Basic Concepts of Financial Accounting

The Basic Accounting Equation

- Financial accounting is based upon the accounting equation.

Assets = Liabilities + Owners' Equity

  - This is a mathematical equation which must balance.
  - If assets total \$300 and liabilities total \$200, then owners' equity must be \$100.

The Basic Accounting Equation

- The balance sheet is an expanded expression of the accounting equation.

The Basic Accounting Equation

Balance Sheet

Assets		Liabilities and Owners' Equity	
Cash	5,000	Liabilities	
Accounts receivable	7,000	Accounts payable	8,000
Inventory	10,000	Notes payable	2,000
Equipment	7,000	Total liabilities	10,000
		Owners' equity	19,000
Total assets	29,000	Total liabilities and owners' equity	29,000

Assets

- **Assets** are valuable resources that are owned by a firm.
  - They represent probable future economic benefits and arise as the result of past transactions or events.

Liabilities

- **Liabilities** are present obligations of the firm.
  - They are probable future sacrifices of economic benefits which arise as the result of past transactions or events.

Owners' Equity

- **Owners' equity** represents the owners' residual interest in the assets of the business.
  - Residual interest is another name for owners' equity.

Owners' Equity

- Owners may make a direct investment in the business or operate at a profit and leave the profit in the business.

Owners' Equity

- Yet another name for owners' equity is net assets.
  - Indicates that owners' equity results when liabilities are subtracted from assets.

Owners' Equity = Assets – Liabilities

The Basic Accounting Equation

- Both liabilities and owners' equity represent claims on the assets of a business.

The Basic Accounting Equation

- Liabilities are claims by people external to the business.

The Basic Accounting Equation

- Owners' equity is a claim by the owners.

Analyzing Transactions

- **Transaction analysis** is the central component of the financial accounting process.
  - Remember that every transaction must keep the accounting equation in balance.

The Entity Assumption

- The entity assumption dictates that business records must be kept separate and distinct from the personal records of the owners.
  - If a person owns more than one business, then each business must have its own set of records.

A transaction may do one of several things:

- It may increase both the asset side and the liabilities and owners' equity side.
- It may decrease both the asset side and the liabilities and owners' equity side.

A transaction may do one of several things:

- It may cause both an increase and a decrease on the asset side.
- It may cause both an increase and a decrease on the liabilities and owners' equity side.

A transaction may do one of several things:

- Regardless of what transaction occurs, the accounting equation must be in balance after the transaction is analyzed.

Transaction Analysis

Owners' Original Investment

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash				H.Jacobs, capital
+$50,000				+$50,000

Transaction Analysis

Bank Loan

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash		Notes Payable		
+$20,000		+$20,000		

Transaction Analysis

Rent

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash				
–$12,000				
Prepaid rent				
+$12,000				

Transaction Analysis

Inventory

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Inventory +$30,000		Accounts Payable +$30,000		

Transaction Analysis

Equipment

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash				
–$25,000				
Equipment				
+$25,000				

Transaction Analysis

ASSETS

Cash	Prepaid Rent	Inventory	Equipment
+50,000			
+20,000			
–12,000	+12,000		
		+30,000	
–25,000			+25,000
33,000	12,000	30,000	25,000

Transaction Analysis

LIABILITIES		OWNER'S EQUITY
Accounts Payable	Notes Payable	H.Jacobs, Capital
		+50,000
	+20,000	
+30,000		
30,000	20,000	50,000

Transaction Analysis

Balance Sheet

Assets		Liabilities and Owners' Equity	
Cash	33,000	Liabilities	
Accounts receivable	12,000	Accounts payable	30,000
Inventory	30,000	Notes payable	20,000
Equipment	25,000	Total liabilities	50,000
		H.Jacobs, capital	50,000
Total assets	100,000	Total liabilities and owners' equity	100,000

Historical Cost

- Historical cost is used for the recording of an asset.
- It is the exchange price on the date of the acquisition of the asset.

