

# DHRM

GOLDEN HUMANS

## 1005 - DCMA

Cost And Management Accounting



## Learning objectives

1. Explain why accounting is important and list the users of accounting information.
2. Describe the organizations and that rules that govern accounting.
3. Describe the accounting equation and define assets.
4. Use the accounting equation to analyze transactions.
5. Prepare financial statements.
6. Use financial statements return on assets ( ROM ) to equate business performance.

## Learning objectives 1

Explain why accounting is important and list the users of accounting information.

Why is accounting important?

- Accounting is the information system that;
  - Measures business activities
  - Processes the information into reports
  - **Communicates the results to decision makers**

Decision making : The user of accounting information

Exhibit 1.2

Decision making : Financial versus managerial accounting.

- External Decision makers. ( Financial accounting )

Should I invest in the business?

Is the business production?

Should we lend money to the business?

Can the business pay us back?

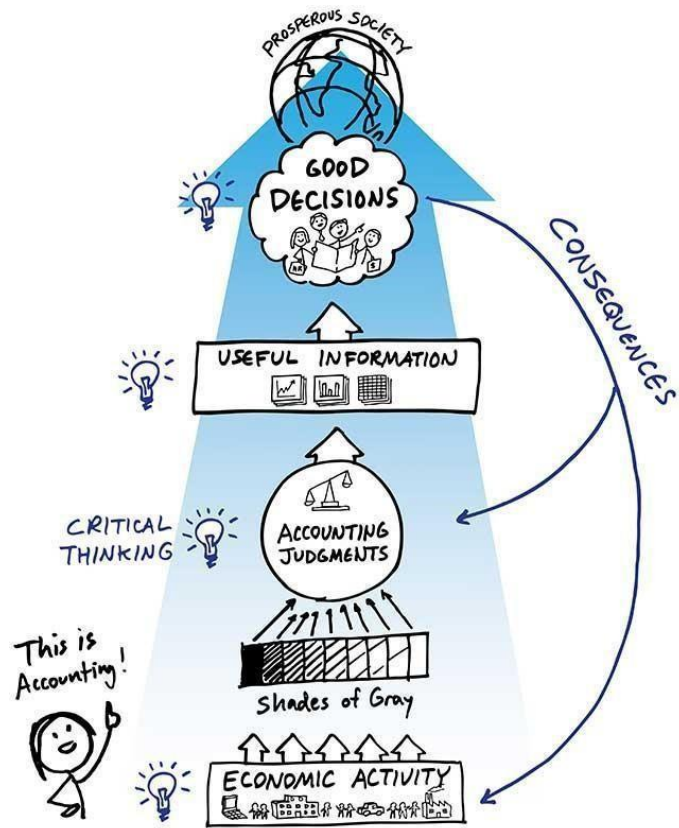
- Internal Decision makers. ( Managerial accounting )

How much money should the business budget for production?

Should the business expand to a new location?

How do actual costs compare to budgeted costs?

- Financial accounting provides information for external decision makers, such as;
  - Investors who own a portion of the business.
  - Creditors to whom the business owes money.
  - Taxing authorities to whom the business owes taxes.
- Managerial accounting provides information to internal decision makers.



# The Accounting Profession

- Types of accounting
  - Certified public accountants (CPA) / chartered accounting (CA) serve the general public.
  - Certified management accountants (CMA) / CIMA / ACCA specialize in management accounting and financial management knowledge and work for a company.
- Accounting positions :
  - Public
  - Private
  - Governmental

## Learning objective 2

Describe the organizations and rules that govern accounting.

What are the organizations and rules that govern accounting?

- Govern organizations ;
  - Institute of chartered accountants sri lanka (ICASL) / financial accounting standards board (FASB) oversees creation and governance of accounting standards.
  - Securities and exchange commission (SEC) oversees the sri lanka financial markets.

