Test Series: March, 2016

MOCK TEST PAPER – 2

FINAL COURSE: GROUP – I

PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT

SUGGESTED ANSWERS/HINTS

1. (a) Calculation of Maximum Price to be paid for the acquisition of Nishana Ltd.

(Rs. Crore)

Year	0	1	2	3	4	5
Operating cash flow	-	10.00	10.00	10.00	10.00	10.00
Gain on Sale of office premises	20.00	-	-	-	-	-
Synergy Benefits	-	2.00	2.00	2.00	2.00	2.00
Disposal of Nishana Ltd.	-	-	-	-	-	50.00
Net cash flow	20.00	12.00	12.00	12.00	12.00	62.00
PVF @ 20%	1	0.833	0.694	0.579	0.482	0.402
Present value	20.00	10.00	8.328	6.948	5.784	24.924

Total of Present value	75.984
Less: Market Value of Debentures	(15.000)
	60.984

Thus, the maximum price to be paid for acquisition of Nishana Ltd. Rs. 60.984 crore.

(b) Let Premium be P, then

0 = (470 – 460 – P) 0.20 + (– P) 0.25 + (480 – 460 – P) 0.35 + (490 – 460 – P) 0.05 + (500 – 460 – P) 0.15

0 = (10 – P) 0.20 – 0.25 P + (20 – P) 0.35 + (30 – P) 0.05 + (40 – P) 0.15

0 = 2 – 0.20P – 0.25P + 7 – 0.35P + 1.5 – 0.05P + 6 – 0.15P

0 = 16.50 – P

P = 16.50

(c) It is stated that the cash flows have been adjusted for inflation; hence they are "nominal". The cost of capital or discount rate is "real". In order to be compatible, the cash flows should be converted into "real flow". This is done as below:

Year	*Nominal cash*	*Adjusted*	*Real cash*	*PVF @ 10%*	*PV of cash*

	flows	*Inflation* factor*	*flows*		*flows*
0	(70)	–	(70)	1.000	(70)
1	30	0.952	28.56	0.909	25.96
2	40	0.907	36.28	0.826	29.97
3	30	0.864	25.92	0.751	19.47
				Total	75.40
Less: Cash out flow					70.00
NPV (+)					5.40

* 1/1.05; $1/(1.05)^2$; $1/(1.05)^3$;

Advise: With positive NPV, the project is financially viable.

Alternatively, instead of converting cash flows into real terms, the discount rate can be converted into nominal rate. Result will be the same.

An alternative solution is presented herewith

Alternative solution:

Year	*Nominal cash flows*	*PVF @ 10% adjusted by the inflation factor i.e. 5%**	*PV of cash flows*
1	30	0.866	25.98
2	40	0.749	29.96
3	30	0.649	19.47
		Cash inflow	75.41
		Less: Cash out flow	70.00
		Net present value	5.41

* $\frac{0.909}{1.05}=0.866, \frac{0.826}{1.1025}=0.749, \frac{0.751}{1.1576}=0.649$

Advise: With positive NPV, the project is financially viable.

(d) Market Risk Premium (A) = 14% – 7% = 7%

Share	*Beta*	*Risk Premium (Beta x A) %*	*Risk Free Return %*	*Return %*	*Return* Rs.
Oxy Rin Ltd.	0.45	3.15	7	10.15	8,120
Boxed Ltd.	0.35	2.45	7	9.45	14,175
Square Ltd.	1.15	8.05	7	15.05	33,863
Ellipse Ltd.	1.85	12.95	7	19.95	89,775
Total Return					1,45,933

Total Investment Rs. 9,05,000

(i) Portfolio Return = $\frac{₹\,1,45,933}{₹\,9,05,000} \times 100 = 16.13\%$

(ii) Portfolio Beta

Portfolio Return = Risk Free Rate + Risk Premium x β = 16.13%

7% + 7β = 16.13%

β = 1.30

Alternative Approach

First we shall compute Portfolio Beta using the weighted average method as follows:

$$Beta_P = 0.45X\frac{0.80}{9.05} + 0.35X\frac{1.50}{9.05} + 1.15X\frac{2.25}{9.05} + 1.85X\frac{4.50}{9.05}$$

= 0.45x0.0884+ 0.35X0.1657+ 1.15X0.2486+ 1.85X0.4972 = 0.0398+ 0.058 + 0.2859 + 0.9198 = 1.3035

