Unit –V

5 Financial statement analysis- 8

Balance sheet and related concepts, profit and loss statement and related concepts, financial ratio analysis, cash-flow analysis, fundsflow analysis, comparative financial statement, analysis and interpretation of financial statements, capital budgeting techniques

WHAT ARE THE COMPONENTS OF A BUSINESS BALANCE SHEET?

The Balance Sheet represents one day in the life of a business. It shows how much of a business is owned (assets) and how much it owes (liabilities) on that one day it time. In other words it is a snap shot of a specific day in the life of a business. The difference between what is owned and what is owed on that day is the business's net worth or equity.

A business Balance Sheet has 3 components: assets, liabilities, and net worth or equity. The Balance Sheet is like a scale. Assets and liabilities (business debts) are by themselves normally out of balance until you add the business's net worth.

Assets minus Liabilities always = Net Worth or Equity

What are Assets?

An asset is a resource with economic value that a business owns with the expectation that it will provide future benefit to the business. As an example, a business owns a forklift with the expectation that it will assist in moving product that will be sold and upon the sale of the product income or value will be added to the business. Therefore, the forklift has brought economic value to the business.

Business assets are broken into 2 categories: current assets and non-current assets. The liquidity of the asset determines into which category it falls. Liquidity is the ease in which an asset can be converted to cash. Assets that will be or should be converted to cash within 12 months are considered current assets. The most common current assets of course include cash on hand, but also inventory and accounts receivable. An Account Receivable is short term financing a business offers to its customers. Normally a business will offer its customers 30 to 60 days from the day of delivery of a product or the performance of service to pay for the product or service. They show this in dollar form on the Balance Sheet as Accounts Receivable until the customer pays and it is converted to cash. Inventory that a business holds is considered a current asset because the likelihood that the inventory will be sold within the next 12 months, which will then convert it to cash. Non-current assets are assets that will not be converted to cash within 12 months and are normally used on-going to run the business, such as, the forklift in our prior example. Most non-current assets are considered fixed assets, and include equipment used in the running of the business, furniture and fixtures and also any real estate the business owns.

What are Liabilities?

A business's liabilities are obligations the business owes. As with assets the liabilities are broken into current liabilities and non-current liabilities, most often called Long Term Debt. Current liabilities are obligations that are scheduled to be paid over the next 12 months. Most common current liabilities include accounts payable, business line of credit and the current portion of long term debt. Accounts payable are short term obligations owed to suppliers or other creditors and are normally paid within 30 to 60 days from the day of a delivery of a product or the performance of a service. Business Lines of Credit are used by businesses to service some short term needs and are paid generally from the collection of the businesses accounts receivable. The current portion of long term debt is the amount scheduled to be paid on long term obligations over the next 12 months. Long term debt are loans incurred by the business to finance long term or fixed assets for the business.

What is Net Worth?

Start up- Hotel/Restaurant (100 cr)

Assets= Equity + Liability

100 cr= 20 cr + 80 cr(Loan)

20 (Equity)= 100(Asset)- 80(Liability), after completing your loan part—100=100-0

0 yr ---20 cr
1 yr--- 30 cr(Profit)
100-50=
2yr-30cr

100=100
7 yr—50 cr

Sometimes referred to as the businesses equity, it refers to value of ownership. The ownership is limited by the businesses assets and debts.

What can be analysed from a Balance Sheet?

- *The general financial state of the business at a specific point in time*
- *The amount of capital retained in the business*
- *The productivity, growth and solvency of the business*
- *The pace at which the assets can be converted to capital*

Advantages of reporting the balance sheet

- **Business snapshot:**

Balance Sheet provides an accurate picture of the business status. While the profit and loss statement provides the profit made in a transaction, balance sheet gives the details of the bills the business owes to the vendors. Every balance sheet is unique; while a business may experience a high profit account, it can simultaneously have a poor balance sheet if the total net asset value is low and vice versa. Balance sheet determines the financial strength of a business and helps in future financial planning.

- **Provides information for apt decision making:**

Balance-Sheet provides the investors and potential lenders with the information needed to take decisions while lending money or resources. It reflects the company’s ability to collect and pay debts on time. On the basis of this, one can form an opinion of the company’s risk and return prospects.

