

# Financial accounting

## Chapter 1

**Accounting:** An information system that measures, processes, and communicates financial information about an economic entity.

It is a link between business activities and decision makers.

Major goals of businesses:

- **Profitability:** Ability to earn enough income to attract and old investment capital.
- **Liquidity:** Ability to have enough cash to pay debts when they are due.

**Bankruptcy:** When a business isn't able to pay off their debts → Failliet.

How to pursue these goals:

- **Operating activities:** Include buying, producing, and selling goods and services.
- **Investing activities**
- **Financing activities:** Involve obtaining adequate funds to begin operating the business and to continue operation it

**Financial analysis:** If a business is well managed and is achieving its goals.

2 types of accounting:

- **Management accounting:** Internal decision makers.
- **Financial accounting:** External decision makers.

2 ways to process accounting information:

- **Bookkeeping:** Mechanical and repetitive; it is the process of recording Financial transaction and keeping financial records.
- **Management information systems (MIS):** Consist of the interconnected subsystems, including accounting, that provide the information needed to run a business.

**Creditors:** People who lend money or deliver goods and services before being paid.

**Debtors:** People who owe money from other people.

Users who need accounting information to make decisions on public issues:

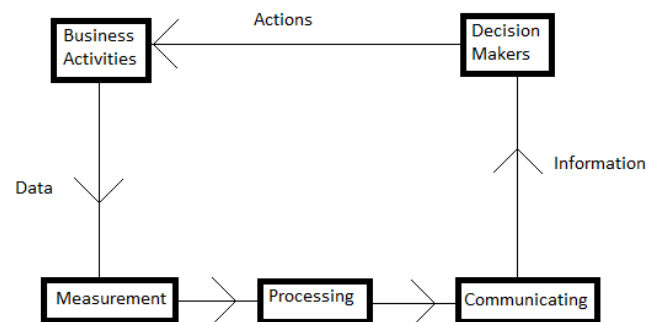
- Tax Authorities
- Regulatory Agencies
- Other Groups: Labor Unions; Advisors of Investors and Creditors; Consumer groups, Customers, and the General Public; Economic Planners.

Three forms of business:

- **Sole Proprietorship:** Eenmanszaak, one person is the owner, takes all the profits or losses of the business, and is liable for all its obligations.
- **Partnership:** VOF, two or more owners. The partners share the profits and losses of the business according to a prearranged formula. No separation between the owners and the business.
- **Corporation:** BV/NV, Business unit chartered by the state and that is legally separate from its owners (stockholders). Stockholders do not directly control the corporation's operations.

Four financial statements:

**Income statement:** Resultaten rekening. Revenues – Expenses = Income before income taxes -



Income taxes expense = Net income.

**Statement of Retained Earnings:** Winstreserve rekening. Retained Earnings begin + Net income – Dividends = Retained Earnings end.

**Balance Sheet: Accounting equation:** Assets = Liability + Stockholders' Equity.

**Assets:** Everything a company has. (cash, inventories, land, buildings, etc.)

**Liabilities:** Vreemd vermogen. A business's present obligations to pay cash, transfer assets, or provide services to other entities in the future. (e.g. Accounts payable).

**Stockholders' Equity:** Eigen vermogen. What would be left over if all liabilities were paid (**Net assets**)  
 $SE = \text{Common Stock} + \text{Retained Earnings}$

**Contributed capital:** The amount that stockholders invest in the business.

$SE = \text{Contributed Capital} + \text{Retained Earnings}$

**Statement of Cash Flows:** Cash flows are the inflows and outflows of cash into and out of a business.

- **Cash Flows from Operating Activities** = Net income + Increase in accounts payable – Increase in accounts receivable – Increase in supplies

- **Cash Flows from Investing Activities** = Purchase of land + Purchase of building

- **Cash Flows from Financing Activities:** Issued common stock – Paid dividends = Net cash flows from financing activities → Net increase/decrease in cash + Cash at begin = Cash at end

**GAAP:** Generally Accepted Accounting Principles.

## Chapter 2

Measurement issues:

- **Recognition:** Deciding when a business transaction should be recorded.

