

# THE EFFECTS OF ENTERPRISE ACCOUNTING POLICIES REGARDING DEPRECIATIONS UPON THE RESULTS AND CORPORATE TAXES

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**Abstract:** *Depreciation and net results define the self-financing ability of an enterprise and any change in depreciations generates reverse effects upon a corporate tax. That is why the measurement and depreciation system of assets must be correlated with capital maintenance. In the event of depreciation, accounting policies may envisage the choice of one of the depreciation methods, for example straight-line, accelerated or degressive methods of depreciation. Choosing a method of depreciation involves an accounting option. The present article includes a comparative approach of depreciation methods and their implications upon the results and profit taxes, comprising own perspectives and opening new research prospects. The question can be “Which method is the best to use?”. The answer depends on enterprise objectives, on the “aggressiveness” used when it wants to approach fiscal management.*

**Keywords:** *accounting policies, IFRS, depreciation, depreciation methods, net result*

**JEL classification:** M41

## 1. Introduction

Enterprise performance pursues the achievement of the following main goals: to make profit and to meet the needs of a certain category of customers. The failure, even the temporary failure to fulfill either goal leads to enterprise market extinction. When pursuing goals, enterprise management must apply accounting policies so that financial statements be compliant with all the provisions of each applicable foreign accounting norm (IFRS and IAS). The existence of several alternatives in terms of accounting entry, measurement, respectively different assessment and calculation methods for financial outcomes and statuses, enterprises must lay down their own accounting policies. The IASB – “*International Accounting Standards Board*” defines accounting policies as specific principles, bases (grounds), conventions, rules and practices applied by an enterprise in order to prepare and submit its financial statements.

Depreciation, by its calculation is an accounting policy instrument that follows fiscal rules allowing for the development of the technical potential of an enterprise. Correlated with the general legislative framework in Romania regarding the calculation of fixed assets depreciation, the basic component of depreciation regimes admitted in our country is the picture of durations set up by use, of annual depreciation quotas and of durations of integral depreciation.

## 2. Theoretical Considerations on Depreciation

Depreciation is allocating depreciable amount of a fixed asset during its predicted life time. As to this general interpretation, there are numerous conceptions regarding depreciation of which the following three are interesting in accounting:

- depreciation as a corrective process of fixed assets' value. Depreciation is the accounting statement of the value loss incurred by fixed assets as a consequence of time impairment, physical wear (generated by technical and mechanical operation and by the influence of natural factors) or obsolescence (caused by the rapid development of technology, the emergence of new, highly performing machines). This interpretation leads

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to the fact that depreciation has the role of correcting the value of fixed assets in order to restore them to a real value level.

- depreciation as a transfer or allotment process of fixed assets' costs upon tax year expenses. Regarded as an allocation process, depreciation is the controllable source coming from the past and producing future benefits. Value allocation or transfer take place during the economic life time of a redeemable asset. That is why the value share shown during a tax year over time must be rational and confining to the principles and rules of a true and fair view. The "rational" term aims at the ratio between the accounting value transferred share of a redeemable asset and the economic benefit which shall arise from asset use.

- depreciation as a financing source for fixed assets' renewal. Capital reconstruction involves the simultaneous approach of depreciation as a matter of recovering investment and as a financing source of investment renewal. By the depreciation mechanism, initial investment is recovered and reconstructed in stages during its operation cycle, becoming a self-financing source for new investment.

Depreciation is a very important element to be found in the calculation of self-financing ability. The self-financing ability of an enterprise is the potential money surplus generated by the enterprise performance. It means an essential contribution of current activities to the variation of global working capital. It can be calculated relying either on the gross operation excess or on net profit.

● **According to Romanian legislation**, enterprises must depreciate tangible and intangible assets according to the Law regarding the depreciation of fixed capital in tangible and intangible assets using one of the following regimes: ***straight-line depreciation, degressive depreciation and accelerated depreciation***. The Fiscal Code also provides certain peculiarities regarding depreciation calculation per product unit: "*depreciation of buildings and mines, salt mines with solution extraction in probes, quarries, open-pit mining for solid minerals, oil extraction sites whose life time is limited by the duration of reserves and cannot be used otherwise after reserve use-up, depreciation of investment are all calculated per product unit according to the usable reserve of useful minerals*" or according to the number of kilometers or the number of operating hours: "*means of transport can be depreciated as per the number of kilometers or hours of operation provided by technical specifications for those purchased after 1 January 2004*".

***Straight-line depreciation*** means the calculation and uniform allocation of accounting entry values of redeemable assets during the entire normal operation duration expressed as years. In its nominal variant, depreciation is calculated by comparing depreciable value to normal operation duration.

***Degressive depreciation*** means the multiplication of corresponding straight-line quotas with a varying coefficient according to currently accepted life time for the respective goods.

Depreciation calculation relies on the fiscal rule imposing the correction of the straight-line rate by multiplicative coefficients set out by Law 15/1994 regarding the depreciation of fixed capital in tangible and intangible assets: 1.5 for a life time between 2 and 5 years; 2 for a life time between 5 and 10 years; 2.5 for a life time longer than 10 years.

