

Valuation of Securities

Discounted Cash flow Valuation

Firm Approach (Eq + Debt)

Equity Approach

Free Cash flow to firm (FCFF)
(Long Term Provider of funds)

Free Cash flow to Equity (FCFE)

Sales
 (-) COGS
 GP
 (-) Adm
 (-) Dep
 (-) S&D
 PBIT
 (-) Tax
 NOPAT
 + Dep
 Cash flow
 - Capital Exp.
 + Working Capital
 = FCFF to be discounted at
 WACC, we get (*)
 (*) Value of firm
 (-) Value of debt
 = Value of Equity
 ÷ No. of Eq. shares
 = Value Per Share

Sales
 (-) COGS
 GP
 (-) Adm
 (-) Dep.
 (-) S&D
 PBIT
 (-) Int (Exp.)
 PBT
 (-) Tax
 PAT
 + Dep
 Cash flow
 - Capital Exp. (Add. to F.A)
 + Working Capital
 - Debt. repayment
 = FCFE to be discounted
 at ke (Cost of Equity)

(**) Value of Equity
 ÷ No. of Shares
 = Value Per Share

Ex. An investor wants to purchase shares of X. Ltd., the Co. is likely to declare a dividend of Rs. 3 per share perpetually. If the discount rate is 10%. Find the value of share.

Solution

$$PV = \frac{a}{r}$$

$$P_0 = \frac{D_1}{r}$$

$$= \frac{3}{10\%}$$

$$= \text{Rs } 30$$

Ex. If in the above example the dividends are expected to grow annually by 2% perpetually then find P_0 .

Solution

$$P_0 = \frac{D_1}{r-g}$$

$$= \frac{3}{10\% - 2\%}$$

$$= \frac{3}{8\%} = 37.5 \text{ Rs.}$$

Ex. For the data in the previous example
 find P_2, P_3, P_4

Solution

$$P_2 = \frac{D_3}{r-g}$$

$$= \frac{3.12}{10\% - 2\%}$$

$$= 39.01 \text{ Rs.}$$

$$P_3 = \frac{D_4}{r-g}$$

$$= \frac{3.18}{10\% - 2\%}$$

$$= \frac{3.18}{8\%}$$

$$= 39.75 \text{ Rs.}$$

$$P_4 = \frac{D_5}{r-g}$$

$$= \frac{3.31}{10\% - 2\%}$$

$$= 41.375 \text{ Rs.}$$

W.N

$$D_1 = 3$$

$$D_2 = 3 \times 1.02 = 3.06$$

$$D_3 = 3 \times (1.02)^2 = 3.12$$

$$D_4 = 3 \times (1.02)^3 = 3.18$$

$$D_5 = 3 \times (1.02)^4 = 3.31$$

— OR —

$$D_1 = 3$$

$$D_2 = 3 \times 1.02 = 3.06$$

$$D_3 = 3.06 \times 1.02 = 3.12$$

$$D_4 = 3.12 \times 1.02 = 3.18$$

$$D_5 = 3.18 \times 1.02 = 3.31$$

Ex. Shares of X Ltd. are likely to give dividend of Rs. 5 per share next year. This will grow at the rate of 10% p.a. till the 6th year thereafter the growth rate will stabilise at 5% p.a. which will go on forever. Disc. Rate is 18%. Find P_0 & P_1 .

Solution

Year	Cash flow	PVIFA 18%	PV
1	5	0.847	4.235
2	$5 \times 1.1 = 5.5$	0.718	3.949
3	$5.5 \times 1.1 = 6.05$	0.608	3.678
4	$6.05 \times 1.1 = 6.65$	0.515	3.425
5	$6.65 \times 1.1 = 7.32$	0.437	3.199
6	$7.32 \times 1.1 = 8.052 + 65$	0.370	27.029
			$P_0 = \underline{\underline{45.515}}$

$$\therefore P_6 = \frac{D_7}{r-g}$$

$$\therefore P_6 = \frac{D_6 (1+g)}{r-g}$$

$$\therefore P_6 = \frac{8.052 (1.05)}{18\% - 5\%}$$

$$\therefore P_6 = 65$$

2nd year is the 1st year

Year	Cash flows	PVIFA _{18%}	PV
1	5.5	0.847	4.65
2	6.05	0.718	4.34
3	6.65	0.608	4.05
4	7.32	0.515	3.76
5	73.052	0.437	31.92
			<u>48.72</u>

