

IMPACT OF DEPRECIATION EXPENSES ON FINANCIAL PERFORMANCE OF COMPANIES

(Impact of Different Depreciation Methods on Financial Performance)

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ABSTRACT:

A company's or enterprise's financial performance can be analysed by the obtained net results of current year. It is not significant because it always takes the profit taxes and the financial elements. The enterprise's actual effort is difficult to ascertain in few cases. The results of an enterprise's financial and business performance is always dependent on the companies fiscal and financial policy, but it also takes in account depreciation, amortization and provisioning policy and also the important one the inventory valuation methods.

The main question for the entrepreneurs and owners is that ' ' which depreciation method is effective and efficient? Will this effect their profitability?. From the view point of my research paper I would propose the 'methods of depreciation' the fixed assets & comparing it with the financial performances of the companies, specially on the results.

In this research paper, I have primarily used the empirical data collected from various sources for my research value, from studies, statistical yearbooks, literature, annual financial statements of companies.

INTRODUCTION TO THEORY OF ASSETS DEPRECIATION:

Depreciation addresses a steady reduction of contribution of fixed assets & liabilities resources all together to give genuine worth of the job of bookkeeping worth of resources with irreversible depreciation / Depreciation.

It refers, to viewpoint, the decline in the worth of the funds or money. Fixed resources are never devalued based on lack of significant worth however based on the deliberate attribution of all the expense of passage over various monetary years. Subsequently, worsening is the consequence of an efficient and intelligent account

/book keeping strategy for the cost of fixed resorts, applied so as to attribute part of that expense for every year to make profit.

Current tax legislation [2] governs the depreciation of fixed assets. It mandates that assets be depreciated in proportion to their normal useful life and establishes proportional quotas for each kind of asset. Period depreciation does not take into account the possibility of more efficient assets emerging, which would render them inoperable before the end of their expected /useful life, nor does it take into account the possibility of extensive use of fixed assets, which would result in the same outcome.

As per regulation [2], the Depreciation kept in the recompenses isn't dependent upon tax assessment, yet the extra deterioration, without the endorsement of the duty specialists, is considered as benefits and in this way dependent upon Depreciation. Depreciation, then, is the process of allocating an asset's depreciable amount over its intended useful life. There are a large number ideas to this translation, yet the premium for bookkeeping is the accompanying three ideas

LITREATURE REVIEW:

- “Depreciation as a process for adjusting the value of an asset using a value adjustment The accounting statement of the value lost by fixed assets due to time, physical, or moral wear and tear is known as depreciation. Beginning from this translation, deterioration is planned to address the worth of fixed resources for take them back to a worth as near the real world”.(Akbas, H.S , 107:119-120)
- “The process of transferring or allocating the cost of fixed assets to the exercise's costs, also known as depreciation. Deterioration is the controllable asset from an earlier time that produces future advantages”.(Clinton, B D & S. Chen,1998)
- “The depreciable asset is assigned or transferred in value during the economic use period. Thusly, the negligible part of significant worth showed over the long run on the result of the activity should be a normal aspect recorded in the standards and rules of the valid picture.”
- “The ratio of the fraction transferred from the depreciable asset's carrying amount to the expected economic benefit from its use is referred to as the "rational" determinant”.(Fernandez P, 2002)
- “The use of depreciation as a means of financing the replacement of fixed assets. As a problem of investment recovery and a source of funding for the renewal of fixed assets, capital reconversion necessitates a simultaneous approach to depreciation”.(Pratt. J, 1991)
- “All tangible and intangible fixed assets are subject to depreciation, with the following exceptions, according to accounting sources [4]: lakes, ponds, and land, including wooded land, that are not the result of investments, except for land with an economic destination obtained through sale and purchase

documents, including expropriation compensation. Until the transition of the young plantations and the completion of five years of plantation protection, young plantations and protection plantations are exempt from depreciation calculations. Unless there is an irreversible depreciation that can be amortized, goodwill is typically exempt from depreciation".(Larson,K D &Millar, 1993)

➤ “Standards address how the entity's year-to-year financial statements can be compared in light of the selection and implementation of the chosen depreciation model at the end of the period.The guidelines that were published in the Journal of Economics, Finance, and Accounting” –(“ JEFA (2016), Vol. 3(4) Erkiran Dil 333, Mert.”)

