

Balance Sheet Equation (The Accounting Identity)

Assets = Liabilities + Stockholders' equity

**Resources = Claims on Resources by
Outsiders + Owners**

- **Key features**

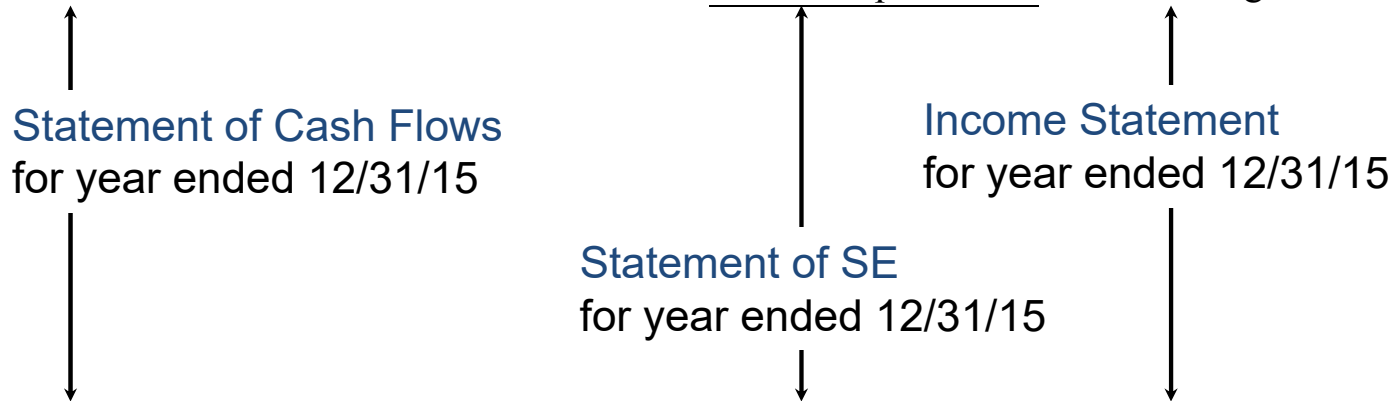
- Must always balance! (Double-entry bookkeeping)
- Changes over a period between two Balance Sheets are summarized in the Income Statement, Statement of Stockholders' Equity and Statement of Cash Flows

Financial Statements

Balance Sheet at 12/31/14

Assets = Liabilities + Stockholders' equity

Cash + Noncash assets = Liabilities + Contributed Capital + Retained Earnings



Cash + Noncash assets = Liabilities + Contributed Capital + Retained Earnings

Assets = Liabilities + Stockholders' equity

Balance Sheet at 12/31/15

Complete Balance Sheet Equation

Assets = Liabilities + Stockholders' equity

Stockholders' Equity = Contributed Capital + Retained Earnings

Retained Earnings = Prior Retained Earnings + Net Income – Dividends

Net Income = Revenues – Expenses

**Assets = Liabilities + Contributed Capital + Prior Retained Earnings
+ Revenues – Expenses – Dividends**

Using the Balance Sheet equation

- **Assets = 100, Liabilities = 50. What is Stockholders' Equity?**

$$\text{Assets (100)} = \text{Liabilities (50)} + \text{Stockholders' Equity (X)} \quad \mathbf{50}$$

- **Liabilities increase by 100 and Stockholders' Equity is unchanged. What is the change in Assets?**

$$\text{Assets (X)} = \text{Liabilities (+100)} + \text{Stockholders' Equity (0)} \quad \mathbf{+100}$$

- **All noncash assets = 70, Total Liabilities = 60, Total Stockholders' Equity = 30. What is Cash?**

$$\text{Cash (X)} + \text{Noncash assets (70)} = \text{Liabilities (60)} + \text{Stockholders' Equity (30)} \quad \mathbf{20}$$

- **Cash decreases by 10 and noncash Assets increase by 15. What is the change in Liabilities?**

$$\text{Cash (-10)} + \text{Noncash assets (+15)} = \text{Liabilities (X)} + \text{Stockholders' Equity (?)}$$

Not enough information

Using the Balance Sheet equation

- Retained Earnings increase by 100, Dividends = 50. What is Net Income?

Retained Earnings = Prior Retained Earnings + Net Income – Dividends

(Retained Earnings - Prior Retained Earnings) (100) = Net Income (X) – Dividends (50) **150**

- Revenue increases by 100 and all other categories are unchanged, except Assets. What is the change in Assets?

Assets (X) = Liabilities (0) + Contributed Capital (0) + Prior Retained Earnings (0) + Revenues (+100) – Expenses (0) – Dividends (0) **+100**

- Expenses increase by 60 and all other categories are unchanged, except Cash. What is the change in Cash?

Cash (X) + Non-cash assets (0) = Liabilities (0) + Contributed Capital (0) + Prior Retained Earnings (0) + Revenues (0) – Expenses (+60) – Dividends (0) **-60**