

## PASSING FROM ACCOUNTING TO FISCAL DEPRECIATION

Marilena Zuca<sup>1</sup>  
Alice Țânță<sup>2</sup>  
Smaranda Andreea Trică<sup>3</sup>

*ABSTRACT: The perception and calculation of depreciation is an issue with tax implications. The terms under which such issue is settled are reflected in the ordinary use durations, in the depreciation regimes opposable to economic agents, implicitly in the deductibility degree of depreciation in establishing the taxable income and the value considered upon depreciation calculation.*

*From the fiscal viewpoint, decentralization in establishing the use duration imposes an authorized control that should moderate the company policy in establishing reduced use durations, and, implicitly, reduced durations of asset depreciation. The durations applied by companies must be fiscally approved.*

*The depreciation durations approved by the tax authorities are in most cases fiscal durations, which differ from accounting durations.*

*Key words: depreciation, depreciation regime, ordinary use durations*

*JEL codes: M41 – Accounting*

### Introduction

Entities, that are engaged in economical activities and that immobilize capital in tangible and intangible assets, subject to depreciation by use or in time, will calculate record and recover their physical and moral wear, for restoring the equity. These operations are called generic “immobilized capital depreciation”.

IAS 16 „Property, Plant and Equipment”, defines amortization as “the systematic allocation of the depreciable amount of an asset over its useful life”<sup>4</sup>.

Depreciation can be analyzed from 3 points of view: accounting (patrimony), the economic and financial. **In accounting terms**, depreciation is the value’s reduction of an asset as a consequence of its use by the company in a given period of time, aging, competition, technology changes and other causes. To take the form of depreciation, this reduction must have an irreversible character, which allows its delimitation from the provision concept. Depreciation is deducted from cost for calculating net book value. **In economic terms**, reducing the value of an asset as a result of impairment requires preparation and replacing it with another no. Consequently, the asset’s acquisition and use represents an expense and an element of cost to the company. We want to point in this way, the need for setting up the necessary funds for the renewal of depreciable assets, at the end of their life, from future revenue, without recourse to equity or debts. **In financial terms**, depreciation is a self-financing source of immobilized capital which is formed even if the company doesn’t have profit, by **drawing** the results. Depreciation is, therefore, an essential component of the self-financing capacity. The capital immobilized in tangible and intangible assets involves in the production process with all its value. In the process of obtaining end products, the value of fixed

<sup>1</sup> Lecturer PhD., Romanian-American University, 0744.374.177, marilena\_zuca@yahoo.com

<sup>2</sup> Lecturer PhD., Romanian-American University, 0729.152.684, dtinta@yahoo.com

<sup>3</sup> PhD. Student., Romanian-American University, 0726.789.271, smaranda.trica@gmail.com

<sup>4</sup> IAS 16 “Property, Plant and Equipment”

assets gradually transfers to the value of the obtained products, while a part of their value remains fixed in the material body of fixed assets. Consequently, we point out, it must be considered that during the utilization period of fixed assets, only their value it's circulating. The use of fixed assets in the production of material goods leads to their wear, which requires replacement, after a series of production cycles, not only in the form of value, but also natural. Therefore, their inclusion in the end products is called depreciation.

### **Depreciation's scientific character**

Depreciation's role in the reproduction process can be achieved only by respecting certain conditions, including: a proper and realistic evaluation of the working means, the depreciation rules to take into account both physical wear and the moral, the depreciation fund's amount to allow recovery of all the costs for assets replacement.

On one hand, imprinting a depreciation rate too accelerate leads to an excessive costs "loading", decreasing profit and underestimation of other efficiency indicators; it may also lead to the abnormal situation when the depreciation fund is fully formed and the fixed assets still have functioning possibilities. On another hand applying a depreciation rate that is too slow compared to the physical and moral wear process, can lead to a situation where, at some point, fixed assets should be taken out, without having fully established the depreciation fund. This last alternative has unproved consequences because by reducing the costs fictively, the economic efficiency indicators are overestimated and thus distort.

