

Money Market – Deposit – Negative Interest Rate

PURPOSE

To show illustration of money market deposit with negative interest rate.

OVERVIEW

- i. Deposit revalued to period end closing rate.
- ii. Income are reported at average booking rate over the life of the deposit.
- iii. Gain and loss arising from foreign exchange movement are analysed into revenue and capital component.

TRANSACTION DETAILS

Accounting Base Ccy
Trade ID
Trade Date
Value Date
Maturity Date
Currency
Amount
Rate
Accrual Method
Total Interest
Maturity Amount
SGD
MMK1001

15-Jan-16
15-Jan-16
15-Feb-16
EUR
1,000,000.00
-1.00%
Act/360
-861.11
999,138.89

SUMMARY OF JOURNALS

ID	Date	Description
J1	15-Jan-16	Money Market Deposit Start.
J2	31-Jan-16	Money Market Month End Accruals.
J3	01-Feb-16	Reversal Money Market Month End Accruals.
J4	15-Feb-16	Money Market Deposit Maturity.

J1 Money Market Deposit Start.

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	15-Jan-16	B	MMK - Deposit	EUR	1,000,000.00	1.550000	SGD	1,550,000.00	J1a
MMK1001	15-Jan-16	B	Cash at Bank	EUR	-1,000,000.00	1.550000	SGD	-1,550,000.00	J1b

Note J1a: The booking rate on 16-Jan-2016 is 1.550000. The rate is rounded to 6dp for display. Full precision is used in calculation.

J2 Money Market Month End Accruals.

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	31-Jan-16	B	MMK - Deposit - Interest Recv	EUR	-472.22	1.532700	SGD	-723.77	J2a
MMK1001	31-Jan-16	P	MMK - Deposit Interest Income	EUR	472.22	1.548982	SGD	731.46	J2b
MMK1001	31-Jan-16	P	FX - Unrealised Gains-Revenue	EUR	0.00		SGD	-7.69	J2c
MMK1001	31-Jan-16	B	MMK - Deposit	EUR	0.00		SGD	-17,300.00	J2d
MMK1001	31-Jan-16	P	FX - Unrealised Losses - Capital	EUR	0.00		SGD	17,300.00	J2e

Note J2a: Calculation of Accrual in EUR

Start date	15-Jan-16	
Month End Date	31-Jan-16	
Days (include 31-Jan)	17	=A
Start date	15-Jan-16	
Maturity Date	15-Feb-16	
Days (exclude 15-Feb)	31	=B
Total Interest	-861.11	=C
Period Interest	-472.22	=C*A/B

Note J2b: The average multiplier rate between 15-Jan and 31-Jan is 1.548982. See Exchange Rates below. The rate is rounded to 6dp for display. Full precision is used in calculation.

Note J2c: The unrealised foreign exchange gain on interest income is analyzed as follows:

	EUR	Rate+	SGD
--	-----	-------	-----

At Closing Rate	-472.22	1.532700	-723.77
At Average Rate	-472.22	1.548982	-731.46
	Gain in exchange		7.69

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

Note J2e: The unrealised loss on the revaluation of the deposit is analyzed as follows:

	EUR	Rate+	SGD
At Closing Rate	1,000,000.00	1.532700	1,532,700.00
At Start Rate	1,000,000.00	1.550000	1,550,000.00
	Loss in exchange		-17,300.00

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

J3 Reversal Money Market Month End Accruals.

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	01-Feb-16	B	MMK - Deposit - Interest Recv	EUR	472.22	1.532700	SGD	723.77	J3a
MMK1001	01-Feb-16	P	MMK - Deposit Interest Income	EUR	-472.22	1.548982	SGD	-731.46	J3b
MMK1001	01-Feb-16	P	FX - Unrealised Gains-Revenue	EUR	0.00		SGD	7.69	J3c
MMK1001	01-Feb-16	B	MMK - Deposit	EUR	0.00		SGD	17,300.00	J3d
MMK1001	01-Feb-16	P	FX - Unrealised Losses - Capital	EUR	0.00		SGD	-17,300.00	J3e

J4 Money Market Deposit Maturity.

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	15-Feb-16	P	MMK - Deposit Interest Income	EUR	861.11	1.541629	SGD	1,327.51	J4a
MMK1001	15-Feb-16	B	MMK - Deposit	EUR	-1,000,000.00	1.550000	SGD	-1,550,000.00	J4b
MMK1001	15-Feb-16	B	Cash at Bank	EUR	999,138.89	1.537890	SGD	1,536,565.71	J4c
MMK1001	15-Feb-16	P	FX - Realised Gains-Revenue	EUR	0.00		SGD	-3.22	J4d
MMK1001	15-Feb-16	P	FX - Realised Losses - Capital	EUR	0.00		SGD	12,110.00	J4e

Note J4a: The average multiplier rate between 15-Jan to 15-Feb is 1.541629. See Exchange Rates below. Note that the last day of the deposit is not included. The rate is rounded to 6dp for display. Full precision is used in calculation.

Note J4d: The realised foreign exchange gain on interest income is analyzed as follows:

	EUR	Rate+	SGD
At Closing Rate	-861.11	1.537890	-1,324.29
At Average Rate	-861.11	1.541629	-1,327.51
	Gain in exchange		3.22

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

Note J4e: The realised loss on the deposit is analyzed as follows:

	EUR	Rate+	SGD
At Closing Rate	1,000,000.00	1.537890	1,537,890.00
At Start Rate	1,000,000.00	1.550000	1,550,000.00
	Loss in exchange		-12,110.00

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

EXCHANGE RATES

Our illustration assumes the company uses different daily exchange rates for accounting.

Average rates are computed by using the multiplier rate from trade/transaction currency to the base currency each day and averaging this over the relevant period.

The following rates were used for this illustration.

Spot rate

Date	EUR/SGD
15-Jan-16	1.550000
31-Jan-16	1.532700
15-Feb-16	1.537890

Average

From Date	To Date	EUR/SGD
15-Jan-16	31-Jan-16	1.548982
15-Jan-16	15-Feb-16	1.541629

* round to 6 dp. Full precision used for calculation of average rates

FREQUENTLY ASKED QUESTIONS

RELATED INFORMATION

CHANGE HISTORY

Date	By	Changes
27-Jun-2017	TS	Creation.
07-May-2020	LT	Re-formatting.