➤ According to [5] paragraph 238 of the applicable legal regulations,

(1) Depreciation is calculated by applying depreciation allowances to the asset's revalued amount and its original value.

(2) The calculation of tangible asset depreciation takes into account the month following the start-up until their full value is recovered. The economic use times and conditions of use are taken into consideration when determining the depreciation of tangible assets [6].

(3) The accounting policies that are used to determine depreciation periods may differ from the depreciation periods that businesses use for tax purposes.

(4) The entity records an expense with depreciation or an expense corresponding to the discovered impairment loss if tangible assets are placed in retention in accordance with the adopted accounting policy.

(5) The revision of the depreciation period may be justified in the case of investments or repairs that are not related to current maintenance or the aging of a tangible fixed asset, as well as in the case of a significant change in the conditions of use, such as the number of exchanges in which the asset is used. Additionally, it may be justifiable to review the depreciation period in the event that the tangible assets are placed in conservation, preventing their use for an extended period of time.

In accordance with ‘Indian Accounting Standards 36 – Depreciation of Assets’, "depreciation" typically refers as to decline in the assets value that has a very low probability of disappearing in the near future due to moral wear and tear, unfavorable market conditions, and other factors. “Any change in the initial parameters that were taken into consideration for the estimation has an effect on either the change in the net - financial result for the current year or the effect in the reserves because a loss from depreciation is recorded, evaluated, and registered in the profit and loss account or the capital account based on estimates” (Mateş, et al., 2009, pg.46).

Two of the opposing atpness are been observed in practice. In order to achieve a lower taxable result, businesses may be tempted to increase the depreciation value. Listed businesses, on the other side, have the opposite proclivity and are entice to the reduction of depreciations to steer clear of significantly influence the result, which could alienate investors.

According to ‘Ind Acc Std 36, Depreciation of Assets’, paragraph 60, any losses aiming from depreciation is recorded in the financial year’s P&L account. Except for the circumstance in which, in accordance with IAS 16 – Tangible assets, the asset is recorded at its revalued amount. Any losses from depreciation is counted as a decrease/ reduction caused by reappraisal in the case of a revalued asset.

The estimated asset recoverable value and, the usefulness value and net sale price will be used to calculate the loss of value. According to Mateş and Grozi, information that are obtained from both internal sources & external sources can be used to estimate the loss from depreciation (Mateş & Grozi, 2008, pp. 46-53).

There are two ways to record loss from depreciation, depending on the depreciated asset's accounting situation: The loss obtained after depreciation will be straight away reflected in the period's P&L a/c if an asset are not being reevaluated; If an asset incase are not being re-evaluated in accordance with the 'Re-evaluation model of Indian Accounting Standard 16', the loss on depreciation must be included in the final result.

Methods for Depreciation:

The utilized depreciation methodology reflects on the anticipated usage model for the entity asset's anticipated future financial and economic benefits. At least once per accounting period, the asset's depreciation method should be revised. In situations where in massive swap/exchange happens in the usage model, the resource's future financial advantages, the technique ought to be exchanged to mirror the changing model.

The depreciable value of an asset can be distributed systematically over its useful life using a various depreciation methods. They are:

- Units of Production Method,
- Straight Line Method,
- Decreasing Balance Method.

“The standards in the Journal of Economics, Finance, and Accounting – JEFA (2016), Vol.3(4) Mert, Erkiran Dil 333. Standards address the impact of selecting and implementing the chosen depreciation model on the period end results and, as a result, on the comparison of the entity's year-to-year financial statements. To put it another way, the standards say that depreciation methods should be used the same way at all times. Except if a great support exists for changing a chose Depreciation technique, the chose strategy is supposed to be utilized reliably during the sequential periods. The change's impact must be measured within the accounting period in which it occurs, and the change itself and the justification for it must be explained.”

