### **Peculiarities of Tangible Fixed Assets Accounting**

### Violeta Mykolaitiene, Giedre Vecerskiene, Kristina Jankauskiene, Loreta Valanciene

Kaunas University of Technology Laisves av. 55, LT-44309, Kaunas, Lithuania e-mail: violeta.mykolaitien@ktu.lt, giedre.vecerskiene@ktu.lt, kristina.jankauskiene@ktu.lt, loreta.valanciene@ktu.lt

In the conditions of economic depression it is very important for each organization to make correct decisions regarding financing and investments, to effectively manage the assets, and to command the timely and correct accounting information that allows reflecting financial results of the organization.

The effectiveness of the organization activity is determined by the level of provision with tangible fixed assets and its rational usage in economic processes. The aforementioned accounting is important in the management system of any organization that provides valuable information for the production organizers. The organization managers and specialists must have operative knowledge about tangible fixed assets, its physical condition, depreciation and level of provision. Such knowledge is useful for control of asset's reception and its turnover, while analyzing its usage effectiveness. (Domeika, 2008).

In the organization activity, accounting is becoming the system of registration, grouping and generalization of economic operations expressed in money, which is meant to adopt economical decisions and make financial reports. According to Valanciene, Strumickas (2009), one of the main tools that help to guarantee successful activity of the organization, is flexible accounting system suitable for management of changes and timely informing of management. According to Markovic (2008), the successful companies in the future will be the ones, which are wise enough to harness the full potential of the entire organization in the rapidly changing business environment. Accounting provides data about the results organization's activity and money flows, and its information is used to evaluate the organization's activity, adopt management decisions and predict future perspectives. Such definition stresses the importance of accounting for economical processes. The success of each organization – personal enterprise, major international organization or public institution, depends on the accounting conceptions and practical skills (Vecerskiene, Valanciene, Boguslauskas, 2008). Therefore accounting needs scientific researches, results of which would help to form the legislation basis and methods of accounting, to correct and develop accounting standards, to form accounting systems of companies' management, and to investigate the cases of their practical implementation. The practical accounting problems of long-term tangible result need scientific researches, while scientific researches require practical results. This helps to transfer accounting to another qualitative level and render knowledge for future practicians. The conditions of knowledge economy have determined global changes, which are changing the nature of organization's (Valanciene & Gimzauskiene, 2007). The real competitive advantage of the organization is made from the combination of several factors: knowledge, skills, technologies, work methods and information (Boguslaukas & Kvedaraviciene, 2009).

In order to prepare correct and accurate financial and tax reports, the method of united configuration accounting of tangible fixed assets (TFA) is needed, which would help to coordinate the provisions of Business Accounting Standards (BAS) and requirements of Law on Corporate Income Tax (LCIT), and which are needed for the preparation of an accurate and correct financial and tax report.

The article reveals the significance of the selection of accounting methodology of tangible fixed assets for the reflection of organization's financial results, analyzes variety of TFA methods, statutory standards of accounting of tangible fixed assets and problems of their compatibility, reveals the influence of discrepancies in the accounting methods of depreciation of tangible fixed assets on the organization's activity results, and presents the research results on the application of TFA methods in the Lithuanian organizations.

Keywords: accounting, tangible fixed assets, depreciation of tangible fixed assets, accounting methods of depreciation, accounting methodology of depreciation of tangible fixed assets.

### Introduction

All organizations have and use tangible fixed assets, independently from their size and character of activity. The tangible fixed assets makes the major part of the assets at disposition of the majority of organizations, thus its depreciation values, which are attributed to expenditure, affect the amount of profit before taxes (taxable profit) significantly. According to Klimaviciene & Mykolaitiene (2008), it is important to compute these assets especially accurately and correctly, because even the smallest changes or inaccuracies in such accounting affect the work results of the organization a lot.

The methodology of TFA accounting affects the residual value of tangible fixed assets, which is the structural part of the balance and important for the evaluation of organizations financial results, which are presented to the outside users: financial, tax and other institutions. This information is very important for making the decisions regarding the organizations financing and

investments, and for the evaluation of management effectiveness of the assets.

When the organization uses the assets, it does not only profit, but also incurs certain expenditure. The tangible fixed assets participate in the manufacturing process and depreciate in pieces. This is included into expenditure when depreciation is calculated. As the depreciation expenditure reduces taxable profit, and the organization saves circulating assets by paying smaller corporate income tax, it is very important to have the correct accounting of tangible fixed assets. It becomes an important element of companies' management.

