention
 - Actual/360, actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates. Business days in this convention must be valid business days on both the calendars. If not, it will be the next day that is a business day on both calendars.
 - Fixed Rate
 - The traded interest rate yield or basis points on Trade Date
 - Floating Leg
 - Reset Frequency
 - Daily
 - Day Count Convention
 - Actual/360, actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention



- Modified Following with adjustment to period end dates. Business days in this convention must be valid business days on both calendars. If not, it will be the next day that is a business day on both calendars.
- Overnight Rate
 - Federal Funds, EONIA. SONIA, AONIA, CANADA OIS, TIS, PRIBOR, CITA, BUBOR, TELBOR01, TONAR, RBNZ02, POLONIA, MOSC, STINA, BRIBOR 01, TIBOR
- Effective Date
 - The first date from which fixed and floating interest amounts accrue. It is also referred to as the Start Date or the Value Date. The Effective Date of the Swap must be a business day subject to the appropriate Business Day Convention.
- Trade Start Type
 - Spot Starting
 - A swap whose Effective Date is 2 business days from the Trade Date (T+2).
 - Forward Starting
 - A swap whose Effective Date is anything after the Effective Date for a Spot Starting swap.
 - Same Day Starting
 - A swap whose Effective Date is the Trade Date (T+0)
 - Day +1 Starting
 - A swap whose Effective Date is the Trade Date (T+1)
- Maturity Date
 - The final date until which Fixed and Floating amounts accrue. The Maturity Date may also be referred to as the Termination Date or End Date.
- Tenor
 - The duration of time from the Effective Date to the Maturity Date. The Exchange will support Tenors of any duration greater than 0 years to 50 years.
 - Listed Tenors, also referred to as On-the-Run, means whole year Spot Starting or Same Day Starting Instruments with a Tenor of 1 through 15, 20, 25, 30, 35, 40, 45 and 50 years.
 - Other Tenors means any whole year Tenors other than the Listed Tenors and any partial year Tenor.
- Roll Day Convention
 - The date used for determining all fixed and floating Reset Dates. Roll Days define the beginning and end of Fixed and Floating interest accrual periods.
 - For On-the-Run Instruments, the Roll Day is the same date of the month as the Effective Date. For Off-the-Run Instruments, it can be any date of the month, subject to the provisions of the Business Day Convention. Roll Day marks the start of a new interest accrual period, and is the date on which a Reset Rate takes effect.
- Floating Reset Dates
 - Dates utilized to determine the Floating Rate amounts for each interest accrual period during the Tenor of the Instrument. Except in the case of a Stub Period, the Reset Date is adjusted business days dependent on the currency prior to the Roll Date for that interest accrual period.
- First Period Fixing Date.
 - For Spot Starting and Same Day Starting swaps, the Interest Rate for the first interest period is fixed on the Trade Date, for both Floating and Fixed Rates.



- For Forward Starting swaps, the Fixed Rate for the first interest period is fixed on the Trade Date, and the Floating Rate for the first interest period is fixed 2 business days prior to the Effective Date
- Stub Period Rate
 - o For swaps with partial year Tenors, an interest period that is shorter than the standard underlying Floating index interest periods may occur between the Effective Date and the first or last Roll Date (knows as a Stub Period). In these cases, the Interest Rate for such Stub Period is determined using linear interpolation based on the two index rates that surround the Stub Period this can be applied either at the start or end of that period: Front or Back.
- Trade Types
 - The Platform may support the following trade types:
 - Outrights
 - An Outright swap is where one party is the payer of the fixed rate and receiver of the floating rate and the other party is the receiver of the fixed rate and payer of the floating rate.
 - Switches also known as Spreads
 - These are the simultaneous purchase and sale of two different Tenors of the yield curve (e.g. 2 year by 10 year).
 - Butterflies
 - Butterflies are the simultaneous purchase(s) and sale(s) of three different tenors of the yield curve (e.g. 2 year by 5 year by 10 year).
- · Instrument minimum and incremental Size.
 - o Minimum notional size is dependent on currency and tenor
 - Block Trades
 - Minimum notional size as stated by the CFTC and increments dependent on currency and tenor.
- Quoting Convention
 - Outrights are quoted in interest rate yield in minimum of 1/40th of a basis point increments.
 - Spreads and Butterflies will be quoted in basis points dependent in multiples of the increments of the underlying Outrights
- Last Trading Day.
 - Spot Starting
 - Close of business on Trade Date.
 - Forward Starting
 - Close of business three business days prior to the Effective Date of the swap.
- Block Trades must occur outside the CLOB and in a quantity that meets or exceeds CFTC thresholds.