Accordingly,

(i) Portfolio Return using CAPM formula will be as follows:

$R_P = R_F + Beta_P(R_M - R_F)$

= 7% + 1.3035(14% - 7%) = 7% + 1.3035(7%)

= 7% + 9.1245% = 16.1245%

(ii) Portfolio Beta

As calculated above 1.3035

2. (a) (i) (a) Effective Annualized Net Cost under Factoring option (With Recourse)

Particulars	Rs.
Average level of Receivables = 40,00,000 × 12 × 45/360	60,00,000
Factoring commission = 60,00,000 × 2/100	1,20,000
Factoring reserve = 60,00,000 × 25/100	15,00,000
Amount available for advance = Rs. 60,00,000 – (1,20,000 + 15,00,000)	43,80,000
Factor will deduct his interest @ 10%:- $\frac{43,80,000 \times 10 \times 45}{100 \times 360}$	Rs. 54,750
Advance to be paid = (Rs. 43,80,000 – Rs. 54,750)	43,25,250

(b) Annual Cost of Factoring to the Firm: Rs.

Factoring commission (Rs. 1,20,000 × 360/45)	9,60,000
Interest charges (Rs. 54,750 × 360/45)	4,38,000
Total	13,98,000
Firm's Savings on taking Factoring Service:	
Cost of credit administration saved (Rs. 50,000 × 12)	6,00,000
Net cost to the Firm (Rs. 13,98,000 – Rs. 6,00,000)	7,98,000
Effective annualized net cost to the firm = $\frac{₹\ 7,98,000 \times 100}{43,25,250}$	18.45%

(ii) Effective Annualized Cost under Discount option

Since Champak Ltd. is offering a discount of 2% for payment in 10 days the customer who opts for this option instead of 45 days are paying 35 days earlier. Accordingly,

98(1 + d) = 100 i.e.

d = 2.04

By using following formula of simple interest the effective annual cost of discount option can be found as follows:

$2.04\% \times \frac{360}{35} = 20.98\%$

(ii) (a) Effective Annualized Net Cost under Factoring option (Without Recourse)

Particulars	*Rs.*
Average level of Receivables = 40,00,000 × 12 × 45/360	60,00,000
Factoring commission = 60,00,000 × 3/100	1,80,000
Factoring reserve = 60,00,000 × 25/100	15,00,000
Amount available for advance = Rs. 60,00,000 – (1,80,000 + 15,00,000)	43,20,000
Factor will deduct his interest @ 10%:-	
$\frac{43,20,000 \times 10 \times 45}{100 \times 360}$	Rs. 54,000
Advance to be paid = (Rs. 43,20,000 – Rs. 54,000)	42,66,000

(b) Annual Cost of Factoring to the Firm: Rs.

Factoring commission (Rs. 1,80,000 × 360/45)	14,40,000
Interest charges (Rs. 54,000 × 360/45)	4,32,000
Total	18,72,000
Firm's Savings on taking Factoring Service:	Rs.
Cost of credit administration saved (Rs. 50,000 × 12)	6,00,000
Cost of Bad Debts (Rs. 4,80,00,000 × 1.5/100) avoided	7,20,000
Total	13,20,000
Net cost to the Firm (Rs. 18,72,000 – Rs. 13,20,000)	5,52,000
Effective rate of interest to the firm = $\frac{₹\ 5,52,000 \times 100}{42,66,000}$	12.94%

Effective Annualized Cost under Discount option

The effective annual cost of discount option is 20.98% (as computed above)

(b) (i) Returns for the year

(All changes on a Per -Unit Basis)

Change in Price:	Rs.48 – Rs.45 =	Rs. 3.00
Dividends received:		Rs. 1.00
Capital gains distribution		Rs. 2.00
Total reward		Rs. 6.00

Holding period reward: $\frac{₹6.00}{₹45} \times 100 = 13.33\%$

(ii) When all dividends and capital gains distributions are re-invested into additional units of the fund @ (Rs. 46/unit)

Dividend + Capital Gains per unit = Rs. 1.00 + Rs. 2.00 = Rs. 3.00

Total received from 200 units = Rs. 3.00 x 200 = Rs. 600/-.

