# Money Market - Loan -Negative Interest Rate

# **PURPOSE**

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

# **OVERVIEW**

- i. Loan revalued to period end closing rate.
- ii. Expense are reported at average booking rate over the life of the loan.
- 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**

J2

ID	Date	Description
J1	15-Jan-16	Money Market Loan 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 Loan Maturity

J1 Money Market Loan Start.

TradeID	PostDate	В/Р	Account	Ссу	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	15-Jan-16	В	MMK - Loan	EUR	-1,000,000.00	1.550000	SGD	-1,550,000.00	J1a
MMK1001	15-Jan-16	В	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.

Money Market Month End Accruals.

TradeID	PostDate	В/Р	Account	Ссу	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	31-Jan-16	В	MMK - Loan - Interest Payable	EUR	472.22	1.532700	SGD	723.77	J2a
MMK1001	31-Jan-16	Р	MMK - Loan Interest Expense	EUR	-472.22	1.548982	SGD	-731.46	J2b
MMK1001	31-Jan-16	Р	FX - Unrealised Losses-Revenue	EUR	0.00		SGD	7.69	J2c
MMK1001	31-Jan-16	В	MMK - Loan	EUR	0.00		SGD	17,300.00	J2d
MMK1001	31-Jan-16	Р	FX - Unrealised Gains - 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 loss on interest expense is analyzed as follows:

	EUR	Rate+	SGD
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At	Closing	Rate	-472.22	1.532700	-723.77
At	Average	Rate	-472.22	1.548982	-731.46
			Loss in exchange		-7.69

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

# Note J2e: The unrealised gain on the revaluation of the loan 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
	Gain in exchange		17,300.00

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

# J3 Accruals.

# Reversal Money Market Month End

TradeID	PostDate	В/Р	Account	Ссу	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	01-Feb-16	В	MMK - Loan - Interest Payable	EUR	-472.22	1.532700	SGD	-723.77	ЈЗа
MMK1001	01-Feb-16	Р	MMK - Loan Interest Expense	EUR	472.22	1.548982	SGD	731.46	J3b
MMK1001	01-Feb-16	Р	FX - Unrealised Losses-Revenue	EUR	0.00		SGD	-7.69	Ј3с
MMK1001	01-Feb-16	В	MMK - Loan	EUR	0.00		SGD	-17,300.00	J3d
MMK1001	01-Feb-16	Р	FX - Unrealised Gains - Capital	EUR	0.00		SGD	17,300.00	J3e

TradeID	PostDate	В/Р	Account	Ссу	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
MMK1001	15-Feb-16	Р	MMK - Loan Interest Expense	EUR	-861.11	1.541629	SGD	-1,327.51	J4a
MMK1001	15-Feb-16	В	MMK - Loan	EUR	1,000,000.00	1.550000	SGD	1,550,000.00	J4b
MMK1001	15-Feb-16	В	Cash at Bank	EUR	-999,138.89	1.537890	SGD	-1,536,565.71	J4c
MMK1001	15-Feb-16	Р	FX - Realised Losses-Revenue	EUR	0.00		SGD	3.22	J4d
MMK1001	15-Feb-16	Р	FX - Realised Gains - 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 loan is not included. The rate is rounded to 6dp for display. Full precision is used in calculation.

Note J4d: The realised foreign exchange loss on interest expense 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
	Loss in exchange		-3.22

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

Note J4e: The realised gain on the loan 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
	Gain 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

<sup>\*</sup> round to 6 dp. Full precision used for calculation of average rates

### FREQUENTLY ASKED QUESTIONS

### **RELATED INFORMATION**

## **CHANGE HISTORY**

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