Romanian's general accounting framework is that of historical cost, found in the depreciation's calculation base. Under these conditions, the cumulated amount of annuities at the end of the depreciation, in constant currency, is lower to the initial investment and the difference is even higher as the amortization period is longer and the inflation rate stronger.

In these circumstances it is natural for the depreciation base to be the replacement cost for ensuring a renewal at least equal to the depreciated asset.

Depreciation, as part of production costs, reduces the tax base and thus diminishes the income taxes, while creating the necessary sources for the replacement of fixed assets. From this point of view all entities are interested in depreciating their fixed assets.

To achieve the desideratum of scientifically and realistically determination of depreciation, in economic practice are applied different regimes of fixed assets depreciation. Entities choose the depreciation method based on the promoted financial policy, the amount of resources wished to be formed for investments in one year or another.

The depreciation method used at a time is not irreversible. It can pass to another system of depreciation; amortization may be interrupted or ceased. In case of ceasing the depreciation the negative flows are increasing (payments to income tax, lowers the correspondent positive investments flows).

In our opinion, such a depreciation policy is applicable when the company hasn't set goals for investment to be financed or wishes to present to its shareholders higher assets return.

Conversely, if the company wants to provide massive funds for investment in the first interval of operation, may apply the degressive depreciation method, which creates a decrease in tax benefit, increasing self-financing sources.

The degressive depreciation method creates the advantage that in inflationary periods, taxes are paid by enterprises in depreciated currency.

If the depreciation is undervalued, it lowers the costs, increases the benefits and the rate of return by subduing possible losses, leads to undue dividends' distribution and the value of tangible fixed assets is overstated, but the depreciation fund becomes insufficient for replacement.

If the depreciation is overstated costs are decreasing, the benefits and rate of return decrease fictively, the distribution of dividends and the amount of tax is affected, but a large depreciation fund it is formed which, if not correlated with the increased needs for investments, may stay

unused.

Degrressive depreciation method rules ensure the concordance of the decreasing depreciation standards with a better technical condition and a higher return of the fixed assets at the beginning of the operation, a faster acquisition of resources for replacing those assets, reducing the risk of losses due to moral wear.

On one hand this method presents some disadvantages by transforming some of the benefits in depreciation fund (at the beginning fixed assets' operation). On the other hand, degressive depreciation contravenes to the objective evolution of physical and moral wear process and complicates, to some extent, the work of calculating and book keeping, claiming a greater time for working.

Accelerated depreciation regime consists in including in operating costs, in the first year of operation, depreciation up to 50% of the fixed asset entry value, which means that in this first year the accounting profit value reduces accordingly, and implicatively the income tax decreases. This depreciation regime advantages the recovery of large part of the investments' value made and the use from this fund, for new investments, for modernization and re-technology.

### **Depreciation between accounting and fiscality**

The perception and calculation of depreciation is an issue with tax implications. The terms under which such issue is settled are reflected in the ordinary use durations, in the depreciation regimes opposable to economic agents, implicitly in the deductibility degree of depreciation in establishing the taxable income and the value considered upon depreciation calculation.

Ordinary use durations corresponding to the depreciation durations are estimated, not measured, depending on the practical experience related to the categories of depreciating assets. In economic terms, such duration expresses the time intervals when the depreciating assets bring services to a company. It is different from the physical life cycle of assets.

Ordinary use durations may be established in centralized and decentralized manner. Centralized establishment starts from the profitability that identical fixed assets have different service durations, depending on the conditions used in companies, materialized in the distinct degrees of physical decay, distinct repair programs and distinct operation environment.

These are completed with the distinct opinions on the moral tear and wear of fixed assets and the perception according to which depreciation is an allowance issue and, consequently, the ordinary use duration must be equal to the economic use duration.

From the fiscal viewpoint, decentralization in establishing the use duration imposes an authorized control that should moderate the company policy in establishing reduced use durations, and, implicitly, reduced durations of asset depreciation. The durations applied by companies must be fiscally approved.