What are the organization and rules that govern accounting

- Accounting guidelines are called generally accepted accounting principles (GAAP) useful accounting information must be ;

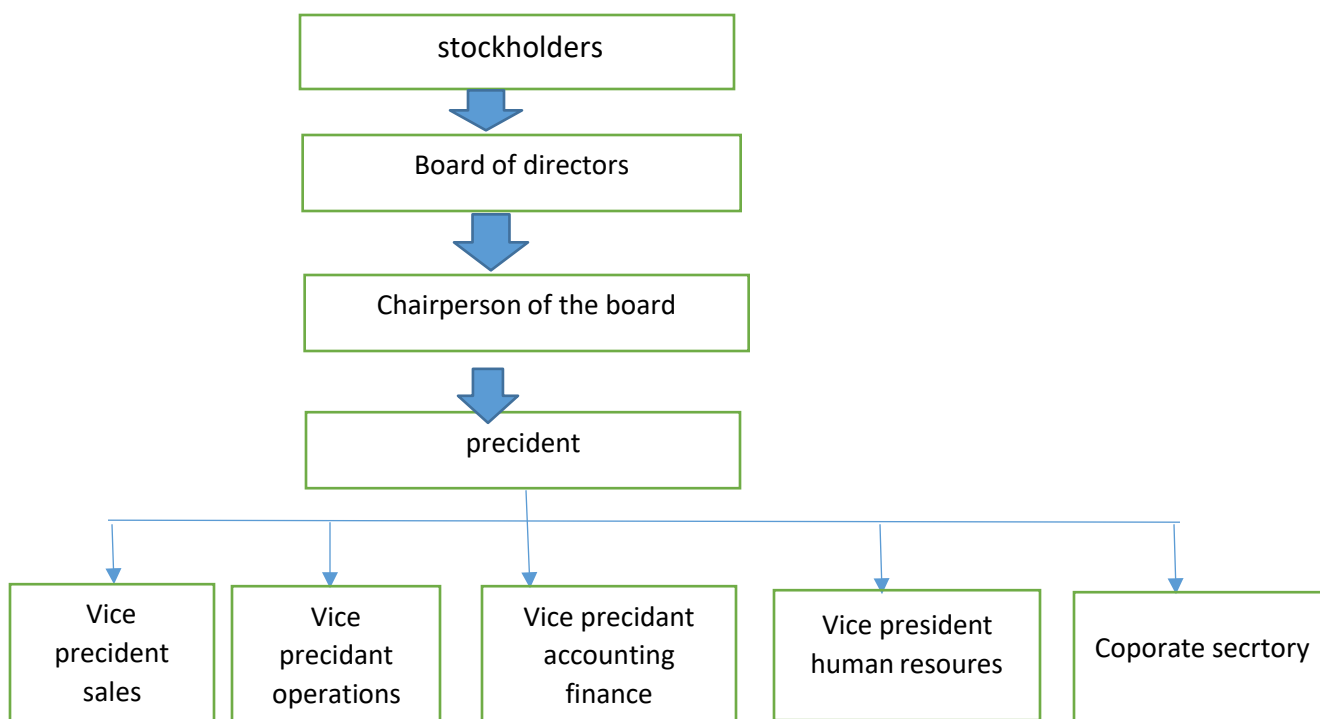
- Relevant
- Faithfully representative

## The economic entity assumption

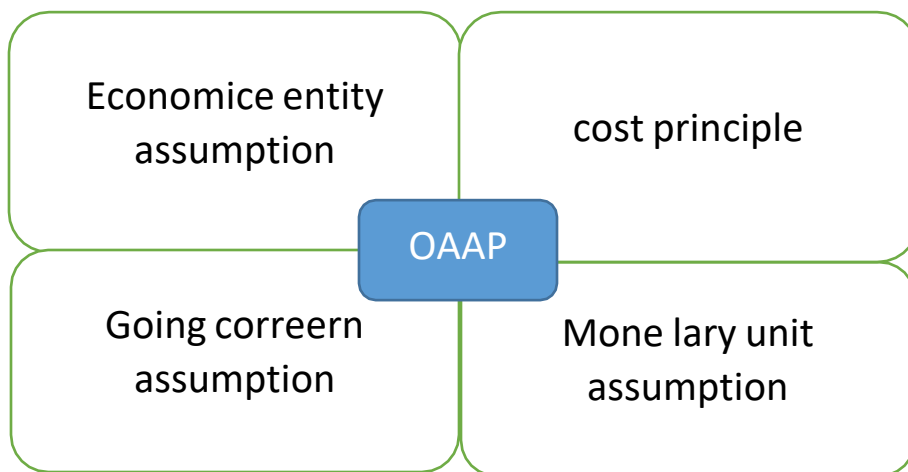
- An organization that stands apart as a separate economic unit follows the economic entity assumption.
- Features of a corporation
  - Separate legal entity
  - Continues life and transferability of ownership
  - No mutual agency
  - Limited liability of stockholders
- A stockholder is a person who owns stock.
  - Separation of ownership and management