The precise and correct adjustment of Business Accounting Standards (BAS) and LCIT requirements determine successful choice of TFA accounting methods and allow the organization to use all legal possibilities to reduce the paid taxes and in such a way to increase circulation .

**Problem.** In order to present real and correct information about the organization's condition and its activity results, it is important for the managers and financiers of organizations to choose the most suitable accounting and depreciation methods of tangible fixed assets, which would best meet their business conditions and the selection of which would correspond to Business Accounting Standards and requirements of Law on Corporate Income Tax. Therefore the research problem of this article is formulated as follows: what accounting method of tangible fixed assets is the best in order to reflect adequately financial results of the organization and make the TFA accounting methods compatible with Business Accounting Standards and requirements of Law on Corporate Income Tax?

The selection of TFA accounting method is affected by the factors of susceptibility to work, simplicity and evenness of strategic planning, and concreteness of perspective expenses.

Numerous authors have analyzed the differences of tangible fixed assets in documents regulating financial accounting and LCIT provisions: Macerniene (2009), Stonciuviene (2002), Kalcinskas (2003), Mockute (2006); the influence of the selection of accounting methods of tangible fixed assets on the organization's profit and other financial indexes have been analyzed by Bagdziuniene (2008), Rudzioniene & Zinkeviciene (2005); Gipiene & Rudzioniene (2008) have analyzed the regulation tendencies of accounting system in Lithuania, while the accounting reconstruction of public sector has been analyzed by Timosenko (2008). Other authors, like Ponikvar & Tajnikar (2009) have paid more attention to the analysis of the financial report of tangible fixed assets, however, there is little researches found in scientific works about the selection of accounting and depreciation methods of tangible fixed assets, when business accounting standards and provisions of Law on Profit Tax are adjusted.

**Purpose of research** – educe accounting peculiarities of tangible fixed assets

**Object of research** – accounting methodology of tangible fixed asset.

The constituents of TFA accounting are important, when they affect the main financial reports by purchase cost price and depreciation amount. The cost price is

determined by external environmental conditions, whereas the amount of depreciation can be selected by the organization that varies among the regulation standards and chooses this amount automatically. Thus, this aspect shall be analyzed in more details in this article.

**Methods of research** – analysis of scientific literature and legal acts, case analysis, systematization, assessment, comparison and generalization.

## Accounting problems of depreciation of tangible fixed assets

In order to make decisions regarding management of tangible fixed assets under the conditions of present changes, the accounting specialists of high qualification are needed, who would be able to coordinate legal requirements and apply them in organization. Grundey (2009) has analyzed the improvement issues of the training process of such specialists in order to relate the theory and practice. According to Stukalina (2008), now the main concern of the pedagogues is to provide the future specialists with as much knowledge as possible in the conditions of new knowledge economy.

When Lithuanian accountants record tangible fixed assets, they encounter the accounting problems because of the following aspects:

- the object of depreciation's calculation may be the group of homogeneous or interrelated assets units if their depreciation is similar, or separate parts of one object if their depreciation periods and usage do not correspond;
- it is difficult to apply the correct depreciation norm that is affected by the useful servicing period of TFA, its liquidation value and period of depreciation's calculation, because the financial accounting requires to reflect as accurately as possible the actually reduced economical value of the assets, while the depreciation norm in the tax accounting cannot exceed the determined maximal amount, which affects taxable profit, paid taxes and circulation.

The selection of accounting method of tangible fixed assets needs the analysis of principal accounting regulations in Lithuania: business accounting standards, Law on accounting, and Law on Corporate Income Tax, which helps to determine depreciation norm, according to the depreciation norms offered in LCIT.

## Factors that affect the expenditure of tangible fixed assets

The selection of accounting method of tangible fixed assets weighted of the depreciation expenditure affects the profitability directly: the shorter the period of useful service is, the bigger expenditure and smaller profit it gets. And on the contrary, if the longer depreciation period is determined, the expenditure is reduced and the profit is increased.

The methodology of TFA accounting primarily stresses the amount of depreciation expenditure, which is determined by three main variables:

- 1. determination of useful service period;
- 2. determination of liquidation value;
- 3. selection of calculation method of depreciation.

The variations of these variables determine the activity results of an organization, amount of balance assets, net

profit and other results significant for the organization. The depreciation value is systematically distributed within the period of a useful service. The distribution of depreciation value will depend on the selected calculation method of depreciation. When the TFA depreciation expenditure is calculated, the selected accounting method and information registered in the accounting documents are used, which confirm: the cost price of acquisition (manufacturing), liquidation value, and period of useful service for each credited unit of fixed assets.

