

## ACCOUNTING POLICIES ON FIXED ASSETS AND THEIR INFLUENCE ON THE FINANCIAL PERFORMANCE OF THE ECONOMIC ENTITY

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### **Abstract**

*Financial performance appreciated on the basis of financial statement data and often on the basis of the accounting result may be misleading, being rather the result of accounting choices rather than a true presentation of reality. Choosing the depreciation method, estimating the duration of use, residual value, appreciating some of the works performed on the fixed assets as modernization or repair has a direct effect on the accounting result, cosmetizing it so as to attract the attention of investors who often perceive this indicator as an important indicator of measuring the financial performance of the entity. But it is a volatile landmark. Neither the balance sheet is affected by these choices and estimates nor any indicators calculated on the basis of the balance sheet asset and the result (solvency, ROA, ROE). Thus, through these, the performance is presented in the form that is desired by the management and does not objectively reflect the financial situation of the economic entity. The disproportionate effects of the accounting policies on fixed assets on the result are eliminated in EBITDA which eliminates from the result Interest, Taxes, Depreciation and Amortization.*

**Keywords:** financial performance; accounting policies, options and estimates; accounting result; amortization

**JEL classification:** M41, M42

### **1. Introduction**

Starting from the idea that profit as an important indicator of financial performance is 'what the accounting calculates' and does not accurately reflect the real situation of the entity, the present paper will attempt to demonstrate this as an effect of accounting policies and options, accounting estimates in terms of fixed assets where there are several variables that can be juggled, such as the amortization method, the useful life, the residual value. We will present the impact that these options have on the accounting result, but also on the balance sheet asset and further on investors and other users.

Accounting policies, options and estimates of fixed assets include, but are not limited to:

- recognition of the fixed nature – valuation at the patrimony entrance, recognition of a modernization or repair;
- estimation of residual value;
- estimation of the normal use time;
- amortization method (linear, accelerated, digressive);
- revaluation of fixed assets.

### **2. Amortization method**

Significantly to be emphasized in the present paper are the differences that occur by using one or the other methods of amortization.

Linear amortization consists in calculating and uniformly allocating the depreciable assets allowance for the normal operating period in years. It has the effect of smoothing the results. This is why 'listed companies prefer the depreciation of fixed assets' (Ionașcu, 1997).

Digressive amortization results in higher depreciation in expense over the first years of use of the good, relative to the subsequent depreciation. Economically, the use of this depreciation method is justified by the fact that for some fixed assets the depreciation is higher in the first exercises than at the end of their lifetime.

Accelerated amortization consists in including in the first operating year in the linear operating costs an amortization of up to 50% of the input value of the fixed asset. The value remaining after the first year of operation is allocated in linear mode for the remaining use time. Accelerated amortization proposes an aggressive approach, making its mark on the variation of the result visible. 'Because the depreciation calculated must be correlated with the use of the asset and, as there are rare situations when a corporeal asset is consumed in the first year by up to 50%, it follows that the accelerated amortization method is less used for accounting purposes (Man et. al., 2011), being rather strategically chosen.

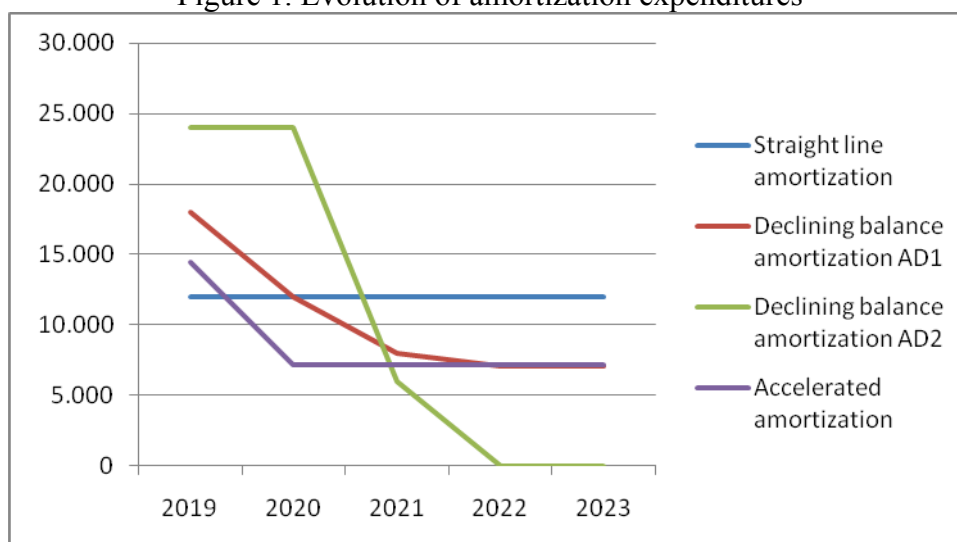
We will basically highlight the footprint of the amortization methods on the profit and loss account and the balance sheet by considering the following case: a plant enters into the patrimony in March of the financial year 2018 with an entry value of 72,000 lei. It is estimated that it has a service life of 6 years.

