

PROFESSIONAL PROGRAMME EXAMINATION

JUNE 2009

FINANCIAL, TREASURY AND FOREX MANAGEMENT

Time allowed : 3 hours

Maximum marks : 100

- NOTE :** 1. Answer FIVE questions including Question No.1 which is compulsory. All working notes should be shown distinctly.
2. Tables showing the present value of Re.1 and the present value of an annuity of Re.1 for 15 years are annexed.

Question 1

Comment on **any four** of the following :

- (i) Failure of a firm is technical if it is unable to meet its current obligations.
 - (ii) In addition to transaction motive, more motives force corporate to hold inventory.
 - (iii) CAPM is a tool to workout cost of equity.
 - (iv) 'Counter party risk' is faced in forward transactions.
 - (v) The function of treasury management is concerned with both macro and micro facets of the economy.
- (5 marks each)

Answer 1(i)

Failure of a firm is technical if it is unable to meet its current obligations. The failure could be temporary and might be remediable. When liabilities exceed assets i.e. the net worth becomes negative, bankruptcy as commonly understood, arises. The technical bankruptcy can be ascertained by comparing current assets and current liabilities i.e. working out current or/and quick ratios. If the amount of current assets is not sufficient to meet the current liabilities, it is known as technical failure of firm. However, this type of failure is related to short term only and firm can recover from such situation in long-term.

Answer 1(ii)

A company may hold inventory with transaction motives in order to facilitate the smooth & uninterrupted production and sales operations. The other motives that force corporate to hold inventory are as follows:

- 1. *Precautionary motives* – To guard against the risk of unpredictable changes in demand and supply forces, short supply, lengthy processes involved in imports etc.
- 2. *Speculative motive* – To gain advantage in terms of quantity discounts connected with bulk purchases or anticipated price rises.

Answer 1(iii)

CAPM – Capital Asset Pricing Model

CAMP helps to work out required rate of return required by investors in the form of

equity investment. It establishes a linear relationship between the required rate of return of a security and its β .

$$R_i = R_f + (\beta_i)(R_m - R_f)$$

β_i = Beta of Security

R_f = Risk free rate of return

R_m = Market rate of return

The R_i calculated as above is the required rate of return of equity investors and it may be called as the cost of equity.

This R_i can be used to find out the price of the share which depends on Dividend and R_i , and can be calculated as follows:

$$P_0 = \frac{D_1}{K_e - G}$$

D_1 = Dividend expected in next year

K_e = R_i

G = Growth rate in dividend

Answer 1(iv)

Yes, Counter Party risk means that there is an ever present risk of the other party not being able to honour its commitment. Counter party risk arises

- (i) From the variation in the quantity of goods, place of delivery, price or
- (ii) When one of the parties of forward contract goes bankrupt.

There is a counterparty risk in forward transactions because these transactions are bilateral and not exchange traded. Both the parties are subject to the risk of default by the other party.

Answer 1(v)

Treasury management is concerned with both macro and micro facets of the economy. At the macro level, the inflows and outflows of cash, credit and other financial instruments are the functions of the government and the business sectors. These inflows are arranged by them as borrowing from the public. The micro units utilize these inflows and build up their capacities for production of output. These leads to establishment of a production system which logically leads us to the natural consequence, i.e. the establishment of distribution and consumption systems. Once the production, distribution and consumption systems are in place at the micro level, the generation of surpluses at the units begins. These surpluses are channeled back into the macro system as outflows from the micro system. The inflows are the taxes paid to the government and repayment of loans made to the banks and financial institutions. These inflows into the macro level have to be managed by the treasury managers at the macro level.

Question 2

(a) The following financial data relates to XYZ Ltd. :

Year	Earnings Per Share (Rs.)	Dividend Per Share (Rs.)	Share Price (Rs.)
2004	42	17	252
2005	46	18	184
2006	51	20	255
2007	55	22	275
2008	62	25	372

A firm of market analysts which specialises in the industry in which XYZ Ltd. operates has recently re-evaluated the company's future prospects. The analysts estimate that XYZ Ltd.'s earnings and dividend will grow at 25% for the next three years. Thereafter, earnings are likely to increase at a lower rate of 10%. If this reduction in earnings growth occurs, the analysts consider that the dividend payout ratio will be increased to 50%.