Method of a Straight Line:

Since it simply substitutes the utilization function for the time function in the depreciation formula, this approach is frequently utilized. This method, which is also known as the regular depreciation method. These Depreciation expense of fixed asset is fixed in the Straight Line method as the residual value stays the unchanged.

The formula for SLD Method is as follows:

Amount of Annual Dep = “ (Cost of Fixed Asset - Residual Value)”

Estimated Useful’

Model:

Consider a piece of gear that costs Rs.25,000 with an residual/ helpful existence for 8 years and a Rs.0 rescue esteem. This equipment's annual depreciation cost would be as follows:

| Year # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------|--------|--------|--------|--------|--------|-------|-------|-------|
| Opening Book Value | 25,000 | 21,875 | 18,750 | 15,625 | 12,500 | 9,375 | 6,250 | 3,125 |
| Depreciation | 8 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 |
| Ending Book Value | 25,000 | 21,875 | 18,750 | 15,625 | 12,500 | 9,375 | 6,250 | 3,125 |

Depreciation Expense = (Rs.25,000 – Rs. 0) / 8 = Rs.3,125 per year



Declining Balance Method:

Life Declining Balance Depreciation costs go down over asset's effective useful life value in this way. It depends on finding out an asset's depreciation value over the economic life using fractions that get smaller. As a result, the annual depreciation amount decreases. The amount of the portions utilized will be equivalent to 1 (one) toward the finish of Depreciation period, and that implies that the whole worth of depreciable resource is assigned to the deterioration sums during their financial life.

‘Periodic Dep Expenses = Book Value at the Beginning x Depreciation Rate.’

| Year # | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| DDB | | | | | | | | | |
| Opening Book Value | | 25,000 | 18,750 | 14,063 | 10,547 | 7,910 | 5,933 | 4,449 | 3,337 |
| Depreciation | 25% | 6,250 | 4,688 | 3,516 | 2,637 | 1,978 | 1,483 | 1,112 | 834 |
| Ending Book Value | 25,000 | 18,750 | 14,063 | 10,547 | 7,910 | 5,933 | 4,449 | 3,337 | 2,503 |

As an illustration,

Consider an example of Rs.25,000 piece of PPE with a residual/salvage value of Rs.2,500 and its useful life (estimated) is 8 yrs. Create a schedule to determine the DDB depreciation.

The following is an solution of the above information:

At the beginning of 1st yr, the asset's beginning BV is calculated, @ the end of 8th yr, the asset's residual value is calculated.

The following is how the rate of dep % is calculated:

Expense =

‘(100% x the asset's useful life) x 2 Expense = (100% x 8) x 2 = 25% We divide the rate of depreciation by 2, as this is a double-declining method.’

3.” To determine the cost for the year, divide the rate / percentage of depreciation by the beginning book value.”

4. “To determine the final book value, (beginning book value - Cost). For instance, the ending book value at the end of the 1st yr is Rs.18,750, which is equal to Rs.25,000 minus Rs.6,250.”

5. “The beginning book value for the subsequent year is the year's ending book value. For instance, the 1st yr completion book worth of Rs.18,750 would be the 2nd year starting book esteem. This is done until the end of the useful life.”

Chart of the 'DDB' Depreciation:

Production Value Method:

Production is the Annual Dep Amount. Depreciation is calculated using anticipated use or production amount in this approach.