	Sole Proprietorship	Partnership	Corporation	Limited-Liability Company (LLC)
Definition	A business with a single owner	A business with two or more owners and not organized as a corporation	A business organized under state law that is a separate legal entity	A company in which each member is only liable for his or her own actions
Number of owners	One (called the Proprietor)	Two or more (called Partners)	one or more (called stockholders)	One or more (called members or partners)
Life of the organization	Terminates at owner's choice or death	Terminates at a Partner's choice or death		
Personal liability for the business debts	Owner is personally liable	Partners are personally liable	Indefinite	Indefinite
Taxation	Not separate taxable entities. The owner pays tax on the proprietorship's earnings.	Partnership tax is not taxed. Instead, partners pay tax on their share of the earnings.	Stockholders are not personally	Members are not personally
Type of business	Small business	Professional organizations of physicians, attorneys, and accountants.	separate taxable entity. Corporation pays tax	LLC is not taxed. members pay tax on their share of earnings

Exhibit 1.5 / Structure of a corporation



## Rules that govern accounting



## Rules the govern accounting

- International financial reporting standards (IFRS)
  - Principles – based standards
  - Used or required by more than 120 nations
  - Published by the International accounting standards board (IASB)



- Ethics in accounting and business
  - An audit is an examination of a company's financial statements and records.
  - The Sarbanes – Oxley act (SOX) requires companies to review internal controls.

## Learning objective 3

Describe the accounting equation and define assets , liabilities

### The accounting equation

- The accounting equation is the basic tool of accounting , measuring the resources of the business and the claims to those resources.

$$\text{Assets} = \text{liabilities} + \text{equity}$$

### Assets

- An asset is an economic resource that is expected to benefit the business in the future.

Examples :

- Cash

- Merchandise inventory
- Furniture
- Land

## Liabilities

- Liabilities are debts that are owed to creditors.
- Many liabilities have the word payable in their titles.
- Examples :
  - Accounts payable
  - Notes payable
  - Salaries payable

## Equity

- The owners claims to the assets of the business are called equity.
  - Also called stockholders equity
- Increases in equity result from :
  - Con tribute capital ( owner can tributions )
  - Revenues
- Decreases in equity result from :
  - Dividends ( owner disitributions )
  - Expenses

## Equity

The accounting equation is expanded to show the components of equity :

$$\begin{array}{rcl}
 \text{Assets} & = & \text{liabilities} + \text{Equity} \\
 & & \text{contributed} \quad \text{retained earnings} \\
 & & \text{Capital} \quad + \\
 & & \text{Common stock} - \text{dividends} + \text{revenue} - \text{expenses}
 \end{array}$$

- Net income / **profit**

Revenues > expenses

- Net lost

Revenues < expenses

## Learning objective 4

use the accounting equation to analyze transactions.

### How to you analyze a transaction?

A transaction is any event that affects the financial position of the business and can be measured with faithful representation.

#### Is it a transaction?

- ✓ Buying a computer for the office for \$ 2000 cash
- ✗ Hiring a new employee

## Transaction analysis for smart touch learning

### Transaction 1 – owner contribution

Sheena bright contributes \$ 30000 cash to smart touch learning , a corporation in exchange for stock. The effect of this transaction on the accounting equation is .

## ➤ Transactions 1

└

<u>ASSETS</u>		=	<del>LIABILITIES</del>	<u>EQUITY</u>
Cash				<u>Contributed</u>
(1 +30,00				to
				+30,00

## ➤ Transactions 2 Purchase of Land for

└ Smart Touch Learning purchases land for an office location. , paying cash of

<u>ASSETS</u>		=	<del>LIABILITIES</del>	+	<u>EQUITY</u>
Cash	Land				Contributed Common
Bal. \$30,000					\$30,00
(2 -2,000	+20,00				
Bal. \$10,000 +	\$20,000				30,00

## Transaction analysis for smart touch learning

Transaction 3 – purchase of office supplies on account

Smart touch learning buys office supplies on account which is a liability called accounts payable agreeing to pay \$ 500 within 30 days.