Additional Units Acquired = Rs. 600/Rs. 46 = 13.04 Units.

Total No. of Units = 200 units + 13.04 units = 213.04 units.

Value of 213.04 units held at the end of the year

= 213.04 units x Rs.48 = Rs. 10225.92

Price Paid for 200 Units at the beginning of the year = 200 units x Rs. 45

= Rs. 9000.00

Holding Period Reward Rs. (10225.92 – 9000.00) = Rs. 1225.92

Holding Period Reward $= \frac{₹1225.92}{₹\ 9000} \times 100 = 13.62\%$

3. (a) Spot Rate = Rs. 40,00,000 /US$83,312 = 48.0123

Forward Premium on US$ = [(48.8190 – 48.0123)/48.0123] x 12/6 x 100 = 3.36%

Interest rate differential = 12% - 8%

= 4% (Negative Interest rate differential)

Since the negative Interest rate differential is greater than forward premium there is a possibility of arbitrage inflow into India.

The advantage of this situation can be taken in the following manner:

1. Borrow US$ 83,312 for 6 months

   Amount to be repaid after 6 months

   = US $ 83,312 (1+0.08 x 6/12) = US$86,644.48

2. Convert US$ 83,312 into Rupee and get the principal i.e. Rs.40,00,000

   Interest on Investments for 6 months – Rs. 40,00,000/- x 0.06= Rs. 2,40,000/-

   Total amount at the end of 6 months = Rs. (40,00,000 + 2,40,000) = Rs.42,40,000/-

   Converting the same at the forward rate = Rs. 42,40,000/ Rs. 48.8190

   = US$ 86,851.43

Hence the gain is US $ (86,851.43 – 86,644.48) = US$ 206.95 OR

Rs.10,103 i.e., ($206.95 x Rs. 48.8190)

Expected Rate spot after 180 days

Future rate for 1 US $ (x_i)	Probability (p_i)	$x_i p_i$
Rs. 48.7600	25%	12.19
Rs. 48.8000	60%	29.28
Rs. 48.8200	15%	7.323
		48.7930

Converting the amount of investment and interest at the expected forward rate as follows:

= Rs. 42,40,000/ Rs. 48.7930= US$ 86,897.71

Hence the gain is US $ (86,897.71 – 86,644.48) = US$ 253.23 OR Rs. 12,356 i.e., ($253.23 x Rs.48.7930)

Since the expected gain is more in case of uncovered interest arbitrage the arbitrageur should go for same. However this gain is slightly higher than the Covered Interest Arbitrage hence he may not go for uncovered interest arbitrage as there as also chances of actual spot rate may not turn out favourable.

(b)

Date	Closing Sensex	Sign of Price Charge
1.10.07	2800	
3.10.07	2780	-
4.10.07	2795	+
5.10.07	2830	+
8.10.07	2760	-
9.10.07	2790	+
10.10.07	2880	+
11.10.07	2960	+
12.10.07	2990	+
15.10.07	3200	+
16.10.07	3300	+
17.10.07	3450	+
19.10.07	3360	-
22.10.07	3290	-
23.10.07	3360	+
24.10.07	3340	-
25.10.07	3290	-
29.10.07	3240	-
30.10.07	3140	-
31.10.07	3260	+

Total of sign of price changes (r) = 8

No of Positive changes = n_1 = 11

No. of Negative changes = n_2 = 8

$$\mu_r = \frac{2n_1n_2}{n_1+n_2}+1$$

$$\mu = \frac{2\times 11\times 8}{11+8} + 1 = 176/19 + 1 = 10.26$$

$$\hat{\sigma}_r = \sqrt{\frac{2n_1n_2(2n_1n_2 - n_1 - n_2)}{(n_1+n_2)^2(n_1+n_2-1)}}$$

$$\hat{\sigma}_r = \sqrt{\frac{(2\times 11\times 8)(2\times 11\times 8 - 11 - 8)}{(11+8)^2(11+8-1)}} = \sqrt{\frac{176\times 157}{(19)^2(18)}} = \sqrt{4.252} = 2.06$$

Since too few runs in the case would indicate that the movement of prices is not random. We employ a two- tailed test the randomness of prices.