- **Valuation:** What value to place on the transaction

- **Classification:** How the components of the transaction should be categorized.

Economic events → Recognition → Valuation → Classification → Business transactions that affect financial position.

**Double-entry system:** Each transaction must be recorded with at least one debit and one credit.

Accounting equation: Assets = Liabilities + Stockholders' Equity

- Debit assets to increase them.

- Credit assets to decrease them.

- Credit L and SE to increase them.

- Debit L and SE to decrease them.

$\text{Stockholders' Equity} = \text{Common Stock} + \text{Retained Earnings} - \text{Dividends} + \text{Revenues} - \text{Expenses}.$

Accounting cycle:

Analyze → Record → Post → Adjust → Prepare → Close (ARPAPC)

*A prepaid expense is an asset*

## Chapter 3

Income Measurement Assumptions:

- **Continuity:** Assuming that the business will continue to operate indefinitely.

- **Periodicity:** Estimate the business's net income in terms of accounting periods.

- **Matching rule:** Transactions must be recorded in the period they occurred.

Adjusting entries: At least one balance sheet account and one income statement account.

- **Deferral:** Cash transaction → Recognition (prepaid expenses)

- **Accrual:** Recognition → Cash transaction

**Contra account:** A separate account that is paired with a related account

**Unearned revenues:** Revenues that are received before they are earned. *Unearned revenues are shown in a liability account*

**Accrued revenues:** Revenues that a company has earned by performing a service or delivering goods but for which no entry has been made.

**Closing entries:**

- 1 Close Revenue Accounts
- 2 Close Expense Accounts
- 3 Close Income Summary Account
- 4 Close Dividends Account

## **Chapter 4**

**Financial reporting:** To provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions in their capacity as capital providers. Information that is decision-useful to capital providers may also be useful of financial reporting who are not capital providers.

**Conventions of financial reporting:**

- **Consistency:** Once a company has adopted an accounting procedure, it must use it from one period to the next.
- **Full Disclosure (Transparency):** Financial statements present all the information relevant to users' understanding of the statements.
- **Materiality:** The relative importance of an item or event. When an item is worth 5 percent or more of net income, accountants treat it as material.
- **Conservatism:** When faced with choosing between two equally acceptable procedures or estimates, accountants should choose the one that is least likely to overstate assets and income.
- **Cost-Benefit:** The benefits to be gained from providing accounting information should be greater than the costs of providing it.

**Balance sheet:** Assets (Current Assets, Investments, Property, Plant and Equipment, Intangible Assets) = Liabilities (Current Liabilities, Long-Term Liabilities) + Stockholders' Equity (Contributed Capital, Retained Earnings).

**Current Liabilities:** Obligations that must be satisfied within one year or within the company's normal operating cycle.

**Long-term Liabilities:** Debts that fall due more than one year in the future or beyond the normal operating cycle and are thus paid out of non-current assets.

**Contributed Capital:** The amount that stockholders invest in the business.

**Multistep Income Statement:**

*Service Company:*

- 1 Revenues – Operating Expenses = Income from Operations
- 2 Income from Operations +/- Other Revenues and Expenses = Income before Income Taxes
- 3 Income before Income Taxes – Income Taxes = Net Income

