THE ACCOUNTING TREATMENT OF ASSET DEPRECIATION AND THE IMPACT ON RESULT

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ABSTRACT: *The users of the financial statements have long been limited to perusing the loss and profit account to find out information about the accounting result. It has been considered the most significant indicator to measure the performance of a company, without taking into account, however, the relevance of such information. The accounting result is the result of the free choice on accounting policies of companies and leads to an increase or decrease of this result. It is difficult to select the most relevant policy of the multiple accounting policies provided by the International Financial Reporting Standards with impact on a company's financial performance. Such various accounting practices make an accurate evaluation of the performance and financial situation of companies of different nationalities difficult. It is certain, though, that different accounting solutions used for re-evaluations, amortizations and adjustments lead to different financial results for identical exploitation conditions.*

KEY WORDS: *depreciation, amortization, adjustment, self-financing*.

JEL CLASSIFICATION: *M41*.

1. AMORTIZATION – COMPONENT OF MAINTENANCE SELF-FINANCING

Much of the fixed assets are subject to degradation over time, which requires their replacement, usually, by amortization. Amortization appears as a value equivalent to the irreversible deterioration of an asset following its operation, the action of natural factors, technical progress or other causes. Part of the assets whose use is unlimited in time, for instance lands and financial investments, are not amortized and their potential depreciation is covered by adjustments.

The financial derivated tools have a special behaviour, as they are financial actives, whose liquidation cost must be admitted in accountancy (Gruiescu, et al., 2010, p.111). The amortized cost is the amount at which the assets and the financial

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debts are measured at the first recognition plus / minus the accumulated depreciation and any other difference between the original amount and the maturity one. Any provision for depreciation and non-charge will be dropped.

Amortization is a notion, a phenomenon, a very complex process, with technical, accounting, economic, financial, legal, tax, etc., determinations. It represents the systematic distribution in expenses of the amortizable amount of an asset throughout its entire lifespan. There are several views regarding amortization:

⇨*According to the economic (accounting) view on amortization*, companies use the purchased goods to obtain economic advantages during several financial years. Based on a commitment accounting and the separation of the financial years, the input amount of an asset must be divided so that each financial year to bear an expense corresponding to the advantages obtained following the use of such asset. As the economic advantages of an asset are consumed by the company, the accounting value of the asset decreases according to its consumption, usually, by recoding an expense with the amortization. The economic or accounting amortization is determined based on the estimations and calculations resulting from the decisions of the company’s management.

⇨*According to the juridical-economic view,* amortization is connected to the patrimony view on the balance sheet. According to the French accounting plan, amortization is an accounting finding regarding the decrease of an asset’s value, arising from the use, the passing of time, technical change or whatsoever cause.

⇨*According to the financial view*, amortization is a means to recover the invested capital, a source to finance the asset. The accumulation of the yearly amortizations must allow the replacement of the asset which cannot or must not be used (because of the moral depreciation).

Amortization thus becomes an element of the self-financing capacity. The self-financing capacity can be determined from the gross surplus from exploitation – the deductive method, or from the net result – the additive method (table no. 1).

Teodorescu and Badea (Teodorescu & Badea, 2007, pp.163-164) consider that maintenance self-financing plays an important role in a company’s performance. Maintenance self-financing consists of amortization, which ensures the replacement of dysfunctional assets, plus the adjustments for depreciation or the value loss of the assets and provisions.

It can be said that **amortization** is a complex phenomenon with various determinations and consequences. It is the main source of self-financing given the simple reproduction of fixed capital (preservation of patrimony). If the company management plans to expand the activity through the development (increase in value) of the assets, it is required to use external financing sources (non-reimbursable loans and financing, bank loans and/or bonds, subsidies, donations, etc.) together with internal sources (allocations from the net profit). In accounting terms, amortization is an expense which indicates the consumption, respectively the use of the asset. The recording of the amortization in the accounting does not affect directly the immobilization account, but only the result account. It plays a role in adjusting the accounting amount of the asset, ensuring the preservation of the information regarding the initial value of the asset. The same as value adjustments, amortizations do not generate negative cash flows and do not affect the company's treasury.