- **Provides helpful financial ratios:**

Balance Sheet helps to calculate the ratios to determine a company’s long-term profitability and short-term financial outlook. Ratios like the current ratio and the acid test or liquidity ratio are calculated using information from the balance sheet. These ratios help obtain a very thorough summary of the company’s financial health by analyzing its cash position, working capital, liquidity and leverage. It also provides insight into the company’s likelihood of defaulting on its credit obligations or even its bankruptcy risk.

Disadvantages of the balance sheet

- **Numbers could be misleading:**

As the balance-sheet gives the financial snapshot at a given point of time, it could be misleading sometimes. For e.g. the analysis could get distorted if the company’s cash position at year end is high, indicating high reserves, but the company may intend to distribute it in the form of dividends.

- **Doesn’t give true value of assets:**

The balance sheet does not provide the true value of the assets as they are reported at the historical costs. It does not reflect the current market valuation.

- **Other limitations:**

The balance sheet has some of the current assets valued on estimated basis, so it does not reflect the true financial position of the business. Also there is complete omission of the valuable non monetary assets from the balance-sheet.

Conclusion

Balance-sheet is one of the essential financial statements needed to take appropriate and sound financial decisions. Blended with the other components (Profit and Loss Statement, Cash Flow Statement and Statement of Owner’s Equity) of financial reporting, one can decide whether the business under focus is right as an investment option.

1. Definition of Budget
2. Budget Sector and Types of Budget
3. **Capital Budgeting**
4. Importance of Capital Budgeting
5. Capital Budgeting : Project Categorization
6. Capital Budgeting: Eight Steps
7. Evaluation Criteria: Capital Investment Appraisals
8. Conclusions

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Definition of Budget

•**Budgeting** is a management tool for planning and controlling future activity.

Financial Buzz Words: A plan for saving, borrowing and spending.

•**Budget** is a financial plan and a list of all planned expenses and revenues.

Budget Sector

- Buisness start-up budget
- Corporate/ Buisness budget
- Government budget
- Event management budget
- Personal / Family budget

Budget Types

Basis of Flexibility : Fixed and Variable Budget
Basis of Time Period : Short-Term and Long –Term Budget
Basis of Functionality: Sales budget, Production budget , Marketing budget, Project budget, Revenue budget, Cash flow/cash budget etc.

Govt. Budget in India Prepared by:
Budget division of Economics Department of Ministry of Finance

Capital Budgeting

Capital: Operating assets used for production.

Budget: A plan that details projected cash flows during some period.

Capital Budgeting: Process of analyzing projects and deciding which ones to include in capital budget.

Importance of Capital Budgeting

- Growth
- Large Amount
- Irreversibility
- Complexity
- Risk
- Long term implications

Benefits of Capital Budgeting Decision:

Capital Budgeting decisions evaluate a proposed project to forecast return from the project and determine whether return from the Project is adequate.

Capital Budgeting decisions evaluate expenditure decisions which involve current outflow of funds but are likely to produce benefits over a period of time more than one year.

Capital Budgeting: Project Categorization

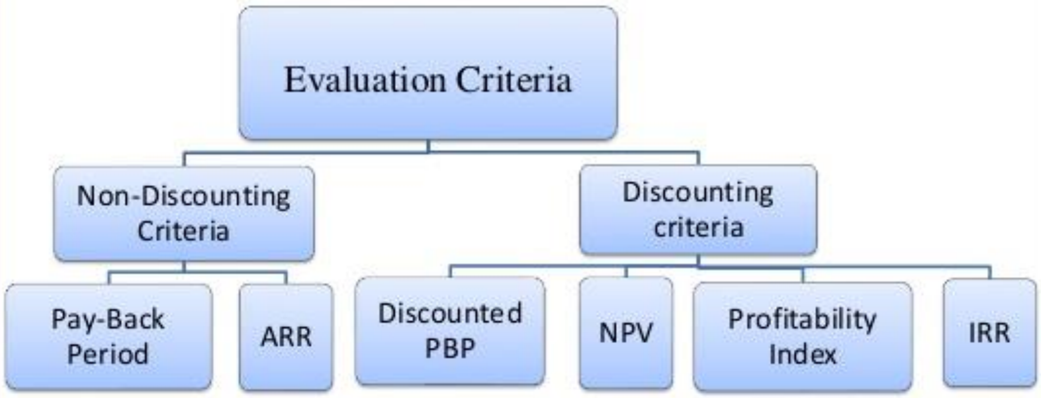
- Establishment of New Products & Services
- Replacement Projects: Maintenance or Cost Reduction
- Expansion of Existing Projects
- Research and Development Projects
- Long Term Cotracts
- Safety and/or Environmental Projects

Broad Prospective

Capital Budgeting is the planning process used to determine a firm's long term investments such as new machinery, replacement machinery, new plants, new products and research & development projects.