XYZ Ltd. is all equity financed and has 10 lakh ordinary shares in issue. The tax rate of 33% is not expected to change in the foreseeable future. Calculate the estimated share price; and the P/E ratio by using dividend valuation model. For this purpose, you can assume a constant post-tax cost of capital of 18%.

(12 marks)

(b) An investor buys a NIFTY futures contract for Rs.2,80,000 (lot size 200 futures). On the settlement date, the NIFTY closes at 1,378. Find out his profit or loss, if he pays Rs.1,000 as brokerage. What would be the amount of profit or loss, if he has sold the futures contract ?

(4 marks)

(c) Ankush Ltd. has a plan to raise an amount of Rs.50 crore for a period of 3 months, 6 months from now. The current rate of interest is 9% but it may rise in 6 months time. The company wants to hedge itself against the increase in interest rate. Bank of India has quoted a forward rate agreement (FRA) at 9.1% per annum.

Find out the effect of FRA and actual interest cost to Ankush Ltd., if the actual rate after 6 months happens to be 9.5% or 8.5%.

(4 marks)

Answer 2(a)

(i) Dividend valuation model : $P_0 = \frac{\text{Dividend}_1}{K_e - g}$

Projection of Dividends

Year	EPS	DPS	PV ₁ @ 18%	Discounted DPS
2009	77.50	31.25	0.8475	26.48
2010	96.88	39.06	0.7182	28.05
2011	121.10	48.82	0.6086	29.71
				84.24

Dividend for year 2012:

$$D_{2012} = \text{Rs. } 121.10 \times 1.10 \times 50\% = \text{Rs. } 66.60$$

Therefore, the perpetuity value, assuming 10% growth rate:

$$P_{2011} = \frac{66.60}{0.18 - 0.10} = \text{Rs. } 832.50$$

Today's price of share :	Rs.
PV of Dividend of 2009 to 2011	84.24
Add. PV of P_{2011} (832.50×0.6086)	506.66
	<u>590.90</u>

(ii) P/E Ratio

$$\begin{aligned} \text{P/E Ratio} &= \text{PV of } P_{2011} / \text{EPS}_0 \\ &= 590.90 / 62 = 9.53 \end{aligned}$$

Answer 2(b)

- (a) In this case, the total value is Rs.2,80,000 and lot is 200, So, the NIFTY Futures on the transaction date is 1400 (i.e. 2,80,000/200). Now on the settlement date, the NIFTY is 1378 therefore, it has reduced by 22 points. The loss to the investor is—

$$\begin{aligned} \text{Loss} &= (1400 - 1378) \times 200 + 1000 \\ &= 4400 + 1000 \\ &= 5400 \end{aligned}$$

In case, he has sold the futures contract, his profit would have been—

$$\begin{aligned} \text{Profit} &= (1400 - 1378) \times 200 - \text{Rs. } 1000 \\ &= 4400 - 1000 = 3400 \end{aligned}$$

Assumption : The brokerage of Rs.1000 would be payable in both the cases.

Answer 2(c)

If actual rate is 9.5%.

In this case, the bank, shall pay a differential of 0.4% (9.5%-9.1%). The cash flow is—

$$\text{Cash Flow} = 50 \text{ Crores} \times 0.4\% \times 0.25 = \text{Rs. } 5,00,000$$

This amount is paid up front to Ankush Ltd., which can invest it @9.5% for 3 months period at 6 months from now. Total accumulation is—

$$\text{Total amount} = \text{Rs. } 5,00,000 \times \left(1 + \frac{0.095}{4}\right) = \text{Rs. } 5,11,875$$

At the end of the borrowing period Ankush Ltd. will pay interest @9.5% on Rs.50 Crores

$$\begin{aligned}\text{Interest} &= \text{Rs. 50 Crores} \times 0.095 \times .25 \\ &= \text{Rs. 1,18,75,000}\end{aligned}$$

$$\text{Net Cost to XYZ} = \text{Rs. 1,18,75,000} - \text{Rs. 5,11,875} = \text{Rs. 1,13,63,125}$$

This is 9.1% of the total borrowing for a period of 3 months. So, by entering into Forward Rate Agreement (FRA), Ankush Ltd. has restricted its cost at 9.1% p.a.

