# THOMSON REUTERS EIKON (=)

# **Key Foreign Exchange Applications**



## **Document History**

Version	Date	Authors	Changes
1.	15 July 2016	Chua Rui Ting Vincent Chia	First Issue for Eikon version 4.x

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#### THOMSON REUTERS

# **EIKON** Eikon shortcuts: **FX**

REAL TIME MONITORING	
ALT	Alert Manager
OPW	Option Watch
Q	Quote
QL	Quote List
QLI	Quote Line
SDB	Sidebar
TAS	Time & Sales
TICK	Ticker

NEWS		
FXBUZZ	FX Buzz	
NEWS	News	
TOPNEWS	Top News	
TOPNEWS	Top News	

CHARTING	
CHRT	Chart App
ECOC	Economic Indicator Chart
FXFC	FX Forecast Chart
FXVO	FX Volatility Chart
TEAC	Technical Analysis Chart
VOLC	Volatility Chart

ANALYTICS AND CALCS		
AVRG	Average Calculator	
BRKD	Broken Dates	
COPP	Currency Options Portfolio	
COPS	Currency Options Strategy	
COPT	Currency Options	
CORR	Correlation Matrix	
DEAN	Deposit Analysis	
DEFO	Deposit vs FX Forwards Overview	
FRAA	FRA Arbitrage Calculator	
FRAP	FRA Pricing	
FXBP	FX Spot Arbitrage	
FXCM	FX Cross Matrix Calculator	
FXCT	FX Carry Trade	
FXCV	Best FX MM Curve	
FXFT	FX Forwards from Futures	
FXOC	FX Options Calculator	
FXVE	FX Volatility Explorer	
NDFX	Non-Deliverable Forwards Calculator	
OISC	Overnight Index Swap	
PARF	Par Forward Calculator	
REGR	Regression Analysis	
SPO	Swap Points and Outrights	
SPOZC	Swap Points from ZC	

MARKETS	
BGC	BGC Market Data Broker Guide
CIG	Currency Index Guide
EE	Economic Events
FXALL	Fxall
FXG	Foreign Exchange Guide
FXHEAT	FX Volume Heatmap
FXMM	FX & Money Views
FXOTCG	FX Options Guide
FXPOLL (e.g. "EUR= FXPOLL")	FX Polls View
FXTFOG	Foreign Exchange Traded Futures and Options Guide
HOL	World Exchange Holidays
HOME	Home page
ICAP	ICAP Guide
NDFO	Non-Deliverable Forwards and Outrights Guide
NDFV	NDF View
SPOTG	Spot Guide
TPB	Tullett Prebon Broker Guide

SEARCHES	
ANSWERS	Eikon Answers
CURVESRCH	Curves – Advanced Search
FXMMSRCH	Money/Foreign Exchange – Advanced Search
SRCH	Advanced Search
TICK	Ticker

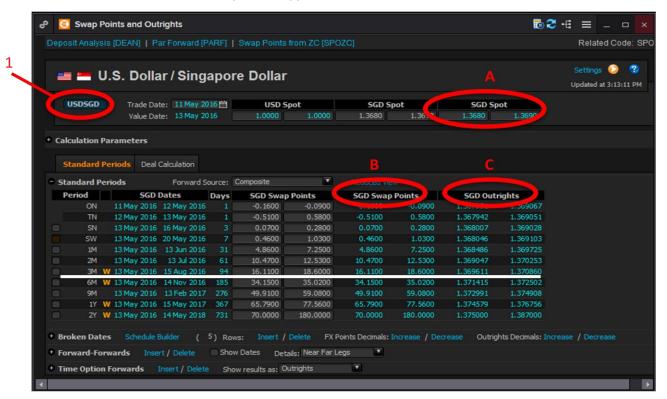
HELP	
FAQ	Frequently Asked Questions
HELP	Online Help

# 1. Swap Points and Outrights <SPO>

The Swap Points and Outrights Calculator would enable users to search for the relevant swap points and corresponding outrights for specific currency pairs.

