Compare and Contrast Depreciation Methods

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There are four common methods of depreciation which are mostly used for determining the levels of revenue and the condition of various assets. The four methods are named as units of production, double-declining balance, straight line, and sum-of-years-digits.

## Straight-Line Method

The simplest method of determining the book value of an asset is the straight-line method which is very common. It assists in figuring out the loss in the value of an asset as time passes. It is computed by dividing the cost minus expected salvage value by the expected number of useful years of an asset. It is most useful in those situations where the benefits of an asset are procured at a constant rate (Singh, 2017). Calculating the depreciation rate of specifically those assets which have a uniform and consistent operation over their life span is also made easier. Straight-line method is also suitable for those items which are not so expensive and are fixed at a reasonable price, for instance, furniture. It works within the defined commercial, legal or estimated life span of the asset, therefore, it can only be used to calculate the depreciation rate of those assets whose life can be predicted. There are also some disadvantages of using the straight-line method. Firstly, it does not include the loss in efficiency while calculating the depreciation rate for an asset. It is also not suitable for those assets that are expensive, for example, huge plants or fragile equipment. Secondly, the calculation of the functional life of an asset is also not possible when the straight-line method is used. Financial analysts and accountants do not prescribe this formuala when the usage of an asset over its life span cannot be predicted.

## Double-Declining Balance

 Also known as the 200% declining balance method of depreciation, the double-declining balance method for computing the level of depreciation calculates depreciation in its accelerated form. This implies that in comparison to the straight-line method, the expense of depreciation will be accelerated in the early years of the asset’s usage, but it will get slowed down in the later years. It does not advocate any difference in the total amount of depreciation during the expected useful life of the asset. This can easily be calculated by multiplying the result of the straight-line method with 2 (Del Giudice, 2016). Double-declining balance method is best suited in situations whereby a business is pursuing a larger and immediate deduction in the tax rate. This can also be useful for bringing a reduction in the tax breaks in the subsequent years. The assets that lose their useful value quickly, for instance, new cars and durable equipment are best suited for this method of calculating depreciation. One quirk of this method is that it cannot be used for those assets that are reliable and do not lose their useful and salvage value quickly.

## Units of Production Method

Units of production is based on the number of units produced during a particular year. The estimated total production is the criteria for calculating the level of depreciation of an asset. This formula is best suited in those scenarios where there is a close association between the value of an asset and the number of units it produces in a given year. Thus, the depreciation rate is conspicuously higher in those years when the usage of the asset is prominently higher than in other years. The depreciation levels of equipment plants and machinery can be best calculated from this formula as their depreciation is directly associated with the level of usage. To calculate depreciation, the potential depreciable value is multiplied with the ratio of the total number of units produced during a year and the total production which is estimated. One significant advantage of this method is that the expanse can be directly allocated and connected to the time period in which it occurred because of the direct connection between the assets used and the depreciation charges (Radu, 2011). If there are high levels of depreciation, the level of physical activities or wear and tear of the asset can be attributed to. There is also a disadvantage of this method. No depreciation charges can be calculated during those time periods when the asset is sitting idle or is not in use. Unlike other methods, the units of production method also require intricate record-keeping of production levels and associate usage.

## Sum-of-Years Method

This method deploys accelerated depreciation which is largely based on the pre-supposed assumption that with the passage of time, the useful life of an asset decreases by virtue of its productivity. This method makes an attempt to charge a higher amount of depreciation expense in the early years of its useful life. This is because this method is best suited in those scenarios whereby the asset is the most productive in the early years of its life. The depreciation levels of those assets which lose their productive and fruitful efficiency in their early years can also be efficaciously calculated through this method. The advantages of this method are multi-faceted. Firstly, many accounting standards, for instance, IFRS and U.S. GAAP and it is also accepted for reporting tax records under the jurisdictions of many revenue organizations (Liapis, 2015). Secondly, the depreciation of assets that undergo rapid obsolescence and need up-gradation shortly after their launch, for instance, computers and mobile phones can easily be calculated through this method. However, there is no creation of larger tax deductions through this method and accordingly, there will be a higher expense of tax deductions from the income.

# References

Del Giudice, V. M. (2016). Depreciation methods for the firm’s assets. *International Conference on Computational Science and Its Applications*, 214-227.

Liapis, K. J. (2015). Depreciation methods and life-cycle costing (LCC) methodology. *Procedia Economics and Finance*, 314-324.

Radu, D. &. (2011). Issues related to the accounting treatment of the tangible and intangible assets depreciation. *Annals of the University of Oradea, Economic Science Series*, 498502.

Singh, R. (2017). Depreciation methods: A study of the practice of the Indian corporate sector. *ZENITH International Journal of Business Economics & Management Research*, 16-23.