If actual rate is 8.5%

If the rate is 8.5%. Ankush Ltd. will be required to pay up front 0.6% to the bank i.e. the amount of Rs.7,50,000. On the due date, interest on Rs.50 Crores is payable @8.5% i.e. Rs.1,06,25,000. The total cost to Ankush Ltd. is Rs.1,13,75,000 which is 9.1% of total funds. It may be noted that the amount of Rs.7,50,000 is to be borrowed at 8.5% p.a. for a period of 3 months. This will be paid to the bank. The borrowing of Rs.7,50,000 will be repaid as Rs.7,65,938 after 3 months inclusive of interest.

Question 3

- (a) *The management of Laxmi Ltd. has called for a statement showing the working capital needed to finance a level of activity of 6,00,000 units of output for the year 2009. The cost structure for the company's product for the abovementioned level is given as under :*

	<i>Cost Per Unit (Rs.)</i>
<i>Raw materials</i>	<i>20</i>
<i>Direct labour</i>	<i>5</i>
<i>Overheads</i>	<i>15</i>
<i>Total costs</i>	<i>40</i>
<i>Profit</i>	<i>10</i>
<i>Selling price</i>	<i>50</i>

Past trends indicate that raw materials are in stock on an average for three months.

Work-in-progress will approximate to half a month's production. Finished goods remain in warehouse on an average for two months. Suppliers of materials extend one month's credit.

Two months' credit is normally allowed to debtors. A minimum cash balance of Rs.1,00,000 is expected to be maintained. The production pattern is assumed to be even during the year.

You are required to prepare the statement of working capital determination.

(12 marks)

- (b) You sold Hong Kong \$1,00,00,000 value spot to your customer at Rs.5.70/HK \$ and covered yourself in London market on the same day, when the exchange rates were :

US \$1=HK \$7.5880 and HK \$7.5920.

Local inter-bank market rates for US\$ were –

Spot US \$1=Rs.42.70 and Rs.42.85.

Calculate — (i) cover rate; and (ii) ascertain profit or loss in transaction. Ignore taxation. (4 marks)

- (c) “Discounted cash flow is very close to economic value added.” Comment. (4 marks)

Answer 3(a)

Statement showing Working Capital Determination

Item	Cost per Unit (Rs.)	Amount for 600000 Units of output (Rs.)
Raw Materials	20.00	1,20,00,000
Direct labour	5.00	30,00,000
Overheads	15.00	90,00,000
Total Cost	40.00	2,40,00,000
Profit	10.00	60,00,000
Sales	50.00	3,00,00,000

Calculation of Working Capital Requirement –

(i) Raw Materials		
(Stock for three months) – Rs.3/12 x 1,20,00,000)	=	30,00,000
(ii) Work-in-progress ½ months productions		
(1/2 month total cost = 1/24 x 2,40,00,000)	=	10,00,000
(iii) Finished good remain in warehouse for two months		
(2/12 x 2,40,00,000)	=	40,00,000
Total Inventory	=	80,00,000
Debtors – 2 months sales (on cost basis)		
2/12 x 2,40,00,000	=	40,00,000
Cash Balance (minimum)	=	1,00,000
Total Current Assets		1,21,00,000
(-) Creditors = (1/12 x 1,20,00,000)	=	10,00,000
Required Working Capital	=	1,11,00,000

Note : Debtors can also be calculated on Sales Basis.

Answer 3(b)

In this case, the cover rate can be calculated as the Cross Rate between Rs. and HK \$ in the London market. The cross rates in the London Market can be stated as follows:

$$\begin{aligned}
 \frac{\text{Rs.}}{\text{HK\$}} &= \frac{\text{Rs.}}{\$} \times \frac{\$}{\text{HK\$}} \\
 &= \frac{\text{Rs.}}{\$} \times \frac{1}{\text{HK\$} / \$} \\
 &= 42.85 \times \frac{1}{7.5880} \\
 &= \text{Rs.} 5.64707
 \end{aligned}$$

As the rate in London is less, the HK\$ can be bought in London and the Profit is:

$$\begin{aligned}
 \text{Profit} &= 1,00,00,000 \times (5.70 - 5.64707) \\
 &= \text{Rs. } 5,29,300
 \end{aligned}$$

Answer 3(c)

Discounted cash flow is very close to economic value-added (EVA), with the discount rate being the cost of capital.