CLP Fixed vs Camara Floating Rate OIS

t+2

"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

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 FollowingCalendars 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 FollowingCalendars New York & Santiago

Muni Basis BMA Swaps

A BMA swap is an interest rate swap in which the payments of one leg are variable and are based upon fixings of the US SIFMA Municipal Swap Index (formerly the BMA Municipal Swap Index or "BMA Index").

The US SIFMA Municipal Swap Index, produced by Municipal Market Data, is a 7-day high-grade market index comprised of tax-exempt VRDOs from MMD's extensive database.

The Index was created in response to industry participants' demand for a short-term index which accurately reflected activity in the VRDO market. In 1991, SIFMA established a Market Index Subcommittee to analyze the need for such an index, and determine a solution. SIFMA contacted Municipal Market Data in this effort because of MMD's extensive database of active variable rate demand notes, and MMD's long-standing reputation within the industry. MMD worked closely with SIFMA to determine appropriate criteria on which to base the index.



The actual number of issues that make up the Index will vary in time as issues are called, converted, mature or are newly issued. In addition, if changes occur which violate the criteria or calculation methods, an issue will be dropped. Typically, the Index has included 500 issues in any given week.

Non Deliverable Swaps

An NDIRS/NDS trade has many trade terms. For example, notional amount, fixed interest rate, floating rate, reference rate, holiday convention, etc. This should be clearly specified to avoid ambiguity. The deal is agreed on the basis that net settlement will be made in USD, or another fully convertible currency, to reflect any differential between the agreed fixed rate and the actual floating rate on the settlement dates. Both NDS and ND IRS are quoted as Offer/Bid. For ND IRS it's the fixed leg which is quoted, hence it comes under Fixed Income Derivatives.

ND IRS

- An agreement between two parties (known as counterparties) where one stream of future interest payments is exchanged for another based on a specified principal amount. Interest rate swaps often exchange a fixed payment for a floating payment that is linked to an interest rate (most often the LIBOR). The interest rate cash flows are net settled in a major currency on fixing date. A company will typically use interest rate swaps to limit or manage exposure to fluctuations in interest rates, or to obtain a marginally lower interest rate than it would have been able to get without the swap.
- Interest rate swaps are simply the exchange of one set of cash flows (based on interest rate specifications) for another. Because they trade OTC, they are really just contracts set up between two or more parties, and thus can be customized in any number of ways.
- ND OIS :
 - o In Singapore, India IRS is traded as ND OIS.
- NDS
 - NDS typically refers to a non-deliverable cross currency swap where the two legs are a major currency and a non convertible currency. Periodic interest amount of the two legs are exchanged and converted into a major currency for net settlement after fixing. NDS can also refer to a non deliverable interest rate swap, with similar features to IRS, except that the interest rate cash flows are net settled in a major currency on fixing date.
- Cross Currency Swap (CCS)
 - On THB from time to time we see CCS being traded onshore. A CCS, also referred to as cross currency interest rate swap is an agreement between two parties to exchange principal and interest payments denominated in two different currencies. The exchange of interest rate can be in the form of fixed to fixed rate, or floating to fixed rate, or floating to floating rate.