The depreciation durations approved by the tax authorities are in most cases fiscal durations, which differ from accounting durations.

The centralized establishment of ordinary use durations (through government decisions at macro-economic level) circumscribes to the tax control only upon simple note of the observance of such durations as depreciation durations, implicitly in establishing accounting and tax depreciation.

With respect to the depreciation regime, it is well-known that the straight-line, declining balance and accelerated methods can be used. From among such methods, the straight-line depreciation method is said to ensure the calculation of a national and economic measure of allocated depreciation written down in the principles and rules of the tax image. Any amount over the year or under straight-line depreciation is a structure of derogatory depreciation dictated by the differences between the accounting result and the tax result, so it is of a fiscal order, the issue being settled in different manners.

From the accounting viewpoint, the amortizations envisage the economic depreciation of a good, as related to the physical, technological or legal wear and tear. In certain countries derogatory depreciation is used, which is not regulated by the legislation in our country. It results exclusively from fiscal provisions and does not correspond to depreciation.

That is why derogatory depreciation does not have a mandatory nature. This is only an opportunity-related decision, allowing companies to optimize their tax result, i.e. the tax to be paid.

In countries where accounting is connected to taxation (e.g. France), straight-line depreciation is deemed a minimum and represents the current depreciation method.

The depreciation plan only contains the depreciation amortizations according to accounting principles as opposed to the derogatory ones applied as a result of tax regulations.

From the fiscal point of view, straight-line depreciation is the ordinary depreciation. The net benefit is established considering the deductibility depending on the use of each fixed asset.

Straight-line depreciation has the advantage that it strongly involves the tendency to elude taxation. The depreciation pro rata must be considered according to the number of use days of fixed assets over the year and not according to the month following the month when the input or output occurred, as regulated in our country.

Since the pro rata calculation method influences the depreciation size and, implicitly, the profit taxation, it is deemed that the solution for the calculation of depreciation pro rata according to the number of use days is the most appropriate. The depreciation amortizations are registered in accounting books by diminishing the assets, and the result account through operating costs.

Degrassive depreciation involves an acceleration of the process to redeem depreciation during the first years of life as of the moment the good is put into operation. By applying degrassive depreciation, decreasing annuity may be obtained either by applying a constant rate with a degrassive value, or by applying a degrassive rate at a constant value.

The former method may not be applied if full depreciation of the good is desired, because the sum of amortizations will never be equal to the record value of the said good, so the net accounting value will never be null.

The former method represents the basis of degrassive fiscal depreciation that was also introduced in the Romanian accounting system. This is applied as a consequence of the legal and tax system and aims at encouraging the update of the production apparatus.

The degrassive depreciation system increases the depreciation expense during the first years by means of a mere game of writing. That is why the benefit is artificially reduced, which allows for the reduction of the income tax.

We consider that in an inflationary economy as is Romanian economy nowadays, the degrassive fiscal depreciation system is not an unjustified advantage, contrary to the opinion of certain specialists. It is, in fact, the depreciation method which best reflects reality.

In certain countries, the fiscal legislation reserves the degrassive method for certain types of limited provided goods such as:

- ☞ Goods of industrial equipment;
  - ☞ Installations which lead to savings of energy and raw materials.
- Limiting the fiscally degrassive depreciation for certain goods does not always allow for the application of a homogeneous method for similar goods, such as, for example, in a water treatment plant and a water pumping and treatment plant. In this situation, the company will have to apply in accounting the degrassive depreciation for the entire category of goods, including the good excluded from the regime of degrassive depreciation.

In counterparty for this type of depreciation, the surplus of accounting amortizations practiced in compliance with tax regulations will be reintegrated off accounting.

If in the Anglo-Saxon system the accounting depreciation is not influenced following the existence of fiscal depreciation, in the continental system, where the accounting serves tax purposes, the record of fiscal depreciation in accounting is a prerequisite for its deduction.