Table1. Comparison between amortization methods

Year	Straight line amortization	Declining balance amortization AD1	Declining balance amortization AD2	Accelerated amortization
2018	9.000	18.000	18.000	27.000
2019	12.000	18.000	24.000	14.400
2020	12.000	12.000	24.000	7.200
2021	12.000	8.000	6.000	7.200
2022	12.000	7.111	0	7.200
2023	12.000	7.111	0	7.200
2024	3.000	1.778	0	1.800
Total	72.000	72.000	72.000	72.000

We illustrate in the next graph of the evolution of the figures for the four variants of amortization and discrepancy between them. We ignore the first and last year's incomplete depreciation in terms of amortization, as it could provide a distorted picture of the perceived evolution of the amounts for each method.

Figure 1. Evolution of amortization expenditures



The influence of amortization methods on the balance sheet asset is presented in the table below.

Table 2. Balance sheet value of the fixed asset according to the amortization method

Year	Straight line amortization	Declining balance amortization AD1	Declining balance amortization AD2	Accelerated amortization
2018	63.000	54.000	54.000	45.000
2019	51.000	36.000	30.000	30.600
2020	39.000	24.000	6.000	23.400
2021	27.000	16.000	0	16.200
2022	15.000	8.889	0	9.000
2023	3.000	1.778	0	1.800
2024	0	0	0	0

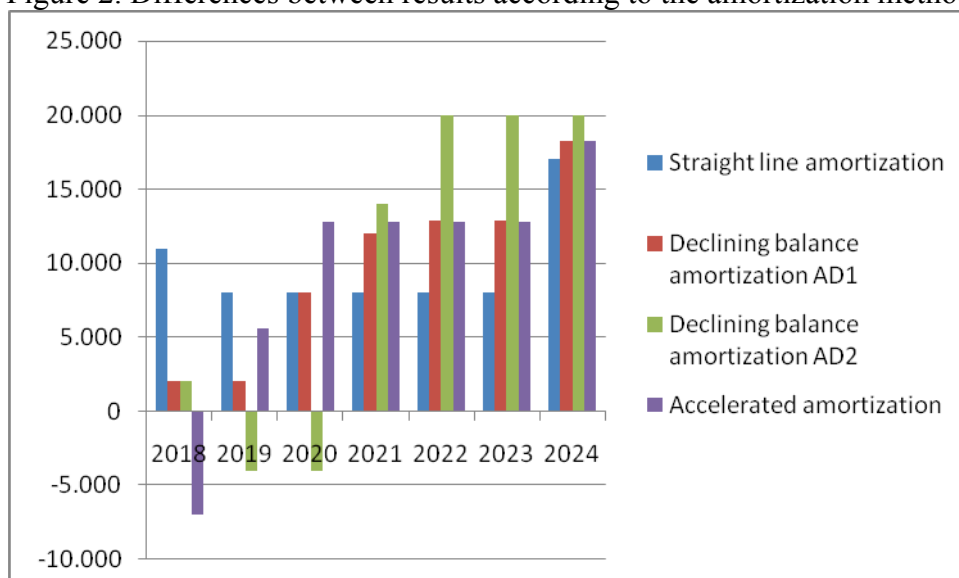
By choosing an amortization method, the differences are also substantial in the balance. Evolution is, of course, decreasing from one year to the next, but the decrease is more abrupt in the case of degressive amortization. Figures are higher every year when the linear method is chosen.

In order to emphasize the exclusive influence of the depreciation on the result, we will consider a fixed result, before the depreciation expense decrease, of 20,000 lei.

Table 3. The accounting result according to the amortization method

Year	Straight line amortization	Declining balance amortization AD1	Declining balance amortization AD2	Accelerated amortization
2018	11.000	2.000	2.000	-7.000
2019	8.000	2.000	-4.000	5.600
2020	8.000	8.000	-4.000	12.800
2021	8.000	12.000	14.000	12.800
2022	8.000	12.889	20.000	12.800
2023	8.000	12.889	20.000	12.800
2024	17.000	18.222	20.000	18.200

Figure 2. Differences between results according to the amortization method



We observe each year the substantial differences, even in the opposite sense, in the first years between the result calculated on the basis of each amortization method. Also, there is a steady trend of profit in the case of linear amortization, an increasing and even suddenly increasing one or a slightly random one in some years, for the other methods.