Historical Cost

- Even though over time an asset's value may increase above the historical cost, that cost is still kept on the books because the number is considered to be reliable.

Revenues and Expenses

- Revenues increase owners' equity.
- Expenses decrease owners' equity.

Revenues

- **Revenues** are inflows of assets (or reductions in liabilities) in exchange for providing goods and services to customers.
  - A retail store such as Wal-Mart earns revenues by selling goods to customers.
  - A CPA firm earns revenues by providing services such as tax return preparation or auditing.

Revenues

- Critically important point:
  - Cash need not be received in order for revenue to be recorded.
  - Revenues are earned when a company does what it is supposed to do according to a contract.

Revenues

- **Accounts receivable** are promises by a customer or client to pay cash in the future.

Revenues

- A related concept concerns cash received before a service is performed or goods are delivered.

Consider the following example:

- A magazine company receives $24, which represents a year's subscription.
- The subscriber, of course, pays in advance.

Consider the following example:

- The magazine company may not record revenue because it has not earned revenue yet.

Consider the following example:

- To earn revenue, it must send the subscriber one magazine a month for twelve months.

Consider the following example:

- It owes magazines to the subscriber and thus has a liability (called Unearned Revenue), not revenue.

Consider the following example:

- As magazines are sent, revenues may be recorded.

Consider the following example:

- Unearned revenues are usually settled by the performance of a service, unlike other liabilities which are usually settled by the payment of cash.

Revenues

Accounts Receivable

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash +$200 Accounts receivable +$400				H.Jacobs, capital Service revenue +$600

Revenues

Unearned Revenue

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash +$100		Unearned revenue +$100		

Expenses

- Expenses occur when resources are consumed in order to generate revenue.
- They are the cost of doing business.
  - Examples include rent, salaries and wages, insurance, electricity, utilities, and the like.

Expenses

Expenses

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash –\$700				H.Jacobs, capital Salary expense –\$700

Expenses

- A critically important point similar to that for revenues holds true for expenses.
  - A business need not pay out cash in order to have to record that an expense has occurred.

Expenses

- A critically important point similar to that for revenues holds true for expenses.
  - If a repairman comes to the business to work on the air conditioning system, then the business has a repair expense even though that work may be charged to its account.

Expenses

- A critically important point similar to that for revenues holds true for expenses.
  - The company will have a liability which it will settle later with the payment of cash.

Expenses

- The word "payable" is usually used in a liability title.

Examples of Payables

- Notes payable—written obligations.
- Accounts payable—unwritten obligations that arise in the normal operations of a business.
- Wages payable.

Examples of Payables

Payable Accounts

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
		Utilities payable		H.Jacobs, capital Utility expense
		+120		–$120

Sales of Inventory

- Sales of inventory contain both revenue and expense components.

Sales of Inventory

- A revenue transaction exists because an asset has been obtained and goods have been provided to customers.

Sales of Inventory

- An expense transaction exists because an asset has been consumed to generate the revenue.

Sales of Inventory

- The resulting expense is called cost of goods sold.

Sales of Inventory

Sales of Inventory

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Accounts receivable +$4,000				H.Jacobs, capital Sales revenue +$4,000
Inventory –2,200				Cost of goods sold –$2,200

Adjustments to Accounts

- Several adjustments must be made to accounting records at the end of the accounting period.

Adjustments to Accounts

- A balance in an account may need to be adjusted because of the passage of time and the occurrence of events in that time period.

Adjustments to Accounts

- An amount may not have been recorded in an account at all.
  - The amount will have to be recorded before the financial statements are prepared so that all the information will be correct.

Interest

- **Interest** is a rental charge for the use of money.
  - It is computed by multiplying the principal (or borrowed amount) by the interest rate and by the period of time involved.

Interest

- Since the interest rate is an annual rate, the time period must also be an annual period.
  - If the time is given in months, then the time fraction will have 12 in the denominator.