Note:- For P_0 includes PV of cash flows from year 7 to infinity discounting it with the 1st six year dividend implies that we found the PV of future cash flows from year 1 to infinity we get P_0

Ex. X Ltd. is likely to declare a dividend of Rs. 10 per share next year this will grow at 15% till the 5th year at 10% till the 8th year & thereafter stabilise at 5%. Find P_0 if $R = 18\%$.

Solution

Year	Cash flows	PVIFA _{18%}	PV
1	10	0.847	8.47
2	10 (1.15) = 11.5	0.718	8.26
3	11.5 × 1.15 = 13.23	0.608	8.03
4	13.23 × 1.15 = 15.21	0.515	7.83
5	15.21 × 1.15 = 17.49	0.437	7.64
6	17.49 × 1.10 = 19.24	0.370	7.12
7	19.24 × 1.10 = 21.16	0.313	6.62
8	21.16 × 1.10 = 23.28 + 188	0.260	56.2
			<u>110.17</u>

$$P_8 = \frac{D_9}{r-g}$$

$$= \frac{D_8(1+g)}{r-g}$$

$$= \frac{23.28 \times 1.05}{18\% - 5\%}$$

$$= 188 \text{ Rs.}$$

— Valuing the Target Company :-

Ex. α is targeting to acquire Beta. Its equity related post tax cash flows without merger are as follows:-

Year 1	Year 2	Year 3	Year 4	Year 5
50 mln	55 mln	60 mln	64 mln	70 mln

Beyond year 5 the cash flows are expected to grow at 6% p.a forever. If Beta is acquired the equity related post tax cash flows of the combined entity would be:-

80 mln	90 mln	105 mln	120 mln	135 mln
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Beyond Year 5 the cash flows are expected to grow at 5% p.a forever.
Cost of Equity of α = 18%.

No. of shares in α & in Beta are 10 mln & 8 mln respectively. Find the value of Beta value per share for both the co.'s & the exchange Ratio.

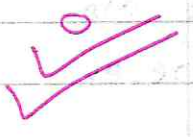
Solution Value of α

Year	Cash flow	PVIFA _{18%}	PV
1	50	0.847	42.35
2	55	0.718	39.49
3	60	0.608	36.48
4	64	0.515	32.96
5	70 + 618.32	0.437	300.8
			<u>452.08</u>

$$P_5 = \frac{D_6}{r-g} \quad \text{OR} \quad \frac{D_5(1+g)}{r-g}$$



$$VE_5 = \frac{FCFE_6}{k_e - g} \quad \text{OR} \quad \frac{FCFE_5(1+g)}{k_e - g}$$



$$VF_5 = \frac{FCFF_6}{WACC - g} \quad \text{OR} \quad \frac{FCFF_5(1+g)}{WACC - g}$$



$$VE_{nth} = \frac{FCFE_{(n+1)}}{k_e - g}$$



$$VF_{nth} = \frac{FCFF_{(n+1)}}{WACC - g}$$

$$P_5 = \frac{D_5 (1+g)}{r-g}$$

$$= \frac{70 (1.06)}{18\% - 6\%}$$

$$= 618.33$$

∴ Value of Equity of Alpha = 452.08

÷ No. of Equity Shares

10 mln

Value Per Share

= Rs. 45.208

Value of Combined Entity (A & B)

Year	Cash flow	PVIFA, 18%	PV
1	80	0.842	67.76
2	90	0.718	64.62
3	105	0.608	63.84
4	120	0.515	61.80
5	135 + 1090	0.434	535.33
			<u>793.35</u>

$$P_5 = \frac{D_5 (1+g)}{r-g} = \frac{135 (1.05)}{18\% - 5\%}$$

$$= 1090$$

∴ Value of Equity of Combined	793.35
(-) Value of Equity of X	<u>452.08</u>
Value of Beta	<u>341.27</u>
÷ No. of Shares	<u>8</u>
Value Per Share	<u><u>42.66</u></u>