Currencies	
USD	
INR	



Currencies

THB

MYR

- Trading Conventions
 - Buyer (Payer) pays fixed interest rate and receives floating interest rate.
 - Seller (Receiver) receives fixed interest rate and pays floating interest rate.
- Swap Leg Conventions
 - The terms of Fixed versus Floating Interest Rate Swaps are based on a number of combinations of the criteria below.
 - Fixed Leg
 - Payment Frequency
 - Monthly, Quarterly, Semi-Annually, or Annually
 - Day Count Convention
 - Actual/360, actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified following with adjustment to period end dates. Business days in this convention must be valid business days for the countries denoted by the currency. If not, it will be the next day that is a business day on both calendars.
 - Fixed Rate
 - The traded interest rate yield or basis points on Trade Date
 - Floating Leg
 - Reset Frequency
 - o Monthly, Quarterly, Semi-Annual
 - Day Count Convention
 - Actual/360, actual/365, 360/360, 30/360, 30E/360, Actual Fixed/365, actual /366, actual / actual
 - Holiday Calendar
 - Applied in accordance for the country currency denoted for the instrument
 - Business Day Convention
 - Modified Following with adjustment to period end dates. Business days in this convention must be valid business days for the countries denoted by the currency. If not, it will be the next day that is a business day on both calendars.
 - Fixed Rate
 - The traded interest rate yield or basis points on Trade Date
 - Interest Rate Benchmark
 - EBOR, BBSW, LIBOR, EURIBOR, CIDOR, PRIBOR, CIBOR2, BUBOR, TELBOR, NIBOR, BKBM, WIBOR, STIBOR, JIBAR, SAIBOR, TIBOR, CZEONIA, TRLIBOR, MOSPRIME
- Effective Date



- The first date from which fixed and floating interest amounts accrue. It is also referred to as the Start Date or the Value Date. The Effective Date of the Swap must be a business day subject to the appropriate Business Day Convention.
- Trade Start Type
 - Spot Starting.
 - A swap whose Effective Date is 2 business days from the Trade Date (T+2).
 - Forward Starting
 - A swap whose Effective Date is anything after the Effective Date for a Spot Starting swap.
 - Same Day Starting
 - A swap whose Effective Date is the same as the Trade Date (T+0)
- Maturity Date
 - The final date until which Fixed and Floating amounts accrue
- Tenor
 - The duration of time from the Effective Date to the Maturity Date. Tenors of any duration greater than 0 years to 50 years.
- Roll Day Convention
 - The date used for determining all fixed and floating Reset Dates. Roll Days define the beginning and end of Fixed and Floating interest accrual periods.
 - For On-the-Run Contracts, the Roll Day is the same date of the month as the Effective Date.
 - For Off-the-Run Contracts, it can be any date of the month, subject to the provisions of the Business Day Convention
 - Roll Day marks the start of a new interest accrual period, and is the date on which a Reset Rate takes effect.
- Trade Types
 - The Platform may support the following trade types:
 - Outrights
 - An Outright swap is where one party is the payer of the fixed rate and receiver of the floating rate and the other party is the receiver of the fixed fate and payer of the floating rate.
 - Switches or Spreads
 - Is the simultaneous purchase and sale of two different Tenors of the yield curve (e.g. 2 year by 10 year).
 - Butterflies
 - Butterflies are a combination of two spreads/switches (e.g. 2 year by 5 year by 10 year).
- Contract Size
 - Minimum notional size is dependent on the associated Risk. It is represented in terms of DV01. For Emerging Markets ND IRS and NDOIS the minimum is 5K DV01. For NDS the minimum size is considered USD 5 Mio.
- Risks associated with interest rate swaps
 - A party entering a swap takes on exposure to a given interest rate; the
 exposure can be long or short depending on whether a counterparty is paying
 or receiving the fixed rate. At the same time, each party take on the risk known as counterparty credit risk of the other party defaulting at some time
 during the life of the contract.



Interest Rate Options

Interest Rate Options contracts cover the following product areas:

- Interest Rate Options
- Swaptions
- Inflation Swaps
- Inflation Rate Options
- Exotic Options and Swaps

Currencies	
Interest Rate Options	
USD	AUD
EUR	NZD
JPY	SAR
GBP	SGD
CHF	RUB
SEK	ILS
DKK	PLN
NOK	TRY
ZAR	
Swaptions	
USD	SEK
EUR	ILS
JPY	AUD
GBP	HKD
DKK	NZD
ZAR	SGD
RUB	KRW (non deliverable)
CHF	
Inflation Swaps	
GBP	ZAR
EUR	ILS
AUD	
Inflation Rate Options	
CHF	DKK
EUR	GBP
RUB	SEK
USD	ZAR
ILS	
Exotic Options and Swaps	
USD	GBP
EUR	

- Option Type
 - o Interest Rate Swaption
 - Type
 - Payer A buyer of a payer Swaption has the option to pay the underlying swap at the agreed price
 - Receiver A buyer of a receiver Swaption has the option to receive the underlying swap at the agreed price