*Merchandising or Manufacturing Company:*

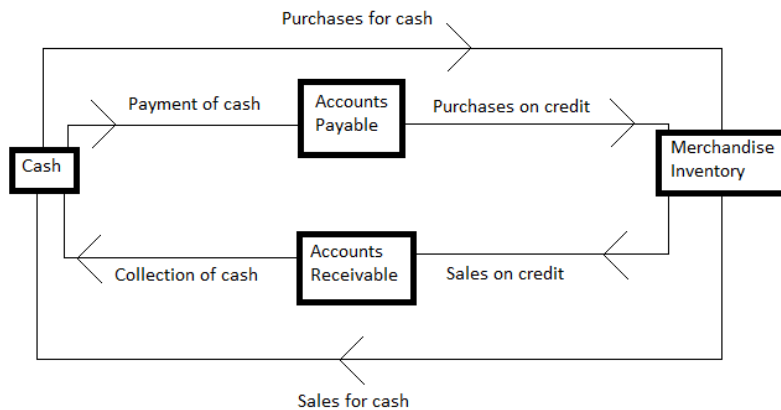
- 1 Net Sales – Cost of Goods Sold = Gross Margin
- 2 Gross Margin – Operating Expenses = Income from Operations
- 3 Income from Operations +/- Other Revenues and Expenses = Income before Income Taxes
- 4 Income before Income Taxes – Income Taxes = Net Income

### Operating Expenses:

- **Selling Expenses:** Costs of storing goods and preparing them for sale.
- **General and Administrative Expenses:** Expenses for accounting, personnel, credit checking collections, etc.

## Chapter 5

### The operating cycle:



### Inventory systems:

- **Perpetual inventory system:** Use Merchandise Inventory account in journal entries. Changes in inventory are directly booked. Costs of Goods Sold is known during the accounting period, the account Supplies is correct.
- **Periodic inventory system:** Use Purchases account in journal entries. Periodic counting. Expense is known at the end of the accounting period, after taking stock. During the accounting period, the account Supplies is incorrect.

**Discounts:** 2/10,n/30 means that the buyer either can pay the invoice within 10 days of the invoice date and take a 2 percent discount or can wait 30 days and pay the full amount of the invoice.

### Transportation Costs:

- **FOB shipping point:** The buyer bears the shipping costs. (*Freight-in* (increases COGS))
- **FOB destination:** The seller bears the shipping costs. (*Freight-out/delivery expense = selling expense*).

**FOB** = Free On Board

**Net purchases** = Total purchases + freight-in – deductions (discounts/purchases returns and allowances).

When sales are returned or when you return your purchases, the accounts **Sales Returns and Allowances** and **Purchases Returns and Allowances** are used.

## Chapter 6

### Inventory costs:

- Invoice price – purchases discounts
  - Freight-in + Insurance in transit
  - Applicable taxes and tariffs
- Effect on income taxes: High profits → High income taxes  
→ No direct effect on cash flows

### Inventory costs methods:

- **Specific Identification Method:** Identifies the cost of each item in ending inventory separately.

- **Average-Cost Method:** Inventory is priced at the average costs of the goods available for sale during the accounting period.
- **FIFO Method:** The costs of the first items purchased should be assigned to the first items sold.
- **LIFO Method:** The costs of the last items purchased should be assigned to the first items sold.

Conservatism – Lower-of-Cost-or-Market rule:

- If replacement cost falls below historical (original) cost
- Conservatism convention (overeenkomst), conservatism: grondvesten op traditie.
- Loss is taken before the actual transaction takes place

**Gross Margin = Sales – Costs of Goods Sold**

## Chapter 7

*Accounts receivable is a short-term asset.*

Two methods to estimate future losses from bankruptcy as uncollectible accounts expense:

- **Percentage of net sales method:** asks how much of a year's **net sales** will not be collected.

*Calculated as: a percentage of net sales (which represents uncollectible accounts expense).*

- **Accounts receivable ageing method:** asks how much of the **ending balance of accounts receivable** will not be collected; the longer someone does not pay, the more likely it becomes that the account is uncollectible.

*Calculated as: the estimated percentage of each accounts receivable category (in terms of due date) times total amount of receivables in each category.*

When money isn't going to be paid back, the Accounts Receivable account is credited and the Allowance for Uncollectible Accounts account is debited.

To account for future losses from bankruptcy, the Uncollectible Accounts Expense account is debited and the Allowance for Uncollectible Accounts account is credited.