✓✓

$$\text{Exchange Ratio} = \frac{\text{Value of Seller}}{\text{Value of Buyer}}$$

$$\therefore \text{Exch. Ratio} = \frac{42.66}{45.20} = 0.94 \text{ Shares}$$

i.e. 1 : 0.94 Shares

Value of Equity :-

Value of Equity = PV of horizon period +
PV of terminal value



$$= FCFE \times PVIFA @ k_e + \left[\frac{FCFE}{k_e - g} \right] \times PVIFA @ k_e$$

Value of Firm :-

Value of Firm = PV of horizon period +
PV of terminal value.



$$= FCFE \times PVIFA @ WACC + \left[\frac{FCFE}{WACC - g} \right] \times PVIFA @ WACC$$

Ex. Calculate the value of the firm

The Free Cash Flow of a firm (FCFF) is expected to grow @ 35% for the next 5 years. Growth will slow down to 5% thereafter. The current year cash flow to the firm is 4 lac. The firm's cost of capital. During the high growth rate period is 18% & 12%. Beyond the 5th year. Calculate the value of the firm.

Solution

Year	FCFF	PVIFA 18%	PV
1	4	0.847	3.388
2	$4(1.35) = 5.4$	0.718	3.87
3	$5.4(1.35) = 7.29$	0.608	4.43
4	$7.29(1.35) = 9.84$	0.515	5.06
5	$9.84(1.35) = 13.28$	0.437	5.82
	+ 200		
			<u>109.94</u>

$$\text{Value of firm}_5 = \frac{\text{FCFF}_5 (1+g)}{\text{WACC} - g}$$

$$= \frac{13.28 (1.05)}{12\% - 5\%}$$

$$= 200.$$

Forex - Practise Questions

Solution 3 (A) (i) Forward Market Hedge

Frwd Rate 1 \$ = 110 ¥

(2) = 500 mln Yen

$$= \frac{500}{110} = 4.54 \text{ mln \$ payable.}$$

(ii) Money Market Hedge

Step-1 Borrow 3.84 mln \$ @ 8% p.a

Step-2 Convert the above \$ into Yen
at the current spot rate

$$1 \$ = 124 ¥ \quad = 476.16 \text{ Yen mln}$$

$$3.84 \$ = ?$$

Step-3 Invest the above 476.16 ¥ mln @
5% p.a

Step-4 On maturity receive 500 mln Yen
from the investment above & pay
your import obligation.

Step-5 :- Cost of Money = \$ loan + Int
Market Hedge Step-1
= 3.84 + 0.307
= 4.147

Case Studies

W.N.1

$$PV = FV$$

$$100\$ = 105\yen$$

$$(?) = 500 \text{ mln Yen}$$

$$= 476.16$$

(B) The future Spot Rate $1\$ = 110 \text{ Yen}$

$$1 \text{ Yen} = \frac{1}{110\$}$$

$$= 0.0091 \text{ Yen (Indirect Method)}$$

A Call option on yen having a Strike Price of $0.0081\$$ will therefore be exercised. The Cash outflow is as follows:-

$$\begin{array}{lll} \text{Strike Price} & 1 \text{ Yen} = 0.0081\$ & 4.05 \text{ mln \$} \\ & 500 \text{ mln \yen} = ? & \end{array}$$

$$(+)\text{ Premium Paid } \yen : \$$$

$$1 : 0.0014 \quad 0.7 \text{ mln \$}$$

$$500 : ?$$

$$4.75 \text{ mln \$}$$

The maximum cash outflow under the call option is $4.12 \text{ mln \$}$ which is the least amongst the hedging alternatives.

