

# Forward FX Rate Calculation (W5)

[This version is superseded. Click here to view the latest guide.](#)

## **PURPOSE**

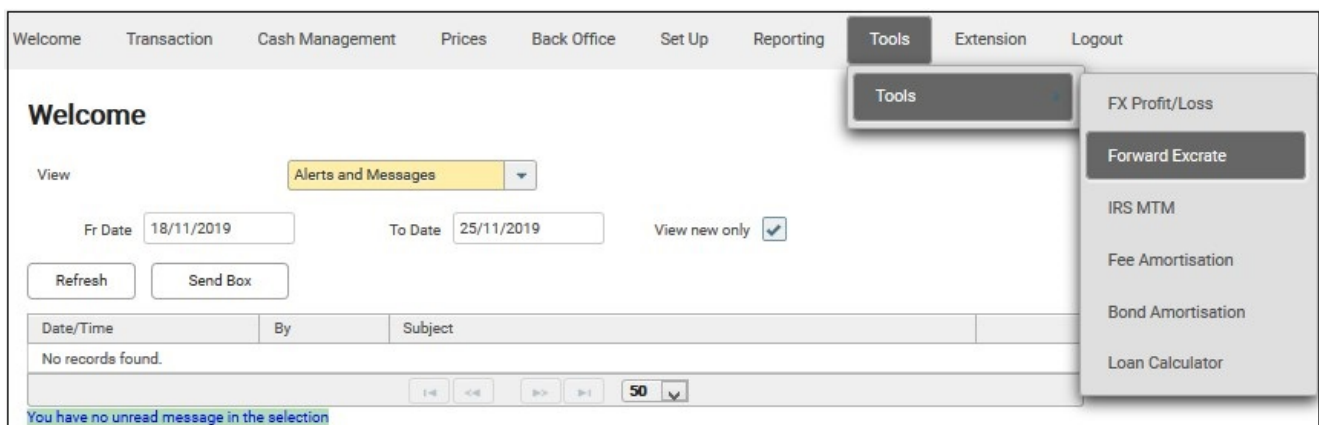
This document provides the formulae and detail computation used by CS Lucas for computing forward FX rate.

## **WHY IS THIS IMPORTANT?**

This allows users to verify the formula and methodology used by CS Lucas to compute the forward FX rate.

## **PROCEDURE**

1. From the main menu, click Tools > Forward Excrate.



2. The following page displays.

Forward FX Rate Calculation					
As At Date*	25/11/2019	VDate*	25/11/2019	Ccy*	SGD
				Rate Type*	Valuation
<button>Recomp</button>					

3. Select the reporting as at date for MTM and the FX transaction's VDate. By default, it is the system date.

4. Select the FX transaction currencies.
5. Select the exchange rate to be used for computing FX forward rate. Exchange rate types are Valuation, Accounting and Alternative.
6. Click Recomp.

**Forward FX Rate Calculation**

As At Date\* 30/06/2017 VDate\* 10/11/2017 Ccy\* USD SGD Rate Type\* Valuation

Recomp

USD Point 2 May 2016		SGD Point 1 Jan 2017	
Days	Mid	Days	Mid
30	11.50	7	9.50
		30	10.50
		60	11.50
		91	12.50
		182	13.50
		365	14.50

133 days 50.98 133 days 12.96

	Spot	Points	Forward	Quote in
USD Fwd 30 Jun 2017				
SGD 1 Jan 2000	1.377300	12.96	1.378596	SGD
Fwd: USD -> SGD		1.378596		
Fwd: SGD -> USD		0.725376		

Note: These numbers have been rounded for display. Actual calculation is based on full precision of available rates and points.

7. The system displays the computation for the FX forward rate.

### Analysis for the interpolation of the FX forward points

As At Date: 30 Jun 2017

Swap points maintained as follows:

Days	Bid	Offer	Mid
1	-0.4	0.6	0.1
7	-1	-0.8	-0.9
30	-9.58	-4.58	-7.08
60	-13.8	-13	-13.4
91	-20	-19	-19.5
182	-40	-38	-39
365	-72.5	-66.5	-69.5
547	-124.88	-71.95	-98.415
730	-162.82	-87.82	-125.32

No. of days	Interpolated Fwd pts (mid)	Spot Rate	Fwd Rate
133	-28.5000	1.37670	1.37385

Total days from reporting as at date to transaction's value date = 133 days

As At Date	30-Jun-17
<u>VDate</u>	<u>10-Nov-17</u>
	<u>133</u>

Calculation for the interpolated forward points =  $(-39 - (-19.5)) / (182-91) * (133-91) + (-19.5)$

= -28.5

Spot rate is from exchange rate maintained on the reporting as at date, 30 Jun 2017. If no rate maintained, the last available rate will be used.

Fwd Rate =  $1.37670 + (-28.5/10000)$

= 1.37385

## **FREQUENTLY ASKED QUESTIONS**

### **RELATED INFORMATION**

[FX MTM Specification](#)

[Creating and Maintaining Swap Points](#)

[Maintaining Exchange Rate](#)

### **CHANGE HISTORY**

Date	By	Changes
15-Feb-2008	-	Created.
8-Sep-2017	TS	Reformatted. Rewritten.
25-Nov-2019	Lyra	Updated Screenshots.