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Antoniuk Volodymyr,

6-year student, Faculty of Finance,

Kyiv National Economic University named after Vadym Hetman

Zholnerchyk Hanna.

Associate professor of Corporate finance and Controlling Department,

Kyiv National Economic University named after Vadym Hetman

The difference between Straight line method and Diminishing Balance method

In current circumstances, when the economic situation in the country is unstable, consumer's demand is decreasing, competition in the market increasing, it is important for each company to learn how to manage available financial resources in the most efficient way. That's why it is important to understand the difference between depreciation methods and get the better of applying them.

According to UA GAAP №7 there are 5 methods of depreciation of fixed assets:

- Straight line method;
- Diminishing balance method
- Double declining method
- Sum of years digits
- Units of production

Speaking about IFRS, depreciation is defined in IAS 16

The most wide-spread among Ukrainian companies such methods as: straight line and diminishing balance. Unfortunately, the situation when the company has once selected depreciation method and continue to use it during a quiet long period of time (for 10 and more years) is common.

However, there can be a significant cash flow benefits from shifting from one method to another. If the company is coming out of a prolonged period of losses and become profitable, it's more likely that company will chose method with the

highest depreciation accruals to gain potential cashtax saving. Under the straight line method the depreciation cost is spread over the useful life of the asset.

The formula for calculating the depreciation charge per year is:

$$\text{Cost} - \text{Residual value} / \text{Useful life of an asset}$$

Residual value is a value of an asset that expected to achieve upon disposal by the company in the end of its useful economic life.

Useful life per UA GAAP 7 determined per groups, per IFRS chief officers are able to determine by their own considerations. Under the diminishing balance method depreciation is charged at a higher rate during the initial years of holding an asset and the charge drops over the time.

The formula for calculating the depreciation charge per year is:

$$(\text{Net book value} - \text{Residual value}) * \text{Depreciation rate}.$$

The depreciation rate is the estimated pattern of usage over its life term.

We propose you to have a look at easy and understandable example. Let's consider that the company buys a new machine for UAH 500,000 and they are expecting to have useful life of 7 years, also at the end of the 7th year they are going to sell it for UAH 100,000. A similar asset has had depreciation rate of 28%.

The depreciation will be calculated with the help of the straight line method in the first table and with diminishing balance method – in the second one.

Table 1

Per straight line method

Year	Calculation	Result, UAH	Total depreciation,UAH
1	$(500,000-100,000)/7$	57,143	57,143
2	$(500,000-100,000)/7$	57,143	114,286
3	$(500,000-100,000)/7$	57,143	171,429
4	$(500,000-100,000)/7$	57,143	228,572
5	$(500,000-100,000)/7$	57,143	285,715
6	$(500,000-100,000)/7$	57,143	342,858
7	$(500,000-100,000)/7$	57,142	400,000

How can we see the depreciation accruals per Straight line method are similar for each year.

Table 2

Per Diminishing balance method

Year	Calculation	Result, UAH	Total depreciation, UAH
1	$500,000 \times 0.28$	140,000	140,000
2	$360,000 \times 0.28$	100,800	240,800
3	$259,200 \times 0.28$	72,576	313,376
4	$186,624 \times 0.28$	52,255	365,631
5	$134,369 \times 0.28$	34,369	400,000

In the last line of the Table 2, notice that 28% of UAH134,369 is UAH37,623, but the salvage value is UAH 100,000, that's why total depreciated value in the 5th year will be UAH 34,369

By diminishing balance method the accruals are higher at the beginning and lower in the end.

In the case of profit of UAH 1,000,000 change for the first year in depreciation accruals will lead to higher amount of the net profit $82,857 \times 0.18 =$ UAH 14,914.26 (140,000 for 1st year per DB method - 57,143 per SL method)

Accountants use the straight line depreciation method because it is the easiest method to operate and it can be applied to all long-term assets. However, the straight line depreciation method does not accurately express the difference in usage of an asset and may not be the most appropriate value calculating method for some assets. For example, a straight line depreciation method may not be suitable for an asset such as a laptop. A laptop would face larger depreciation expenses in its early useful life and smaller depreciation expenses in the later periods of its useful life, due to the quick obsolescence of older technology. It would be inaccurate to assume a laptop would incur the same depreciation expense over its entire useful life.

The greatest advantage of the diminishing balance method is the tax benefit. Under the diminishing method, the business is able to claim a larger depreciation tax deduction earlier on. Most businesses would rather receive their tax break

sooner rather than later. From a financial accounting perspective, the diminishing balance method makes sense for assets that lose their value quickly, like new cars and other vehicles. For these assets, diminishing balance depreciation better matches depreciation expense with the actual decline in fair market value.

In the conclusion, we need to highlight that companies should manage their depreciation methods to increase efficiency of their cash flow. The straight line method is the easiest for use. But if the company buys new computer for employees, this type of asset naturally lose more value early in their life than they do later on. To create tax shield for some periods, especially when the company begins to operate and has profit diminishing balance method is better than straight line method.

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Бабяк Н.Д.,

к.е.н., професор кафедри корпоративних фінансів і контролінгу

Муха І.О.,

студентка, 6 курс

ДВНЗ «КНЕУ імені Вадима Гетьмана»

Детермінанти фінансового контролінгу на торгівельному підприємстві

Найбільш актуальним завданням сьогодні для окремо узятото підприємства, що працює в сучасних кризових умовах господарювання, є створення теоретичної бази і заснованого на ній інструментарію, які допомогли б модернізувати організаційну й інформаційну структуру