Interest

- Since the interest rate is an annual rate, the time period must also be an annual period.
  - If a company borrowed $12,000 at 10% for three months, and one month has elapsed, then accumulated interest is computed as follows:

$12,000 X .10 X 1/12 = $100

Interest

- Since the interest rate is an annual rate, the time period must also be an annual period.
  - If the time is given in days, then the time fraction will have 360 (bobtail or banker's year) or 365 in the denominator.

Interest

- Since the interest rate is an annual rate, the time period must also be an annual period.
  - The number 360 is used in the denominator because it eases computations.

Interest

- Since the interest rate is an annual rate, the time period must also be an annual period.
  - The number 360 is also used by some financial institutions because it results in more interest for them.

Which results in more interest?

- Try multiplying $12,000 X 10% X 90/360.
- Now multiply $12,000 X 10% X 90/365.

Interest Payable

Interest Payable

ASSETS	=	**LIABILITIES**	+	**OWNERS' EQUITY**
		Interest payable		H.Jacobs, capital Interest expense
		+$133		–$133

Rent

- If rent is prepaid, then as time elapses, the asset is used up, or consumed, and an expense is incurred.

Rent

- If a business prepays $6,000 for five months' worth of rent, and if two months have gone by, then the business has incurred $2,400 of expense—$1,200 per month for two months.
  - The same is true for other items paid in advance, such as insurance.

Rent

Prepaid Rent

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Prepaid rent –$1,000				H.Jacobs, capital Rent expense –$1,000

Depreciation

- Depreciation shows that an asset such as equipment or a building is wearing out and being used up.

Depreciation

- Depreciation expense is computed by dividing the estimated useful life of the asset into the asset's historical cost less any salvage value estimated by the business.

Depreciation

- If a machine cost $5,000 and has a salvage value of $500, with a useful life of five years, then the depreciation expense per year will be $900.

$$\left(\$5{,}000 - \$500\right) \big/ 5\text{years} = \$900$$

Depreciation

Depreciation

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Equipment –$208				H.Jacobs, capital Depreciation expense –$208

Unearned Revenue

- If a company has unearned revenue, then it may have earned revenue as time has elapsed because it has provided the service to the customer.
  - The liability "Unearned Revenue" will have to be decreased, and revenue will have to be recorded.

Unearned Revenue

- Using the magazine example, if three months' worth of magazines have been sent to the subscriber, then the company will reduce its liability and increase its revenues by $6.

3 months X ***$2/month = $6***

Unearned Revenue

Unearned Revenue

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
		Unearned revenue –\$50		H.Jacobs, capital Service revenue +\$50

Withdrawal by Owner

- A withdrawal by owner is treated exactly the opposite of a contribution by the owner.

Withdrawal by Owner

Withdrawal by Owner

ASSETS	=	LIABILITIES	+	OWNERS' EQUITY
Cash –$100				H.Jacobs, capital Withdrawal –$100

Revenues and Expenses

- Remember that four transactions affect owners' equity.
  - Owner investments increase owners' equity.
  - Owner withdrawals decrease owners' equity.
  - Revenues increase owners' equity.
  - Expenses decrease owners' equity.

Simple Balance Sheets and Income Statements

- The end result of the accounting process is the preparation of financial statements.

The Balance Sheet

- The balance sheet shows a firm's assets, liabilities, and owner's equity at one point in time.
  - The date on the balance sheet will be a single date, such as December 31 or June 30.

Balance Sheet
January 31, 2000

Assets		Liabilities and Owners' Equity	
Cash	$ 32,500	Liabilities	
Accounts receivable	4,400	Accounts payable	$ 30,000
Prepaid rent	11,000	Unearned revenue	50
Inventory	27,800	Utilities payable	120
Equipment	27,792	Interest payable	133
Total assets	$100,492	Notes payable	20,000
		Total liabilities	50,303
		H.Jacobs, capital	50,189
		Total liabilities and owners' equity	$100,492

The Income Statement

- The income statement summarizes a firm's revenues and expenses for a period of time.
  - The date on the income statement will be a phrase such as, "For the month ended July 31," or "For the year ended December 31."