Fourth Important Step of capital budgeting:
<u>carry out Financial Analysis</u>

Evaluation Criteria: Capital Investment Proposal



Non discounting: Pay-Back Period

1. **Pay-Back Period Method-** It is defined as the number of years required to recover original cost invested in a project. It has two conditions

- **When cash inflow is constant every year**

  PBP= Cash outflow/cash inflow (p.a.)

- **When cash inflow are not constant every year**

$$PBP = \text{Completed years} + \frac{\text{Required inflow}}{\text{In flow of next year}} * 12$$

Non discounting Criteria: Annual Rate of Return

2. **Average Rate of Return Method** - ARR means the average annual earning on the project. Under this method, profit after tax and depreciation is considered. The average rate of return can be calculated in the following two ways.

$$\text{ARR on Average investment} = \frac{\text{Average Profit After Tax}}{\text{Average Investment}} * 100$$

$$\text{ARR on Initial investment} = \frac{\text{Average Profit After Tax}}{\text{Initial Investment}} * 100$$

Discounting Criteria: Pay-Back Period

3. **Discounted Pay-Back Period Method** - In discounted pay- back period method, the cash inflows are discounted by applying the present value factors for different time periods. For this, discounted cash inflows are calculated by multiplying the P.V. factors into cash inflows.

$$\text{Dis. PBP} = \text{Completed years} + \frac{\text{Required inflow}}{\text{In flow of next year}} * 12$$

Discounting Criteria: Net Present Value

4. **Net Present Value Method:-** It is the best method for evaluation of investment proposal. This method takes into account time value of money.

NPV= PV of inflows- PV of outflows

➢**Evaluation of Net Present Value Method:-** Project with the higher NPV should be selected.

Accept if	NPV>0
Reject	NPV<0
May or may not accept	NPV=0

Discounting Criteria: Internal Rate of Return

5. **Internal Rate of Return Method:-** IRR is the rate of return that a project earns. The rate of discount calculated by trial and error , where the present value of future cash flows is equal to the present value of outflows, is known as the Internal Rate of Return.

$$IRR = \text{Higher Rate} - \frac{\text{NPV of Higher Rate}}{\text{Difference in cash flows}} * \text{Difference in Rate}$$

$$IRR = \text{Lower Rate} + \frac{\text{NPV of Lower Rate}}{\text{Difference in cash flows}} * \text{Difference in Rate}$$

Example

The expected cash flows of a project are:-

Year	Cash Flows (Rs.)
1	20,000
2	30,000
3	40,000
4	50,000
5	30,000

The cash outflow is Rs. 1,00,000

The cost of capital is 10%

Calculate the following:

a) NPV b) Profitability Index

c) IRR

d) Pay-back period e) Discounted Pay-back Period

Computation of NPV and PI

Year	Cash Flows (Rs.)	PV Factors@10%	PV of Cash Flows (Rs.)
1	20,000	.909	18,180
2	30,000	.826	24,780
3	40,000	.751	30,040
4	50,000	.683	34,150
5	30,000	.620	18,600
	Total Cash Inflow		1,25,750
	Less: Cash Outflows		1,00,000
	NPV		25,750
	P.I.		1.2575

Computation of IRR

Year	Cash Flows (Rs.)	PV Factors @19%	PV of Cash Flows (Rs.)	PV Factors @18%	PV of Cash Flows (Rs.)
1	20,000	.84	16,800	.847	16,940
2	30,000	.706	21,180	.718	21,540
3	40,000	.593	23,720	.609	24,360
4	50,000	.499	24,950	.516	25,800
5	30,000	.42	12,600	.437	13,110
Total Cash Inflow			99,250		1,01,750
Less Cash Outflows			1,00,000		1,00,000
NPV			(-)750		(+)1750