In this circumstance, degressive annuity is the same with accounting annuity which is recorded in accounting:

Account 681 "Operating expenses on depreciations and provisions" is debited and account 281 "Depreciations on tangible assets" is credited.

In the former situation, the accounting annuity is linear, but the difference between the fiscal (degressive) annuity and linear annuity is nothing else but derogatory depreciation. Thus, due to the superposition between the accounting depreciation and the fiscal depreciation, there are no time differences between the accounting result and the fiscal result, and, consequently, no delayed taxes.

Two records occur in accounting:

a) For linear annuity:

$$6811=281$$

b) For the difference between degressive and linear annuity.

The former record is not permitted in Romania because derogatory amortizations are not fiscally accepted. The depreciation plan by means of the solution "linear for depreciation with fiscal degressive complement in derogatory amortizations" as against the solution "fiscal degressive for depreciation" does not result in improving the current result and the own capitals.

Practice has shown that the two solutions obtain the same net result, the same gross operating surplus (EBE), with the same self-financing capacity and the same working capital.

The three terms of the depreciation-fiscal relation, i.e. the use duration, the depreciation regime and the value to be depreciated are settled in distinct manners in the countries which may present themselves as reference system. Thus, in the USA, the current fiscal depreciation system MACRS (Modified Accelerated Cost Recovery System) differs from accounting depreciation with respect to the length of the service durations (shorter), the use of degressive methods and the omission of the residual value upon calculation of the annual depreciation.

Fixed tangible assets are divided into distinct categories depending on the fiscal service duration: 3, 5, 7, 10, 15, 20, 27 1 / 2, 31 1/2 years (the last two groups for residential and non residential buildings). The depreciation methods accepted for tax purposes:

- ☞ Degressive method with 2 tax coefficient (the method of double decline) for the fixed assets in groups 3, 5, 7, 10 years;
- ☞ The degressive method with 1.5 tax coefficient for the fixed assets in groups 15 and 20 years;
- ☞ The straight-line method for assets in the last two groups 27 1/2 and 31 1/2.

Furthermore, fiscal depreciation is calculated for half a year during the first year, regardless of the acquisition date and, as a result, the above-mentioned intervals are increased by one year.

In Great Britain, the fiscal depreciation permitted by the Inland Revenue relies on the degressive method, with the application of a 25% rate from the asset value. During hyperinflation periods, the fiscal depreciation for plant and installations may reach up to 100% from the acquisition cost on the year the record took place.

These examples illustrate the fact that the accounting depreciation is not influenced by the existence of the fiscal depreciation (in countries of Continental Europe, the fiscal depreciation is a prerequisite and a form of fiscal depreciation deductibility).

### **Conclusions**

The realistic assets' assessment is an essential condition for establishing the proper depreciation. Their over- or underestimation lead to the making up of an unjustified depreciation fund, higher or lower than the replacement needs of the working means, which reverberates on costs and profit, misrepresenting their real value.

The profit is used as a base to compute depreciation, and as so we can say that depreciation represents a resource for the company. . It is an element of self-financing.

The resulting funds (from computing the depreciation) being an important self-financed source for investments, should be scientifically determined so that depreciation corresponds with the subjective process of physical and moral wear and with the forming needs of the necessary replacement costs of assets.

The depreciation of fixed assets is a generalized process all over the world, whether it is practiced in one way or another, having a multilateral economic role.

Depreciation value is a component of production costs and has a well established role in determining profitability. The more depreciation amount will decrease in costs, the more return rate and profits will increase.

### **References**

1. McLANEY E. - "Contabilitatea și finanțele pe înțelesul tuturor", Editura Rentrop&Straton, 2006
  2. GRIGORESCU C. J. - "Analiză economico-financiară", Editura Universitaria, București, 2006
  3. PANTEA P. - "Contabilitate financiară românească conforma cu Directivele europene. Ediția a II-a", Editura Intelcredo, 2007
- \*\*\* Revista de Contabilitate și legislație, fiscalitate, 2007-2008  
\*\*\* Revista de Gestiune și Contabilitate, 2007-2008