

FOREX CLASS 26

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.
81	Classic	CW Q BOOK	35
82	Classic	CW Q BOOK	35
83	Classic	CW Q BOOK	36
84	Classic	CW Q BOOK	36
85	Classic	CW Q BOOK	37
86	Classic	CW Q BOOK	37
87	Classic	CW Q BOOK	38
88	Classic	CW Q BOOK	38

Topic 26 INTERNATIONAL WORKING CAPITAL MANAGEMENT

Question 81: SSEI CW Book Page No. 35

Suppose you are a treasurer of XYZ plc in the UK. XYZ have two overseas subsidiaries, one is based in Amsterdam and another in Switzerland. The surplus position of funds in hand is as follows which it does not need for the next three months but will be needed at the end of that period (91 days).

Holding Company	£ 150,000
Swiss Subsidiary	CHF 1,996,154
Dutch Subsidiary	€ 1,450,000

Exchange Rate as on date are as follows:

Spot Rate (€)	£0.6858 - 0.6869
91 day Pts	0.0037 - 0.0040
Spot Rate (£)	CHF 2.3295 - 2.3326
91 day Pts	0.0242 0.0228

91-Day Interest rates on p.a. basis on the Deposits in Money Market are as follows:

Amount of Currency	£	€	CHF
0 – 200,000	1.00	0.25	Nil
200,001 – 1,000,000	2.00	1.50	0.25
1,000,001 – 2,000,000	4.00	2.00	0.50
Over 2,000,000	5.38	3.00	1.00

You have been approached by your banker wherein the above-mentioned surplus was lying, requesting you to swap the surplus lying with other two subsidiaries and place them in deposit with them.

Determine the minimum interest rate per annum (upto 3 decimal points) that should be offered by the bank to your organization so that your organization is ready to undertake such swap arrangement.

Note: Consider 360 days a year.

(Source: ICAI)

ANSWER:

XYZ plc shall be ready to undertake this swap arrangement only if it receives the interest on the surplus funds if invested on individual basis as follows:

	Interest	Amt. after 91 days	Conversion in £
Holland € 1,450,000 x 0.02 x 91/360 =	€ 7,330.56	€ 1,457,330.56	£1,004,829.42 (1,457,330.56 x 0.6895)
Switzerland CHF 1,996,154 x 0.005 x 91/360 =	CHF 2,522.92	CHF 1,998,676.92	£865,303.02 (1,998,676.92 ÷ 2.3098)
UK £ 150,000 x 0.01 x 91/360 =	£ 379.17	£ 150,379.17	£ 150,379.17
Total GBP at 91 days			£ 2,020,511.61

Swap to Sterling

Sell € 1,450,000 (Spot at 0.6858) buy £	£ 994,410.00
Sell CHF 1,996,154 (Spot at 2.3326) buy £	£ 855,763.53
Independent GBP amount	£ 150,000.00
	£ 2,000,173.53
Amount accrued on Individual Basis (Principal + Interest)	£ 2,020,511.61
Interest Required	£ 20,338.08
Required Interest Rate on Per Annuam Basis $\frac{20,338.08}{2,000,173.53} \times \frac{360}{91} \times 100$	4.023%

Thus, the minimum rate that should be offered is 4.023%.

Question 82: SSEI CW Book Page No. 35

Trueview plc, a group of companies controlled from the United Kingdom includes subsidiaries in India, Malaysia and the United States. As per the CFO's forecast that, at the end of the June 2010 the position of inter-company indebtedness will be as follows:

- The Indian subsidiary will be owed Rs. 1,44,38,100 by the Malaysian subsidiary and will owe the US subsidiary US\$ 1,06,007.
- The Malaysian subsidiary will be owed MYR 14,43,800 by the US subsidiary and will owe it US\$ 80,000.

Suppose you are head of central treasury department of the group and you are required to net off inter-company balances as far as possible and to issue instructions for settlement of the net balances.

For this purpose, the relevant exchange rates may be assumed in terms of £ 1 are US\$ 1.415; MYR 10.215; Rs. 68.10.

What are the net payments to be made in respect of the above balances?