The calculation method of depreciation affects the amount of depreciation expenditure. It can be determined in the accounting methods, according to certain TFA groups. In consideration of the character of organization's activity and following the criteria of accuracy, promptitude and optimality, the priority is taken into account – usage period of the assets or amount of the made production using these assets, while attempting to reflect the objective information.

The method of depreciation's calculation, the liquidation value of the assets and period of useful service shall be reviewed and specified regularly.

In the opinion of Macerniene (2009), the useful service period has to be real and determined, following not the depreciation norms specified in the Law on Corporate Income Tax, but the objective usage conditions of the assets. The Commission appointed by the organization's manager could best determine the depreciation norms. It would consist of competent persons, who know well the usage environment of the assets, its usage intensiveness, and change of useful properties during the maintenance well because of their particular work in the organization, and skills in technologies and economic advancement that ages the assets morally.

According to the Law on Corporate Income Tax, the unit determines (selects) the liquidation value of fixed assets that cannot be smaller than 1 litas and that cannot exceed 10 percent of the purchase prices.

In the opinion of Zakalskiene (2007), the liquidation value shows, how much the assets will be worth in the end of its usage. If it is planned to use the assets for a long period and it is difficult to define its liquidation value, usually its minimal amount – litas – is selected. Such liquidation value is called the memorized value, because it does not allow the completely depreciated but still used assets "disappearing" from the balance.

It should be noted that the limitation of liquidation value in the Law on Corporate Income Tax— not more than 10 percent of the purchase prices—contradicts the provisions of the 12<sup>th</sup> BAS, where the limits of the liquidation value are not regulated. However, it should be taken into account that if the liquidation value is reduced groundlessly to 1 Lt, the depreciation value is increased artificially, and at the same the depreciation expenditure of the reporting period increases, while the activity's result decreases.

According to Macerniene (2009), the liquidation value of 1 Lt should be left only if no benefit is expected after the usage period of the assets.

Another extremity encountered in the practice when the liquidation value is determined is that 10 percent of the purchase prices are applied for all TFA objects, not taking into account their benefit that is expected in the end of useful service period of the assets. There are some cases when the liquidation value of 10 percent is left without any expectations to get any profit when the assets are written off. Thus the provisions regarding liquidation value should not be formed homologously in the accounting policy of the organization: "amount of liquidation value – 1 Lt" or "amount of liquidation value – 10 percent of the purchase prices".

It is necessary to select the TFA depreciation method very carefully, because this decision will determine the financial result of the future periods. When the TFA depreciation method is used, the depreciation expenditure of the reporting period should be related with the income earned during that period.

According to Kalcinskas (2007), when we apply the accelerated calculation methods of depreciation, the biggest depreciation will always be at the beginning of usage of fixed assets, and the smallest – at the end.

## Compatibility of depreciation's calculation of tangible fixed assets with BAS and LCIT

When TFA is used in the organization's activity, it depreciates physically and morally, thus, the organizations has to predict its usage period so that the calculation norm of depreciation could be determined. In order for the depreciation norm to guarantee the economically grounded transfer of cost price to the expenditure during the usage period of the assets, it is necessary to evaluate a lot of technical, economic and legal factors. (Jagminas, 2005).

Jociuniene & Stonciuviene (2008) state that the most difficult part to calculate the TFA depreciation is to determine the right norm of depreciation. The financial accounting needs the TFA depreciation norm to correspond to the reduced economic value of the assets as close as possible, while it is important for a tax report that the depreciation norm would not exceed the determined maximal value. It is the best when these two requirements are adjusted.

The tax report attempts to control that the depreciation expenditure was not increased and that the profit was not reduced. When the profit tax is calculated, organizations have to determine the minimal price of each TFA group, according to which the acquired assets will be attributed to the fixed or short-term assets, and also the depreciation period that should not be shorter than the determined depreciation standards of LCIT (in years). These norms determine the minimal usage time of the fixed assets, while the maximal period is not specified. The maximal depreciation norms confirmed or separate LCIT groups are applied when the depreciation expenditure is recognized by allowable deductions, while calculating the taxable profit. The maximal norms express the highest depreciation expenditure during the period and the longest period for writing off the value of acquired assets into the expenditure in the Financial accounting – in the 12<sup>th</sup> BAS, the norms are not determined; only the circumstances are presented, which have to be taken into account when the period of useful service of the assets is determined.

