

# Depreciation

## Depreciation in Accounting

Depreciation in the context of accounting methods is the determination of the cost incurred in the life expectancy or usage of a particular tangible asset.

The characteristics of depreciation are mentioned below:

- Depreciation is a loss of value that takes place for tangible assets due to the passage of time.
- It is primarily the decrease that is recorded in fixed assets' book value.
- Depreciation is necessarily a continuous process until it reaches the conclusion of the lifespan of the assets.

## Reasons for Depreciation

There are a host of different causes that lead to the depreciation of physical assets.

- The passage of time and regular wear and tear leads to deterioration which in turn causes a decrease in the asset value. Such deterioration may also arise from revenue-generating activities of the asset as well as business operations.
- In a few instances, with the expiry of legal rights which are inherent to a certain class of assets, the latter loses its value with the expiry of the pre-determined period.
- The tangible asset may also become out-of-date, causing its value to go in a downward spiral. In this case, the particular asset becomes outdated, and usually, newer substitutes are made available.

## Methods of Depreciation

The types of depreciation calculation owing to its methods are indicated below:

### 1. Straight-Line Method

In case of straight-line depreciation calculation, the amount of expense is the same for each year of the asset lifespan.

The depreciation formula is –

$$\text{Depreciation Expense} = (\text{Cost} - \text{Salvage Value}) / \text{Useful Life}$$

## 2. Units of Production Method

An asset is depreciated on the basis of the total number of units that are generated by utilizing the asset or the total number of hours for which it has been used across its lifespan.

The depreciation formula is –

$$\text{Depreciation Expense} = (\text{Number of Units that have been Produced} / \text{Life in Number of Units}) \times (\text{Cost} - \text{Salvage Value})$$

## 3. Double Declining Balance Method

Double declining balance depreciation method causes a higher amount of expenses in the previous years when compared to the latter years of the lifespan of a particular asset. It shows that such classes of assets are significantly more productive in its earlier years.

The depreciation formula is –

$$\text{Depreciation Expense on a Periodic Basis} = \text{Beginning Book Value} \times \text{Depreciation Rate}$$

## 4. Sum-of-Years Digits Method

The sum-of-years digits method of depreciation is accelerated when compared to other methods. In the early years of the lifespan of an asset much higher expense is incurred, and as the years' progress, the expenses reduce. For this calculation, the asset's remaining life is divided by the aggregate of years and subsequently multiplied by the depreciating base.

The depreciation formula is –



$$\text{Depreciation Expense} = (\text{Remaining Life} / \text{Sum-of-Years Digits}) \times (\text{Cost} - \text{Salvage Value})$$

## Different Aspects of Straight Line Method of Depreciation

The benefits of the straight-line method of depreciation are –

- Given that it is a relatively simple method for calculation of depreciation, asset depreciation can go up to zero value which is also the net scrap value.
- In the profit and loss account, pursuant to this method, the same is charged as the depreciation amount.

The limitations of the straight-line method of depreciation are –

- Even though the depreciation of assets under this calculation can go up to zero, assets' book value can never be zero.
- A suitable rate of depreciation becomes difficult to be ascertained.

## Written Down Value Method of Depreciation

Written down value essentially indicates the asset value after accounting amortization or depreciation. It shows what is the present worth of an asset that has already been purchased.

(The term, amortization is mostly used with respect to intangible assets. The concept of amortization includes the measure of writing off certain intangible assets such as copyrights, patents, franchises, trademarks, etc. It can be understood that those aspects are also covered under the written down value method of depreciation)

The calculation of the written-down value is done by subtracting the amortization or the accumulated depreciation from the original value of the asset. The depreciation becomes a fixed percentage of the asset's original cost. The written-down value figure will reflect on the balance sheet.

## Comparison between the Straight-Line Method and Written Down Value Method



Parameters	Straight-line Method of Depreciation	Written Down Value Method of Depreciation
Depreciation charge	The original cost of the physical assets is taken into consideration in the course of calculating depreciation	The book value of the physical assets is taken into consideration in the course of calculating depreciation
Annual depreciation amount	During the lifespan of the fixed assets, the annual depreciation amount remains constant	The depreciation amount of the fixed assets experience a steady decline with succeeding years
Repairs and cost of depreciation	It incurs a lower cost in the early years which gradually increases in the subsequent years. The incurred cost is the combined amount from repairs and depreciation	The cost remains more or less similar in the course of the lifespan of the fixed asset. The incurred cost is the combined amount from repairs and depreciation
Income tax recognition	Straight-line method calculation of depreciation is not recognized by the Income Tax department in India	Written down value method calculation of depreciation is recognized by the Income Tax department in India

If you are looking to know more about this topic, feel free to read through a number of online materials available on Vedantu's platform. You can also install Vedantu's app to access the study materials anytime.

### How Depreciation affects the Selling Price of Assets?



Machines and tools are the physical objects that help in performing various functions that are essential for developing a product or getting work done. To illustrate an example: Vehicles help in transportation of goods and people, packaging machines in industrial setups perform the function of packaging of final products. Electronic devices such as computers and smartphones help in conducting various tasks and communication. Because all these physical or tangible objects add value to the product they deal with, they are known as assets in general terms. The value of the materials and effort used in the making of these assets constitute the value of these assets. According to this value, the cost of the assets is determined to be sold in the market.

Anybody who needs the service performed by these assets can buy it and use it. With time the value of the asset also decreases with time as they are used up worn and torn down gradually. So after each year, the value of the equipment or asset will decrease. This decrease in value determines the selling price of the equipment each year. As the balance sheet of a business also includes the values of every equipment and asset the effect of depreciation is also reflected in it. It sometimes benefits the owner of the asset or business to cut down his tax expenses during accounting.

There are various methods and formulas derived and established for the calculation of depreciated value during accounting. To name some are straight-line methods, declining balance methods, fixed percentage methods. Often the law of attraction determines the use of anyone method for the computation of depreciation.