***Accelerated depreciation*** means the calculation and inclusion in operation expenses during the first operation year of depreciation of up to 50% of the respective fixed asset's entry value. Annual depreciations for the following tax years are calculated according to the remaining redeemable value relying on the straight-line depreciation according to the number of remaining life years. The accelerated system means a way to quickly recover the value of fixed assets in order to avoid obsolescence. It affects profit in terms of reduction and therefore state-owed taxes decrease, at the same time making it possible for an enterprise to use the resulting fund for the purchase of new necessary fixed assets.

- In compliance with **IAS 16 “Tangible Assets”**, an enterprise is the one deciding upon a depreciation method both in the beginning of and during asset performance, when the use of another depreciation method may be needed in accordance with the consumption manner of future economic benefits. It is also necessary to consistently apply the selected method except some changes that lead to another change in the depreciation method, too.

The depreciation method used by an entity must reflect the estimated consumption pace of the future economic benefits in an asset. Various depreciation methods are used for the systematic allocation of an asset’s redeemable value along its useful life time. Such methods include: the straight-line method of depreciation, the degressive depreciation method and the manufacturing unit method.

*The straight-line method of depreciation – according to the provisions of IAS 16 “Tangible Assets”* – brings about the following changes: deducing the residual value from the initial or revalued amount and life time estimation made by an enterprise. In practice, a residual value is mostly insignificant and can be neglected when calculating a redeemable value. However, if a residual value is significant, it has to be estimated.

IAS 16 Standard on “Tangible Assets” states that for a basic accounting treatment, a residual value is estimated per the price on asset purchase date; for the sale of a similar asset which has reached the end of its estimated useful life time and has been used up in similar conditions to those during which the asset shall operate. A residual value does not increase afterwards due to the variations of price and value. In the event of an alternative accounting treatment allowed, there is a new estimation of the residual value on the date of each asset revaluation using the prices on the respective date. Its estimation takes place either on fixed asset entry date or on the date of a potential subsequent measurement of the fixed asset.

*The degressive method of depreciation according to IAS 16 “Tangible Assets”* may have several presentation versions:

- a constant depreciation percentage for a variable base (net accounting value or remaining value to be depreciated);
- a variable depreciation percentage for a constant base (accounting value).

The degressive method has no connection with the accelerated method used in the Romanian practice until now.

*The method of manufacturing units* results in an expense against estimated use or manufacturing.

### **3. General Aspects of Accounting Policies on Depreciation upon Outcomes and Corporate Taxes**

An enterprise accounting policy related to depreciations has a certain influence upon outcomes and corporate taxes by the impact of annual depreciation recognition as an expense for the respective period. Therefore, any recognition or registration error as well as any estimation changes regarding future economic benefits generated by the use of tangible and intangible assets entangle a new dimension of tax year outcomes due to changes in some major depreciation calculation factors: for tangible assets: life time; for intangible assets: depreciation period.

Depreciation entry means an important aspect while determining enterprise financial statements. Each element underlying depreciation calculation may influence its dimension.

The existence of several accounting methods to ascertain and register depreciations requires enterprises to have accounting options. If an enterprise has the opportunity to choose when it comes to depreciation, its concern is related to investment and this concern challenges the State’s fiscal one. Below there is the comparative calculation of depreciation in three methods in order to determine influences upon outcomes and corporate taxes.

*Example: Let us consider the accounting entry value of 60,000 lei for some equipment, and its normal operation duration of 5 years. The total raised revenues are 100,000 lei.*

**Table no. 1. Depreciation Comparative Status in Three Depreciation Methods and Associated Corporate Tax**

<b>Straight-line depreciation</b>	<b>Degressive depreciation</b>	<b>Accelerated depreciation</b>
20% annual depreciation rate	30% annual degressive rate	
Annual depreciation: - year N: 12,000 lei - year N+1: 12,000 lei - year N+2: 12,000 lei - year N+3: 12,000 lei - year N+4: 12,000 lei	Annual depreciation: - year N: 18,000 lei - year N+1: 12,600 lei - year N+2: 9,800 lei - year N+3: 9,800 lei - year N+4: 9,800 lei	Annual depreciation: - year N: 30,000 lei - year N+1: 7,500 lei - year N+2: 7,500 lei - year N+3: 7,500 lei - year N+4: 7,500 lei
Financial and fiscal implications are the same for all years: - Total revenues: 100,000 lei - Depreciation expenses: 12,000 lei - Accounting outcome: 88,000 lei - Corporate tax: $88,000 \times 16\% = 14,080$ lei	<b>For year N:</b> - Total revenues: 100,000 lei - Depreciation expenses: 18,000 lei - Accounting outcome: 82,000 lei - Corporate tax: $82,000 \times 16\% = 13,120$ lei <b>For year N +1:</b> - Total revenues: 100,000 lei - Depreciation expenses: 12,600 lei - Accounting outcome: 87,400 lei - Corporate tax: $87,400 \times 16\% = 13,984$ lei <b>For years N +2, N+3, N+4</b> - Total revenues: 100,000 lei - Depreciation expenses: 9,800 lei - Accounting outcome: 90,200 lei - Corporate tax: $90,200 \times 16\% = 14,432$ lei	<b>For year N:</b> - Total revenues: 100,000 lei - Depreciation expenses: 30,000 lei - Accounting outcome: 70,000 lei - Corporate tax: $70,000 \times 16\% = 11,200$ lei. <b>For years N+1....N+4:</b> - Total revenues: 100,000 lei - Depreciation expenses: 7,500 lei - Accounting outcome: 92,500 lei - Corporate tax: $92,500 \times 16\% = 14,800$ lei.