<u>Assets</u>				<u>liabilities + equality</u>	
Cash	+	office	+	land	
					contributed retained
					<u>capita</u> <u>earnings</u>
					common stock
		Supplies			
Bal.\$ 10,000	+			\$ 20,000	
					accounts
					payble
					+\$500
					+
(5)		\$500			<u>\$500</u>
					<u>\$ 30,000</u>
<u>Bal.\$10,000</u>	+	<u>\$500</u>	+	<u>\$20,000</u>	

## Transaction analysis for smart touch learning

### Transaction 4 – Earning of service revenue for cash

Smart touch learning earns service revenue by providing traninng services for clients the business collects 5,500 in cash.

<u>Assets</u>				<u>liabilities + equality</u>		
Cash	+	office	+		contributed	retained
		Supplies			capital	earnings
Bal. \$10,000	+	\$500	+	\$20,000		
(4)					accounts	common + service
					payable	stock revenue
Bal. 10,000	+	\$ 500	+	\$20,000	+	\$ 500 + \$ 30,000 + 5,500

➤ **Transaction 5** – Earning of Service Revenue on Account

- Smart Touch Learning performs a service for clients who do not pay immediately. The clients Promise to pay \$3,000 within one month. This promise is an asset called **account receivable**.

ASSETS				LIABILITIES + EQUALITY		
Cash	+ Accounts Receivable	+ office Supplies	+ Land	Accounts payable	contributed capital common stock	Retained Earnings Service Revenue
Bal. \$10 000 +		\$ 500	+ \$20 000	+ \$ 500	+ \$30 000	+ \$5 500
(3) + 5 500	+ 3 000					+ 3 000
Bal. 15 500	+ \$3 000	+ \$500	+ \$20 000	\$ 500	\$30 000	\$ 8 500

### Transaction 6 – Payment of Expenses with Cash

- Smart Touch Learning pays \$3,200 in cash expenses: \$2,000 for office rent and \$1,200 for employee salaries.

ASSETS				LIABILITIES + EQUALITY				
						Contributed capital	Retained Earnings	
cash	+ Accounts Receivable	office supplies	+ land	Accounts payable		common stock	+ Service Revenue	+ Rent Expense
Bal \$15 500	+ \$3 000	\$ 500	+ \$20 000	+ \$ 500		+ \$30 000	+ \$8 500	
(6) - 3 200								
Bal . 12 300	+ \$ 3 000	\$ 500	+ \$20 000	\$ 500		+ \$ 30 000	+ \$8 500	- \$2 000 - 1 200

➤ **Transaction 7** – payment on account (account payable)

Smart touch learning pays \$ 300 to the store from which it purchased office supplies in transaction 3



ASSETS				LIABILITIES +		EQUALITY			
						contributed capital	Retained Earnings		
Cash	+ Accounts Receivable	office Supplies	+ Land	Accounts payable	+ Common Stock	+ Service Revenue	- Rent Expense	- Salaries Expense	
Bal. \$12 300	+ \$ 3 000	\$ 500	+ \$20 000	+ \$ 500	+ \$30 000	+ \$ 8 500	-	-	
(7) - 300				- 300			+ 3 000	- 2 000	- 1 200
Bal. 12 000	+ \$ 3 000	+ \$ 500	+ \$20 000	\$ 200	+ \$ 30 000	+ \$ 8 500	- \$ 2 000	- \$ 1 200	

➤ **Transaction 8** – collection on account ( accounts receivable )

Smart touch learning now collects \$ 2,000 from the client from transaction 5.

## ASSETS

cash + Accounts office + Land  
Receivable Supplies

Bal. \$12,000 + \$3,000 + \$500 + \$20,000

(8) + 2,000 - 2,000

Bal. \$14,000 + \$1,000 + \$500 + \$20,000

## LIABILITIES + EQUALITY

contributed Retained  
capital Earnings

Accounts payable

+ common + Service - Rent - Salaries  
Stock Revenue Expense Expense

\$ 200

+ \$30,000 + \$8,500 - \$2,000 - \$1,200

\$ 200

+ \$30,000 + \$8,500 - \$2,000 - \$1,200

➤ **Transaction 9 – Payment of Cash Dividend**

- Smart Touch Learning distributes a \$5,000 cash dividend to the stockholder, Sheena Bright.