(Source: ICAI)

ANSWER:

	India	Malaysia	US
India	-	Rs. 1,44,38,100	(US\$ 1,06,007)
Malaysia	(Rs. 1,44,38,100)	-	MYR 1,443,800 (US\$ 80,000)
US	US\$ 1,06,007	(MYR 14,43,800) US\$ 80,000	

Table showing conversion of above position into pound sterling

	India £	Malaysia £	US £	Total £
India	-	2,12,013	(74,917)	1,37,096
Malaysia	(2,12,013)	-	1,41,341 (56,537)	(1,27,209)
US	74,917	(1,41,341) 56,537	-	(9,887)
	(1,37,096)	1,27,209	9,887	-

Decision: Central treasury department will instruct the Malaysia subsidiary to pay the Indian subsidiary £1,27,209 and the US subsidiary to pay the Indian subsidiary £9,887.

Question 83: SSEI CW Book Page No. 36

AMK Ltd. an Indian based company has subsidiaries in U.S. and U.K.

Forecasts of surplus funds for the next 30 days from two subsidiaries are as below:

U.S.	\$12.5 million
U.K.	£ 6 million

Following exchange rate information is obtained:

	\$/₹	£/₹
Spot	0.0215	0.0149
30 days forward	0.0217	0.0150

Annual borrowing/deposit rates (Simple) are available.

₹	6.4%/6.2%
\$	1.6%/1.5%
£	3.9%/3.7%

The Indian operation is forecasting a cash deficit of ₹500 million.

It is assumed that interest rates are based on a year of 360 days.

- Calculate the cash balance at the end of 30 days period in ₹ for each company under each of the following scenarios ignoring transaction costs and taxes:
 - Each company invests/finances its own cash balances/deficits in local currency independently.
 - Cash balances are pooled immediately in India and the net balances are invested/borrowed for the 30 days period.
- Which method do you think is preferable from the parent company's point of view?

(Source: ICAI)

ANSWER:

Cash Balances:

(‘000)

Acting independently

	Capital	Interest	₹ in 30 days
India	-5,00,000	-2,666.67	-5,02,667
U.S.	12,500	15.63	5,76,757
U.K.	6,000	18.50	4,01,233
			4,75,323

Cash Balances:-

Immediate Cash pooling

	₹
India	- 5,00,000
U.S. $\frac{12,500}{0.0215}$	5,81,395
U.K. $\frac{6,000}{0.0149}$	4,02,685
	4,84,080

Immediate cash pooling is preferable as it maximizes interest earnings

Note: If the company decides to invest pooled amount of ₹4,84,080/- @ 6.2% p.a. for 30 days an interest of ₹2,501/- will accrue.

Question 84: SSEI CW Book Page No. 36

India Imports co., purchased USD 100,000 worth of machines from a firm in New York, USA. The value of the rupee in terms of the Dollar has been decreasing. The firm in New York offers 2/10, net 90 terms. The spot rate for the USD is ₹ 55; the 90 days forward rate is ₹ 56.

- i. Compute the Rupee cost of paying the account within the 10 days.
- ii. Compute the Rupee cost of buying a forward contract to liquidate the account in 10 days.
- iii. The differential between part a and part b is the result of the time value of money (the discount for prepayment) and protection from currency value fluctuation. Determine the magnitude of each of these components.

(Source: ICAI)

ANSWER:

i. $(98,000) (\text{₹}55) = \text{₹}53,90,000$

ii. $(100,000) (\text{₹}56) = \text{₹}56,00,000$

Differences = $\text{₹}56,00,000 - \text{₹}53,90,000 = \text{₹}2,10,000$

iii. Time value of money = $(100,000 - 98,000) (\text{₹} 56) = \text{₹}1,12,000$

Protection from devaluation = $(98,000) (\text{₹}56 - \text{₹}55) = \text{₹}9,80,000$

Question 85: SSEI CW Book Page No. 37

A Company's international transfer of funds amounts to about \$2 million monthly. Presently the average transfer time is ten days. It has been proposed that the transfer of funds be turned over to one of the larger international banks, which can reduce the transfer time to an average of two days. A charge of one-half of 1 percent of the volume of transfer has been proposed for this service. In view of the fact that the firm's opportunity cost of funds is 12 percent, should this offer be accepted?

(Source: ICAI)

ANSWER:

\$2,000,000 per month = \$24,000,000 per year.

Time saved = $10 - 2 = 8$ days funds are freed for other uses.

Investing \$24,000,000 at 12% for 8 days: Yield = $24,000,000 (0.12) (8/360) = \$64,000$

% yield = $64,000 / 24,000,000 = 0.00267$ or 0.267%

Since the firm saves less than 0.3% and the proposed charges is 0.5%, the services would not produce commensurate savings. However, the new transfer time would shorten the exposure of the funds to various risks by an average of 8 days. The firm must decide whether or not this reduction in risk is worth the difference between the proposed fee and the savings due to the shorter transfer time, $0.5\% - 0.267\% = 0.233\%$.

