

Project Cost Management

**Prepared by
Dr. Hoda Metwally**

PMG 213

Lecture 7



Financial Management Basis

The following are the main branches of accounting:

(a) Financial accounting:

Financial Accounting is that branch of accounting which involves identifying, measuring, recording, classifying, summarizing the business transactions, i.e. it involves the steps from Identifying, Recording of transactions to Summarization, and communicating the financial data.

(b) Cost accounting:

Cost Accounting is that branch of accounting which is concerned with the process of ascertaining and controlling the cost of products or services.

(c) Management accounting

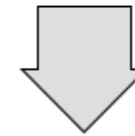
Management accounting refers to that branch of accounting which is concerned with presenting the accounting information in such a way that helps the management in planning and controlling the operations of a business and in decision making.

Accounting Equation

$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$

Resources

Sources of Funding



**Resources
to use to
generate
revenues**

=

**Creditors'
claims
against
resources**

+

**Owners'
claims
against
resources**

What are assets?

Items owned/controlled by the entity that have value



- Resources controlled by entity
- Result of a past transaction (ie not a future transaction)
- Future economic benefits will flow to the entity

Types of Assets:

1. Current Assets

Items that meet the definition of an asset but are either cash or items that will be turned into cash within 12 months:

Examples:

Cash

Inventory (Goods for resale)

Accounts Receivable



2. Non-Current Assets

Items that meet the definition of an asset but will be held and used in the business over a number of years and usually for more than 12 months:

Examples:

- Land; buildings (eg factory)
- Plant and equipment or machinery,
- Motor vehicles, Office fixtures and fittings; computer equipment
- Investments



Definition of a liability:

Money the business owes to others

- Present obligation
- to make a future economic sacrifice
- as a result of a past event



Two main types of Liabilities:

1. Current Liability

Money you owe another entity that will be payable within the next 12 months:

Examples:

- Accounts Payable (For inventory supplied for resale); wages payable; interest owing to the bank
- Current Portion of a loan (Amount of repayments due within the next 12 months)

2. Non-Current Liability

Money you owe another entity that will be payable after the next 12 months: Example:

- Non-Current Portion of a loan (Amount of repayments due after 12 months – Total Due \$36,000; repayments \$1,000 per month – Current liability would be \$12,000; Non-Current Liability would be \$24,000)

Definition of Equity:

If the business sold all its assets and paid off all its liabilities, what's left is called the 'Owner's Equity' $E = A - L$

Equity is the residual interest in the assets (A) of the entity after deducting all its liabilities (L)

- Assets – Liabilities = Equity
- Otherwise known as Net Assets
- **Accounting equation!**

CONTROL/OWN

minus

OWE

=

**OWNERS'
WORTH
(Equity)**



Equity (Types)

- **Capital (+)** = amounts contributed by owners
 - ☐ sole trader or partnership: **Owner's Capital**
 - ☐ company: **Share Capital**
- **Retained Profits (+)** = profits kept in the business not returned to the owners
- **Distributions to owners (money taken out of the business) (-)**

Basic financial statements:

- ❶ Balance Sheet
 - ❷ Income Statement
 - ❸ Statement of Retained Earnings
 - ❹ Statement of Cash Flows
- Primary financial statements answer basic questions including:
 - What is the company's current financial status?
 - What was the company's operating results for the period?
 - How did the company obtain and use cash during the period?

Balance sheet:

- Summary of the financial position of a company at a particular date
- Assets: cash, accounts **receivable**, inventory, land, buildings, equipment and intangible items
- Liabilities: accounts **payable**, notes payable and mortgages payable, loan.
- Owners' Equity: net assets after all obligations have been satisfied

Balance Sheet answers these questions:

- What are the resources of the company?
- What are the company's existing obligations?
- What are the company's net assets?