ASSETS					LIABILITIES +		EQUITY			
							Contributed Capital +		Retained Earnings	
Cash	+ Accounts Receivable	+ Office Supplies	+ Land	=	Accounts Payable	+ Common Stock	– Dividends	+ Service Revenue	– Rent Expense	– Salaries Expense
Bal. \$14,000	+ \$1,000	+ \$500	+ \$20,000		\$200	+ \$30,000		+ \$8,500	– \$2,000	– \$1,200
(9) -5,000							-5,000			
Bal. \$9,000	+ \$1,000	+ \$500	+ \$20,000		\$200	+ \$30,000	– \$5,000	+ \$8,500	– \$2,000	– \$1,200

**Exhibit 1-6** | Analysis of Transactions, Smart Touch Learning

- Smart Touch Learning received \$30,000 cash and issued common stock to Sheena Bright, stockholder.
- Paid \$20,000 cash for land.
- Bought \$500 of office supplies on account.
- Received \$5,500 cash from clients for service revenue earned.
- Performed services for clients on account, \$3,000.
- Paid cash expenses: office rent, \$2,000; employee salaries, \$1,200.
- Paid \$300 on the accounts payable created in Transaction 3.
- Collected \$2,000 on the accounts receivable created in Transaction 5.
- Paid cash dividends of \$5,000 to stockholders, Sheena Bright.

## Transaction Analysis for smart touch Learning

ASSETS				LIABILITIES +		EQUALITY			
Cash	Accounts Receivable	Office Supplies	Land	Accounts payable	common stock	contributed capital	Retained Earnings		
(a) + 30 000					+ 30 000				
(a) - 20 000			+ 20 000						
Bal. 10 000			Bal. 20 000		\$ 30 000				
(b)		\$ 500		+ \$ 500					
Bal. 10 000		\$ 500 + \$ 20 000		\$ 500		\$ 30 000			
(c)									
Bal. 10 000		\$ 500 + \$ 20 000		\$ 500		+ \$ 30 000		+ \$ 500	
								\$ 5 500	
(d) + 5 500 + 3 000									
Bal. 15 500 + \$ 3 000 + \$ 500 + \$ 20 000				\$ 500 +		\$ 30 000		+ 3 000	
								\$ 8 500	
(e) - 3 200									
Bal. 12 300 + \$ 3 000 + \$ 500 + \$ 20 000				\$ 500 +		\$ 30 000		+ \$ 8 500 - 2 000 - 1 200	
(f) - 300				- 300					
Bal. 12 000 + \$ 3 000 + \$ 500 + \$ 20 000				\$ 200 +		\$ 30 000		+ 3 000 - 2 000 - 1 200	
								\$ 8 500 - \$ 2 000 - \$ 1 200	
(g) + 2 000		- 2 000							
Bal. 14 000 + \$ 1 000 + \$ 500 + \$ 20 000				\$ 200 +		\$ 30 000		+ \$ 8 500 - \$ 2 000 - \$ 1 200	
(h) - 5 000									
Bal. 9 000 + \$ 1 000 + \$ 500 + \$ 20 000				\$ 200 +		\$ 30 000 + 5 000 + \$ 8 500 - \$ 2 000 - \$ 1 200			
Bal. 930 500				Bal. 930 500					

## Reading and Understanding Basic Financial Statements

# Primary Financial Statement

## Basic Financial Statements:

1. Balance Sheet
2. Income Statement
3. Statement of Retained Earning
4. Statement of Cash Flows

### **The 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. □ Owners' Equity: net assets after all obligations have been satisfied.

### **The Income Statement**

#### Revenue

- Assets (Cash or AR) created through business operations.

#### Expenses

- Assets (Cash or AP) consumed through business operations.

#### Net Income or (net loss)

- Revenues – Expenses

### **Statement of Cash Flows**

- Reports the amount of cash collected and paid out by a company in Operating, investing and financing activities for a period of time.
- How did the company receive cash?

- How did the company use its cash?
- Complementary to the income statement.
- Indicates ability of a company to generate income in the future.

## **Notes to the Financial Statements**

- Notes are used to convey information required by GAAP or to provide further explanation.

## **What are the Fundamental Concepts and Assumptions?**

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

### **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.

## **Financial Statement**

### **Content**

- ❖ Common Size Financial Statements
  - Horizontal Analysis
    - Two years change
    - Base year
  - Vertical Analysis

❖ Ration Analysis for SMEs ❖  
Interpretation

Horizontal Analysis

**Example**

The following slides illustrate a horizontal analysis of clover corporation's December

31. 2005 and 2004, Comparative balance sheets and Comparative income statements.