Using this application, users can also customise the specific spot and swap points in order to calculate the corresponding FX Outright value.

In the Eikon Toolbar, search **<SPO>** to open the application



- 1. Key in the currency pair at 1 (i.e. < USDSGD>)
- 2. Locate the necessary period from the first column (i.e. 3M for 3 months) There are 3 main bid-ask figures which would be of interest.

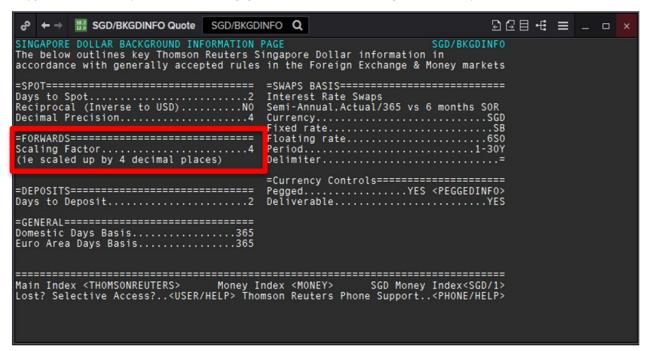
Figure	What it is	Alternative Methods to Obtain it
Α	FX Spot Price	F4 > Search for spot price of currency e.g. <b><sgd=></sgd=></b>
В	FX Swap Points	F4 > Search for forward swap points/rates e.g. <sgdfwd=></sgdfwd=>
С	FX Outrights	F4> Search for <0#SGDF=> or type <sgdf=> and press F3</sgdf=>

### **Scaling Factor**

In the previous screenshot, the resultant outright price of USDSGD was not the sum of the corresponding FX spot price and FX swap points. This is due to the scaling factor of the SGD.

How to find the scaling factor of a currency?

- 1. In Eikon, press F4
- 2. Type in the country name (i.e. <Singapore> and select <Background Info>)



Here, Singapore has a scaling factor of 4 decimal places.

Hence, the following equation can be derived.

Deliverable FX Outrights = FX Spot Price + FX Swap Points / factor (if any)

Note:

Days to deposit (whether it is 1 or 2 days from trade date to spot date) can be found too.

### 2. Deposit Analysis <DEAN>

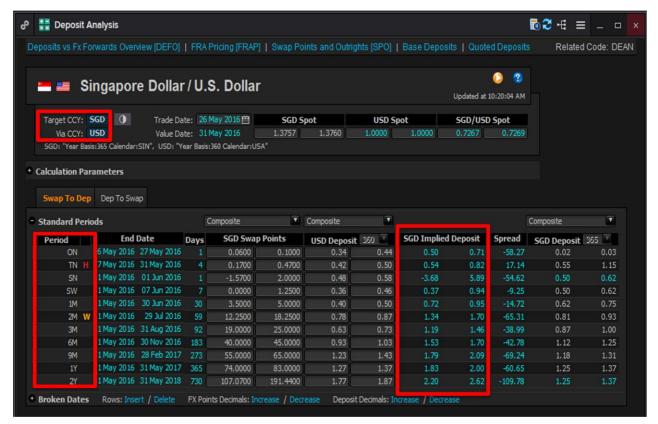
On the Deposit Analysis Calculator <DEAN>, users can find the implied deposit, deposit rates for different pairs of currencies.

First, Eikon uses certain terminologies.

Target Currency: This refers to the currency that is required at the end (the horizontal line of the previous diagram)

Via Currency: The currency that the implied deposit is carried through.