There are two key components to EVA. The net operating profit after tax (NOPAT) and the capital charge, which is the amount of capital times the cost of capital. In other words, it is the total pool of profits available to provide cash return to those who provided capital to the firm. The capital charge is the product of the cost of capital times the capital tied up in the investment. In other words, the capital charge is the cash flow required to compensate investors for the riskiness of the business given the amount of capital invested. On the one hand, the cost of capital is the minimum rate of return on capital required to compensate debt and equity investors for bearing risk-a cut-off rate to create value and capital is the amount of cash invested in the business, net of depreciation. In formula form,

$$\text{EVA} = (\text{Operating Profit}) - (\text{A Capital Charge})$$

$$\text{EVA} = \text{NOPAT} - (\text{Cost of Capital} \times \text{Capital})$$

Question 4

*Distinguish between **any four** of the following :*

- (i) *'Financing of current assets' and 'financing of fixed assets'.*
- (ii) *'Financial derivatives' and 'commodity derivatives'.*
- (iii) *'Interest rate parity' and 'purchasing power parity'.*
- (iv) *'Capital structure' and 'financial structure'.*
- (v) *'Liquidity management' and 'treasury management'.* (5 marks each)

Answer 4(i)**‘Financing of Current Assets’ and ‘Financing of Fixed Assets’**

The more of the funds of a business are invested in working capital, lesser is the return in term of profitability and less amount is available for investing in long-term assets such as plant and machinery, etc. Therefore, the corporate enterprise has to minimize investment in working capital and to concentrate on investment of resources in fixed assets.

Fixed assets financing is different from current assets financing. In fixed assets investment is made in building, plant and machinery which remains blocked over a period of time and generates funds through the help of working capital at a percentage higher than the return on investment in current assets. Working capital financing or current assets financing is done by raising short-term loans or cash credits limits but fixed assets financing is done by raising long-term loans or equity.

Answer 4(ii)**‘Financial Derivatives’ and ‘Commodity Derivatives’**

Derivative contracts can be entered into for different types of commodities such as sugar, jute, pepper, gur castorseeds etc. In India, futures contracts in commodities are available at different commodities exchanges. MCX, NMCEX and NCDEX offer futures contracts in several agricultural commodities and metals.

On the other hand, the derivative in currencies, gilt-edged securities, shares, shares indices, etc. are known as financial derivatives. These are transacted at different exchanges all over the world. Financial derivatives can be broadly classified into currency derivatives, interest rate derivatives and stock and stock index derivatives. In India, Stock Index Futures, Stock Index Options, Stock Options and Stock Futures can be traded at BSE or NSE. Interest rate Derivatives have also been allowed by the Government.

Answer 4(iii)**‘Interest Rate Parity’ and ‘Purchasing Power Parity’**

Interest Rate Parity: According to interest rate parity principle, the forward premium (or discount) on currency of a country vis-à-vis the currency of another country will be exactly offset by the interest rate differential between the countries. The currency of the country with lower interest rate is quoted at a forward premium and vice versa.

Purchasing Power Parity: According to the Purchasing Power Parity (PPP) Principle, the currency of a country will depreciate vis-à-vis the currency of another country on the basis of differential in the rates of inflation between them. The rate of depreciation in the currency of a country would roughly be equal to the excess inflation rate in the country over the other country.

Answer 4(iv)**‘Capital Structure’ and ‘Financial Structure’**

- Capital structure relates to long term capital sources for creation of long term assets. Financial structure involves creation of both long term and short term sources.

- Capital structure is the core element of the financial structure. Capital structure can exist without the current liabilities and in such cases, capital structure shall be equal to the financial structure. But we can not have a situation where the firm has only current liabilities and no long term capital.
- Components of the capital structure may be used to build up the level of current assets but the current liabilities should not be used to finance acquisition of fixed assets. This would result in an asset liability mismatch.

Answer 4(v)

‘Liquidity Management’ and ‘Treasury Management’

Liquidity management ensures that the right amount of cash is available, at the right time and in the right place, is firmly positioned as a pivotal task for every treasurer. Liquidity management is in fact a part of the treasury management. Over the past few years, many treasurers have made substantial progress towards increasing the visibility of their cash flow and centralizing cash within countries or regions. However, liquidity management and particularly cash flow forecasting remain the greatest challenges facing treasurers. With credit more expensive and elusive for many companies, it is now imperative to tackle these challenges effectively. Liquidity management of a financial institution or bank or company is some how different to that of other trading units. The process starts with tapping of funds at lower rate in shape of deposits/borrowing and ends with investing the same in higher rate to earn profit out of business with a margin of small portion of cash-in-hand kept to meet day to day operation.