(c) PCC would be indifferent between the option & the forward hedge. If the cash outflow under the forward hedge is 4.12 mln \$. This would happen if the following forward rate is available in the market

$$\begin{array}{l} \text{¥} \quad \$ \\ 500 \text{ ¥} : 4.12 \quad 0.00824 \\ 1 \text{ ¥} : ? \end{array}$$

$$1 \$: 0.00824 = \frac{1}{0.00824} = 121.35 \$$$

$$(\text{?}) = 1$$

Solution 4 (A) A forward hedge

$$1 \text{ €} = 1.10 \$ = 27.27 \text{ €}$$

$$(\text{?}) = 30 \$$$

(B) Money Market

"Case Studies"

Step-1 Borrow 29.12 \$ @ 3% for 6 mths. $\frac{30}{103\%}$

"Case"

Step-2 Convert the above \$ into Euros at the above spot rate

$$1 \text{ €} = 1.05 \$ \quad 27.74 \text{ €}$$

$$27.74 \times 1.05 = 29.12 \text{ €}$$

Step-3 Invest the Euros 27.74

Step-4 On maturity receive export proceeds of 30 mln \$ \$ repay the \$ loan of Step-1 along with interest.

Step-5 Proceeds from = Inv. in Step 3 + Int
Money Market Hedge
$$= 27.74 + 0.69$$
$$= 28.43$$

(c) Option Hedge

Strike Price $1 \$ = € 0.95$
Spot Price $= \frac{1}{1.1}$ $1 \$ = 0.91 €$

A put option on \$ having a strike price $1 \$ = 0.95 €$ i.e. it would be exercised.

Total Cash Proceeds.

$1 € = 0.95 \$$

28.50 \$

(9) = 30 mln €

(←) Premium

0.6 \$

27.9 \$

Solution 2(a) For Baltimore m/c giving an option to pay either 10000 \$ / 15000 SF implies a rate of

$$\frac{10000 \$}{15000 \text{ SF}} = 0.67 \$$$

(b) If the spot exchange rate.

1 SF = 0.62 \$ and the Swiss firm chooses to pay 10000 \$ it would cost the firm ✓

$$1 \text{ SF} = 0.62 \$$$

$$(?) = 10000$$

$$16129 \text{ SF}$$

Whereas, if it chooses to pay 15000 SF it would be cheaper. ✓

∴ The Swiss Co. will rather pay in SF and the value of this option is 1129 SF (16129 SF - 15000 SF)

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Date		

1. The first part of the problem is to find the area of the rectangle. The area of a rectangle is given by the formula $A = l \times b$, where l is the length and b is the breadth.

$$A = l \times b$$

$$A = 10 \times 5$$

$$A = 50$$

2. The second part of the problem is to find the perimeter of the rectangle. The perimeter of a rectangle is given by the formula $P = 2(l + b)$, where l is the length and b is the breadth.

$$P = 2(l + b)$$

$$P = 2(10 + 5)$$

$$P = 2(15)$$

$$P = 30$$

$$P = 30$$

$$P = 30$$

$$P = 30$$

3. The third part of the problem is to find the area of the square. The area of a square is given by the formula $A = s^2$, where s is the side length.

$$A = s^2$$

$$A = 10^2$$

$$A = 100$$

Advanced Forex (Principles Types of Rates)

TT Buying Rate

\$ Re I' Bank Spot Buy Rate	XXXX
(Less) TT Exchange Margin	<u>XXXX</u>
\$ Re TT Buying Rate	<u><u>✓✓</u></u>

TT Selling Rate :

\$ Re I' Bank Spot Sell Rate	XXXX
ADD :- TT Exchange Margin	<u>XXXX</u>
\$ Re. TT Selling Rate	<u><u>✓✓</u></u>

I' Bank = Inter Bank

TT = Telegraphic Transfers.

Bill Buying Rate (Exporter - Export Bill Purchase)

\$ Re. I' Bank Spot Buy Rate	XXXX
ADD:- Premium (Lowest)	XXXX
-OR-	

(Less) :- Discount (Highest)	<u>XXXX</u>
\$ Re I' Bank forward rate	XXXX
(Less) :- TT Exchange Margin	<u>XXXX</u>
Bill Buying Rate	<u><u>✓✓</u></u>

Bill Selling Rate (Importer - Import Bill Retirement or Payment)

\$ Re I' Bank Spot Sell Rate	XXXX
ADD:- TT Exchange Margin	<u>XXXX</u>
\$ Re TT Selling Rate	XXXX
ADD:- Bill Exchange Margin	<u>XXXX</u>
Bill Selling Rate	<u><u>✓✓</u></u>

⊛ All Rates are to be rounded off in the multiples of 0.0025.