Table 1. Self-financing capacity

No.		Deductive method		Additive method
1.		**GROSS SURPLUS FROM EXPLOTATION**		**NET RESULT**
2.	+	Other exigible income from exploitation (save for those from the sale of assets)	+	Calculated expenses (amortizations, provisions, adjustments for depreciation or value loss)
3.	-	Other payable exploitation expenses (save for expenses with assigned assets).	-	Calculated income (income from the resumption of provisions and adjustments for depreciation or value loss).
4.	+	Exigible financial income	-	Income from sale of assets
5.	-	Payable financial expenses	+	Unamortized value of assigned assets
6.	+	Extraordinary income	-	Share of subsidies for investments recorded in income
7.	-	Extraordinary expenses		
8.	-	Profit tax		
9.	=	**Self-financing capacity**	=	**Self-financing capacity**

Source: Adaptation after: Teodorescu; Badea, 2007, p.39

2. THE ACCOUNTING TREATMENT OF DEPRECIATION IN ROMANIA

In the Romanian accounting, we notice at present the increasingly focused tendency to separate accounting from fiscality. As regards amortization, two sensibly different views are currently being used (Popescu, 2008, pp.54-62): *Accounting amortization*, stipulated by the accounting regulations; *Tax amortization*, stipulated by the tax regulations. The accounting amortization is the amortization recorded in the accounting books as expenses, determined according to accounting rules and regulations.

Stipulated under OMFP no. 3.055/2009 for the passing of the Accounting Regulations as per the European directives, accounting amortization is defined in art 31, paragraphs (1) and (2) of OMFP no. 3.055/2009, as follows: *(1) Value adjustments include all the corrections aimed to consider the decreases in the amounts of the individual assets, set on the date of the balance sheet, even if such decrease is definitive or not. (2) Value adjustments can be: permanent adjustments, hereinafter referred to as amortizations, and/or temporary adjustments, hereinafter referred to as adjustments for depreciations or value loss, according to the permanent or temporary nature of the assets' adjustment.* In accounting terms, current regulations preserve the view of the duration of economic use, understood as the useful lifespan which represents: *the period for which an asset is set to be used by a certain entity; or the number of produced units or of similar units to be obtained by the entity through the use of such asset.*

Amortization is set by enforcing the amortization shares on the input value of the assets. The amortization of tangible assets is calculated with the month following their startup and until the full recovery of their input value. When the amortization of the tangible assets is determined, there are considered the period of economic use and the use conditions. According to the domestic accounting rules, *there are for types of amortizations* used by companies: *a) Linear amortization,* performed by a uniform inclusion in the exploitation expenses of fixed amounts, established proportionally with the number of years of their period of economic use; *b) Digressive amortization*, which consists of the multiplication of the shares of linear amortization by a certain coefficient. In this case, the legislation in force should be considered; *c) Accelerated amortization*, which is the inclusion, in the first year of operation, in the exploitation expenses of an amortization of maximum 50% of the asset's input value. Yearly amortizations for the following financial years are calculated according to the reminder to be amortized, according to the linear amortization, depending on the number of years. Given that the calculated amortization must be correlated to the use of the asset and given that there are rare situations when a tangible asset is consumed in the first year up to 50%, it is considered that the accelerated amortization is less used for accounting purposes; *d) Amortization calculated per unit of product or service*, when the type of assets justifies the use of such amortization method.

The amortization method used must indicate how the future economic benefits of the asset are to be used by the company. Amortization is applied consistently for all the assets of the same type and used in identical conditions, according to the accounting policy agreed on. It can be changed only when an error occurs in the estimation of the economic benefits' consumption.

As regards amortization per components, the domestic rules indicate that the components from the structure of a tangible asset, whose regular lifespan differs from the one of the asset, the amortization will be determined for each individual component. The treatment of amortization per components is recognized only for the components which require regular replacement and which have a high price. The second type of components, concerning the expenses for general verifications, are considered expenses made for repairs because it is considered that they do not generate additional economic benefits for the company. Therefore, they will be recorded directly in the result account.

According to the domestic accounting rules, value adjustments include all corrections meant to take into account the decreases of the individual assets' amount, set on the date of the balance sheet, even if such decrease is definitive or not. Following the calculation and recording of adjustments for depreciation or the value loss of the assets, the temporary loss of value is calculated, observing the requirements for the accounting information, namely to offer a clear, honest, faithful and full image of the patrimony.

In terms of the accounting treatment, temporary adjustments are similar to provisions. The recording of the expenses regarding the adjustment of the tangible assets' value will result into the decrease of the gross result of the financial year, of the profit tax in case of provisions which can be deducted fiscally and implicitly, of the net financial result. The takeover of a loss from depreciation must be recorded in the loss and profit account.

The recording of the adjustments regarding the depreciation must not be a decision of the company. It is an obligation which will lead to the presentation of an accurate image of the financial statements.