Question 5

- (a) *Sumati Ltd. is considering three finance plans. Total investments required is Rs. 2,00,000.*

Plan	Equity	Debt	Preference Shares
A	100%	—	—
B	50%	50%	—
C	50%	—	50%

Cost of debt : 8%

Cost of preference shares : 8%

Tax rate : 30%.

Equity shares of face value of Rs. 10 each will be issued at a premium of Rs. 10 per share.

Expected EBIT is Rs.80,000.

You are required to calculate for each finance plan —

- (i) *Earnings per share (EPS); and*
 - (ii) *EBIT range among the EPS equivalency point. (6 marks each)*
- (b) *Rosa Chemicals Ltd. has outstanding 1,20,000 shares selling at Rs. 20 per share. The company hopes to make a net income of Rs.3,50,000 during the year ending 31st March, 2009. The company is thinking of paying a dividend of Rs. 2*

per share at the end of current year. The capitalisation rate for risk class of this firm has been estimated to be 15%. Assuming no taxes, answer the questions listed below on the basis of the Modigliani Miller dividend valuation model :

- (i) What will be the price of share at the end of 31st March, 2009, if – (a) the dividend is paid; and (b) the dividend is not paid ? (6 marks)
- (ii) How many new shares the company must issue if the dividend is paid and company needs Rs.9,50,000 for an approved investment expenditure during the year ? (2 marks)

Answer 5(a)

(i) Computation of EPS of Sumati Ltd. under Plan A, B and C

Plan	A	B	C
EBIT	80000	80000	80000
Less : Interest	—	8000	—
PBT	80000	72000	80000
Less : Tax (.30)	24000	21600	24000
PAT	56000	50400	56000
Less : Dividend on Preference shares	—	—	8000
= Earnings for equity	56000	50400	48000
No. of equity shares	10000	5000	5000
EPS	5.6	10.08	9.6

(ii) EBIT Range

Plan A & B

$$\frac{(EBIT - 0)(1 - 0.30)}{10,000} = \frac{(EBIT - 8000)(1 - 0.30)}{5,000}$$

∴ EBIT = Rs. 16,000

EPS in both cases would be Rs. 1.12

Plan B & C

EBIT can not be calculated

Plan A & C

$$\frac{(EBIT - 0)(1 - 0.30)}{10,000} = \frac{[(EBIT - 0)(1 - 0.30)] - 8000}{5,000}$$

∴ EBIT = Rs.22,857

EPS in both cases would be Rs. 1.60

Answer 5(b)

(i) (a) Price of the share if the dividend is paid-

$$P_0 =$$

$$20 = \frac{2 + P_1}{1 + 0.15}$$

$$20(1 + 0.15) = (2 + P_1)$$

$$P_1 = 23 - 2 = 21$$

(b) Price of the share if dividend is not paid-

$$20 = \frac{0 + P_1}{1 + 0.15}$$

$$20 = \frac{0 + P_1}{1.15}$$

$$P_1 = 20(1.15)$$

$$P_1 = 23$$

$$\frac{\text{Rs. } 9,50,000 - (\text{Rs. } 3,50,000 - \text{Rs. } 1,10,000)}{(1 + K_e)^1} = \frac{\text{Rs. } 7,10,000}{21}$$

$$\Delta N = I - (E - ND_1) / P_1$$

$$N =$$

$$= \frac{9,50,000 - 1,10,000}{21}$$

$$= 8,40,000 / 21 = 40,000 \text{ Shares}$$

Question 6

An iron ore company is considering investing in a new processing facility. The company extracts ore from an open pit mine. During a year, 1,00,000 tons of ore is extracted. If the output from the extraction process is sold immediately upon removal of dirt, rocks and other impurities, a price of Rs. 1,000 per ton of ore can be obtained. The company has estimated that its extraction costs amount to 70% of the net realisable value of the ore.

As an alternative to selling all the ore at Rs. 1,000 per ton, it is possible to process further 25% of the output. The additional cash cost of further processing would be Rs. 100 per ton. The processed ore would yield 80% final output and can be sold at Rs. 1,350 per ton.

For additional processing the company would have to install equipments costing Rs. 100 lakh. The equipment is expected to have a useful life of 5 years with no salvage value. The company follows the straight line method of depreciation. Additional

working capital requirement is estimated at Rs. 10 lakh. The company's cut-off rate for such investments is 15%. Assume corporate tax rate 30% (including surcharge and education cess).