Solution 93 TT Buying Rate

\$ Re Inter Bank Spot Buy Rate	49.2500
(-) TT Exch. Margin (0.08%)	<u>0.0394</u>
\$ Re TT Buying Rate	49.2106
\$ Re TT Buying Rate (Roff)	49.2100

$$\text{Rupee Amt. payable to customer} \\ = 49.2100 \times 5000 = 2,46,050 \text{ R.}$$

Solution 96 TT Selling Rate

\$ Re Inter Bank Spot Sell Rate	49.3825
+ TT Exch. Margin (0.15%)	<u>0.0741</u>
\$ Re TT Selling Rate	49.4566
\$ Re TT Selling Rate	49.4575

$$\text{Amt Payable} = 25000 \times 49.4575 \\ = 1,23,644$$

Solution 105 TT Selling Rate

\$ Re I Bank Spot Sell Rate	49.2125
+ Exch. Rate (0.15%)	<u>0.0738</u>
\$ Re TT Selling Rate	49.2863
\$ Re TT Selling Rate (Roff)	49.2875

$$\text{Amt. Payable} = 49.2875 \times 10000 \\ = 4,92,875$$

Solution 94 Bill Buying Rate

\$ Re I Bank Spot Buy Rate	49.6525
(-) Discount	0.6000
\$ Re Int. Bank For Buy Rate	49.0525
(-) TT Exch. margin (0.15%)	0.0735
\$ Bill Buying Rate	48.9789
\$ Bill Buying Rate (Roff)	48.9800

$$\begin{aligned}\text{Amt Payable} &= 48.9800 \times 100000 \\ &= 48,98,000\end{aligned}$$

Solution 95 Bill Buying Rate

\$ Re I Bank Spot Buy Rate	49.3000
(-) Exch. margin (0.1%)	0.0493
\$ Bill Buying Rate	49.2507
\$ Bill Buying Rate (Roff)	49.2525

$$\begin{aligned}&= 49.2525 \times 85000 (100000 - 15\%) \\ &= 41,86,250\end{aligned}$$

$$\begin{aligned}&\therefore \text{Amt Payable} \quad 41,86,250 \\ &(-) \text{Int. to be received from customer} \\ &\quad \left(41,86,250 \times 10\% \times \frac{25}{365} \right) \quad 28672 \\ &\quad \underline{\underline{41,57,578}}\end{aligned}$$

Note:-

The transaction falls due in October (8th Sept + 25 days). But, since the forward

IMP...

Solution 101 Bill Buying Rate.

\$ Re I Bank June Rate (Buy)	50.9525
(-) Exch. Margin (0.10%)	<u>0.051</u>
\$ Bill Buying Rate	50.9015
\$ Bill Buying Rate (Roff)	50.9025

Am't payable to customer = 127,25,625
(50.9025 × 250,000)

(-) 25% EEFC	<u>31,81,406</u>
	95,44,219
(-) Int @ 10% $(95,44,219 \times 10\% \times \frac{85}{365})$	<u>22,92,625</u>
	<u>93,21,956</u>

Solution 102 Bill Buying Rate

\$ Re I Bank June Buy Rate	48.7825
(-) Discount	<u>0.4000</u>
\$ Re I Bank forward Buy Rate	48.3825
(-) Exch. Margin (0.10%)	<u>0.0484</u>
\$ Bill Buying Rate	48.3341
\$ Bill Buying Rate (Roff)	48.3350

Am't Payable (48.3350 × 50,000) 24,16,750
(-) Int thereon
 $24,16,750 \times 10\% \times \frac{25}{365}$ 16,553

Am't Payable.

24,00,197

Solution 97 Bill Selling Rate.

\$ Re I Bank Spot Sell Rate	49.7200
(+) TT Exch. Margin (0.15%)	<u>0.0745</u>
\$ Re TT Selling Rate	49.7945
(+) Bill Margin (0.20%)	<u>0.0995</u>
\$ Bill Selling Rate	49.8940
\$ Re Bill Selling Rate (R.off)	49.8950

$$\text{Amt Payable} = 49.8950 \times 10000 = 4,98,950$$

Solution 106 Bill Selling Rate.