Notes:

- **Maturity date:** The date on which a note must be paid.
- **Maker of the note:** The one who has to pay.
- **Payee:** The one who has to be paid
- **Principal:** The amount that is lent.
- **Interest:** Principal x Rate of Interest x Time.
- **Maturity value:** The amount that has to be paid after a certain time: Principal + Interest
- **Duration of a note:** Time between a promissory note's issue date and its maturity date.
- **Dishonored note:** A note not paid at maturity.

## Chapter 8

**Current Liabilities:** Debts and obligations that a company expects to satisfy within one year or within its normal operating cycle.

**Long-Term Liabilities:** Obligations that are due to be paid after one year or beyond the normal operating cycle.

**Definitely Determinable Liabilities:** Current liabilities that are set by contract or statute and that can be measured exactly.

- Issue of Note: Cash is debited, Notes Payable is credited
- Payment of Note: Notes Payable and Interest Expense are debited, Cash is credited.
- To record an interest expense: Interest Expense is debited, Interest Payable is credited.

**Estimated Liabilities:** Definite debts or obligations whose exact dollar amount cannot be known until

a later date.

- To record estimated product warranty expense: Product Warranty Expense is debited, Estimated Product Warranty Liability is credited.

- Replacement of muffler under warranty: Cash and Estimated Product Warranty Liability are debited, Service Revenue and Merchandise Inventory are credited (adjustment)

#### **Present Value:**

\*Compute the present value of \$8000 at compound interest of 5 percent for three years:

Present Value = Future Value x Factor =  $\$8000 \times 0.684 = \$6912$

\*Compute the present value of 3 annual payments of \$6000 with an interest rate of 5 percent.

Present Value = Periodic Payment x Factor =  $\$6000 \times 2.723 = \$16338$

## **Chapter 9**

Long-term assets: Have a useful life of at least one year or operating cycle.

- **Tangible assets:** Depreciation: Periodic allocation of the cost of a tangible long-lived asset over its estimated useful life

- **Natural resources:** Depletion: Exhaustion of a natural resource through mining, cutting, pumping or other extraction and the way in which the cost is allocated.

- **Intangible assets:** Amortization: Periodic allocation of the cost of an intangible asset to the periods of its benefits.

**Carrying value:** Gross value – Accumulation depreciation/depletion/amortization.

Factors in computing depreciation:

- **Cost:** Net purchase price + Installation costs

- **Residual Value**

- **Depreciable cost:** Asset's costs – Residual Value

- **Estimated useful life**

Methods of computing depreciation:

- **Straight Line Method:** Depreciation is every year the same. Depreciation Expense = (Cost – Residual Value)/Estimated Useful Life

- **Production Method:** Every year different depreciation due to different production of asset.

Depreciation Expense = (Cost – Residual Value)/Estimated Units of Useful Life

- **(Double) Declining-Balance Method:** With this method, you do not subtract the residual value of the cost. Annual Depreciation Rate = (2 x Percent of Useful Life)/Estimated Useful Life

## **Chapter 10**

**Capital lease:** Used to finance equipment for the major part of its useful life, and there is a reasonable assurance that the lessee will obtain ownership by the end of the lease term.

To record capital lease on machinery: Capital Lease Equipment is debited, Capital Lease Obligations is credited.

Made a payment on capital lease: Interest Expense and Capital Lease Obligations are debited, Cash is credited.

**Operating lease:** Finances equipment for less than its useful life, and at the end of the lease term the lessee returns the equipment to the lessor without further obligations. = treated as rent expense.