### 3. Depreciation time

The figures for depreciation costs are also different if different depreciation periods are estimated. We will compare the values for linear depreciation for a period of 3, 6 and 10 years.

Table 4. The impact of depreciation on the balance sheet and the profit and loss account for different estimates of the useful life

Year	Depreciation expense			Balance sheet asset			Accounting result		
	3 years	6 years	10 years	3 years	6 years	10 years	3 years	6 years	10 years
2018	18.000	9.000	5.400	54.000	63.000	66.600	2.000	11.000	14.600
2019	24.000	12.000	7.200	30.000	51.000	59.400	-4.000	8.000	12.800
2020	24.000	12.000	7.200	6.000	39.000	52.200	-4.000	8.000	12.800
2021	6.000	12.000	7.200	0	27.000	45.000	14.000	8.000	12.800
2022		12.000	7.200	0	15.000	37.800	20.000	8.000	12.800
2023		12.000	7.200	0	3.000	30.600	20.000	8.000	12.800
2024		3.000	7.200	0	0	23.400	20.000	17.000	12.800
2025			7.200	0	0	16.200	20.000	20.000	12.800
2026			7.200	0	0	9.000	20.000	20.000	12.800
2027			7.200	0	0	1.800	20.000	20.000	12.800
2028			1.800	0	0	0	20.000	20.000	18.200
Total	72.000	72.000	72.000						

Figure 3. Differences between amortization expense for different estimated amortization periods

