Accounting Equation

Accounting equation is a basic concept of agreement between left-hand and right-hand site and starting pint of double entry. Double entry bookkeeping states that for every debit entry there should be pass a credit entry. Every transaction has twofold effect; this concept has a result of Balance Sheet Equation or Fundamental Equation. At any point of time total assets must be equal to equities. In other words we can say that left hand side which is resource side must be equal to right hand side which is of course source side.

The two basic elements of a business are what it owns and what it owes. Assets are the resources a business owns. For example, ABC Ltd. has total assets of approximately Rs. 50.5 billion. Liabilities and owner's equity are the rights or claims against these resources. Thus, ABC Ltd. has Rs. 50.5 billion of claims against its Rs. 50.5 billion of assets. Claims of those to whom the company owes money (creditors) are called liabilities. Claims of owners are called owner's equity. ABC Ltd. has liabilities of Rs. 20 billion and owners' equity of Rs. 30.5 billion. We can express the relationship of assets, liabilities, and owner's equity as an equation, as shown:

$$Asset = Liabilities + Owner\ Equity$$

Or

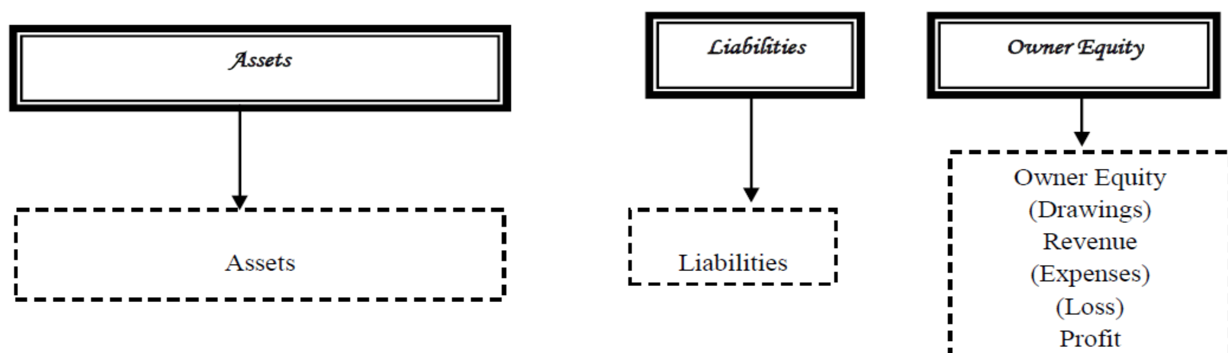
$$Assets = Equities / Claims$$

Or

$$Resources = Sources$$

Or

$$Left\ hand\ side = Right\ hand\ side$$



This relationship is the basic accounting equation. Assets must equal the sum of liabilities and owner's equity. Liabilities appear before owner's equity in the basic accounting equation because they are paid first if a business is liquidated. The accounting equation applies to all economic entities regardless of size, nature of business, or form of business organization. The equation provides the underlying framework for recording and summarizing economic events.

Different Presentation of Accounting Equation

There are different styles of presentation mention below for balance sheet equation:

Which of the following is correct form of Equation?

Assets	=	Liabilities	+	Owner's Equity		
Assets	-	Liabilities	=	Owner's Equity		
Liabilities	=	Assets	-	Owner's Equity		
Asset	-	Liabilities	-	Owner's Equity	=	0

The accounting equation as a statement of financial position may be expressed as:
Assets minus Liabilities equal Ownership interest; the ownership interest is the residual claim after liabilities to third parties have been satisfied. The equation expressed in this form emphasizes that residual aspect. Another way of thinking about an equation is to imagine a balance with a bucket on each end. In one bucket are the assets (A) minus liabilities (L). In the other is the ownership interest (OI). If anything happens to disturb the assets then the balance will tip unevenly unless some matching disturbance is applied to the ownership interest. If anything happens to disturb the liabilities then the balance will tip unevenly unless some matching disturbance is applied to the ownership interest. If a disturbance applied to an asset is applied equally to a liability, then the balance will remain level.

Accounting Equation Examples

Example # 1:

For each of the following transactions indicate the effects i.e. (Increase, Decrease, Conversion or No Effect)?

(1) The owner invests personal cash in the company?

Assets	Liabilities	Owner's Equity
Increase	No Effect	Increase

(2) The owner withdraws company's assets for personal use?

Assets	Liabilities	Owner's Equity
Decrease	No Effect	Decrease

(3) The company purchases equipment with its cash?

Assets	Liabilities	Owner's Equity
Conversion	No Effect	No Effect

(4) The company repays the bank loan by introducing reinvestment of owner in the company?

Assets	Liabilities	Owner's Equity
No Effect	Decrease	Increase

Expanded Accounting Equation

The Expanded Accounting Equation of sole proprietorship and partnership is Accounting Equation (Assets = Liabilities + Owner's Equity) – Expenses + Revenue – Drawings Account.

In case of company business the expanded accounting equation in the balance sheet equation (Assets = Liabilities + Stockholders' Equity) with replacement of Stockholders' Equity with Paid-in Capital – Expenses + Revenues – Treasury Stock – Dividends.