**Bond:** A security, usually long term, representing money that a corporation borrows from the investing public.

- **Principal:** The borrowed amount (interest excluded) = **Face Value**
- **Face Interest Rate:** Fixed rate of interest paid to bondholders based on the face value of the bonds.
- **Market Interest Rate:** The rate of interest paid in the market on bonds of similar risk. This fluctuates daily.
- **Discount:** The excess of the face value over the issue price. Market interest rate > Face interest rate.
- **Premium:** The excess of the issue price over the face value. Face interest rate > Market interest rate.
- Unsecured bonds:** Are issued on the basis of a corporation's general credit.
- Secured bonds:** Carry a pledge (asset) of certain corporate assets as a guarantee of repayment.
- Sell bonds: Cash is debited, Bonds Payable is credited.
- Paid interest to bondholders: Bond Interest Expense is debited, Cash/Interest Payable is credited.
- Bonds issued at a Discount: Cash and Unamortized Bond Discount are debited, Bonds Payable is credited.
- Bonds issued at a Premium: Cash and Unamortized Bond Premium are debited, Bonds Payable is credited.
- A** = Carrying Value at Beginning of Period, **B** = Interest Expense, **C** = Interest Payment, **D** = Amortization of Bond Discount/Premium, **E** = Unamortized Bond Discount/Premium at End of Period, **F** = Carrying Value at End of Period.
- B** = Percentage \* A, **C** = Percentage \* Face Value, **D** = B-C, C-B, **E** = E - D, **F** = A + D

## Chapter 11

### Dividend Dates:

- **Declaration Date:** The date on which the board of directors formally declares that the corporation is going to pay a dividend.
- **Record Date:** The date on which ownership of stock, and therefore the right to receive a dividend, is determined. (No entry)
- **Payment Date:** The date on which the dividend is paid to the stockholders of record.

### Stockholders Equity:

- **Contributed Capital:** The stockholders' investments in the corporation
  - **Par value:** Arbitrary amount assigned to each share.  $\text{\#issued shares} * \text{par value} = \text{Corporation's legal Capital}$
  - **Non-Par Value**
  - **Common stock:** The basic form of stock.
  - **Preferred stock:** Preferred stockholders are paid dividends before common stockholders.
    - **Cumulative preferred stock:** Preferred dividends from earlier years must be paid before any dividends on common stock are paid.
    - **Noncumulative preferred stock:** There is no obligation to make up for missed preferred dividends for earlier years.
- **Retained Earnings:** Earnings of the corporation since its inception – losses – dividends – transfers to contributed capital.
- **Treasury stock:** Shares of the corporation's own stock that it has bought back on the open market. Is treated as a reduction in SE and not an investment.
- Outstanding shares:** Shares which are still in the market.
- Authorized shares:** The maximum number of shares that a corporation's state charter allows it to issue.

Issue shares: Cash is debited, Common Stock and Additional Paid-In Capital are credited.

Buy back shares: Treasury Stock is debited, Cash is credited

Sell Treasury Stock at Above Cost: Cash is debited, Treasury Stock and Paid-In Capital are credited.

Sell Treasury Stock at Below Cost: Cash and Paid-In Capital and Retained Earnings are debited, Treasury Stock is credited.

**Stock Dividends:** Proportional distribution of shares of a corporation's stock to its stockholders, so stockholders receive additional stocks, rather than cash.

*Stock Dividends is debited, Common Stock Distributable and Additional Paid-In Capital are credited.*

Distributed a stock dividend of x common shares: Common Stock Distributable is debited, Common Stock is credited.