Test at 5% level of significance at 18 degrees of freedom using t- table

The lower limit

$= \mu - t \times \hat{\sigma}_r = 10.26 - 2.101 \times 2.06 = 5.932$

Upper limit

$= \mu + t \times \hat{\sigma}_r = 10.26 + 2.101 \times 2.06 = 14.588$

At 10% level of significance at 18 degrees of freedom

Lower limit

$= 10.26 - 1.734 \times 2.06 = 6.688$

Upper limit

$= 10.26 + 1.734 \times 2.06 = 13.832$

As seen r lies between these limits. Hence, the market exhibits weak form of efficiency.

*For a sample of size n, the t distribution will have n-1 degrees of freedom.

4. (a) Workings:

Asset turnover ratio	= 1.1
Total Assets	= Rs. 600
Turnover Rs. 600 lakhs × 1.1	= Rs. 660 lakhs
Liabilities	= Rs. 125 lakhs + 50 lakhs = 175 lakh
Interest	= Rs. 125 lakhs × 0.08 + Rs. 50 lakhs × 0.10 × $\frac{9}{12}$
	= Rs. 10 lakh + Rs. 3.75 lakh = Rs. 13.75 lakh

Operating Margin = 10%

Hence operating cost = (1 - 0.10) Rs. 660 lakhs = Rs. 594 lakh

Dividend Payout = 16.67%

Tax rate = 40%

(i) Income statement

	(Rs. Lakhs)
Sale	660.00
Operating Exp	594.00
EBIT	66.00
Interest	13.75
EBT	52.25
Tax @ 40%	20.90
EAT	31.35
Dividend @ 16.67%	5.23
Retained Earnings	26.12

(ii) SGR = G = ROE (1-b)

$$ROE = \frac{PAT}{NW} \text{ and } NW = \text{Rs. } 100 \text{ lakh} + \text{Rs. } 300 \text{ lakh} = 400 \text{ lakh}$$

$$ROE = \frac{\text{Rs. } 31.35 \text{ lakhs}}{\text{Rs. } 400 \text{ lakhs}} \times 100 = 7.84\%$$

SGR = 0.0784(1 – 0.1667) = 6.53%

(iii) Calculation of fair price of share using dividend discount model

$$P_o = \frac{D_0(1+g)}{k_e - g}$$

$$\text{Dividends} = \frac{\text{Rs. } 5.23 \text{ lakhs}}{\text{Rs. } 10 \text{ lakhs}} = \text{Rs. } 0.523$$

Growth Rate = 6.53%

$$\text{Hence } P_o = \frac{\text{Rs. } 0.523(1+0.0653)}{0.15\text{-}0.0653} = \frac{\text{Rs. } 0.5572}{0.0847} = \text{Rs. } 6.58$$

(iv) Since the current market price of share is Rs. 5, the share is undervalued. Hence the investor should invest in the company.

(b) Profit as per Spot Rates on the date of export/import

	Rs.
Sales Revenue (US$ 200 X 200 X Rs. 65)	26,00,000
Less: Cost of Imported Raw Material $\left(200 \times \frac{6000}{115} \times \text{Rs. } 66\right)$	6,88,696
Labour Cost (200 × Rs. 1,300)	2,60,000
Variable Overheads (200 × Rs. 650)	1,30,000
Profit	15,21,304

Profit as per expected Spot Rates on the date of receipt/ payment

	Rs.
Sales Revenue (US$ 200 X 200 X Rs. 68.90)	27,56,000
Less: Cost of Imported Raw Material (200 X $\frac{6000}{105}$ X Rs. 69.25)	7,91,429
Labour Cost (200 X Rs. 1,300)	2,60,000
Variable Overheads (200 X Rs. 650)	1,30,000
Profit	15,74,571

Increase/ (Decrease) in Profit due to Transaction Exposure Rs. 53,267

(Rs. 15,74,571 – Rs. 15,21,304)

5. (a) (i) If there is no growth in Dividend then market price of share should be:

$$P_0 = \frac{D}{k} = \frac{\text{Rs. } 2.50}{0.20} = \text{Rs. } 12.50$$

(ii) If there is growth in Dividend @ 5% p.a. then market price of share should be:

$$P_0 = \frac{D_0 (1 + g)}{(k - g)} = \frac{\text{Rs. } 2.50 (1 + 0.05)}{(0.20 - 0.05)} = \text{Rs. } 17.50$$

