

FOREX CLASS 17

HOME WORK SUPPORT

COVERAGE

Question			Answer			Lecture Time
Q. No	Page no.	Book	Q. No	Page no.	Book	
28	12	HW Q BOOK	28	20	HW ANS BOOK	00:00:34 TO 00:04:39
Extra Q.	64	HW ANS BOOK	Extra Q.	64	HW ANS BOOK	00:04:40 TO 00:11:52

PART III: FX EXPOSURE AND HEDGING

Topic 16 PARTIAL HEDGING

Question 28: SSEI HW Book Page No. 12

Mercury Cine Film Equipment (P) Ltd. Imported lab equipment and accessories at a cost of JPY 50 million from M/s SONY of Japan on January 01, 2002 and the amount is payable on June 30 2002.

The firm approaches a bank in Mumbai, which informed him that no forward quotation is available for JPY in the Indian market and the bank has to quote a rate based on the 6 month ₹/\$ forward in the Mumbai market and 6 month JPY/\$ forward in the Singapore market. The exchanges rates quoted to the firm on January 01, 2002 at Mumbai and Singapore market are as follows :

Mumbai	₹/\$ Spot	48.55/80
	6 months forward	50/60
Singapore	JPY/\$ spot	124.50/125.00
	6 months forward	4.00/4.50

The treasurer of the firm believes that the forward market is over estimating the weakness of rupee against dollar. So instead of going to the Mumbai bank for forward selling of JPY, it is planning to buy JPY 6 month forward in Singapore market against dollar to settle the payable, and buy US \$ against rupee after 6 months in the Mumbai spot market to deliver US \$ against JPY in the Singapore.

If the ₹/\$ spot exchange rate on June 30, 2002 in Mumbai turns out as 48.95/20.

You are required to calculate the saving the firm can make from the strategy instead of buying JPY from the Mumbai bank.

(Source: FOD)

ANSWER: HW ANS BOOK PAGE 20

Here we have to compare the cash out flows on account of the payable between (i) notional cash outflow involved in the Rupee/Japanese yen forward cross rate and (ii) actual cash out flow involved in rupees against purchase of dollars in spot market for sale/delivery against the Japanese yen forward purchase contract in order to calculate the amount of savings to the company on account of the above strategy.

INR/JPY 6 months forward cross rate is : 0.3788/0.3844

- i. If the company buys JPY forward against rupees from the Mumbai bank, it has to pay
= 50,000,000 × 0.3844 = Rs.1,92,20,000

ii. Amount of US dollars to be delivered on due date to purchase

$$\text{JPY 50 million forward} = 5,00,00,000 / 128.50 = \$ 3,89,105.06$$

Rupee amount paid to purchase US dollars on the due date in the spot market in Mumbai =
 $3,89,105.06 \times 49.20 = \text{Rs.}19,143,969$

iii. The company could save = $19,220,000 - 19,143,969 = \text{Rs.}76,031$.

PART III: FX EXPOSURE AND HEDGING

EXTRA QUESTION

Topic 16 PARTIAL HEDGING

Question: HW ANS BOOK PAGE 64

An Indian manufacturer imported goods worth 195 million Argentine Pesos(ARS) from Argentina on 1st Jan 2022. The amount for the same was payable in 3 months. Following Spot Exchange Rates (1st January) are quoted in two different markets:

USD/ INR	82.00/ 82.50	in Mumbai
USD/ ARS	195.00/ 196.20	in New York

Since hedging of Foreign Exchange Risk was part of company's strategic policy and no contract for hedging in ARS was available at any onshore market, it approached an off-shore Non-Deliverable Forward (NDF) Market for hedging the same risk.

In NDF Market a dealer quoted 3 month USD/ ARS at 195.00/195.90 for notional amount of USD 10,00,000 to be settled at reference rate declared by Argentinian bank.

After 3 months the dealer agreed for ARS 194/USD as rate for settlement and on the same day the Spot Rates in the above markets were as follows:

USD/ INR	82.60/83.10	in Mumbai
USD/ ARS	194.5/195.80	in New York

Analyze the position of company under each of the following cases, comparing with Spot Position of 1st Jan.

- i. Do Nothing.
- ii. Opting for NDF Contract.

Note: Googly in quotation

(Source: FOD)

ANSWER: HW ANS BOOK PAGE 64

i. Do Nothing

We shall compute the cross rates in Spot Market on both days and shall compare the amount payable in INR on these two days.

On 1st January 2022

Rupee – Dollar selling rate	= Rs. 82.50
Dollar – ARS	= ARS 195.00
Rupee – ARS cross rate	= Rs. 82.50/195.00
	= Rs. 0.4231

Amount payable by Importer as per above rate (195 Million x Rs. 0.4231)= INR 8,25,04,500

On 1ST April 2022

Rupee – Dollar selling rate	= Rs. 83.10
Dollar – ARS	= ARS 194.50
Rupee – ARS cross rate	= Rs. 83.10/194.50
	= Rs. 0.4272

Amount payable by Importer as per above rate (195 Million x Rs. 0.4272)= INR 8,33,04,000

Thus, Exchange Rate Loss = INR 8,33,04,000 - INR 8,25,04,500 = INR 7,99,500

ii. Hedging in NDF

Since company needs ARS after three months it will take long position in ARS at quoted rate of ARS 195/ USD and after three-months it will reverse its position at fixing rate of ARS 194/USD. The profit/ loss position will be as follows:

Buy ARS 195 Million and sell USD (195 Million/ 195)	USD 1,000,000
Sell ARS 195 Million and buy USD at Fixing Rate (195 Million/ 194)	USD 1,005,155
Profit	5,155

Final Position

Amount Payable in Spot Market (as computed earlier)	INR 8,33,04,000
Less: Profit form NDF Market USD 5,155* 82.60	INR 4,25,803
	INR 8,28,78,197

Thus, Exchange Rate Loss = INR 8,28,78,197 - INR 8,25,04,500 = INR 3,73,697

Decision: Since Exchange Loss is less in case of NDF same can be opted for.