

# Topic 1: Balance Sheet Equation (BSE)

## Introduction

The Balance Sheet Equation (BSE), also known as the accounting equation, is the fundamental principle underlying all accounting systems. It states that: **Assets = Liabilities + Stockholders' Equity**. This equation must always remain in balance after every transaction, reflecting the dual aspect of accounting where every transaction affects at least two accounts.

## Components of the Equation

### Assets

**Assets** are resources owned or controlled by the business that have future economic value. They represent what the company owns and can be categorized as current assets (cash, accounts receivable, inventory, prepaid expenses) or non-current assets (equipment, buildings, long-term investments). Assets are listed on the left side of the balance sheet.

### Liabilities

**Liabilities** are obligations or debts that the business owes to external parties. These represent claims against the company's assets by creditors. Liabilities can be current (due within one year, such as accounts payable, salaries payable) or long-term (due beyond one year, such as bonds payable, mortgages). They appear on the right side of the balance sheet.

### Stockholders' Equity

**Stockholders' Equity** represents the owners' residual interest in the company after all liabilities are deducted from assets. It consists of contributed capital (common stock, additional paid-in capital) and retained earnings (accumulated profits minus dividends). The equation can be expanded as: Assets = Liabilities + Contributed Capital + Retained Earnings.

## Recording Transactions Using the BSE

Every business transaction affects at least two accounts, maintaining the equation's balance. This is the foundation of double-entry bookkeeping. When recording transactions in tabular format, create columns for each account (assets on the left, liabilities and equity on the right). Each transaction is recorded on a separate row, showing increases (+) and decreases (-) to relevant accounts.

For example, when stockholders invest \$50,000 cash: Cash (asset) increases by \$50,000, and Common Stock (equity) increases by \$50,000. Both sides of the equation increase by the same amount, maintaining balance. When purchasing equipment for \$6,000 cash: Equipment (asset) increases by \$6,000, and Cash (asset)

decreases by \$6,000. Total assets remain unchanged.

## Key Principles

- 1. The equation always balances:** After every transaction, Assets must equal Liabilities plus Stockholders' Equity. If they don't balance, an error has been made in recording the transaction.
- 2. Dual effect:** Every transaction has at least two effects on the accounting equation. Some transactions may affect only one side (like exchanging one asset for another), while others affect both sides (like borrowing money increases both assets and liabilities).
- 3. Revenue and expense effects:** Revenues increase stockholders' equity (specifically retained earnings), while expenses and dividends decrease stockholders' equity. These are often tracked separately in the BSE table to facilitate income statement preparation.

## Expanded Equation for Analysis

For detailed analysis, the equation is often expanded to show the components of stockholders' equity separately: **Assets = Liabilities + Common Stock + Retained Earnings + Revenues - Expenses - Dividends**. This expanded form helps in tracking the sources of changes in equity and facilitates the preparation of both the balance sheet and income statement from a single tabular analysis.

Understanding the BSE is crucial because it provides the framework for organizing financial information, ensures accuracy through the balancing requirement, and serves as the foundation for preparing all financial statements.