- Term The future length of the swap
- Exercise The date at which the option can be exercised on
- Underlying Swap
 - Fixed Leg
 - Fixed Interest rate
 - Floating Leg
 - Underlying benchmark
- Optional knockout clause
- o Interest Rate Options
 - Type
 - Cap The buyer of a Cap option receives the payments at the end of each period in which the underlying interest rate exceeds an agreed strike price
 - Floor The buyer of a Floor option receives the payments at the end of each period in which the underlying interest rate is below an agreed strike price
 - Underlying Interest Rate
 - Single Underlying Rate Single underlying interest rate as listed in the Interest Rate benchmarks
 - Spread Spread between 2 underlying interest rates as listed in the interest rate benchmarks
 - Strike
 - Expiry Date
 - Convention
 - Payment Frequency
 - Monthly
 - Quarterly
 - o Bi-Annually
 - Annually
 - Payment rate
 - Digital
 - o Linear
 - Payment currency
 - Optional no call period must be an agreed number of calendar days
 - Option premium
 - Optional reset period must be an agreed number of calendar days
 - Start Type
 - Immediate
 - Forward
- Exotic Options and Swaps
 - Type
 - Buyer The buyer of the swap receives a series of payments in relation to one agreed swap leg (leg 1) and makes a series of payments based on another agreed swap leg (leg 2)
 - Seller The seller of the swap makes a series of payments in relation to one agreed swap leg (leg 1) and receives a series of payments based on another agreed swap leg (leg 2)
 - Tenor
 - Leg 1
 - Rate type
 - Fixed agreed spread
 - Floating



- Single Underlying Rate Single underlying interest rate as listed in the Interest Rate benchmarks
- Spread Spread between 2 underlying interest rates as listed in the interest rate benchmarks
- Currency
- Optional agreed spread
- · Optional agreed rate range
- Optional cap
- Optional floor
- Leg 2
 - Rate type
 - o Fixed agreed spread
 - Floating Floating
 - Single Underlying Rate Single underlying interest rate as listed in the Interest Rate benchmarks
 - Spread Spread between 2 underlying interest rates as listed in the interest rate benchmarks
 - Currency
 - · Optional agreed spread
 - · Optional agreed rate range
 - Optional cap
 - Optional floor
- Optional reset period must be an agreed number of calendar days
- Optional break clause
- Optional correlation factor This will be a mathematical formula on which the payout of the trade will be based. This formula will be agreed at the time of trade.
- Start Type
 - Immediate
 - Forward
- Optional coupon
- Optional lockout period
- Inflation Swap
 - Inflation Swap The buyer of an inflation swap pays a fixed interest rate and receives the agreed floating inflation rate
 - Tenor
 - Fixed Rate (Traded Price)
 - Inflation Rate benchmark this can be any inflation benchmark that settles in the listed currencies
 - Optional forward start
- Inflation Option
 - Types
 - Cap The buyer of a cap option receives the right to receive a payment should the rate of the agreed underlying index rise above a certain level
 - Floor The seller of a floor option receives the right to receive a payment should the rate of the agreed underlying index fall below a certain level
 - Tenor



- Exercise Type
 - American
 - European
 - Bermudan
- Premium (Traded Price x agreed notional)
- Premium Type
 - Spot
 - Annuity
 - Forward
- Payment Frequency
 - Interest Rate Swaptions the payment frequency will be an agreed, valid, calendar integer
 - Interest Rate Options the payment frequency will be an agreed, valid, calendar integer
 - Exotic Options and Swaps the payment frequency will be an agreed, valid, calendar integer
 - Inflation Swaps the payment frequency will be an agreed, valid, calendar integer
 - Inflation Rate Options the payment frequency will be an agreed, valid, calendar integer
- Day Count Convention
 - Interest Rate Swaptions
 - **30/360**
 - Act/360
 - Act/365
 - **360/360**
 - 30E/360
 - AFI/365
 - ACT/366
 - ACT/ACT
 - Interest Rate Options
 - ACT/360
 - ACT/365
 - **360/360**
 - **30/360**
 - 30E/360
 - AFI/365
 - ACT/366
 - ACT/ACT
 - Exotic Options and Swaps
 - ACT/360
 - ACT/365
 - **360/360**
 - **30/360**
 - 30E/360
 - AFI/365
 - ACT/366
 - ACT/ACT
 - Inflation Swaps
 - ACT/360
 - ACT/365
 - **360/360**