“Annual Depreciation Amount = Annual Depreciation Ratio x Annual Production Amount
Annual Depreciation Amount = Annual Depreciation Amount”

&

“Annual Depreciation Rate = (Cost of Fixed Asset – Residual Value) / Estimated Total
Production (during its entire useful life) “

The units-of-production method's formula is:

“Depreciation Cost = (Number of Units Produced / Life in Units) x (Cost – Salvage Value)”

As an illustration,

Consider a RS.25,000 machine that is estimated to produce 100 million units and has no salvage value. 4 million units were produced by the machine during the first quarter of operation.

| Year# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------|--------|--------|--------|--------|--------|-------|-------|-------|
| Units | | | | | | | | |
| Production (Units) | 4 | 7 | 4 | 23 | 32 | 12 | 6 | 12 |
| Opening Book Value | 25,000 | 24,000 | 22,250 | 21,250 | 15,500 | 7,500 | 4,500 | 3,000 |
| Depreciation | 1,000 | 1,750 | 1,000 | 5,750 | 8,000 | 3,000 | 1,500 | 3,000 |
| Ending Book Value | 25,000 | 24,000 | 22,250 | 21,250 | 15,500 | 7,500 | 4,500 | 3,000 |

Utilizing the formula above, you can determine the depreciation expense:

Cost of depreciation: (4 million x 100 million) x (Rs.25,000 minus zero) = Rs.1,000



4. “Sum-of-the-Years-Digits Depreciation Method”:

This is One among the associated depreciation methods is the ‘SYD’. In the early years of the asset's proper useful life, a high expenses were incurred, while in later years, a low expenses are incurred.

The SYD method's formula for depreciation:

“Depreciation Expense = (Remaining life / Sum of the years digits) x (Cost – Salvage value) Consider the example below to better comprehend the sum-of-the-years digits depreciation method.”

Take for instance where a piece of machinery that costs Rs.25,000, has been estimated 8-year of the machinery useful life, and no salvage value. Create a schedule to determine the sum of the years' digits depreciation:

Amount of-the-Years Digits Deterioration Strategy ModelThe data in the timetable is made sense of beneath:

| Year # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------|--------|--------|--------|--------|-------|-------|-------|-----|
| SYD | | | | | | | | |
| Remaining Life | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Opening Book Value | 25000 | 19,444 | 14,583 | 10,417 | 6,944 | 4,167 | 2,083 | 694 |
| Depreciation | 5,556 | 4,861 | 4,167 | 3,472 | 2,778 | 2,083 | 1,389 | 694 |
| Ending Book Value | 25,000 | 19,444 | 14,583 | 10,417 | 6,944 | 4,167 | 2,083 | 694 |

The following formula is used to calculate the depreciation base, which stays the same over time:

1. “Depreciation Base is the sum of the cost and the salvage value. Depreciation Base is Rs.25,000 minus Rs.0, or Rs.25,000.”

2. “ The remaining life is merely the asset's remaining life. For instance, toward the start of the year, the resource has an excess existence of 8 years. The next year, the resource has an excess existence of 7 years, and so on.”

3.”in RL/SYD "remaining life partitioned by amount of the years." The asset has an 8- year useful life in this example. As a result, the total number of years would be 36: 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 At the beginning of year 1, the remaining life is 8. Consequently, the RM / SYD = 8 / 36 = 0.2222.”

4. “The expense for that year is calculated by multiplying the RL / SYD method number by the depreciating the base.”