Clover Corporation  
Comparative Balance Sheets  
December 31

Increase ( Decrease )				
	2005	2004	Amount	%
Assets				
Current Sheets;				
Cash	\$ 12,000	\$ 23,500	\$ (11,500)	(48.9)
Accounts Recievable, Net	60,000	40,000	20,000	50.0
Inventory	80,000	100,000	(20,000)	(20.0)
Prepaid Expenses	3,000	1,200	1,800	150.0
Total Current Assets	155,000	164,700	(9,700)	(5.9)
Property and Equipment Net				
Land	40,000	40,000	-	0.0
Building and Equipment Net	120,000	85,000	35,000	41.2
Total Property and Equipment	160,000	125,000	35,000	28.0
Total Assets	315,000	289,000	25,300	8.7



I  
Clover Corporation  
Comparative Income Statements  
For the years ended December 31

	2005	2004	Amount	Increase (Decrease) %
Sales	\$ 520,000	\$ 480,000	\$ 40,000	8.3
Cost of goods sold	360,000	315,000	45,000	14.3
Gross Margin	160,000	165,000	(5,000)	(3.0)
Operating Expenses	128,600	126,000	2,600	2.1
Net operating income	31,400	39,500	(8,100)	(19.5)
Interest Expense	6,400	7,000	(600)	(8.6)
Net income before taxes	25,000	32,000	(7,000)	(21.9)
Less income taxes (30%)	7,500	9,600	(2,100)	(21.9)
Net income	17,500	22,400	(4,900)	(21.9)

Sales increased by 8.3% yet net income decreased by 21.9% .

There were increase in both cost of goods sold (14.3%) and operating expenses (2.1%) .

These increased costs more than offset the increase in sales, yielding an overall decrease in net income

## Trend percentage

Trend percentage state several years Financial data in terms of a **Base year**, which equals 100 percent.



## Trend Analysis

$$\text{Trend Percentage} = \frac{\text{Current year amount}}{\text{Base year amount}} \times 100\%$$

### Example

- 2001  
see
- Look at the income information for Berry Products for the years through 2005. We will do a trend analysis on these amounts to what we can learn about the company.

Berry Products Income Information For the years Ended December 31					
Item	Year				
	2005	2004	2003	2002	2001
Sales	\$ 400,000	\$ 355,000	\$ 320,000	\$ 290,000	\$ 275,000
Cost of goods sold	285,000	250,000	225,000	198,000	190,000
Gross margin	115,000	105,000	95,000	92,000	85,000

**The Base year is 2001, and its amounts will equal 100%**

Berry Products Income Information For the years Ended December 31					
Item	Year				
	2005	2004	2003	2002	2001
Sales	145%	129%	116%	105%	100%
Cost of goods sold	150%	132%	118%	104%	100%
Gross margin	135%	124%	111%	108%	100%

**By Analyzing the trends for Berry Products, We can see that Cpst of goods sold is increasing faster than sales,**

**Which is slowing the increase in gross margin.**

### Common-Size Statements

- **Vertical Analysis** focuses on the relationship among financial statement items at a given point in time. A **Common-Size** financial statement is a vertical Analysis in which each financial statement item is expressed as a percentage.
- In **Income statements**, all items are usually expressed as a **Percentage of sales**.

### Gross Margin Percentage

$$\text{Gross Margin Percentage} = \frac{\text{Gross Margin}}{\text{Sales}}$$

- ❖ This measure indicates how much of each sales dollar is left after deducting the Cost of goods sold to cover expenses and provides a profit.

❖ In **balance sheets**, all items are usually expressed as a **percentage of total Assets**.

### Example

- Let's take another look at the information from the Comparative income statements of Clover Corporation for 2005 and 2004.

This time let's prepare Common-Size statements.

Clover Corporation Comparative Income Statement For the year Ended December 31				
	Common-Size Percentages			
	2005	2004	2005	2004
Sales	520,000	480,000	100.0	100.0
Cost of goods sold	360,000	315,000	69.2	65.6
Gross Margin	160,000	165,000	30.8	34.4
Operating expenses	128,600	126,000	24.8	26.2
Net operating income	31,400	39,000	6.0	8.2
Interest expenses	6,400	7,000	1.2	1.5
Net income before taxes	25,000	32,000	4.8	6.7
Less income taxes (30%)	7,500	9,600	1.4	2.0
Net income	17,500	22,400	3.4	4.7