To generalize the determination criteria of annual TFA depreciation norm, first of all, the period of the planned

usage of the assets in the organization has to be taken into account. Then the attention is paid to all the technological and legal factors, which can make the usage period of the assets even shorter, and determine, how much such usage period gets shorter because of them. Then it is necessary to assess the usage intensity of the assets and the change of its economical value in time.

With regard to the financial accounting, all organization have the absolute right of choice of the aforementioned norms, while the maximal limits are determined for the calculation of profit of the majority of companies. Therefore the author suggests to avoid the double accounting of the assets and advises companies to determine such calculation norms of the asset's depreciation, which would not exceed depreciation norms specified in the Annex 1 of LCIT (Bruzauskas, 2004)

In all the cases the liquidation value of TFA has to be reduced by the planned expenses at the end of the useful service of the assets. It is especially topical when we speak about the machines and equipment, dismantling of which usually costs a lot at the end of the period of useful service. The amount of dismantling expenses is increased by the depreciated value of fixed assets after the liquidation value is reduced.

The change of the period of useful service in the financial accounting is regarded as the change of reporting evaluation and it is shown in the financial accounts in the perspective mode, i.e. in the reporting and future periods. When the period of useful TFA service is corrected, non-depreciated value of the assets should be depreciated during the remaining (corrected) period of useful service of the assets.

According to the Law on Corporate Income Tax, the depreciation norms of tangible fixed assets can be corrected in the following cases:

- after the reconstruction or repair that has extended the period of useful service of the assets, or otherwise improved its useful properties;
  - the purpose of the fixed assets is changed;
  - another part of the same fixed assets is acquired;
- because of the objective reasons, but only if the local tax administrator consents;
- if the organization does not satisfy the conditions, which allowed it to determine the depreciation norms by itself, without taking into account the approved norms of LCIT.

The calculation methods of the depreciation define the depreciation amount of fixed assets of a certain period. Various calculation methods of TFA depreciation lead to different results of the same reporting period.

When the Business Accounting Standards come into force, the following calculation methods of the depreciation of tangible fixed assets are applied in the financial accounting:

- directly proportionate (linear),
- production,
- number of years,
- double declining value.

The remark is also presented that the methods of the number of years and double – declining value are not recommended for the calculation of tangible fixed asset's depreciation in order to make financial accounts, except when it is done in order to express the results of organization's activity and benefits provided by the assets correctly. According to LCIT, the tax report calculates the depreciation of tangible fixed assets using two methods:

- directly proportionate (linear),
- double declining value.

The linear method has numerous disadvantages because while calculating each period, similar depreciation amounts are received. It is not taken into account, what usage expenditure of tangible fixed assets helps to earn income.

In order to calculate the profit tax, the applied accelerated calculation methods of depreciation of fixed assets allow the companies depreciating the purchase price of the major part of the fixed assets during the first usage years of fixed assets. Thus during, the first usage years of the assets, when the depreciation expenditure, which is attributed to the allowable deductions, increases, the taxable profit of the organization decreases. Thus, the organization acquires the possibility to reduce the payable profit tax legally. The accelerated calculation methods of depreciation of fixed assets motivate the organization's technological advancement.

Jociuniene & Stonciuviene (2008) motivate the selection of these methods by the improvement of technologies: a lot of equipment lose their value because of the effectiveness of TFA objects in production: they are used the most effectively while they are new, i.e. during the first exploitation years, because they depreciate quicker. One more argument for the application of this method is that the repair expenses are usually bigger at the end of object's usage than at the beginning.

Mackevicius (2003) recommends using the accelerated calculation methods of depreciation. The usage of accelerated methods is justified by the fact that the newer the asset is, the more and more qualitatively it can "work". Thus, the more it works, the more it depreciates.

Juskauskas (2005) calls the accelerated calculation methods of depreciation the legal tool for reduction of tax. When the organization attempts to reduce the payable profit tax, it is forced to dispose the assets depreciated in its major part for the purpose of payable profit tax, and to acquire new, more advanced assets that will be depreciated again using the accelerated calculation methods of TFA depreciation. In such a way the majority of companies are included into the process of economical development: in order to minimize the payable amount of profit tax, the organizations are directly interested to replace the fixed assets by the new one.

The calculation procedure of tangible fixed assets in the financial accounts is important as much as the correct calculation methods are selected, and the set norms are observed, when the calculation is started and terminated.