3. THE ACCOUNTING TREATMENT OF DEPRECIATION ACCORDING TO THE INTERNATIONAL ACCOUNTING RULES

The literature describes two accounting methods to evaluate assets from financial statements: the amortization method and the depreciation method. The two methods ensure the re-evaluation of the assets' value when the financial statements are prepared and start from the idea that the assets' value is influenced by the following: (1) *A definitive depreciation*, which results into the recording of an amortization; (2) *A temporary depreciation*, which results into the recording of an adjustment for depreciation. Value adjustments include all the corrections meant to consider the decrease in value of the assets set on the date of the balance sheet, even if such decrease is definitive or not.

The International Accounting Standards define amortization as the systematic distribution of the amortizable amount of an asset during its entire useful lifespan (CECCAR, 2011)[1]. To determine the useful lifespan of an asset, a company must consider the following assets: a). the estimated use of the asset, evaluated according to the estimated capacity of the asset or to the physical production; b). the estimated physical wear and tear which depends on the operational factors; such as the number of shifts when the asset is to be used; the repair and maintenance schedule, etc.; c). the technical or commercial wear and tear caused by production changes or improvements or by a change in the market demand as regards the product or service delivered by the asset; d). the limits stipulated by the law or the like for the use of the asset, for instance the expiry date of the leasing contract.

The amortization of an asset starts when it becomes available for us, respectively when it is in the emplacement and condition required to function according to the plans of the company's management (CECCAR, 2011). The amortization must be recorded even if the actual value of the asset exceeds its accounting value, as long as the residual value[2]does not exceeds its accounting value[3].

The amortizable value is the cost of an asset (if the company plans to use the asset until the termination of its economic lifespan) or any other value which replaces the cost in the financial statements, less the residual value of the asset (if the company plans to replace the asset before the termination of its economic lifespan).

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[1] According to IFRS, the term *amortization* is generally used instead of the term depreciation for intangible assets, the two terms having the same meaning.

[2] *The residual value* of an asset is the estimated value to be obtained by an entity if the asset is assigned, after deducting the assignment related costs and if the asset has the age and condition stipulated until the end of its useful lifespan.

[3] *The accounting value* of an asset is the value for which the asset is recorded after deducting the accrued amortization and the losses accrued from depreciation.

The assets which generate future economic advantages, which are unlimited in time, are not amortizable. These are lands, artworks, etc., whose purchase price is not distributed in time.

A company can use several amortization methods. The selection of the amortization method must indicate the rhythm estimated to consume the future economic benefits of the asset. Each amortization method influences in a certain way the expense for the amortization: a). *the linear amortization* results into a constant expense throughout the useful lifespan of the asset if the residual value of the asset is not changed; b). *the digressive amortization* results into a decreasing amortization expense during the useful lifespan of the asset; c). *the amortization calculated by the method of the units of production* results in an expense determined based on the use or production estimated to be obtained.

A special aspect of the tangible assets' amortization, stipulated by IAS 16 *Tangible immobilizations*, concerns the amortization per components. It can be used if two conditions are simultaneously met: future economic benefits are likely to be generated for the company and the cost of the immobilization can be credibly evaluated;

The International Financial Reporting Standards state that each part of an element of tangible assets with a significant cost related to the total cost will be amortized separately. There are two types of components: elements to be replaced and the expenses generated by the multiannual verifications made to identify malfunctions. These expenses must not be mistaken for the current repairs which must be recorded directly in the loss and profit account.

In **France**, for instance, in terms of the accounting plan, companies must amortize assets according to their predictable real lifespan. According to the French accounting rules, the probable useful lifespan can be determined starting from criteria such as: physical wear and tear, moral wear and tear and the so-called juridical decline of an intangible asset, which starts from the reason that the protection of certain rights, such as patents, exclusivity rights, usufructs, etc., is limited in time (Cozian & Deboissy, 2009). The French accounting rules indicate that for the same type of immobilization, this lifespan can differ from one company to another, according to the use of the machines. Lifespan can also depend on the renewal policy of the immobilizations (for instance, a company can decide to renew a car park every five or three years; in the first case, it is amortized in five years and in the second in three years, taking into account the residual value[4]).

In the particular case of France, before the reform in the field of accounting begun on January 1, 2005, tangible assets were amortized unitarily even if some of their components deteriorated faster and had to be replaced on the way.