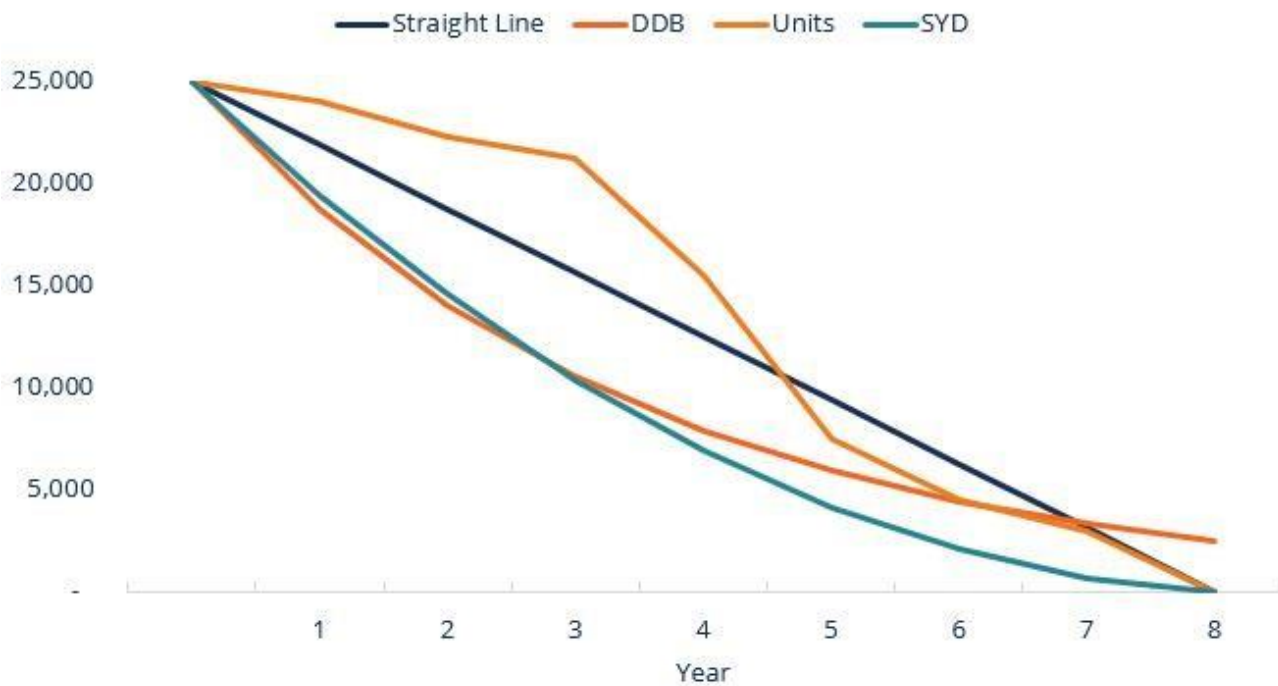
5. “The procedure continues in the years following. RL/SYD will be 7 / 36, or 0.1944, at the beginning of year 2. 0.1944 x Rs.25,000 = Rs.4,861 cost for 2nd year.”

RESULTS:

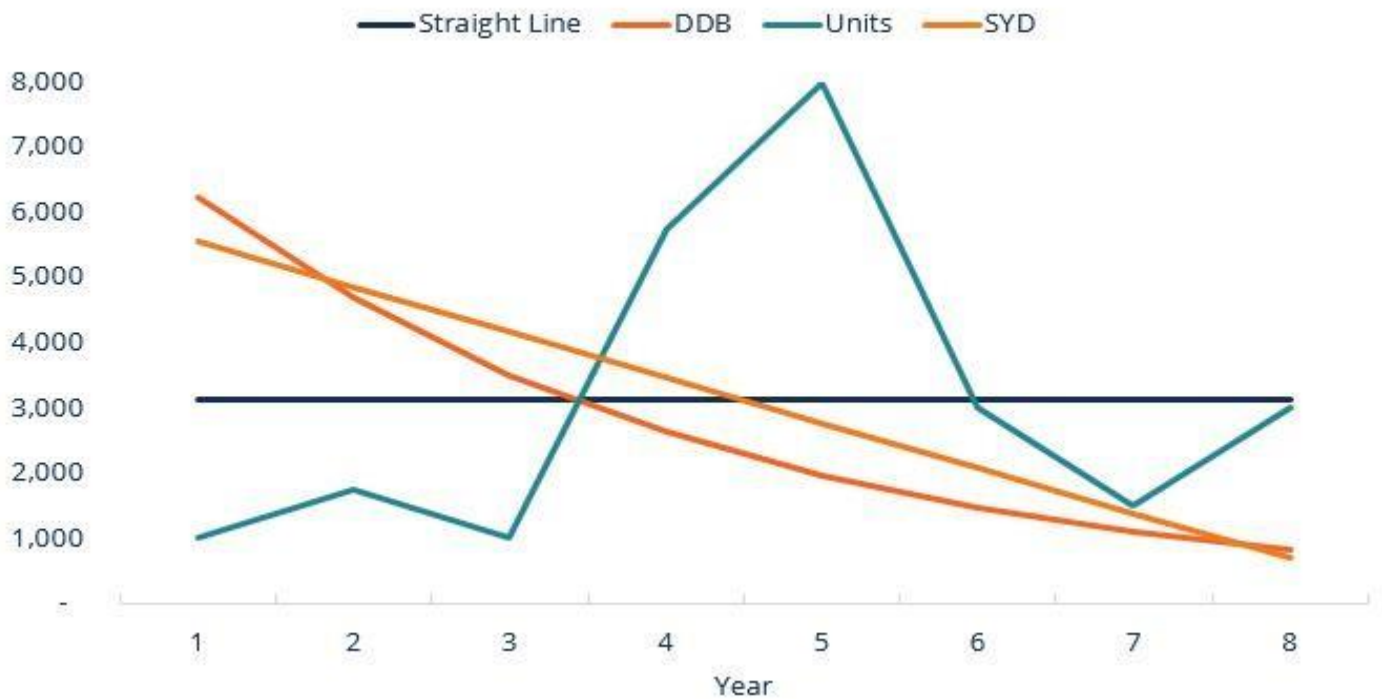
SUMMARY OF DEPRECIATION METHODS:

| Year # | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| Straight Line | | | | | | | | | |
| Opening Book Value | | 25,000 | 21,875 | 18,750 | 15,625 | 12,500 | 9,375 | 6,250 | 3,125 |
| Depreciation | 8 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 | 3,125 |
| Ending Book Value | 25,000 | 21,875 | 18,750 | 15,625 | 12,500 | 9,375 | 6,250 | 3,125 | - |
| DDB | | | | | | | | | |
| Opening Book Value | | 25,000 | 18,750 | 14,063 | 10,547 | 7,910 | 5,933 | 4,449 | 3,337 |
| Depreciation | 25% | 6,250 | 4,688 | 3,516 | 2,637 | 1,978 | 1,483 | 1,112 | 834 |
| Ending Book Value | 25,000 | 18,750 | 14,063 | 10,547 | 7,910 | 5,933 | 4,449 | 3,337 | 2,503 |
| Units | | | | | | | | | |
| Production (Units) | | 4 | 7 | 4 | 23 | 32 | 12 | 6 | 12 |
| Opening Book Value | | 25,000 | 24,000 | 22,250 | 21,250 | 15,500 | 7,500 | 4,500 | 3,000 |
| Depreciation | | 1,000 | 1,750 | 1,000 | 5,750 | 8,000 | 3,000 | 1,500 | 3,000 |
| Ending Book Value | 25,000 | 24,000 | 22,250 | 21,250 | 15,500 | 7,500 | 4,500 | 3,000 | - |
| SYD | | | | | | | | | |
| Remaining Life | | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Opening Book Value | | 25000 | 19,444 | 14,583 | 10,417 | 6,944 | 4,167 | 2,083 | 694 |
| Depreciation | | 5,556 | 4,861 | 4,167 | 3,472 | 2,778 | 2,083 | 1,389 | 694 |
| Ending Book Value | 25,000 | 19,444 | 14,583 | 10,417 | 6,944 | 4,167 | 2,083 | 694 | 0 |

Book Value



Depreciation Expense



CONCLUSION:

The depreciation system has a direct impact on the short-term operating result, but in the long run, the impact is reduced or even eliminated due to offsets between the results of the first and last periods. However, both theory and practice recommend a logical and methodical depreciation regime. In other words, no matter how the asset will lose its useful value over time, the cost of entry should not be distributed arbitrarily to exercises.

The assets' diminished service capacity must be reflected in the depreciation regime chosen. To the inquiry, "Which approach to depreciation is more effective and efficient?". The response is based on the company's goals, the "aggressiveness" with which it wants to approach financial management, and, obviously, the decision made by the general meeting of shareholders or associates. Interest is typically the investment interest when an entity has the option of depreciation, and this interest competes with the state's fiscal policy.

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