(iii) If constant dividend for first 5 years and thereafter Dividend grows @ 5% p.a. then market price of share should be:

P_0 = PV of Constant Dividend for first 5 years + PV of Share after 5 years with constant growth of dividend in perpetuity

$$P_0 = \text{PVAF } (20\%, 5) \times \text{Rs. } 2.50 + \text{PVF } (20\%, 5) \times \frac{\text{Rs. } 2.50 (1 + 0.05)}{(0.20 - 0.05)}$$

$$P_0 = 2.991x \text{ Rs. } 2.50 + 0.402 \times \frac{\text{Rs. } 2.50\,(1 + 0.05)}{(0.20 - 0.05)}$$

P_0 = Rs. 7.48 + Rs. 7.04 = Rs. 14.52

(iv) If constant dividend for first 5 years and thereafter share is sold at Rs. 20, then market price of share should be:

P_0 = PV of Constant Dividend for first 5 years + PV of Share after 5 years

P_0 = PVAF (20%, 5) x Rs. 2.50 + PVF (20%, 5) x Rs. 20

P_0 = 2.991 x Rs. 2.50 + 0.402 x Rs. 20

P_0 = Rs. 7.48 + Rs. 8.04 = Rs. 15.52

(b) High growth phase :

k_e = 0.10 + 1.15 x 0.06 = 0.169 or 16.9%.

k_d = 0.13 x (1-0.3) = 0.091 or 9.1%.

Cost of capital = 0.5 x 0.169 + 0.5 x 0.091 = 0.13 or 13%.

Stable growth phase :

k_e = 0.09 + 1.0 x 0.05 = 0.14 or 14%.

k_d = 0.1286 x (1 - 0.3) = 0.09 or 9%.

Cost of capital = 0.6 x 0.14 + 0.4 x 0.09 = 0.12 or 12%.

Determination of forecasted Free Cash Flow of the Firm (FCFF)

(Rs. in crores)

	Yr. 1	Yr. 2	Yr 3	Yr. 4	Terminal Year
Revenue	2,400	2,880	3,456	4,147.20	4,561.92
EBIT	360	432	518.40	622.08	684.29
EAT	252	302.40	362.88	435.46	479.00
Capital Expenditure	96	115.20	138.24	165.89	-
Less Depreciation					
Δ Working Capital	100.00	120.00	144.00	172.80	103.68
Free Cash Flow (FCF)	56.00	67.20	80.64	96.77	375.32

Alternatively it can also be computed as follows:

(Rs. in crores)

	Yr. 1	Yr. 2	Yr 3	Yr. 4	Terminal Year
Revenue	2,400	2,880	3,456	4,147.20	4,561.92
EBIT	360	432	518.40	622.08	684.29
EAT	252	302.40	362.88	435.46	479.00
Add: Depreciation	240	288	345.60	414.72	456.19
	492	590.40	708.48	850.18	935.19
Less: Capital Exp.	336	403.20	483.84	580.61	456.19
Δ WC	100.00	120.00	144.00	172.80	103.68
	56.00	67.20	80.64	96.77	375.32

Present Value (PV) of FCFF during the explicit forecast period is:

FCFF (Rs. in crores)	PVF @ 13%	PV (Rs. in crores)
56.00	0.885	49.56
67.20	0.783	52.62
80.64	0.693	55.88
96.77	0.613	59.32
		Rs. 217.38

Terminal Value of Cash Flow

$$\frac{375.32}{0.12 - 0.10} = ₹\,18,766.00\,\text{Crores}$$

PV of the terminal, value is:

$$\text{Rs. } 18,766.00\,\text{Crores} \times \frac{1}{(1.13)^4} = \text{Rs. } 18,766.00\,\text{Crores} \times 0.613 = \text{Rs. } 11,503.56\ \text{Crores}$$

The value of the firm is :