The new international accounting regulations have had a significant impact on the accounting treatment of amortization. Thus, a building was amortized within a sole period of time (for instance, thirty years) even if parts thereof had to be replaced after a

[4] The new accounting standards require companies to consider the residual value of an asset when it is safe that the useful lifespan will be lower than the probable lifespan of the asset. The residual value must match the price the company will obtain when it resells the asset, at the end of its useful lifespan; it must be significant and measurable on the purchase of the asset.

shorter period of use (for instance, ten years). According to the new accounting regulations, the cost of the immobilization to be amortized is made per components. For the example presented above, an amount of the building's structure is determined and will be amortized in thirty years and another amount is set for the heating and air-conditioning systems which will be amortized within a shorter period, like ten years. The breakdown applies with certain restrictions as regards the amount of the components and their lifespan. Thus, the distribution of cost per components is not made for those components, whose amount is lower than 500 euro or if it is lower than 15% of the cost of the entire equipment for movable assets (1% for immovable assets). The restriction regarding lifespan forbids the distribution of cost for those components whose lifespan is higher or equal to 80% of the entire equipment's lifespan. The distribution is not made if the lifespan of a component is lower than a year.

Most opinions on the amortization per components indicate that these changes have impacted the company's tax basis. As Burlaud & Colasse (Burlaud & Colasse, 2010, pp.10-15) state, the amortization per components generated in the financial year 2005 an increase or decrease of the taxable income, depending on the company. The breakdown of assets into components affects the periods and specific means of amortization. Thus, in case of spare parts[5]which meet the conditions on amount and lifespan, as regards the breakdown on components of an asset, the enforcement of the new regulations results into their re-evaluation. Until the replacement of the deteriorated components, the spare parts will be considered assets. It can be said that the breakdown of tangible assets per components influences their amortizable amount, considered as base to calculate the amortization and, implicitly, the financial result of the company. Save for amortization, which is a permanent depreciation, there is also another class of depreciations, which indicate a temporary loss of value, which can be cancelled in the future. The recording in the historical cost points out the assets in the balance sheet at their initial value (the purchase value of the production value). The initial value remains unchanged, irrespective of the evolution of the asset's value. To ensure a faithful image of the financial statements and taking into account the principle of prudence, the depreciation of the asset's value is recorded. An asset is considered depreciated when its current value is below the net accounting value. It can be noticed that, according to the International Financing Reporting Standards, depreciation is the size of the positive difference[6] between the accounting value of an asset and its recoverable value, in which situation the asset is considered depreciated. If the recoverable value is higher than the accounting value, the asset is appreciated in value and this appreciation is not registered in the accounting based on the principle of prudence. The finding of depreciation is made both for amortizable assets and for non-amortizable ones. In case of amortizable findings, depreciation leads to the decrease of the amortization basis for the future financial years.

Depreciation is not definitive and its value can be readjusted up or down if the asset gains or losses value. Depreciation is an expense indicating the loss of value for an asset as regards its sale or use, a special situation concerning the assets evaluated at their re-evaluated value. An adjustment regarding depreciations or losses of value

[5] Seen as components of an asset
[6] Recoverable asset lower than the accounting value

appears when the accounting value of an asset exceeds the recoverable value, in case of fixed assets, the net value for inventories or the actual value or the amortizable costs in case of financial instruments. The recording of an adjustment regarding depreciation or loss of value is an effect of the enforcement of the principle of prudence in accounting.

A loss from depreciation is recorded, evaluated and registered in the loss and profit account or in the capital account based on estimates. Any change of the initial parameters considered for the estimation influences the net financial result of the current period or the change of reserves.

4. THE INFLUENCE OF DEPRECIATION ON THE COMPANY'S RESULT

According to IAS 36 – *Depreciation of assets,* depreciation usually refers to a deterioration of an asset's value, which has low chances to disappear in the future, as it is caused by moral wear and tear, unfavourable market conditions, etc. Taking into account that a loss from depreciation is recorded, evaluated and registered in the profit and loss account or in the capital account based in estimates, *any change of the initial parameters considered for the estimation influence the net financial result of the current period or the change of reserves* (Mateş, et al., 2009, p.46).

In practice, two opposed tendencies have been noticed. Companies are tempted to increase the value of the depreciation to lower the taxable result. On the other hand, listed companies have an opposed tendency and are tempted to reduce depreciations to avoid affecting significantly the result, which might lead to the alienation of investors.

Paragraph 60 of IAS 36 – *Depreciation of assets,* states that any loss from depreciation will be immediately recorded in the loss and profit account of the financial year. Save for the situation when the asset is recorded at its revaluated amount, as per the provisions of IAS 16 – *Tangible assets.* In case of a revaluated asset, any loss from depreciation will be considered as a decrease generated by re-evaluation.