Accounting Equation

$$A = L + E \text{ or}$$
$$A - L = L + E - L$$
$$A - L = E$$

'Account' Format $A = L + E$

Assets

=

Liabilities

+

Equity

'Narrative' Format $A - L = E$

Assets

-

Liabilities

=

Equity

Classified Balance Sheet

<u>Assets</u>	<u>Liabilities and Stockholders Equity</u>
Current assets	Current liabilities
Long-term investments	Long-term liabilities
Property, plant & equipment	Stockholders' equity
Intangible assets	

Sample Balance Sheet

Assets

Cash	\$ 40
Accounts receivable	100
Land	<u>200</u>
Total assets	<u>\$340</u>

Liabilities

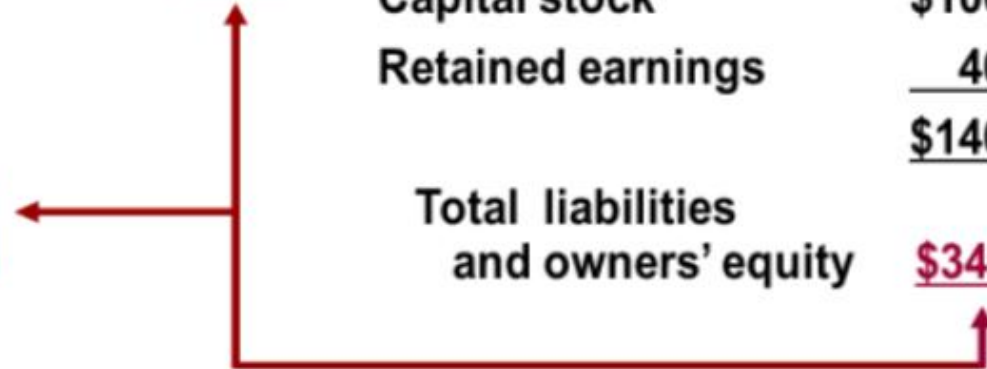
Accounts payable	\$ 50
Notes payable	<u>150</u>
	<u>\$200</u>

Owners' Equity

Capital stock	\$100
Retained earnings	<u>40</u>
	<u>\$140</u>

Total liabilities
and owners' equity \$340

**Must
Equal**



Classified and Comparative Balance Sheets

- They distinguish between:
 - Current and long-term assets
 - Current and long-term liabilities
- Listed in decreasing order of liquidity
- Comparative so financial statement users can identify significant changes over time. They have more than one year on the Balance Sheet.

The Income Statement

- Shows the results of a company's operations over a period of time.
- What goods were sold or services performed that provided revenue for the company?
- What costs were incurred in normal operations to generate these revenues?
- What are the earnings or company profit?

What is the difference between Revenue and Income?

Net income or net profit (or loss)=

Sales revenue (revenue) - Expenses

Income Statement:

Revenues

- Assets (cash or AR) created through business operations

Expenses

- Assets (cash or AP) consumed through business operations

Net Income or (Net Loss)

- Revenues - Expenses

The Income Statement or Statement of profit and loss

- Purpose is to report the success or failure, thus performance (Profit or Loss) of the entity's operations for a period of time
- Managers are interested in the profit because they allocate resources based on their beliefs about an entity's future performance
- The income statement reflects the accounting return for an entity over a specified time period
- Profit is the difference between the income and expenses for a reporting period
- **Profit = Income (or Revenue) - Expenses**

The Example Company
Income Statement
For the Years Ended December 31, 2010 and 2011

	2011	2010
Revenues:		
Sales	\$100	\$ 85
Other revenue	<u>30</u>	<u>15</u>
Total revenues	\$130	\$100
Expenses:		
Cost of goods sold	\$ 62	\$ 58
Operating & admin.	16	12
Income tax	<u>20</u>	<u>18</u>
Total expenses	<u>\$ 98</u>	<u>\$ 88</u>
Net Income	\$ 32	\$ 12

What Are The Fundamental Concepts and Assumptions?

- Separate Entity Concept
- Arm's-Length Transactions
- Cost Principle
- Monetary Measurement Concept
- Going Concern Assumption

Separate Entity Concept

Entity — The organizational unit for which accounting records are maintained.

Separate entity concept — The activities of an entity are to be separate from those of its individual owners.

- Proprietorship
- Partnership
- Corporation

The Cost Principle

- All transactions are recorded at historical cost.
- Historical cost is assumed to represent the fair market value of the item at the date of the transaction because it reflects the actual use of resources by independent parties.

The Monetary Measurement Concept

- Accountants measure only those economic activities that can be measured in monetary terms.
- Listed values may not be the same as actual market values:
 - Inflation
 - Measurement issues

The Going Concern Assumption

- An entity will have a continuing existence for the foreseeable future.