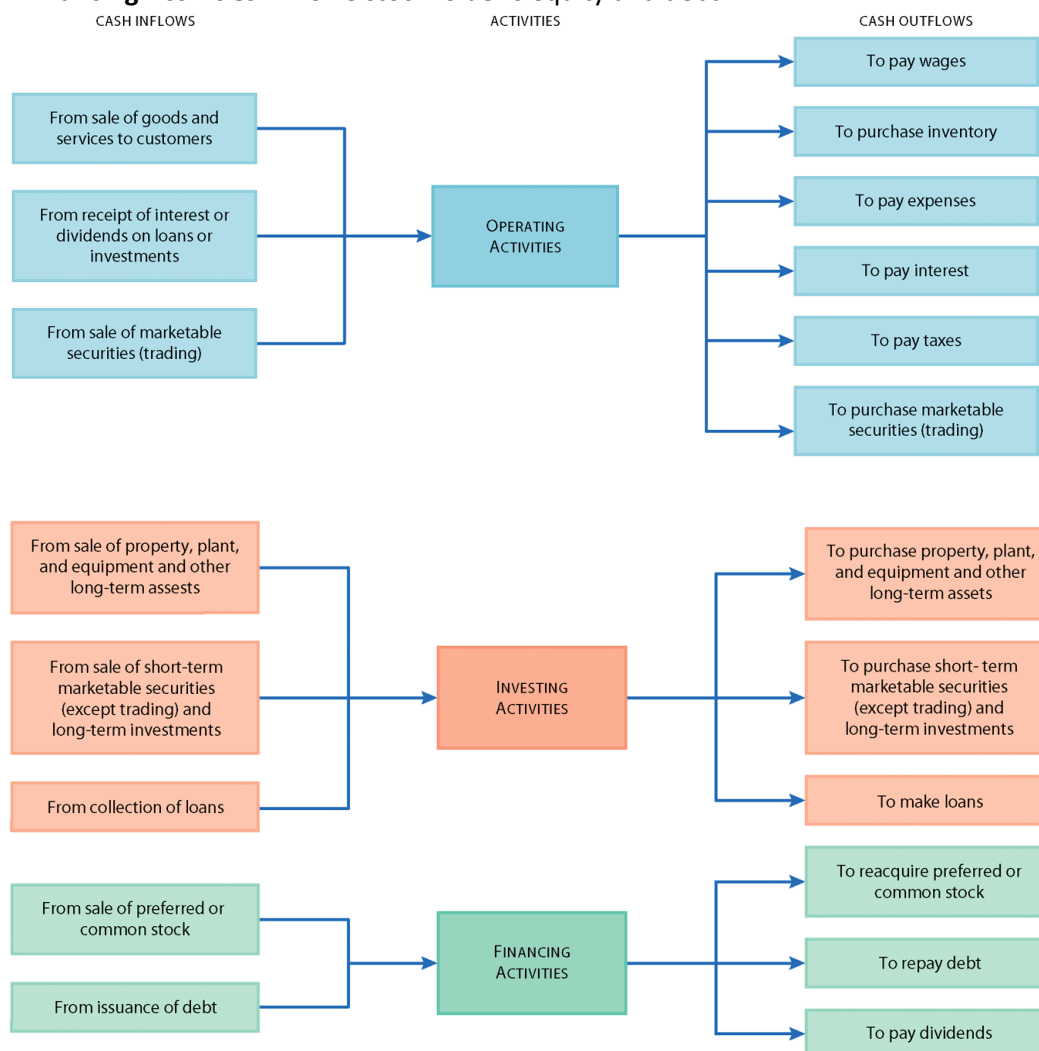
**Stock Splits:** For example 30,000 Stocks of 1 euro → 60,000 stocks of 0.50 euro

## Chapter 12

**Statement of Cash Flows:** Shows how a company's operating, investing and financing activities have affected cash during an accounting period. It explains the net increase or decrease in cash during the period.

Classification of Cash Flows:

- **Operating Activities:** Involve day-to-day sale of goods and services.
- **Investing Activities:** Involve long-term assets and investments.
- **Financing Activities:** Involve stockholder's equity and debt.



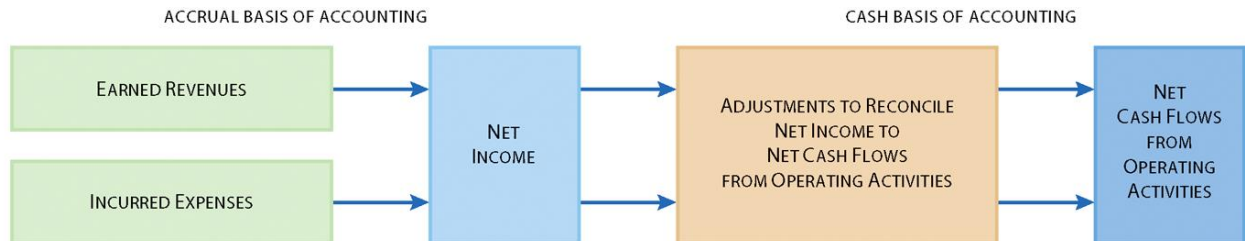


**Approach:** Income statement needs to be translated from the accrual basis to the cash basis.

Two ways to accomplish this:

- **Direct method:** Adjusting each item on the income statement.
- **Indirect method:** Only make the necessary adjustments.