To determine the loss of value, the recoverable value of the asset will be estimated and, implicitly, of the net price of sale and usefulness value. Mateş and Grozi deem that the estimation of the loss from depreciation is based on the existence of clues arising from information from sources external to the company (increase of the asset's market value, significant changes with favourable effects in the technological, economic, legal or market environment where the company operates) and from inner sources (significant changes in the use of an asset) (Mateş & Grozi, 2008, pp.46-53).

According to the accounting situation of the depreciated asset, loss from depreciation is recorded two ways: ❶ *If an asset hasn't been re-evaluated*, the loss from depreciation will be recorded directly in the profit or loss of the period; ❷ *If an asset has been re-evaluated* (as per the re-evaluation model of IAS 16), the loss from depreciation must be recorded in the overall result, by decreasing the surplus arising from the re-evaluation if the loss from depreciation does not exceed the surplus from the re-evaluation of such asset. If the loss from depreciation is higher than the surplus from re-evaluation, the loss of value is charged mainly on the reserve from re-evaluation and after its depletion is recorded as expense in the profit or loss of the period.

IAS 36 – *Depreciation of assets* indicates the situations when the company must resume or decrease a loss from depreciation. The resumption of a loss from depreciation results into an accounting value which must not exceed the initial cost of the asset from which the amortization's value is decreased. Any value exceeding the historical depreciated cost must be treated as difference from re-evaluation by influencing the capital costs. The standard IAS 36 – *Depreciation of assets* indicates that a loss of value recorded in the financial years will be resumed only of a change occurred in the estimates used to determine the recoverable value from the last recording of the loss from depreciation. This loss can be resumed only if it does not lead to an accounting value higher than the one determined if there had not been any depreciation in the previous years. Both after the recording and after the resumption of a loss from depreciation, the amortization of the asset must be adjusted in the future financial years (thought the remaining useful lifespan, the review accounting value of the asset will be distributed, less its residual value, if any). The amortizable value must be recalculated to determine the future amortization, irrespective of the method used to record the depreciation in the accounting.

International accounting rules state that it is not necessary to determine both the just value of an asset (less the cost generated by the sale) and the use value, indicating that, any of these values exceeds the accounting value of the asset, the asset is not depreciated. The calculation of the value, less the costs generated by the sale[7]is possible even if the asset considered is not sold on an active market[8]. The estimation of the use value of an asset represents: estimation of future cash incoming or outgoing arising from the continuous use of the asset and from its assignment; the enforcement of the update share proper for these future treasury flows.

The update rate must be the rate before taxation, which indicates the evaluations of the current market of the value – time of money and risks specific to the asset.

At the end of the financial year, a company which recorded in the previous years a loss from depreciation for an asset or a unit generating cash flows[9]must evaluate if there a new clues to cancel the loss from depreciation or to decrease it. If there is such information, the company must re-evaluate the recoverable value of the asset or of the unit generating cash flows and to resume or decrease the loss from depreciation.

In **France,** the observation of a depreciation results into recording a deductible expense from the accounting result as taxable result. Further readjustments, namely the

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[7] *The just value minus the sale (assignment) costs* represents the value to be obtained following the sale of an asset or of an unit generating cash flow, in a transaction completed under objective conditions, between interested and informed parties, less the assignment costs. The assignment costs are costs for the change of level of activity, costs directly related to the assignment of an asset or of a unit generating cash flow, save for the financing costs and the profit tax costs.

[8] According to IFRS, an *active market* is a market which cumulatively meets the following three conditions: the elements transacted on the market are homogenous; normally, sellers and buyers can be found at any moment; the prices are accessible to the public.

[9] *The unit generating cash flows* is the smallest identifiable group of assets whose continuous use generates cash flows, independently of the incoming cash flows generated by other assets or groups of assets.

increase of the value, lead to the recording of some income in accounting. No extra-accounting corrections are made.

5. CONCLUSIONS

The result can be only a relative one. Given the current environment of regulations, where there are several options to record the same transaction, therefore it cannot be said that there is an objective result, but rather a subjective one. The subjectivity arises from the selection of a norm or option which involves the elimination of another norm or option. This game of selection impacts the financial statements and, implicitly, the accounting result.

The presence of options in accounting gives raise to the issue of criterion to decide on such accounting policy. Starting from the limits of the accounting principles, the producers of information call on different ways to shape, up to deformation, the final result.

The recording of depreciations or further adjustments in accounting explains at least partially the economic crisis started in 2008. Certain assets considered "toxic products" listed in the balance sheets of certain banks or insurance companies justified massive depreciations which led to negative results on the conclusion of the financial year of 2008.

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