Various Accounting Terminologies:

Assets

Assets can be thought of as the things you own, the things you have rights to, and expenses that have been paid for and have not yet been used up. The things a company owns include *cash, investments, inventory, land, buildings, equipment, vehicles, furniture, and fixtures.* Assets that represent items the company have rights to include *licenses, trademarks, copyrights, and franchises*.

Assets represent an expense that has been paid for and not yet used up is a prepaid expense. Assets are often divided into current and noncurrent (sometimes called long-term).

i) **Current assets** are those assets that are expected to be turned into cash or used up within the next twelve months. Typical current assets are cash, accounts receivable, inventory, marketable securities, and prepaid expenses.

ii) **Noncurrent assets** are those assets that are not going to be turned into cash or used up within the next twelve months. E.g. land, building, machinery, vehicles, office equipment, furniture etc.

Assets are defined as, "*a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity*".

To understand this definition fully, each phrase must be analyze separately as below:

- Controlled by entity

- Past events
- Future economic benefits

Examples of Assets

The following items are commonly found in the assets section of balance sheet of a company:

- Plant and machinery owned
- Land and buildings owned
- Land and buildings leased
- Vehicles
- Inventory/Stock
- Raw materials
- Work in progress
- Finished goods
- Account receivables
- Prepaid insurance and rentals
- Investments in shares of other companies (Marketable Securities)
- Cash held in a bank account.

As noted above, assets are resources a business owns. The business uses its assets in carrying out such activities as production and sales. The common characteristic possessed by all assets is the capacity to provide future services or benefits. In a business, that service potential or future economic benefit eventually results in cash inflows (receipts).

Types of Assets

It has four types, Tangible Assets, Intangible Assets, Natural Resources and Financial Assets.

Tangible Assets: Machinery, Furniture, Building, Equipments, Plant, Car, Inventories, Fixture and Fittings, Computer, Books etc. etc.

Intangible Assets: Patents, Goodwill, Copy Rights, Trade Mark etc. etc.

Natural Resources: Land, Mines, Coal, Forest etc. etc.

Financial Assets: Cash, Note Receivables, Marketable Securities, Bank, Prepaid items, etc. etc.

Current Assets and Non-Current Assets

It is conventional practice to separate assets into current assets and non-current assets. Current assets are held with the intention of converting them into cash within the business cycle. Non-current assets, also called fixed assets, are held for continuing use in the business. The business cycle is the period (usually 12 months) during which the peaks and troughs of activity of a business form a pattern which is repeated on a regular basis.

Recognition of Assets

When an item has passed the tests of definition of an asset, it has still not acquired the right to a place in the statement of financial position (balance sheet). To do so it must meet further tests of recognition. Recognition means reporting an item by means of words and amounts within the main financial statements in such a way that the item is included in the arithmetic totals. An item which is reported in the notes to the accounts is said to be disclosed but not recognized. The conditions for recognition have been expressed as in the following definition.

An asset is recognized in the statement of financial position (balance sheet) when: it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably.

Liabilities:

Liabilities are the things that you owe. Liabilities require the future sacrifice of assets. In business, however, credit is often used rather than paying with cash or a check. If we purchase something on credit, the credit will be to accounts payable rather than to Cash. Like assets, liabilities are classified as current liabilities or Non-current (also called long term liabilities).

- **Current liabilities** are those liabilities that are expected to be satisfied within the next twelve months (the next year).
- **Non-current liabilities** are those liabilities that are not expected to be satisfied within the next twelve months. In some cases, a portion of a liability will be paid within the next year and another portion will not be. A good example of this is a mortgage.

Liabilities are defined as:

"a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits".

To understand this definition fully, each phrase must be analyze separately as below:

- Present obligation
- Past events
- Outflow of economic benefits

Examples of Liabilities

Here is a list of items commonly found in the liabilities section of the balance sheets of companies:

- Bank loans and overdrafts
- Trade payables (amounts due to suppliers of goods and services on credit terms)
- Taxation payable
- Accruals (amounts owing, such as unpaid expenses)
- Provision for deferred taxation

- Long-term loans
- Salaries payables
- Interest Payables
- Notes payables
- Accounts payables

Types of Liabilities

Liabilities are a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits. The first items in this list would be classified as **current liabilities** because they will become due for payment within one year of the date of the **financial statements**. The last item would be classified as non-current liabilities because they will remain due by the business for longer than one year.

Liabilities are typically divided into two categories: short-term or Current Liabilities and Long Term Liabilities.

Current Liabilities

A current liability is a liability which satisfies any of the following criteria:
(a) It is expected to be settled in the entity's normal operating cycle;
(b) It is held primarily for the purpose of being traded;
(c) It is due to be settled within 12 months after the reporting period.

Current liabilities are listed in the order in which they are expected to be satisfied. The ones that will be paid first are listed first.

Current Liabilities: Account Payable, Bank Overdraft/Overdrawn, Note Payable outstanding or payables, etc.