\$ Re I Bank Spot Sell Rate	49.6850
+ TT Exch. Margin (0.15%)	<u>0.0745</u>
\$ Re TT Selling Rate	49.7595
+ Bill Margin (0.2%)	<u>0.0995</u>
\$ Bill Selling Rate	49.8590
\$ Re Bill Selling Rate (R.off)	49.8600

$$\begin{aligned}\text{Amt Payable} &= 49.8600 \times 50100 (50,000 + 100) \\ &= 24,97,986.\end{aligned}$$

TT ~~Buying~~ ^{Selling} Rate.

Solution 98 Bill discounted by the bank at 49.16 is dishonoured on maturity.
 $\therefore$ The Bank will recover the amt. from the customer by selling the foreign currency & quoting the TT Selling Rate.

\$ Re I/Bank Spot Sell Rate	48.9700
+ TT Margin (0.15%)	<u>0.0735</u>
\$ Re I/Bank Spot Sell Rate	48.9700 49.0435
\$ Re I/Bank Sell Rate R.off	49.0450

Amt. ^{debited} Paid to customer on purchase of bill dishonour = $49.0450 \times 100,000$ 49,04,500

($\rightarrow$) Amt paid to the customer on purchase of bill $49.16 \times 100,000$	<u>49,16,000</u>
Profit to customer	<u><u>11,750</u></u>

Solution 100 The Rate to be quoted to the customer would be the 1 which is prevailing on 14th of August. The customer A/c will be credited at the following rate i.e.

TT ~~Selling~~ ^{Buying} Rate

\$ Re I/Bank Spot Buy Rate	48.6850
($\rightarrow$) Exch. margin (0.08%)	<u>0.0389</u>
\$ Re Buy Rate (R.off)	48.6450

A/c Paid to customer = $48.6450 \times 100,000 = 48,64,500$

Solution 101

	\$ Re I Bank Buy Rate	49.4300
	(-) Exch. Margin (0.1%)	<u>0.0494</u>
	\$ Re Buy Rate	49.3806
Bill Buying Rate	\$ Re Buy Rate (R.off)	49.3800

Am't Payable 2398562
 (49.38×48573.56)

(-) Interest $2398562 \times 10\% \times \frac{5}{365}$ 3285

2395277

(-) Out of Pocket Expenses 400

2394877

Solution 102

	\$ Re I Bank Buy Rate	49.3675
	(-) Exch. Margin 0.08%	<u>0.0395</u>
TT Buying Rate	\$ Re Buy Rate	49.380
	\$ Re Buy Rate (R.off)	49.3275

Am't. Payable 49.3275×148000 7300470

(-) Int. $7300470 \times 10\% \times \frac{5}{365}$

10000
7290470

(-) Out of Pocket Expenses 300

7290170

CROSS RATE

International Mkt

$$1 \$ = 1.50 / \underline{1.65} \text{ AUD (Buy \$ = Sell AUD)}$$

Inter Bank Mkt

$$1 \$ = \underline{40.15} / 40.65 \text{ Rs. (Sell \$ - Buy Rs.)}$$

TT Buying Rate

\$ Re. Spot I^l Bank Buy Rate XXXX

(-) Exch. Margin XXXX

\$ Re TT Buying Rate (1) XXXX

\$ FC Spot I^l Bank Sell Rate (2) XXXX

Re. FC TT Buying Rate $(1 \div 2)$



Solution 107 The Initial transaction of issuing a DD i.e TT Selling cancelling the transaction means quoting the customer TT Buying Rate.