Rs. 217.38 Crores + Rs. 11,503.56 Crores = Rs. 11,720.94 Crores

6. (a) (i) Return of a US Investor

$$= \frac{\text{Ending Price} - \text{Initial Price}}{\text{Initial Price}} \times 100$$

$$= \frac{1919 - 2028}{2028} \times 100 = -5.37\%$$

(ii) Return of Mr. X

Initial Investment (Rs.)	1.58 Crore
Applicable Exchange Rate on 1.1.20x1	Rs. 62.25
Equivalent US$	US$ 2,53,815.26
Purchase Price of Standard & Poor Index	2028
No. of Standard & Poor Indices Purchased	125.16
Ending Price of Standard & Poor Index	1919
Proceeds realised in US$ on sale of Standard & Poor Index	US$ 2,40,182.04
Applicable Exchange Rate on 1.1.20x2	Rs. 67.25
Proceeds realised in INR on sale of Standard & Poor Index	Rs. 1,61,52,242
Rate of Return $\left(\frac{16152242-15800000}{15800000}\times 100\right)$	2.23%

(iii) Rate of Return had the amount been invested in India

Initial Investment (Rs.)	1.58 Crore
Purchase Price of Indian Index	7395
No. of Standard & Poor Indices Purchased	2136.58
Let Ending Price of Indian Index	X
Then to be indifferent with return in International Market	$\frac{2136.58\times X - 1.58}{1.58}\times 100 = 2.23$
Price of Indian Index to be indifferent	7559.90 say 7560

(b) Securities need to be ranked on the basis of excess return to beta ratio from highest to the lowest.

Security	R_i	β_i	$R_i - R_f$	$\frac{R_i - R_f}{\beta_i}$
A	15	1.5	8	5.33
B	12	2	5	2.5
C	10	2.5	3	1.2
D	9	1	2	2
E	8	1.2	1	0.83
F	14	1.5	7	4.67

Ranked Table:

Security	$R_i - R_f$	β_i	σ^2_{ei}	$\frac{(R_i - R_f) x}{\sigma^2_{ei}}$	$\sum_{e=i}^{N} \frac{(R_i - R_f) x}{\sigma^2_{ei}}$	$\frac{\beta_i^2}{\sigma^2_{ei}}$	$\sum_{e=i}^{N} \frac{\beta_i^2}{\sigma^2_{ei}}$	C_i
A	8	1.5	40	0.30	0.30	0.056	0.056	1.923
F	7	1.5	30	0.35	0.65	0.075	0.131	2.814
B	5	2	20	0.50	1.15	0.20	0.331	2.668
D	2	1	10	0.20	1.35	0.10	0.431	2.542
C	3	2.5	30	0.25	1.60	0.208	0.639	2.165
E	1	1.2	20	0.06	1.66	0.072	0.711	2.047

CA = 10 x 0.30 / [1 + (10 x 0.056)] = 1.923

CF = 10 x 0.65 / [1 + (10 x 0.131)] = 2.814

CB = 10 x 1.15 / [1 + (10 x 0.331)] = 2.668

CD = 10 x 1.35 / [1 + (10 x 0.431)] = 2.542

CC = 10 x 1.60 / [1 + (10 x 0.639)] = 2.165

CE = 10 x 1.66 / [1 + (10 x 0.7111)] = 2.047

Cut off point is 2.814

$$Z_i = \frac{\beta_i}{\sigma^2_{ei}}\left[\left(\left[\left[\frac{(R_i - R_f)}{\beta_i} - C\right]\right]\right)\right]$$

$$Z_A = \frac{1.5}{40}(5.33 - 2.814) = 0.09435$$

$$Z_F = \frac{1.5}{30}(4.67 - 2.814) = 0.0928$$

X_A = 0.09435 / [0.09435 + 0.0928] = 50.41%

X_F = 0.0928 / [0.09435 + 0.0928] = 49.59%

Funds to be invested in security A & F are 50.41% and 49.59% respectively.

7. (a) Steps in Simulation Analysis

(i) Modelling the project- The model shows the relationship of NPV with parameters and exogenous variables. (Parameters are input variables specified by decision maker and held constant over all simulation runs. Exogenous variables are input variables, which are stochastic in nature and outside the control of the decision maker).

(ii) Specify values of parameters and probability distributions of exogenous variables.

(iii) Select a value at random from probability distribution of each of the exogenous variables.

(iv) Determine NPV corresponding to the randomly generated value of exogenous variables and pre-specified parameter variables.

(v) Repeat steps (3) & (4) a large number of times to get a large number of simulated NPVs.

(vi) Plot frequency distribution of NPV.

(b) Cross-border leasing is a leasing agreement where lessor and lessee are situated in different countries. This raises significant additional issues relating to tax avoidance and tax shelters. It has been widely used in some European countries, to arbitrage the difference in the tax laws of different countries.