Non-current Liabilities

A non-current liability is any liability that does not meet the definition of a current liability. Non-current liabilities are also described as long term liabilities. **Non-current liabilities** are grouped by type (Loans payable, Bonds payable, Notes payable and so on). The footnotes will usually explain the components of the non-current liabilities (the basic terms, maturities, interest rates, and so on).

Long Term Liabilities: Bank Loan, Debenture, Bonds, Mortgage Loan etc. etc.

Recognition of Liabilities

As with an assets, when an item has passed the tests of definition of a liability it may still fail the test of recognition. In practice, because of the concern for prudence, it is much more difficult for a liability to escape the statement of financial position **(balance sheet)**. The condition for recognition of a liability uses wording which mirrors that used for recognition of the **asset**. The only difference is that the economic benefits are now expected to flow from the enterprise. A liability is recognized in the statement of financial position (balance sheet) when:

- It is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and
- The amount at which the settlement will take place can be measured reliably.

For current liabilities there will be a payment soon after the date of the **financial statements** and a past record of making such payments on time. For non-current liabilities (long-term liabilities) there will be a written agreement stating the terms and dates of repayment required. The enterprise will produce internal forecasts of **cash flows** which will indicate whether the cash resources will be adequate to allow that future benefit to flow from the enterprise.

Examples of liabilities which are not recognized in the statement of financial position are:

- A commitment to purchase new machinery next year (but not a firm contract)
- A remote, but potential, liability for a defective product, where no court action has yet commenced
- A guarantee given to support the bank overdraft of another company, where there is very little likelihood of being called upon to meet the guarantee.

Because of the prudent nature of accounting, the liabilities which are not recognized in the statement of financial position (balance sheet) may well be reported in note form under the heading contingent liabilities. This is referred to as disclosure by way of a note to the accounts.

Looking more closely at the list of liabilities which are not recognized, we see that the commitment to purchase is not legally binding and therefore the outflow of resources may not occur. The claim based on a product defect appears to be uncertain as to occurrence and as to amount. If there has been a court case or a settlement out of court then there should be a provision for further claims of a similar nature. In the case of the guarantee the facts as presented make it appear that an outflow of resources is unlikely. However, such appearances

have in the past been deceiving to all concerned and there is often interesting reading in the note to the financial statements which describes the contingent liabilities.

Drawings

An owner may withdraw cash or other assets for personal use; we use a separate classification called **drawings** to determine the total withdrawals for each accounting period. Drawings decrease **owner's equity**. They are recorded in a category called owner's drawings.

- De-investment of the owner from business.
- Drawing is defines as withdrawal made by owner in the form of cash and other assets for their personal use.
- This will be reducing the owner equity account.
- This is the case only sole proprietorship and partnership.
- There is no drawing account in case of corporation. Drawing decrease owner equity in the business.

Expenses

An expense is caused by a transaction or event arising during the ordinary activities of the business which causes a decrease in the ownership interest. **Expenses** are the cost of assets consumed or services used in the process of earning **revenue**. They are decreases in owner's equity that result from operating the business. For example, in Pizza business recognizes the following expenses:

- Cost of ingredients (meat, flour, cheese, tomato paste, mushrooms, etc.); cost of beverages;
- Salaries and wages expense; utilities expense (electric, gas, and water expense);
- Delivery expense (gasoline, repairs, licenses, etc.); supplies expense (napkins, detergents, aprons, etc.);
- Rent expense; interest expense; and property tax expense.

Following are some examples of expenses:

Wages, Salaries, Rent, Octri, Fright, Carriage, Stationery, Repairs, Carriage, Discount, Transportation, Commission and all accounts have debit balance (Dr) etc.

Owner's Equity

The ownership claim on total assets is **owner's equity**. It is equal to total assets minus total **liabilities**. The assets of a business are claimed by either creditors or owners. To find out what belongs to owners, we subtract the creditors' claims (the liabilities) from **assets**. The remainder is the owner's claim on the assets—the owner's equity. Since the claims of creditors must be paid before ownership claims, owner's equity is often referred to as residual equity.

Types of Owner's Equity

In a company the arrangements for sharing the net assets depend on the type of ownership chosen. The owners may hold **ordinary shares** in the company, which entitle them to a share of any dividend declared and a share in net assets on closing down the business. The ownership interest is in direct proportion to the number of shares held. Some investors like to hold **preference shares**, which give them a preference (although not an automatic right) to receive a dividend before any ordinary share dividend is declared. The rights of preference shareholders are set out in the articles of association of the company. Some will have the right to share in a surplus of net assets on winding up, but others will only be entitled to the amount of **capital** originally contributed.
The ownership interest is called equity. Equity is the residual interest in the assets of the entity after deducting all its liabilities. Net assets means the difference between the total assets and the total liabilities of the business: it represents the amount of the ownership interest in the entity.

Owner's Equity Recognition

There can be no separate recognition criteria for the ownership interest because it is the result of recognizing assets and recognizing liabilities. Having made those decisions on assets and

liabilities the enterprise has used up its freedom of choice. The owner will become better off where the net assets are increasing. The owner will become worse off where the net assets are decreasing.