The Time Period Concept

The life of a business is divided into distinct and relatively short time periods so the accounting information can be timely, generally 12 months or less.

Why Use Accrual Accounting?

- GAAP – Generally Accepted Accounting Principles
- Business requires periodic, timely reporting
- Accrual-basis accounting better measures a firm's performance than does cash flow data.

- **Define Accrual Accounting**
- A system of accounting in which revenues and expenses are recorded as they are earned and incurred, not necessarily when cash is received or paid.
- Provides a more accurate picture of a company's profitability.
- Statement users can make more informed judgments concerning the company's earnings potential.

- **Cash-Basis Accounting**
- Revenues and expenses are recognized only when cash is received or payments are made.
- Mainly used by small businesses.
- Not an accurate picture of true profitability.

The Matching Principle

costs and expenses

- All costs and expenses incurred in generating revenues must be recognized in the same reporting period as the related revenues.
- This process of matching expenses with recognized revenues determines the amount of net income reported on the income statement.

related revenues

Explain the Users of Accounting Information:

Users may be categorized into internal users and external users.

(A) Internal Users

- **Owners:** Owners contribute capital in the business and thus they are exposed to maximum risk. So, they are always interested in the safety of their capital.
- **Management:** Accounting information is used by management for taking various decisions.
- **Employees:** Employees are interested in the financial statements to assess the ability of the business to pay higher wages and bonuses.

(B) **External Users**

- **Banks and financial institutions:** Banks and Financial Institutions provide loans to business. So, they are interested in financial information to ensure the safety and recovery of the loan.
- **Investors:** Investors are interested to know the earning capacity of business and safety of the investment.
- **Creditors:** Creditors provide the goods on credit. So they need accounting information to ascertain the financial soundness of the firm.
- **Government:** The government needs accounting information to assess the tax liability of the business entity.
- **Researchers:** Researchers use accounting information in their research work.
- **Consumers:** They require accounting information for establishing good accounting control, which will reduce the cost of production

FINANCIAL STATEMENTS

GENLYTE , INC.

Genlyte, Inc.
Balance Sheet
December 31, 2006

Assets		Liabilities & Equity	
Current Assets	\$156,000	Current liabilities	\$70,000
Plant & equipment	74,000	Long-term liabilities	114,000
Intangible assets	<u>14,000</u>	Stockholders' Equity	<u>60,000</u>
Total assets	\$244,000	Total liabilities & equity	\$244,000

The following ratio analysis uses Genlyte data.

Genlyte, Inc.
Income Statement
For the Year Ended December 31, 2006

Sales	\$430,000
Cost of goods sold	<u>295,000</u>
Gross profit	135,000
Selling and administrative expenses	<u>109,000</u>
Income from operations	26,000
Other expenses & losses	5,000
Income before income taxes	<u>21,000</u>
Income tax expense (33.3%)	7,000
Net income	<u>14,000</u>
Earnings per share (40,000 shares outstanding)	0.35

ANALYZING FINANCIAL STATEMENTS

Three major characteristics are evaluated

LIQUIDITY

PROFITABILITY

SOLVENCY

Each can be evaluated by financial statement ratios

LIQUIDITY

LIQUIDITY RATIOS measure a company's Ability to pay its maturing obligations and meet unexpected needs for cash.

Current Ratio

Current assets/Current liabilities

$$156,000/70,000 = 2.23 \text{ to } 1$$

Working capital

Current assets – Current liabilities

$$156,000 - \$70,000 = \$86,000$$

PROFITABILITY

PROFITABILITY RATIOS measure the operating success of a company for a given period of time.

ROA

(return on assets)

Net Income / Total Assets $\times 100$

$$\text{\$14,000} / \text{\$244,000} = 5.7\%$$

$\times 100$

ROE

(return on equity)

Net Income / Common Equity $\times 100$

$$\text{\$14,000} / \text{\$60,000} = 23.3\%$$

$\times 100$

SOLVENCY

SOLVENCY RATIOS measure the ability of a company to survive over the long term.

DTA

(debt to total assets)

Total Debt / Total Assets

$$\text{\$184,000} / \text{\$244,000} = 75.4\%$$

DTE

(debt to equity)

Total Debt / Total Equity

$$\text{\$184,000} / \text{\$60,000} = 3.06 \text{ to } 1$$



Thank You