

# FOREX CLASS 17

## CLASS WORK COVERAGE

To streamline our learning process, I've categorized the questions we'll tackle in class into four distinct groups:

1. **Classic:** *These questions are exactly as presented in your book, providing a familiar foundation.*
2. **Transformed:** *Here, we've converted book questions into multiple-choice format to enhance your analytical skills.*
3. **Adapted:** *These are similar to book questions but with altered numbers or names, presented as multiple-choice questions for varied practice.*
4. **Original:** *These are entirely new questions not found in your book, designed to challenge and expand your understanding.*

*This structure will help us navigate through a range of problems, ensuring a comprehensive grasp of the material. Looking forward to our next session!*

Q. No	Type	Book	Page No.
43	Classic	CW Q BOOK	17
44	Classic	CW Q BOOK	18

## PART III: FX EXPOSURE AND HEDGING

## Topic 16 PARTIAL HEDGING

**Question 43: SSEI CW Book Page No. 17**

Somu Electronics imported goods from Japan on July 1st 2009, of JP ¥ 1 million, to be paid on 31st, December 2009. The treasury manager collected the following exchange rates on July 01, 2009 from the bank.

Delhi Rs./US\$ Spot	45.86 /88
6 months forward	46.00/03
Tokyo JP ¥/ US\$ Spot	108/108.50
6 months forward	110/110.60

In spite of fact that the forward quotation for JP ¥ was available through cross currency rates, Mr. X, the treasury manager purchased spot US\$ and converted US\$ into JP ¥ in Tokyo using 6 months forward rate.

However, on 31st December, 2009 Rs./US\$ spot rate turned out to be 46.24 /26.

You are required to calculate the loss or gain in the strategy adopted by Mr. X by comparing the notional cash flow involved in the forward cover for Yen with the actual cash flow of the transaction.

**(Source: ICAI)**

**ANSWER:**

Here we have to compare the notional cash outflow for the forward rate of JP ¥ and the actual cash outflow involved in rupees against forward purchase of JP ¥ for dollars in Tokyo and spot purchase of dollars in Delhi for Rs.

**A. Cash flow of forward purchasing the JP ¥**

Rs. /JP ¥ 6 month forward rate

Bid rate = Bid rate of US\$ / Ask Rate of JP ¥ = Rs. 46 / JP ¥ 110.60 = Rs. 0.415913

Ask rate = Ask rate of US\$ / Bid Rate of JP ¥ = Rs. 46.03 / JP ¥ 110 = Rs. 0.418454

Hence, Rs./JP ¥ 6 month forward rate = 0.415913/0.418454

Accordingly, if the company had purchased JP ¥ forward against rupees it would have paid = Rs.418454.50

**B. Cash flow of forward purchasing US\$ in spot market and converting into JP ¥**

Amount of US dollars to be paid on due date by purchase of JP¥ 1 million in forward market  
 = JP¥ 1,000,000/ JP¥ 110 = US\$ 9090.91

Cash outflows in rupees against purchase of dollars in on Dec. 31, 2009 = US\$ 9090.91 ×  
 Rs. 46.26 = Rs. 420,545.50

**C. Loss or gain due to strategy adopted by Mr. X.**

(A) – (B) = Rs. 4,18,454.50 – 4,20,545.50 = Rs. 2091.00

Thus, the company paid more Rs. 2,091.00 in the strategy adopted by Mr. X.

**Question 44: SSEI CW Book Page No. 18**

On 1st February 2020, XYZ Ltd. a laptop manufacturer imported a particular type of Memory Chips from SKH Semiconductor of South Korea. The payment is due in one month from the date of Invoice, amounting to 1190 Million South Korean Won (SKW). Following Spot Exchange Rates (1st February) are quoted in two different markets:

USD/ INR	75.00/ 75.50	in Mumbai
USD/ SKW	1190.00/ 1190.75	in New York

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

In NDF Market a dealer quoted one-month USD/ SKW at 1190.00/1190.50 for notional amount of USD 100,000 to be settled at reference rate declared by Bank of Korea.

After 1 month (1st March 2020) the dealer agreed for SKW 1185/ USD as rate for settlement and on the same day the Spot Rates in the above markets were as follows:

USD/ INR	75.50/ 75.75	in Mumbai
USD/ SKW	1188.00/ 1188.50	in New York

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

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

Note: Both Rs./ SKW Rate and final payment (to be computed in Rs. Lakh) to be rounded off upto 4 decimal points.

**(Source: ICAI)**

**ANSWER:****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 February 2020**

Rupee – Dollar selling rate	= Rs. 75.50
Dollar – SKW	= SKW 1190.00
Rupee – SKW cross rate	= Rs. 75.50 / 1190.00
	= Rs. 0.0634

Amount payable to Importer as per above rate (1190 Million x Rs. 0.0634) Rs. 754.4600 Lakh  
On 1st March 2020

Rupee – Dollar selling rate	= Rs. 75.75
Dollar – SKW	= SKW 1188.00
Rupee – SKW cross rate	= Rs. 75.75 / 1188.00
	= Rs. 0.0638

Amount payable to Importer as per above rate (1190 Million x Rs. 0.0638) Rs. 759.2200 Lakh  
Thus, Exchange Rate Loss = (Rs. 759.2200 Lakh - Rs. 754.4600 Lakh) Rs. 4.7600 Lakh

**ii. Hedging in NDF**

Since company needs SKW after one month it will take long position in SKW at quoted rate of SKW 1190/ USD and after one-month it will reverse its position at fixing rate of SKW 1185/USD. The profit/ loss position will be as follows:

Buy SKW 1190 Million and sell USD (1190 Million/ 1190)	USD 1,000,000
Sell SKW 1190 Million and buy USD at Fixing Rate (1190 Million/ 1185)	USD 1,004,219
Profit	USD 4,219

**Final Position**

Amount Payable in Spot Market (as computed earlier)	Rs. 759.2200 Lakh
Less: Profit form NDF Market USD 4219 x 75.50	Rs. 3.1853 Lakh
	Rs. 756.0347 Lakh

Thus, Exchange Rate Loss = (Rs. 756.0347 Lakh - Rs. 754.4600 Lakh) Rs. 1.5747 Lakh

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