

# Foreign Exchange Outright Cross

## PURPOSE

To show illustration of foreign exchange outright cross.

## OVERVIEW

- i. Foreign Exchange outright transaction revalued at period and using forward rates discounted to present value.
- ii. Settlement amounts are journalled across multi-currency cash clearing accounts in the general ledger.

## TRANSACTION DETAILS

Accounting Base Ccy	
Trade ID	
Trade Date	
Value Date	
Buy	
Sell	
Buy Amount	
Sell Amount	
USD	
FRX1001	
25-Mar-03	
3-Apr-03	
SGD	
GBP	
2,490,000.00	
-1,000,000.00	

## SUMMARY OF JOURNALS

ID	Date	Description
J1	31-Mar-03	Month end revaluation
J2	1-Apr-03	Reversal of Month end revaluation
J3	3-Apr-03	Settlement of Trade
J4	3-Apr-03	Settlement of Trade

## **J1** **Month end revaluation**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amount	Exc Rate	Ccy	Base Amount	Line
FRX1001	31-Mar-03	B	FRX: Derivative Liability Fair Value	USD	-9,116.91	1.000000	USD	-9,116.91	J1a
FRX1001	31-Mar-03	P	FX - Unrealised Losses - FX Trade	USD	9,116.91	1.000000	USD	9,116.91	J1b

**Note J1a:** **The FX revaluation Profit/Loss is analyzed as follows:**

### Forward Points at 31-Mar-03

CCY	Description	Days	Bid	Offer	Mid
GBP	1 Week	7	10	12	11
	1 Month	30	25	27	26
SGD	1 Week	7	-46	-44	-45
	1 Month	30	-69	-67	-68

### Interpolation of GBP forward points

7 days forward	11	A
Days	3	A' = 31-Mar-03 to -3-Apr-03
3 days forward	4.714285714	B = A/7* A'
Spot Rate at 31-Mar-03	1.448060	C

Add Forward Points	0.000471	$D = B/10000$
Forward Rate	1.448531	$E = C + D$

#### Interpolation of SGD forward points

7 days forward	-45	A2
Days	3	$A2' = 31\text{-Mar-03 to } 3\text{-Apr-03}$
3 days forward	-19.28571429	$B2 = A2 / 7 * A2'$
Spot Rate at 31-Mar-03	1.731800	C2
Add Forward Points	-0.001929	$D2 = B2/10000$
Forward Rate	1.729871	$E2 = C2 + D2$

#### Computation of forward rate

SGD forward rate to USD	1.729871	$F = E2$
GBP forward rate to USD	1.448531	$G = E$
SGD forward rate to GBP	2.505773	$H = F * G$

#### Future Value Profit and Loss in Settlement (Against Currency) GBP

Transaction Amount	SGD	2,490,000.00	I
Cost	GBP	1,000,000.00	J
Revalued	GBP	993,705.41	$K = I / H$
Losses (FV)	GBP	-6,294.59	$I = K - J$

#### Discounting Valuation Currency Method

Losses(FV)	USD	-9,117.91	$J = I * E$
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#### Discount Rate

Ccy	Description	Days	Rate
USD	1 Week	7	3.123%
USD	1 Month	30	4.456%

## Interpolation of discount rate

7 days forward	3.123%	K
3 days forward	1.338%	$L = K / 7 * A'$
Discount Factor	0.999890763	$M = 1/(1+L)^{(3/365)}$

## Present Value Profit and Loss in Settlement (Against Currency) USD

Losses(PV)	-9,116.91	$N = J * M$
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### **J2** **Reversal of Month end revaluation**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amount	Exc Rate	Ccy	Base Amount	Line
FRX1001	1-Apr-03	B	FRX: Derivative Liability Fair Value	USD	9,116.91	1.000000	USD	9,116.91	J2a
FRX1001	1-Apr-03	P	FX - Unrealised Losses - FX Trade	USD	-9,116.91	1.000000	USD	-9,116.91	J2b

### **J3** **Settlement of Trade**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amount	Exc Rate	Ccy	Base Amount	Line
FRX1001	3-Apr-03	B	Cash at Bank	SGD	2,490,000.00	0.581416	USD	1,447,724.92	J3a
FRX1001	3-Apr-03	B	FX Cash Clearing Account	SGD	-2,490,000.00	0.581416	USD	-1,447,724.92	J3b

**Note J3a:** **The exchange rate on value date is 1.719940 (multiplier 0.581416). See Exchange Rates below. The rate is rounded to 6dp for display. Full precision is used in calculation.**

### **J4** **Settlement of Trade**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amount	Exc Rate	Ccy	Base Amount	Line
FRX1001	3-Apr-03	B	Cash at Bank	GBP	-1,000,000.00	1.455237	USD	-1,455,236.81	J4a
FRX1001	3-Apr-03	B	FX Cash Clearing Account	GBP	1,000,000.00	1.455237	USD	1,455,236.81	J4b

**Note J4a:**                    **The exchange rate on value date is 1.455237. See Exchange Rates below. The rate is rounded to 6dp for display. Full precision is used in calculation.**

## **EXCHANGE RATES**

The following rates were used for this illustration.

Spot rate

Date	USD to SGD	SGD to USD*	GBP to USD	GBP/SGD
31-Mar-03	1.731800	0.577434	1.448060	2.507750
3-Apr-03	1.719940	0.581416	1.455237	2.502920

\*Rates used for calculation are in full precision. Illustrated rates are rounded to 6dp.

## **FREQUENTLY ASKED QUESTIONS**

## **RELATED INFORMATION**

## **CHANGE HISTORY**

Date	By	Changes
28-Jul-2008	CS	Creation.
10-Jun-2016	RJ	Reformatted.
23-Apr-2020	LT	Re-formatting.