*Should the company install the equipment for further processing of the iron ore ?
(20 marks)*

Answer 6

<i>Cash Outflows</i>	<i>(Rs.)</i>
Cost of equipment	1,00,00,000
+ Additional working capital	10,00,000
	<u>1,10,00,000</u>

Cash Inflows (operating) years (1-5)

<i>Particulars</i>	<i>Amount (Rs.)</i>
Incremental revenue (350 x 20,000)	70,00,000
(-) Incremental Costs -	
Processing costs(100 x 25,000 tons)	25,00,000
Depreciation (1,00,00,000 / 5)	<u>20,00,000</u>
Earnings before taxes	25,00,000
(-) Taxes @ 30%	<u>7,50,000</u>
	17,50,000
+ Depreciation	<u>20,00,000</u>
Earnings / Cash Flow After Tax	<u>37,50,000</u>

NPV

<i>Particulars</i>	<i>Year</i>	<i>Amount (Rs.)</i>	<i>PVF at 15%</i>	<i>Total PV (Rs)</i>
Cash outflows	t = 0	(1,10,00,000)	1.000	(1,10,00,000)
Operating CFAT	t = 1-5 (Annuity)	37,50,000	3.3522	1,25,70,750
Recovery of WC	t = 5	10,00,000	0.4972	<u>4,97,200</u>
NPV				<u>20,67,950</u>

Recommendations - The company is advised to install the equipment for further processing of Ore, as it promises a positive Net Present Value.

Question 7

Write notes on **any four** of the following :

- (i) *Participating preference shares*
- (ii) *Credit investigation factors*
- (iii) *Transfer pricing*
- (iv) *Risks in forex market*
- (v) *Financial distress.*

(5 marks each)

Answer 7(i)**Participating preference shares**

Preference shareholders are entitled to a fixed dividend which has been indicated as part of the terms of issue, even in a year in which the company has made huge profits. Subject to provision in the terms of issue these shares can be entitled to participate in the surplus profits left, after payment of dividend to the preference and the equity shareholders to the extent provided therein. So, participative preference share may be entitled, in a particular year, to two dividends i.e. first their fixed dividends and second, their additional dividend out of surplus profit.

Answer 7(ii)**Credit investigation factors**

Factors influencing the nature of further credit investigations are—

- Types of customers, i.e. new or existing
- The customer business line & related issues involved in his business
- The nature of the product, i.e. perishable or seasonal
- Company's credit policies & practices.

Company maintain separate file for each customer, and compile the information & reports of the same. Credit investigation involves cost. However, as it assists the firm in reducing bad debt losses, the credit investigation should be carried on as long as its savings exceed cost.

Answer 7(iii)**Transfer Pricing**

Transfer Pricing: It is a rate at which goods and services are transferred through intra-firm transactions. It can be applied to transactions between the parent firm and its subsidiaries or between strong currency and weak currency subsidiaries. Subject to the demands of competition, a parent may charge higher prices to its weak currency subsidiary, thereby increasing its own profit and reducing that of the subsidiary. The taxable income of the subsidiary comes down. Recovering higher level of operating charges from the subsidiaries also serves the same purpose.

Answer 7(iv)**Risks in forex market**

- (i) Credit risk arising out of lending to a foreign borrower whose credit rating is not known for certainty.
- (ii) Exchange Rate risk of trading in a currency whose stability and strength is known to fluctuate.
- (iii) Country risk involved in dealing in the currency of a country whose political and economic stability is uncertain.
- (iv) Solvency risks due to mismatch between current assets and liabilities of dealers and resultant default in meeting forward commitments.

Answer 7(v)**Financial distress**

Generally the affairs of a firm should be managed in such a way that the total risk – business as well as financial – borne by equity holders is minimized and is manageable, otherwise, the firm would obviously face difficulties. If cash inflow is inadequate, the firm will face difficulties in payment of interest and repayment of principal. If the situation continues long enough, the firm would find itself in a situation called financial distress. It may have to sell its assets to discharge its obligations to outsiders at prices below their economic values i.e. resort to distress sale. So when the sale proceeds are inadequate to meet outside liabilities, the firm is said to have failed or become bankrupt or (after due processes of law are gone through) insolvent.