- 1. In the Eikon Toolbar, search < DEAN>
- 2. Select the target and via currency pair required
- 3. Match the period and the impled deposit for that particular date.
- 4. If required, you could select the broken date (e.g. 1M3D)



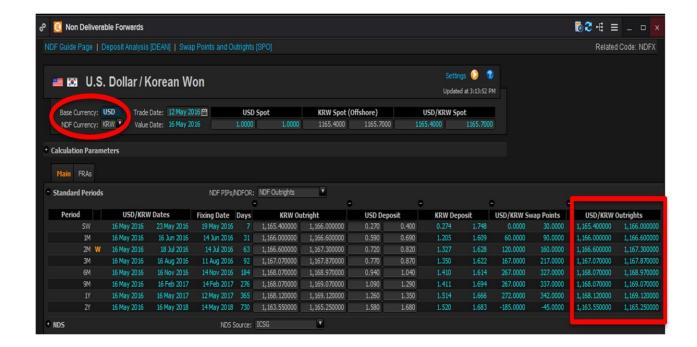
**DEAN:** Deposit Analysis

### 3. Non Deliverable Forwards < NDFX>

Using the Non Deliverable Forwards Calculator, users can calculate the outrights for non deliverable contracts.

- 1. In the Eikon Toolbar, search < NDFX >
- 2. Key in the Base and NDF Currency as indicated below (i.e. for USDKRW, USD is the base currency and KRW is the NDF currency, where the profiting party will receive the profit in USD terms at the end of the contract.
- 3. Look under the <USD/KRW Outrights> for the price of the FX NDF

However, one should note that non deliverable forward contracts are not available for all currencies. Hence, users can utilise the dropdown menu for the NDF Currency in order to choose the currency pair.

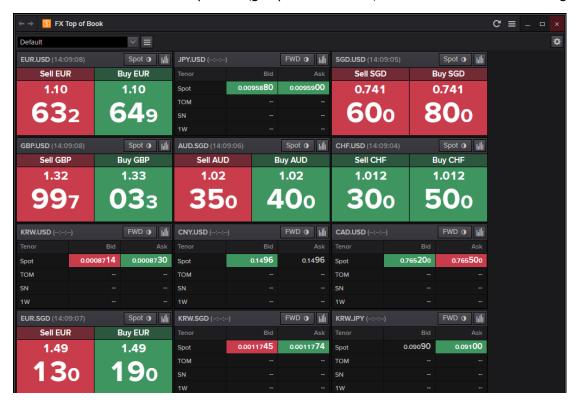


# 4. FX Top of Book <TOB>

An application which enables users to view different currency pairs as well as their corresponding spot and forwards is the FX Top of Book <TOB> Application.

In the Eikon Toolbar, search <TOB>.

Press in order to add new profiles (groups of currencies) or different currencies into a group.



Alternatively select for the following view of a table of spot and forward figures for the currencies within the profile group.

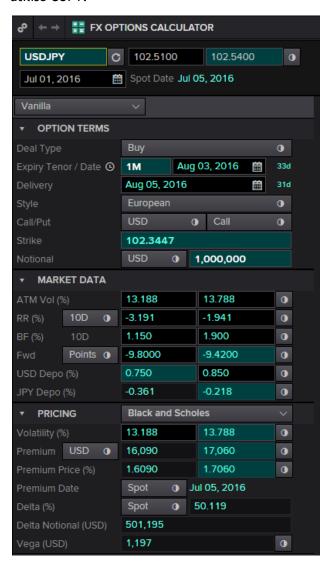


# 5. FX Options Calculator <FXOC>

For calculating the option premium costs for:

- 1. Vanilla
- 2. Barrier
- 3. European Digital
- 4. Touches
- 5. Average
- 6. Lookback
- 7. Forward Start
- 8. Compound
- 9. Chooser
- 10. Vanilla Strategy
- 11. Multi-Leg Strategy (User Defined Strategy + Strip Builder)

Users are able to utilise the FXOC in order to find the option premium in a similar way as to how to utilise COPT.