The Income Statement

- If revenues exceed expenses, then the result is net income.
- If expenses exceed revenues, then the result is a net loss.

The Income Statement

- Only revenues and expenses appear on the income statement.
  - Students sometimes think that cash is a good thing and should appear on the income statement.
  - Cash is an asset and so will appear on the balance sheet.

Income Statement
For the Month Ended January 31, 2000

Revenues		
Sales	$ 4,000	
Service		
	650	
Total revenue		4,650
Expenses		
Cost of goods sold	2,200	
Rent	1,000	
Salary	700	
Depreciation	208	
Interest	133	
Utilities	120	
Total expenses		4,361
Net income		$ 289

The Statement of Owners' Equity

- The statement of owners' equity summarizes the changes that took place in owners' equity during the period under review.

The Statement of Owners' Equity

- It will have the same date as does the income statement.
- It shows results over a period of time, not just at one point in time.

The Statement of Owners' Equity

- The statement starts with the beginning balance of owners' equity and adds in any owner investment and net income.
- If there are withdrawals, then they are subtracted, as is a net loss.

The Statement of Owners' Equity

- A business will have either a net income or a net loss, not both.

The Statement of Owners' Equity

Statement of Owners' Equity
For the Month Ended January 31, 2000

Balance, January 1	$ 0
Investment by owner	$ 50,000
Net income	289
Withdrawal by owner	(100)
Balance, January 31	$ 50,189

Relationship Between Balance Sheet and Income Statement

- Changes in net income, owner contributions, and owner withdrawals, all of which affect owners' equity, explain changes in net assets.

The Accrual Basis of Accounting

- The accrual basis of accounting records revenues when goods have been delivered or services have been performed, regardless of when cash is received.

The Accrual Basis of Accounting

- This basis also records expenses when resources are consumed, regardless of when payment is made.

The Cash Basis of Accounting

- The cash basis of accounting records revenue when cash is received.
- This basis also records expenses when cash is paid.

The Accrual Basis Is Preferable

- The accrual basis is preferable for providing the most useful information to financial statement users.
  - GAAP requires use of the accrual basis.

The Accrual Basis Is Preferable

- The accrual basis keeps in place the matching principle.
  - All resources consumed in generating revenue should be shown on the same income statement (that is, during the same time period) as that revenue.

Forms of Business Organization

- Profit-oriented enterprises can be organized in one of three ways.
  - Sole proprietorships
  - Partnerships
  - Corporations

Sole Proprietorships

- **Sole proprietorships** are businesses that are owned by one individual and usually operated by that individual.

Sole Proprietorships

- Their primary advantage is ease of formation.
- Their major disadvantage is unlimited liability.

Sole Proprietorships

- Because of the entity assumption, records of the business and its owner must be kept separate.

Partnerships

- **Partnerships** consist of two or more persons in business to make a profit.
- They are very similar to sole proprietorships.

Corporations

- **Corporations**, unlike proprietorships or partnerships, are separate legal entities.
- They are more difficult to form, and they must pay income taxes.

Corporations

- If shareholders receive dividends, then those dividends are taxable, leading to double taxation of income.

Corporations

- A major advantage of a corporation is the limited liability of its shareholders.
  - Only a shareholder's investment in the corporation is at risk.

Balance Sheet Differences

- Differences in balance sheets lie mainly in the equity section.

Balance Sheet Differences

- A sole proprietorship has one capital account.
- In a partnership, each partner has his or her own capital account.

Balance Sheet Differences

- Shareholders' equity of a corporation consists of two components:
  - **Invested capital**—results from direct contributions by the shareholders.
  - **Retained earnings**—reflects the increases and decreases in the shareholders' interest in the company that arose from operations since the company's inception.

Basic Concepts of Financial Accounting

End of Chapter 2