**Indirect method of Determining Net Cash Flows from Operating Activities:**



- 1) Net Income
- 2) Depreciation, Amortization and Depletion
- 3) Gains or Losses
- 4) Current Assets and Current Liabilities

The following items are included in the income statement (and affect net income), but do NOT affect cash flows:

- Depreciation Expense: *Add to Net Income*
- Amortization Expense: *Add to Net Income*
- Depletion Expense: *Add to Net Income*
- Losses: *Add to Net Income*
- Gains: *Deduct from Net Income*

Why do we add losses to net income? The **actual** cash involved is accounted for under investing activities!

If current assets decrease, they need to be added to net income, if they increase, they need to be deducted from net income.

If current liabilities increase, they need to be added to net income, if they decrease, they need to be deducted from net income.

Preparation of the Statement of Cash Flows:

- 1) Determine Cash Flows from Operating Activities.
- 2) Determine Cash Flows from Investing Activities.
- 3) Determine Cash Flows from Financing Activities.
- 4) Prepare the Statement of Cash Flows.

# Ratios

## Chapter 4

Important ratios for a company's performance:

- **Profit margin** = Net Income/Net Sales
- **Asset turnover** = Net Sales/Average Total Assets
- Profit margin x Asset turnover = **Return on Assets** = Net Income/Average Total Assets
- **Cash flow yield** = Cash Flows from Operating Activities/Net Income
- **Debt to equity ratio** = Total Liabilities/Total Stockholders' Equity
- **Return on Equity** = Net Income/Average Stockholders' Equity

## Chapter 5

**Current Ratio** = Current Assets/Current Liabilities

**Inventory Turnover** = Cost of Goods Sold/Average Inventory = The average number of times a company sells an amount equal to its average level of inventory during an accounting period.

**Day's Inventory on Hand** = 365/Inventory Turnover = The average number of days it takes a company to sell an amount equal to its average inventory.

## Chapter 7

- **Receivable turnover** = Net Revenue/Average Accounts Receivable
- **Days' Sales Uncollected** = 365 Days/Receivable Turnover

## Chapter 8

*Working Capital* = Current Assets – Current Liabilities

**Payables Turnover** = (Costs of Goods Sold ± Change in Merchandise Inventory)/Average Accounts Payable.

**Days' Payable** = 365 Days/Payables Turnover

## Chapter 10

**Interest Coverage Ratio** = (Income Before Income Taxes + Interest Expense)/Interest Expense

## Chapter 11

**Dividends Yield** = Dividends per Share/Market Price per Share

**Price/Earnings (P/E) Ratio** = Market Price per Share/Earnings per Share

## Chapter 12

- **Cash Flow Yield** = Net Cash Flow from Operating Activities/Net Income
- **Cash Flows to Sales** = Net Cash Flows from Operating Activities/Net Sales
- **Cash Flows to Assets** = Net Cash Flows from Operating Activities/Average Total Assets

**Free Cash Flow:** The amount of cash that remains after deducting the funds a company must commit to continue operating at its planned level.

= Net Cash Flows from Operating Activities – Dividends – Purchases of Plant Assets + Sales of Plant Assets

If free cash flow is positive, the company

- Has met all of its planned cash commitments
- Has cash available to reduce debt or expand

If free cash flow is negative, the company will have to

- Sell investments
- Borrow money
- Issue stock in the short term to continue at its planned level of operation