- **30/360**
- 30E/360
- AFI/365
- ACT/366
- ACT/ACT
- Holiday Calendar Conventions
 - o Interest Rate Swaptions
 - ABU DHABI
 - SYDNEY
 - TORONTO
 - PRAGUE
 - COPENHAGEN
 - HONG KONG
 - BUDAPEST
 - LONDON
 - TEL AVIV
 - JAFFA
 - TOKYO
 - WELLINGTON
 - SEOUL
 - BANGKOK
 - TARGET
 - WARSAW
 - MOSCOW
 - RIYADH
 - SINGAPORE
 - ISTANBUL
 - NEW YORK
 - OSLO
 - STOCKHOLM
 - JOHNNESBURG
 - KUALA LUMPAR
 - o Interest Rate Options
 - ABU DHABI
 - SYDNEY
 - TORONTO
 - PRAGUE
 - COPENHAGEN
 - HONG KONG
 - BUDAPEST
 - LONDON
 - TEL AVIV
 - JAFFA
 - TOKYO
 - WELLINGTON
 - SEOUL
 - BANGKOK
 - TARGET
 - WARSAW
 - MOSCOW
 - RIYADH
 - SINGAPORE
 - ISTANBUL

- NEW YORK
- OSLO
- STOCKHOLM
- JOHNNESBURG
- KUALA LUMPAR
- o Exotic Options and Swaps
 - ABU DHABI
 - SYDNEY
 - TORONTO
 - PRAGUE
 - COPENHAGEN
 - HONG KONG
 - BUDAPEST
 - LONDON
 - TEL AVIV
 - JAFFA
 - TOKYO
 - WELLINGTON
 - SEOUL
 - BANGKOK
 - TARGET
 - WARSAW
 - MOSCOW
 - RIYADH
 - SINGAOPRE
 - ISTANBUL
 - NEW YORK
 - OSLO
 - STOCKHOLM
 - JOHNNESBURG
 - KUALA LUMPAR
- Inflation Swaps
 - NEW YORK
 - LONDON
 - EUROPE
 - Australia
- Inflation Rate Options
 - NEW YORK
 - LONDON
 - EUROPE
- Business Day Conventions
 - o Interest Rate Swaptions
 - Modified
 - Modified Following
 - Interest Rate Options
 - Modified
 - Modified Following
 - Exotic Options and Swaps
 - Modified
 - Modified Following
 - Inflation Swaps
 - Modified
 - Modified Following
 - o Inflation Rate Options

- Modified
- Modified Following

Effective Date

- Interest Rate Swaptions The effective date will be a valid business day
- Interest Rate Options The effective date will be a valid business day
- Exotic Options and Swap The effective date will be a valid business day
- o Inflation Swaps The effective date will be a valid business day
- o Inflation Rate Options The effective date will be a valid business day

Maturity Date

- o Interest Rate Swaptions The maturity date will be a valid calendar day
- o Interest Rate Options The maturity date will be a valid calendar day
- Exotic Options and Swaps The maturity date will be a valid calendar day
- Inflation Swaps effective date + tenor of swap
- o Inflation Rate Options Not applicable

Tenors

- Interest Rate Swaptions 0 100 years inclusive
- Interest Rate Options 0 100 years inclusive
- Exotic options and swaps 0 100 years inclusive
- o Inflation Swap -0 100 years inclusive
- Inflation Rate Options0 100 years inclusive

Roll Dates

- Interest Rate Swaptions
 - Calendar dates
 - End of month
 - IMM Dates
- Interest Rate Options
 - Calendar dates
 - End of month
 - IMM Dates
- Exotic Options and Swaps
 - Calendar dates
 - End of month
 - IMM Dates
 - None
- \circ Inflation Swaps -0-50 years inclusive
- o Inflation Rate Options -0-50 years inclusive

Fixing Dates

- Interest Rate Swaptions The fixing date will be a valid business day
- Interest Rate Options The fixing date will be a valid business day
- Exotic Options and Swaps The fixing date will be a valid business day
- Inflation Swaps The fixing date(s) will be a valid calendar day
- Inflation Options The fixing date(s) will be a valid calendar day

• Settlement

- Interest Rate Swaptions
 - Swaptions will be settled by either
 - Cash
 - Delivery of the swap
 - Part Cash; Part Delivery