**Table no. 2 Summary of expenses related to depreciation and corporate tax**

<b>Straight-line depreciation</b>	<b>N</b>	<b>N+1</b>	<b>N+2</b>	<b>N+3</b>	<b>N+4</b>	<b>Total</b>
Depreciation-associated expenses	12,000	12,000	12,000	12,000	12,000	60,000
Corporate tax	14,080	14,080	14,080	14,080	14,080	70,400
<b>Degressive depreciation</b>	<b>N</b>	<b>N+1</b>	<b>N+2</b>	<b>N+3</b>	<b>N+4</b>	<b>Total</b>
Depreciation-associated expenses	18,000	12,600	9,800	9,800	9,800	60,000
Corporate tax	13,120	13,984	14,432	14,432	14,432	70,400
<b>Accelerated depreciation</b>	<b>N</b>	<b>N+1</b>	<b>N+2</b>	<b>N+3</b>	<b>N+4</b>	<b>Total</b>
Depreciation-associated expenses	30,000	7,500	7,500	7,500	7,500	60,000
Corporate tax	11,200	14,800	14,800	14,800	14,800	70,400

By comparing the three methods, it can be seen that depreciation-associated expenses and paid corporate taxes during the depreciation period are the same. An enterprise gets a financial advantage for the methods with higher depreciation amounts during the first years (degressive, accelerated depreciation) as compared with the straight-line method due to the fact that it enjoys a money surplus within a shorter term ensuing from the lack of payment of taxes and dividends.

The straight-line method is favorable as it is easier to apply and it is the most commonly used due to the uniform expenses during a tax year and the uniform costs over time. The main limits ensue from its simplified aspect and mean that the value decrease in goods is not constant all throughout their life time. Additionally, the method does not take into account the decrease in manufacturing ability nor does it consider the time increase in maintenance expenses due to wear and tear. From the fiscal perspective, the method has the advantage of decreasing enterprises' trend to avoid fiscality but it does not take account of the influence of technical progress, more precisely of obsolescence. This system has represented the basis for the development of the other depreciation regimes.

Degressive depreciation is optional as an enterprise may prefer it to the straight-line one and then it can go back to straight-line depreciation after having practised the degressive one on condition that annuities be calculated at their net accounting value. Degressive depreciation has the advantage of passing higher amounts onto the category of exploitation expenses during the first years of operation in accordance with the proper depreciation of the following tax years. It can be economically justified by depreciation being higher for certain tangible assets during the first tax years and on the other hand by the assets' higher service ability during their first years of life and then some entangle increasing maintenance costs.

As compared with straight-line depreciation, degressive depreciation helps an enterprise treasury when it uses its liquidities for investment. From the perspective of a fiscal advantage, the degressive method allows an enterprise to carry out significant tax saving in the beginning of assets' life time; consequently, during the years to come, investment shall be less important. During an inflation period, the method involves the delay of taxes which shall be regulated in a depreciated currency.

The degressive depreciation regime has the advantage of diminishing the effects of obsolescence by recovering assets' value within a shorter period of time. It is believed the main disadvantage of the method is that enterprises cannot quantify the effect of a priori obsolescence upon tangible assets, with multiplicative coefficients that have no actual calculation base.

#### **4. Conclusions**

Theory and practice recommend that the depreciation regime used should be logical and systematical. In other words, an entry cost must not be allocated per tax years in an arbitrary manner without taking account of the way the goods shall lose some of their useful values during the years. The depreciation regime selected must reflect the reduction of the service ability of fixed assets. The question "*Which depreciation regime is the best?*" has the following answer: it is according to enterprise objectives, to the "aggressiveness" of its desire to approach fiscal management and, of course, to the decisions made during company shareholders' or partners' general meeting.

It is known that choosing a depreciation regime is a matter of appreciation. If an enterprise has the opportunity to choose when it comes to depreciation, its concern is related to investment and it challenges the State's fiscal concerns.

Straight-line depreciation has the advantage of being easy to apply and the most commonly used thanks to the uniformity of tax year expenses and other costs over time.

Choosing the degressive or accelerated system is adequate to enterprises that are beneficiaries or about to become so during the first years after investment. Since fast depreciation is degressive, they can delay the payment of taxes thus benefiting from money depreciation. If they are faulty in their outcomes during the following years, enterprises can definitely avoid taxation.

Irrespective of the depreciation method an enterprise uses, depreciation brings it new financing sources reflected in its self-financing ability and if it applies depreciation methods with higher expenses during the first years, it manages to create an economic advantage.

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