Computation of IRR Contd..

$$IRR = \text{Higher Rate} - \frac{\text{NPV of Higher Rate}}{\text{Difference in cash flows}} * \text{Difference in Rate}$$

$$IRR = 19 - \frac{750}{2500} * 1 = 18.7\ \%$$

Computation of discounted pay-back period

Year	Cash Flows (Rs.)	PV Factors@10%	PV of Cash Flows (Rs.)	Cumulative Cash Flows
1	20,000	.909	18,180	18,180
2	30,000	.826	24,780	42,960
3	40,000	.751	30,040	73,000
4	50,000	.683	34,150	1,07,150
5	30,000	.620	18,600	1,25,750

$$\text{PBP} = \text{Completed years} + \frac{\text{Required inflow}}{\text{Inflow of Next year}} * 12$$

$$= 3\text{years} + \frac{(1{,}00{,}000 - 73{,}000)*12}{34150}$$

$$= 12.48 \text{ years}$$

Conclusions

We have Studied various evaluation criteria for Capital Budgeting.

❖Generally an impression created that the firm should use NPV method for decision making.

❖Most of the large companies consider all the measures because each one provides somewhat different piece of relevant information to the decision maker.

Profit and Loss (P&L)

Definition - What does *Profit and Loss (P&L)* mean?

A profit and loss (P&L) statement is an accounting statement prepared at the end of a financial quarter or year which comprises revenue and expense items to indicate an accounting net profit or loss.

A profit and loss statement needs to be studied, along with the balance sheet and statement of cash flows, to get a comprehensive idea of the firm's financial position. Because P&L statements are based on accounting rules which can vary or be subject to estimates, investors need to fully understand how different estimates would affect the company's performance particularly if aggressive estimates have been used to show better profit.

A profit and loss statement is an indicator of the overall financial health of a firm. It summarizes the revenue costs and expenses incurred over a specific, fixed period of time. It discloses gains and losses that arise from commercial transactions. The cost of running the business — that is, the cost of goods sold, operating expenses, interest, tax, etc. — is subtracted from the revenue generated to arrive at profit and loss.

In order to assess the cash flow available, to repay existing debt, to finance additional debt for business expansion, or to reinvest in the company, a careful analysis of the components of a profit and loss statement is necessary. In many merger and acquisition transactions, these statements may be prepared to comply with buyers' requirements. In some cases, firms looking to dispose of only a portion of their operations prepare separate financial statements, called carve-out financial statements, of the section being sold.

In practice when assessing a business for sale, three to five year historical P&L statements are a minimum requirement. Buyers often attempt to estimate recurring EBITDA or EBIT from these statements. However, more important is estimated cash flows from these statements (which necessitates the balance sheets as well) and also figuring out what future performance would look like. In stable industries, the historical P&L may be a good proxy for future performance, but in growing businesses, projected P&L statements are often required.

Features of Profit and Loss Account:

1. This account is prepared on the last day of an account year in order to determine the net result of the business.
2. It is second stage of the final accounts.
3. Only indirect expenses and indirect revenues are shown in this account.
4. It starts with the closing balance of the trading account i.e. gross profit or gross loss.
5. All items of revenue concerning current year - whether received in cash or not - and all items of expenses - whether paid in cash or not - are considered in this account. But no item relating to past or next year is included in it.

the assets less any debts with a pledge against those assets. This meaning is encapsulated in the fundamental accounting equation, which defines the owner's equity in the business as equal to Assets minus Liabilities.

How does a business grow its Net Worth or Equity?

Businesses grow through building their Net Worth or Equity. A main goal of every business is to see this growth. There are various ways a business can grow their Net Worth, most evident is to decrease debt. This means a business will have more ownership in the businesses assets, since less of the assets will be pledged to debt. The greatest contributor to the growth in a business's equity or net worth is retained earnings. The earnings of the business become equity in the business in the form of retained earnings, which is listed as such under the equity section of the Balance Sheet. Another way to grow a business's net worth is through an outside capital injection. This is most often money put into the business by ownership or by outside investors. This normally shows as Capital under the equity section of the businesses Balance Sheet.

This represents a general overview and is not considered accounting advice. Please seek direction from an accounting professional for detailed information regarding your business financials.