In the Eikon Toolbar, search <FXOC>

**FXOC:** FX Options Calculator

Adjust the following settings:

- 1. Currency Pair
- 2. Type of Strategy (e.g. Vanilla)
- 3. Buy or Sell
- 4. Expiry or Tenor
- 5. European or American
- 6. Call or Put

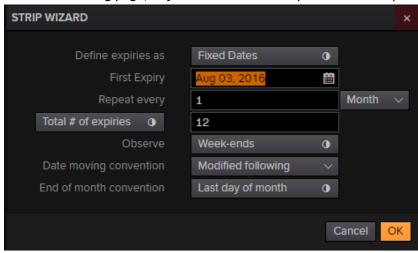
Note that the ATM Strike is by default the FX Outright at the end of the tenor.

#### Strip Builder

In order to build a series of options, users can utilise the strip wizard function in order to repeat the same option over and over again.

For example, using the previous Vanilla option, we wish to repeat this for 12 times every month.

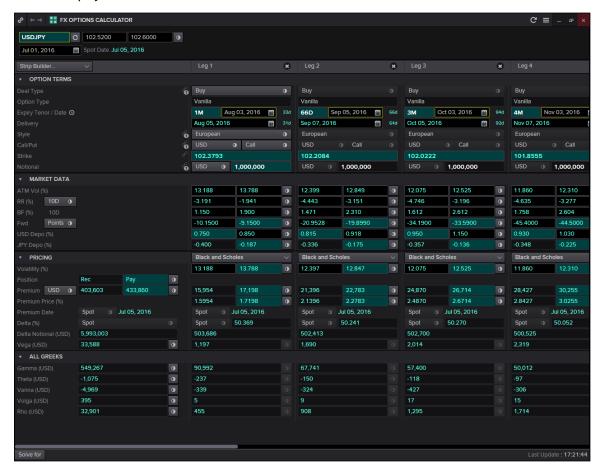
- 1. Select the Strip Builder through Multi-leg strategy>Strip Builder
- 2. In the following page, adjust the number of expires and the repetition frequency.



3. The following page will appear, with a series of options being repeated consecutively.



- 4. By default, the calculator would synchronise all the strike prices to the same price. However, users are able to adjust this, by clicking on the button at the strike row.
- 5. This would cause the strike prices to unsynchronise and will now follow the FX outright price at each of the expiry dates.



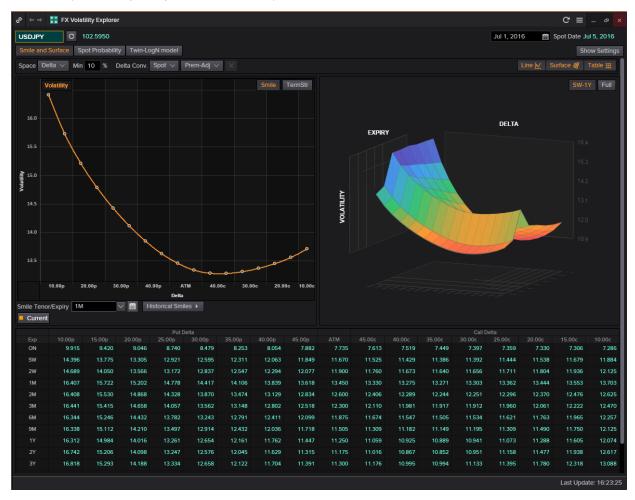
# 6. FX Volatility Explorer <FXVE>

Here, using the FX Volatility Explorer, users are able to view the FX implied volatility smiles (FX Implied Volatility against Delta) at different expiries. Furthermore, the spot probabilities are provided in the second tab, where the different probabilities as well as the implied probability distributions are plotted. Here, the discrepancy between the implied distribution curve and the log-normal distribution curve, especially at the lower delta values would give rise to the "fat-tail effect" or the smile at the two ends of the implied volatility curve.

However, one should note that should the "fat tail effect" only occurs if the probability distribution of the implied and log-normal distribution differs. If not, a "smirk" like curve as seen below would be presented.

