

CA FINAL

STRATEGIC FINANCIAL MANAGEMENT (NEW SCHEME)

NEW SUMS IN
ICAI MOCK TEST PAPER

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Question 1

In March 2020, XYZ Bank sold some 7% Interest Rate Futures underlying Notional 7.50% Coupon Bonds. The exchange provides following details of eligible securities that can be delivered:

Security	Quoted Price of Bonds	Conversion Factor
7.96 GOI 2023	1037.40	1.0370
6.55 GOI 2025	926.40	0.9060
6.80 GOI 2029	877.50	0.9195
6.85 GOI 2026	972.30	0.9643
8.44 GOI 2027	1146.30	1.1734
8.85 GOI 2028	1201.70	1.2428

Recommend the Security that should be delivered by the XYZ Bank if Future Settlement Price is 1000.

Source: ICAI MTP- 2(New Scheme), Test Series: April 21, Question No. 1a

Answer:

The XYZ Bank shall choose those CTD (Cheapest-to-Deliver) Bonds from the basket of deliverable Bonds which gives maximum profit computed as follows:

Profit = Future Settlement Price x Conversion Factor – Quoted Spot Price of Deliverable Bond Accordingly, the profit of each bond shall be computed as follows:

Security (1)	Future Settlement Price (2)	Conversion Factor (3)	(4) = (2) x (3)	Quoted Price of Bonds (5)	Profit (6)
7.96 GOI 2023	1000	1.0370	1037.00	1037.40	- 0.40
6.55 GOI 2025	1000	0.9060	906.00	926.40	- 20.40
6.80 GOI 2029	1000	0.9195	919.50	877.50	42.00
6.85 GOI 2026	1000	0.9643	964.30	972.30	- 8.00
8.44 GOI 2027	1000	1.1734	1173.40	1146.30	27.10
8.85 GOI 2028	1000	1.2428	1242.80	1201.70	41.10

Since maximum profit to the Bank is in case of 6.80 GOI 2029, same should be opted for.

Question 2

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 MTP- 2(New Scheme), Test Series: April 21, Question No. 6a

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 1187/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.

Question 3

Z has to remit USD \$1,00,000 for her daughter's education on 4th April 2021. Accordingly, she has booked a forward contract with his bank on 4th January 2021 @ ₹ 73.8775. The Bank has covered its position in the market @ ₹ 73.7575.

The exchange rates for USD \$ in the interbank market on 4th, 7th and 14th April 2021 were:

	4th April ₹	7th April ₹	14th April ₹
Spot USD 1=	73.2775/73.2975	73.1575/73.1975	73.1375/73.1775
Spot/March	73.3975/73.4275	73.2775/73.3275	73.2575/73.3075
April	73.5275/73.5675	73.4075/73.4650	73.3875/73.4475
May	73.7775/73.8250	73.6575/73.7275	73.6375/73.7050
June	74.0700/74.1325	73.9575/74.0675	73.9500/74.0525

Exchange margin of 0.10 percent and interest outlay of funds @ 12 percent are applicable. The remitter, due to rescheduling of the semester, has requested on 14th April 2021 for extension of contract with due date on 14th June 2021.

Calculate:

- (i) Cancellation Rate;
- (ii) Amount Payable on \$ 100,000;
- (iii) Swap loss;
- (iv) Interest on outlay of funds, if any;
- (v) New Contract Rate; and
- (vi) Total Cost

Note: Rates must be rounded to 4 decimal places in multiples of 0.0025 and assume 365 days in a year.

Source: ICAI MTP- 1(New Scheme), Test Series: Oct 21, Question No. 1a

Answer:

(i) Cancellation Rate

The forward sale contract shall be cancelled at Spot TT Purchase for \$ prevailing on the date of cancellation as follows:

\$/ ₹ Market Buying Rate	₹ 73.1575
Less: Exchange Margin @ 0.10%	₹ 0.0732
	₹ 73.0843
Rounded off to	₹ 73.0850

(ii) Amount payable on \$ 1,00,000

Bank sells \$1,00,000 @ ₹ 73.8775	₹ 73,87,750
Bank buys \$1,00,000 @ ₹ 73.0850	₹ 73,08,500
Amount payable by customer	₹ 79,250

(iii) Swap Loss

On 4th April, the bank does a swap sale of \$ at market buying rate of ₹ 73.4275 and forward purchase for April at market selling rate of ₹ 73.2775.

Bank buys at	₹ 73.4275
Bank sells at	₹ 73.2775
Amount payable by customer	₹ 0.1500

Swap Loss for \$ 1,00,000 in ₹ = ₹ 15,000

(iv) Interest on Outlay of Funds

On 4th April, the bank receives delivery under cover contract at ₹ 73.7575 and sell spot at ₹ 73.2775.

Bank buys at	₹ 73.7575
Bank sells at	₹ 73.2775
Amount payable by customer	₹ 0.4800

Outlay for \$ 1,00,000 in ₹ 48,000

Interest on ₹ 48,000 @ 12% for 3 days ₹ 47

(v) New Contract Rate

The contract will be extended at current rate

\$/ ₹ Market forward selling Rate for June	₹ 74.0525
Add: Exchange Margin @ 0.10%	₹ 0.0741
	₹ 74.1266
Rounded off to	₹ 74.1275

(vi) Total Cost

Cancellation Charges	₹ 79,250.00
Swap Loss	₹ 15,000.00
Interest	₹ 47.00
	₹ 94,297.00