PART VI: RESIDUAL

Topic 27 ADR/GDR

Question 86: SSEI CW Book Page No. 37

M/s. Raghu Ltd. is interested in expanding its operation and planning to install manufacturing plant at US. It requires 8.82 million USD (net of issue expenses/ floatation cost) to fund the proposed project. GDRs are proposed to be issued to finance this project. The estimated floatation cost of GDRs is 2%.

Additional information:

- i. Expected market price of share at the time of issue of GDR is ₹ 360 (Face Value ₹ 100)
- ii. Each GDR will represent two underlying Shares.
- iii. The issue shall be priced at 10% discount to the market price.
- iv. Expected exchange rate is INR/USD 72.
- v. Dividend is expected to be paid at the rate of 20% with growth rate of 12%.
 1. You, as a financial consultant, are required to compute the number of GDRs to be issued and cost of the GDR.
 2. What is your suggestion if the company receives an offer from a US Bank willing to provide an equivalent loan with an interest rate of 12%?
 3. How much company can save by choosing the option as recommended by you?

(Source: ICAI)

ANSWER:

Net Issue Size = \$ 8.82 million

Gross Issue = $8.82 / 0.98 = \$9.00$ million

Issue Price per GDR in ₹ (360 x 2 x 90%)	₹ 648
Issue Price per GDR in \$ (₹ 648/ ₹ 72)	\$ 9.00
Dividend Per GDR (D1) = ₹ 20 x 2 =	₹ 40
Net Proceeds Per GDR = ₹ 648 x 0.98 =	₹ 635.04

1.

a. Number of GDR to be issued

$\$9.00 \text{ million} / \$9 = 1.00 \text{ million}$

b. Cost of GDR

$$K_e = \frac{40.00}{635.04} + 0.12 = 18.30\%$$

- If the company receives an offer from US Bank willing to provide an equivalent amount of loan with interest rate of 12%, it should accept the offer.
- If the offer is accepted there will be net saving of 6.30%.

Question 87: SSEI CW Book Page No. 38

Right Limited has proposed to expand its operations for which it requires funds of \$ 30 million, net of issue expenses which amount to 4% of the issue size. It proposed to raise the funds through a GDR issue. It considers the following factors in pricing the issue:

- i. The expected domestic market price of the share is ₹ 300 (Face Value of ₹ 10 each share)
- ii. 4 shares underlying each GDR
- iii. Underlying shares are priced at 20% discount to the market price
- iv. Expected exchange rate is ₹ 70/\$

You are required to compute the number of GDR's to be issued and cost of GDR to Right Limited, if 20% dividend is expected to be paid with a growth rate of 20%.

(Source: ICAI)

ANSWER:

Net Issue Size = \$30 million

Gross Issue = \$30 million / 0.96 = \$31.25 million

Issue Price per GDR in ₹ (300 x 4 x 80%)	₹ 960
Issue Price per GDR in \$ (₹ 960 / ₹ 70)	\$13.71
Dividend per GDR (D1) (₹ 2 x 4)	₹ 8
Net Proceeds per GDR (₹ 960 x 0.96)	₹ 921.60

a. Number of GDR to be issued

\$31.25 million / \$13.71 = 2.2794 million

b. Cost of GDR to Right Ltd.

$$K_e = \frac{8}{921.60} + 0.20 = 20.87\%$$

Question 88: SSEI CW Book Page No. 38

M/s. Raghu Ltd. is interested in expanding its operation and planning to install manufacturing plant at US. It requires 8.82 million USD (net of issue expenses/ floatation cost) to fund the proposed project. GDRs are proposed to be issued to finance this project. The estimated floatation cost of GDRs is 2%.

Additional information:

1. Expected market price of share at the time of issue of GDR is ₹ 360 (Face Value ₹ 100)
2. Each GDR will represent two underlying Shares.
3. The issue shall be priced at 10% discount to the market price.
4. Expected exchange rate is INR/USD 72.
5. Dividend is expected to be paid at the rate of 20% with growth rate of 12%.

Required:

- i. Calculate the number of GDRs to be issued.
- ii. Advise company for making GDR issue if the company receives an offer from a US Bank willing to provide an equivalent loan with an interest rate of 12%?

(Source: ICAI)

Answer:

Same as Q86