(ROSS-RATE
TT Buying)

\$ Re Spot I Bank Buy Rate	49.5275
(-) Exch. Margin (0.08%)	<u>0.0396</u>
\$ Re TT Buying Rate (1)	49.4879
\$ FC Spot International Mkt Sell Rate (2)	<u>1.4561</u>
Re FC TT Buying Rate (1 ÷ 2)	33.9866
Re. FC TT Buying Rate (R. off)	33.9875

Amt. Paid by customer on issue on DD
 $34.4850 \times 50000 = 17,24,250$

(-) Amt of Credit Rec. to the customer on Cancellation $33.9875 \times 50000 = 16,99,375$
 Loss to the customer 24,875

- OR -

USD / INR = 1.4561 (Sell Rate)

USD / INR = Rs. 49.5275 (Buy Rate)

$$\therefore \frac{\text{USD/INR}}{\text{USD/INR}} = \frac{49.5275}{1.4561} = 33.9874$$

$$- \frac{0.0264 (0.08\%)}{33.9874}$$

$$22.0012 \text{ INR/...}$$

Solution 108

	\$ Re Spot I Bank Buy Rate	49.3500
	(-) Exch. Margin (0.08%)	<u>0.0395</u>
CROSS RATE	\$ Re TT Buying Rate (1)	49.3105
TT Buying	\$ FC Spot Indl Mkt Sell Rate (2)	7.9280
	Re. FC TT Buying Rate (1 ÷ 2)	6.2198
	Re. FC TT Buying Rate (R.off)	6.2200

$$\begin{aligned}\text{Amt Payable} &= 6.2200 \times 85000 \\ &= 528,700\end{aligned}$$

- OR -

$$\begin{aligned}\text{USD / INR} &= \text{Rs. } 49.35 \quad (\text{Buy Rate}) \\ \text{USD / INR} &= 7.9280 \quad (\text{Sell Rate})\end{aligned}$$

$$\begin{aligned}\frac{\text{USD / INR}}{\text{USD / INR}} &= \frac{\text{Rs. } 49.35}{7.9280} = 6.2248 \\ &\quad - 0.0049 \quad (0.08\%) \\ &\quad \hline &\quad 6.2199 \\ &\quad 6.2200 \quad (\text{R.off})\end{aligned}$$

CROSS RATE - Bill Buying Rate

\$ Re. Spot I' Bank Buy Rate	XXXX
ADD :- Premium (Lowest)	XXXX
-OR-	
Less:- Discount (Highest)	<u>XXXX</u>
\$ Re I' Bank forward Rate	XXXX
(-) Exch. Margin	<u>XXXX</u>
\$ Bill Buying Rate (1)	XXXX

\$ FC I'nal Mkt Spot Sell Rate	XXXX
ADD :- Premium (Highest)	XXXX
-OR-	
Less:- Discount (Lowest)	<u>XXXX</u>
\$ FC forward Rate (2)	XXXX

FC - Re. Bill Buying Rate ($1 \div 2$)

XXXX

Solution 109

\$ Re. I Bank Spot Buy Rate	49.3500
(-) Exch. Margin (0.10%)	<u>0.0494</u>
\$ Bill Buying Rate	49.3006
\$ Bill Buying Rate (1)	49.3006

(Cross Rate
Bill
Buying Rate)

\$ FC I'nal Mkt Spot Sell Rate	1.8340
+ Premium (Higher)	<u>0.0045</u>
\$ FC Forward Rate (2)	1.8385

FC Re Bill Buying Rate (1 ÷ 2)	26.8156
FC Re. Bill Buying Rate R. off	26.8150

Am't Payable 26.815×100000	26,81,500
(-) Int. $2681500 \times 10\% \times \frac{25}{365}$	<u>1,83,66</u>
	<u><u>26,63,134</u></u>

CROSS RATE - TT Selling Rate

— \$ Re I ^l Bank Spot Sell Rate	xxx
ADD:- Exch. Margin.	<u>xxx</u>
TT Selling Rate (1)	xxx
— \$ FC I ^l Nat Mkt Spot Buy Rate (2)	<u>xxx</u>
Re FC TT Selling Rate (1 ÷ 2)	<u>xxx</u>

CROSS RATE - Bill Selling Rate

\$ Re I ^l Bank Spot Sell Rate	xxxxx
(+) Exch. Margin	<u>xxxxx</u>
TT Selling Rate	xxxxx
(+) Bill Exch. Margin	<u>xxxxx</u>
Bill Selling Rate (1)	xxxxx
\$ FC I ^l Nat Mkt Spot Buy Rate (2)	xxxxx
Re FC Bill Selling Rate (1 ÷ 2)	<u>xxxxx</u>