- The settlement date(s) will be valid business days
- Interest Rate Options
 - All options contracts are cash settled
 - The settlement date(s) will be valid business days
- Exotic Options and Swaps
 - Contracts will be settled by either
 - Cash
 - · Delivery of the swap
 - Part Cash; Part Delivery
- The settlement date(s) will be valid business days
- o Inflation Swaps Are cash settled in line with the payment frequency
- Inflation Rate Options Are cash settled in line with the payment frequency

Contract Size

- Minimum and Incremental Sizes
 - Interest Rate Swaptions
 - The minimum size for a Swaption is 1,000 of the agreed currency of the trade
 - There is no minimum incremental size for a Swaption
 - Interest Rate Options
 - The minimum size for an option is 1,000 of the currency of the underlying index of the trade
 - There is no minimum incremental size for a option
 - Exotic Options and Swaps
 - The minimum size for an instrument in this category is 1,000 units of the currency of the underlying index of the trade
 - There is no minimum incremental size for instruments in this category
 - Inflation Swaps
 - The minimum size for an instrument in this category is 1,000 units of the currency of the underlying index of the trade
 - There is no minimum incremental size for instruments in this category
 - Inflation Rate Options
 - The minimum size for an instrument in this category is 1,000 units of the currency of the underlying index of the trade
 - There is no minimum incremental size for instruments in this category
- Accreting Size Any product can be traded on
 - An accreting basis
 - A non accreting basis
- Quoting Convention
 - Interest Rate Swaptions are all quoted in basis points
 - o Interest Rate Options are all quoted in basis points
 - o Exotic Options and Swaps are all quoted in basis points
 - Inflation Swaps are all quoted in basis points
 - Inflation Options are all quoted in basis points
- Benchmark Interest Rates
 - Contracts will be limited to all or a subset of the following underlying benchmark indices:
 - EBOR



- BBR
- CDOR
- LIBOR
- PRIBOR
- CIBOR
- CIBOR2
- HIBOR
- BUBOR
- TELBOR01
- WIBOR
- MOSPRIME
- SAIBOR
- TRILIBOR
- NIBOR
- STIBOR JIBAR
- EURIBOR
- ISDAFIX
- ICAP Listed Interest Rates Swaps
- Minimum and Incremental Price
 - Interest Rate Swaptions
 - There is no minimum price
 - There is no minimum incremental price
 - o Interest Rate Options
 - There is no minimum price
 - There is no minimum incremental price
 - Exotic Options and Swaps
 - There is no minimum price
 - There is no minimum incremental price
 - Inflation Swaps
 - There is no minimum price
 - There is no minimum incremental price
 - Inflation Options
 - There is no minimum price
 - There is no minimum incremental price
- Reporting
 - All Interest Rate Options trades are reported in accordance with NFA and SDR requirements
- Clearing
 - o Interest Rate Options traded on ICAP SEF are not cleared

Interest Rate Options on the Mexican Peso

- TIIE Swap Options
 - The Mexican Swap option market allows counterparties to buy or sell European style options of various maturities on the MXN fixed/float TIIE interest rate swap market.
 - These options enable option buyers the right but not the obligation to pay or receive a fixed interest rate at a given strike price on a given date in an agreed upon amount for a given swap maturity. Delta neutral strategies are



for the most part quoted as Black and Scholes volatility expressed as a percentage of yield / underlying swap rate. Live premium prices for given structures are also quoted.