In order to utilise the **FXVE** application,

- 1. In the Eikon Toolbar, search <FXVE>
- 2. Choose your currency pair and view the different tenors and deltas in order to obtain the implied volatility of the option premium necessary.



**FXVE:** FX Volatility Explorer

### 7. Swap Data Repository View <SDRV>

**SDRV** is a reporting tool for OTC trades reported by financial institutions within the USA. The toll pulls in all declared swaps and options and this allows users to swap on all asset classes.

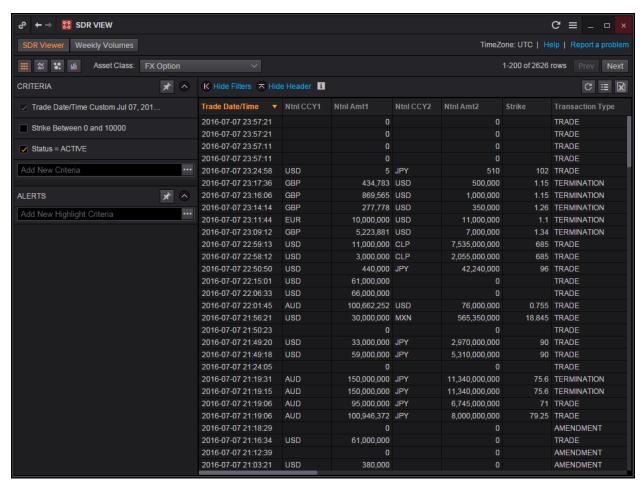
Information on this page is sourced from two repositories:

- DTCC: The Depository Trust and Clearing Corporation.
   It is a US-based post-trade financial services company which provides clearing and settlement services to the financial markets.
- CME: Chicago Mercantile Exchange
   It trades commodities and financial instruments using the open outcry format and the electronic trading through Globex.

In order to utilise the following page,

In the Eikon Toolbar, search for < SDRV> and choose from the different asset classes in order to view the trades available.

One way to view all the trades for a specific currency would be to select on the Notional Currency 1 or 2 to sort the results obtained.

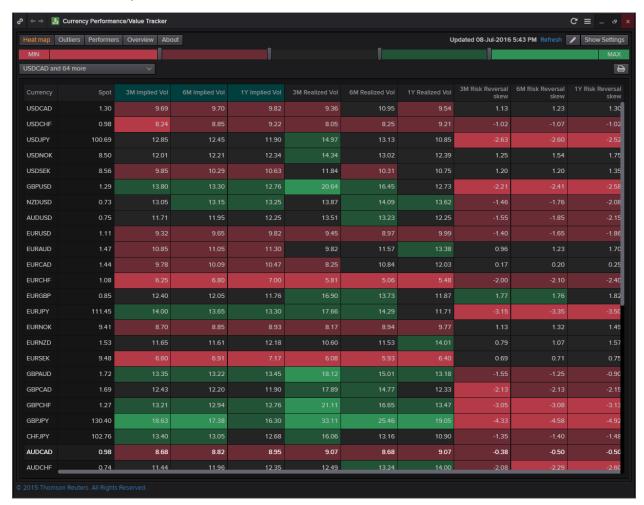


# 8. Currency Performance/ Value Tracker <FXPT>

Using the Currency Performance/ Value Tracker application, users can compare how a specific currency performed historically and currently. While the 3 months implied volatility implies the market's sentiments on the currency pair currently, the 3 months realised volatility is the traded volatility 3 months ago.

Hence, comparing the two figures could be beneficial to an options buyer as to whether they should buy or sell an option right now.

In the Eikon Toolbar, search <FXPT>.



For example,

Here, the 3M implied volatility for USDCAD is 9.69 while the 3M realised volatility is 9.36.

Hence the currency pair USDCAD is currently more volatile as compared to 3M ago.