Cross-border leasing have been in practice as a means of financing infrastructure development in emerging nations. Cross-border leasing may have significant applications in financing infrastructure development in emerging nations - such as rail and air transport equipment, telephone and telecommunications, equipment, and assets incorporated into power generation and distribution systems and other projects that have predictable revenue streams.

A major objective of cross-border leases is to reduce the overall cost of financing through utilization by the lessor of tax depreciation allowances to reduce its taxable income, The tax savings are passed through to the lessee as a lower cost of finance. The basic prerequisites are relatively high tax rates in the lessor's country, liberal depreciation rules and either very flexible or very formalistic rules governing tax ownership.

(c) Companies are compelled to declare annual cash dividends for reasons cited below:-

(i) Shareholders expect annual reward for their investment as they require cash for meeting needs of personal consumption.

(ii) Tax considerations sometimes may be relevant. For example, dividend might be tax free receipt, whereas some part of capital gains may be taxable.

(iii) Other forms of investment such as bank deposits, bonds etc., fetch cash returns periodically, investors will shun companies which do not pay appropriate dividend.

(iv) In certain situations, there could be penalties for non-declaration of dividend, e.g. tax on undistributed profits of certain companies.

(d) It is increasingly realised that commercial evaluation of projects is not enough to justify commitment of funds to a project especially when the project belongs to public utility and irrespective of its financial viability it needs to be implemented in the interest of the society as a whole. Huge amount of funds are committed every year to various public projects of all types–industrial, commercial and those providing basic infrastructure facilities. Analysis of such projects has to be done with reference to the social costs and benefits since they cannot be expected to yield an adequate commercial rate of return on the funds employed at least during the short period. A social rate of return is more important. The actual costs or revenues do not necessarily reflect the monetary measurement of costs or benefits to the society. This is because the market price of goods and services are often grossly distorted due to various artificial restrictions and controls from authorities, hence a different yardstick has to be adopted for evaluating a particular project of social importance and its costs and benefits are valued at 'opportunity cost' or shadow prices to judge the real impact of their burden as costs to the society. Thus, social cost benefit analysis conducts a monetary assessment of the total cost and revenues or benefits of a project, paying particular attention to the social costs and benefits which do not normally feature in conventional costing.

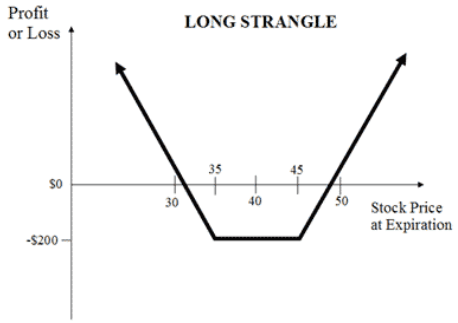
United Nations Industrial Development Organisation (UNIDO) and Organisation of Economic Cooperation and Development (OECD) have done much work on Social Cost Benefit analysis. A great deal of importance is attached to the social desirability of projects like employment generation potential, value addition, foreign exchange benefit, living standard improvement etc. UNIDO and OECD approaches need a serious consideration in the calculation of benefits and costs to the society. This technique has got more relevance in the developing countries where public capital needs precedence over private capital.

(e) The strategy involves buying an out-of-the-money call and an out-of-the-money put option. A strangle is generally less expensive than a straddle as the contracts are purchased out of the money. Strangle is an unlimited profit, limited risk strategy that is taken when the options trader thinks that the underlying stock will experience significant volatility in the near term. It has two different strike prices.

Suppose XYZ stock is trading at $40 in June. An options trader executes a strangle by buying a JUL 35 put for $100 and a JUL 45 call for $100. The net debit taken to enter the trade is $200, which is also his maximum possible loss.

If XYZ stock rallies and is trading at $50 on expiration in July, the JUL 35 put will expire worthless but the JUL 45 call expires in the money and has an intrinsic value of $500(Assuming one lot of option contract has 50 shares). Subtracting the initial debit of $200, the options trader's profit comes to $300.

On expiration in July, if XYZ stock is still trading at $40, both the JUL 35 put and the JUL 45 call expire worthless and the options trader suffers a maximum loss which is equal to the initial debit of $200 taken to enter the trade.



Pay off Diagram for Strangle