- Option Style: European style
- Expiration: 12:30pm New York time
- o Premium Payment: Paid in MXN by buyer to option writer value one
- Mexican business day following trade date (T+2).
- Option Maturities:
 - Option maturities are by default, calculated using the Mexican TIIE 28day calendar but can be date specific or conform to regular calendar maturities. Maturities are calculated from the trade date (T0) to the expiration date.
- Mexican TIIE calendar example:
 - In the case of a six month option using the 28-day TIIE calendar, option expiration will occur 168-days (6 coupons of 28-day TIIE) (T+168) from the trade date (T0).
 - T0 = September-23-2005
 - Expiration = March-10-2006 12:30pm New York time.
 - In the case of expiration falling on a holiday, the expiration date will be adjusted according to Mexican business day following convention.
- USD Swap Option example:
 - In the case of plain vanilla calendar year calculations, a six-month option expiration will be calculated as the date exactly six calendar months after the trade date (T0).
 - T0 = September-23-2005
 - Expiration = March-23-2006 12:30pm New York time.
 - In the case of a MXN option, using this calendar with expiration falling on a holiday, the expiration date will be adjusted according to Mexican business day modified following convention.
 - Option Settlement:
 - Currently, in the event of option exercise the physically delivered Interest Rate swap has an effective date one Mexican business day following option expiry.
 - Cash Settlement:
 - ICAP is currently taking the initiative in creating a daily Interest Rate Swap fixing mechanism to allow counterparties to cash settle swaptions: dramatically reducing the trade's credit profile. ICAP is currently the calculation agent for USD swap fixings.
- TIIE Caps & Floors
 - MXN TIIE caps and floors share the exact same payment calendar as TIIE interest rate swaps except for the initial TIIE reference. Caps and floors initially reference TIIE on trade date + 28 days, providing for one less



calculation period than the corresponding interest rate swap maturity. Intrinsic value, if any, for each caplet or floorlet, is paid by option writer to option buyer in arrears for each subsequent calculation period on an Actual/360 day count basis using a following Mexican business day payment convention.

- o Premium Payment:
 - Paid in MXN by buyer to option writer value one Mexican business day following trade date (T+2).
- UDI/LIBOR Cross Currency Swap
 - The UDI vs LIBOR cross currency swap is structured as MXN peso fixed vs USD LIBOR floating swap where the MXN rate is paid as a Real rate of interest calculated to a Mexican Peso notional that is adjusted periodically to inflation using the UDI Index. The UDI Index is published on Reuters Page MEX14, Bloomberg and can also be found on the Banxico website, and is adjusted on a daily basis according to published inflation rates. Although UDI/LIBOR swaps are quoted in USD the value of the UDI Index in tandem with the fair value of Spot USD/MXN at the trade's inception, allows us to determine the structure's UDI notional amount which in turn enables the counterparties to adjust the MXN notional to inflation for each relevant calculation period. The UDI notional is calculated as follows
 - USD Notional x Spot USD/MXN / UDI Index as published for value spot.
 - The structure of this swap requires an initial and final exchange of currencies.
 - Initial Exchange:
 - The UDI rate payer sells USD notional to the USD rate payer
 - The USD rate payer sells USD x Spot F/X in MXN to the UDI rate payer
 - Final Exchange:
 - The UDI Rate Payer sells UDI Notional to USD Rate Payer
 - The USD Rate payer sells USD notional to the UDI rate payer.
 - The vanilla structure is: Effective date value spot. Semi-annual coupons of UDI vs 6-month USD LIBOR paid in arrears on an Act/360 modified following day count basis. The most traded maturity is currently the 10-year.
 - On occasion UDI swaps are traded with 28-day TIIE as the floating rate. Price is adjusted using the LIBOR/TIIE cross currency basis swap value for the equivalent maturity vs the UDI/LIBOR fair value.

TIPS Asset Swaps

Several variations of the inflation asset swap structure exist. In its simplest form it can be treated as consisting of two separate trades. In return for an upfront payment of par (par inflation asset swap) or the dirty price (market asset swap), the asset swap buyer:

- Receives an inflation-linked bond from the asset swap seller. Typically the bond is trading away from par. Depending on the passed life of the trade the bond can trade substantially away from par.
- Enters into a series of inflation swaps (equivalent to the OTC inflation bond described in Section 7.1) to pay the asset swap seller inflation coupons equal to that of the



asset. In return the asset swap buyer receives regular floating rate payments of Libor plus (or minus) an agreed fixed spread. The transaction is shown in Figure 7.6. The fixed spread to Libor paid by the asset swap seller is known as the asset swap spread and it is set at a breakeven value such that the net present value of the transaction is zero at inception.

- Notional
 - o Typically 25mm and above
- Tenors
 - o Published from the TIPS
- Fixed Payment Dates
 - Semi-Annually commencing 07/15/2013. In the event that a payment date discrepancy exists between the swap and the Reference Security, the payment date on Reference Security will govern.
- Float Payment Dates
 - o Quarterly on an Act/360 basis, commencing 04/15/2013 (Modified following).
- Final Principal Amount (FPA)
 - o The final principal value of the Reference Security at Maturity