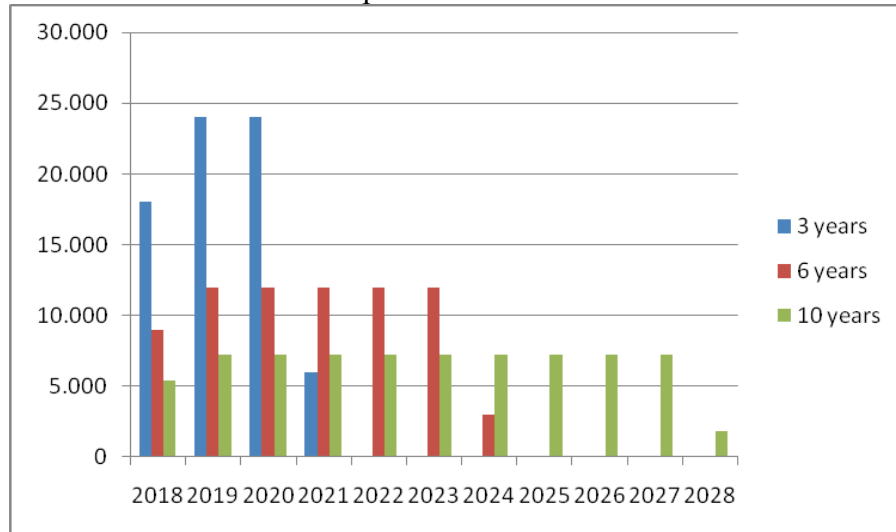


Figure 4. Differences in balance for different expected amortization periods

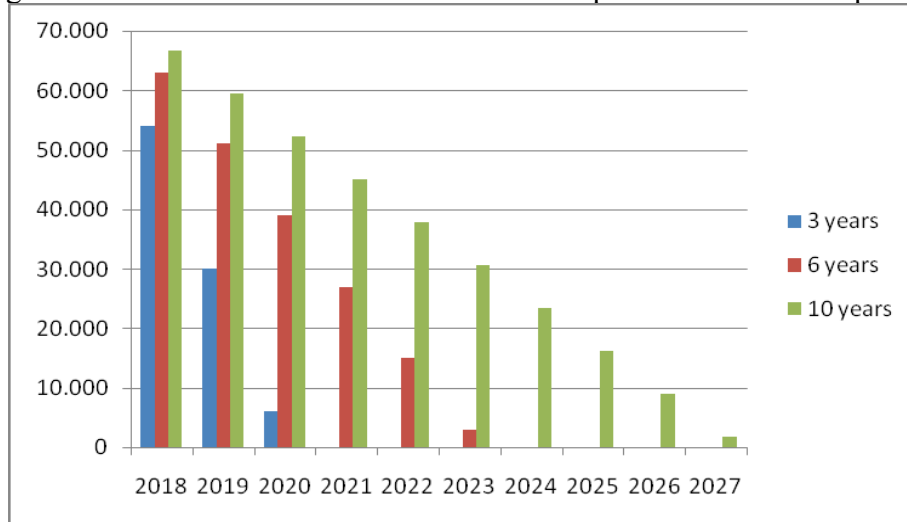
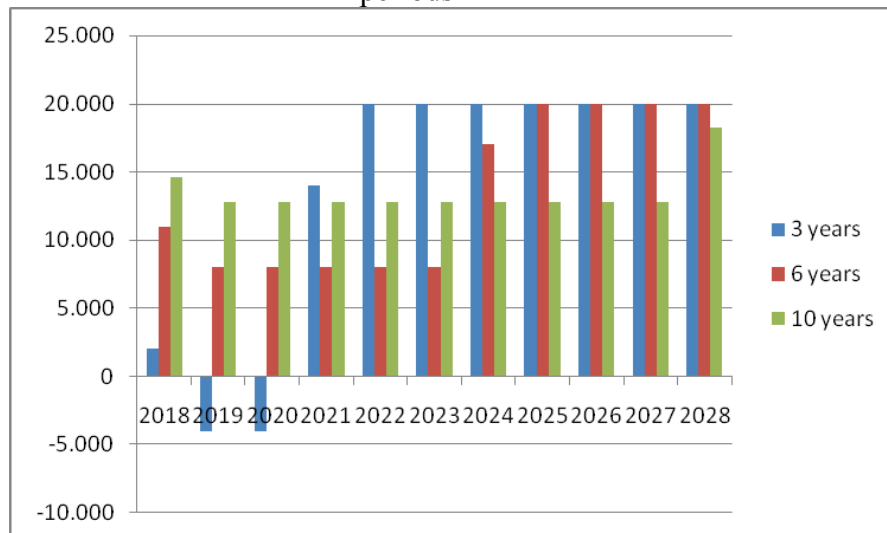


Figure 5. Differences between the accounting result for different expected amortization periods



Again we observe the different distribution over time of the accounting result and the balance sheet value of the fixed asset as the effect of the depreciation expense, which in turn differs according to the estimated amortization period.

#### 4. Residual value

Residual value is the amount an entity expects to obtain from the disposal of an asset, after deducting the estimated cost of disposal at the end of its useful life. Deduction of the residual value of the asset's input value is permitted by IAS 16, determining a depreciable amount different from the input value. OMFP 1802/2014 does not refer to the residual value.

It being an estimation, here its effects may again vary. Estimating a higher value for residual value leads to annual expenses with lower depreciation if the other conditions remain unchanged, as outlined in the following table where two variants are compared: one in which the residual value is 0 and the second in which the residual value is 12,000 lei, for an entry value of 72,000 lei and an estimated useful life of 6 years.

Table 5. Difference in depreciation for different residual values

Year	Residual value 0	Residual value 12.000	Absolute differences	Relative differences
2018	9.000	7.500	1.500	20%
2019	12.000	10.000	2.000	20%
2020	12.000	10.000	2.000	20%
2021	12.000	10.000	2.000	20%
2022	12.000	10.000	2.000	20%
2023	12.000	10.000	2.000	20%
2024	3.000	2.500	500	20%
Total	72.000	60.000		

Different combinations can be made between depreciation methods, depreciation times and different estimates of residual value with effects on the accounting result. The case in which it remains fixed, before decreasing the depreciation expense, is hypothetical. In fact, it is influenced by real business developments, sales volume and other market conditions. But economic entities, especially those listed, 'are afraid to publish volatile results, with dramatic increases and decreases. They prefer to show a slight but sure increase in profits from one year to another because, in turn,' investors prefer instead of real change the illusion of growth. This illusion can be created by revenue smoothing.' For this purpose, during the use of the fixed asset, revaluations of the amortization period, residual value, changes in accounting policies in respect of the depreciation method, with the argument of changing the initial estimated conditions can be made. Due to these variations between the effects of depreciation methods that influence the performance of an entity, some indicators that do not take into account depreciation, such as gross operating surplus or EBITDA, are calculated.

However, many performance indicators that take into account the asset's balance sheet, result or total equity are distorted as the effect of the tangible assets policies and options: solvency ratios, economic and financial returns, etc.

#### 5. Conclusions

The importance given to the accounting result can lead to misinterpretations of financial performance, thus drawing attention to the impact of policy options and accounting estimates on this indicator, but also on the balance sheet and on other indicators derived from them. The

calculations and graphs above are relevant in this respect, the linear depreciation illustrating a smoothing of results, while the remaining methods of amortization cause their growth from year to year. The same effect can be created by reassessing the damping time or residual value. Therefore, professional skepticism is recommended when the financial situation impresses with the positive evolution of the result. The analysis of explanatory notes on the depreciation method, changes in accounting policies ensure that this growth is not artificial and is not due only to the application of advantageous accounting treatments.

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