The normative acts that regulate financial accounting and calculation of profit tax specify different provisions for the calculation of TFA depreciation, which are presented in Table 1.

Calculation provisions of depreciation of tangible fixed assets, according to BAS and LC IT

Calculation provisions of depreciation of tangible fixed assets	According to Business Accounting Standards	According to the Law on Corporate Income Tax	
Determination of the method to calculate the beginning of TFA depreciation	Method of the next month	Method of the next month (it is applied only when the whole TFA is depreciated by linear method) Method of half-year (it is applied independently from the chosen depreciation method)	
Selection of the calculation method of TFA depreciation	Directly proportionate (linear) Production Number of years Double – declining value	Directly proportionate (linear) Double – declining value	
Calculation of depreciation of reappraised TFA	The depreciation is calculated from the newly determined value	The depreciation is not calculated	
Determination of liquidation value of TFA	The depreciation norm is not limited	$10\% \ge$ depreciation norm $\ge 1$	
Determination of the period of TFA depreciation	According to the period of useful service; planned usage intensity Technological advancement and other factors	According to the depreciation norms	
Correction of TFA depreciation norms	When additional information is received	If the purpose of FA is changed If the reconstruction or repair of FA is done If another part of the same FA is acquired Because of other reasons, if the local tax administrator consents	
Calculation of depreciation of unused TFA or conserved TFA for repair	The depreciation is calculated	The depreciation is not calculated	
Calculation of depreciation of repurchased TFA	The depreciation is calculated as the newly acquired assets	The depreciation is calculated from the not depreciated purchase price before the first transfer	

According to Table 1, the laws are harmonious. Thus, when the calculation method for TFA depreciation is selected, it is necessary to evaluate business environment as objectively as possible, as well as perspectives of organization's activity and presumptions of activity's development, thus the economic logics should be observed, because when one or another method is applied blindly, the organization's results may improve only "theoretically".

# Influence of discrepancy of depreciation's calculation of log-term tangible assets on the result of the organization's activity

Each subject of Lithuanian economy is confronted with the variety of reports, accountabilities and declarations. Alongside with the financial reports, socalled tax report is prepared, which contrary to the financial reports, is drafted according to the principles stated in the normative acts. Particularly many problems of financial and LCIT accounting incompatibility appear in the cases of calculation and accounting of profit tax. Therefore the methodology of profit tax calculation and accounting, which incorporates the requirements of BAS and LCIT, is necessary in the practice, because all information that is needed for the different types of reports has to be accounted at one time. The provisions of LCIT, while applying the value of taxable profit, in many cases disagree with the factors of financial reports. Many Lithuanian organizations select such calculation methodology of TFA, which would not conflict neither with the norms of financial accounting or the provisions of LCIT, because the main purpose of preparation of reports still is the proper calculation of taxes and as much accurate presentation of information as possible.

In order to calculate the amount of depreciation of tangible fixed assets of the reporting period, purchase price of TFA, period of useful service, as well as liquidation value, methods of depreciation calculation, methods to calculate the beginning of TFA depreciation, depreciation limitations have to be determined properly.

While calculating taxable profit, the depreciation expenditure of fixed assets, which is calculated pursuant to the requirements of normative acts, is attributed to the allowable deductions and reduces taxable profit. Thus, the more extensive amount of depreciation expenditure of tangible fixed assets is attributed to the allowable deductions within a much shorter period of time, less profit tax has to be paid by the organization per reporting period.

Valuzis & Palubinskaite (2005) state that most complicated and actual question relating to the calculation of depreciation is interconnected with the calculation of taxable profit and taxation of profit. The authors underline a variety of different sources of TFA acquisitions on which calculation profit tax depend. Dytczak & Ginda state that in order to achieve effective decision the information about importance is crucial.

After maximum unification of financial accounting and LTP methodologies of fixed assets, the increase of accounting work would be avoided, whereas the result information would remain qualified enough. This would allow successfully enact further evaluation procedures of the organization's activity. According to Valanciene & Gimzauskiene (2009), the application of progressive evaluation methods of the organization's activity would allow to form the totality of organizational values interconnected with the market, external and internal competition. In economic depression, it is very relevant to improve accounting methodology of TFA in order to use

control of recourses, advantages of evaluation system of the organization's activity and achieved experience effectively.

According to the analysis of theoretical BAS provisions and LCIT requirements applied for calculation

of depreciation of tangible fixed assets, organizations could apply one of the recommended models for TFA accounting, which are presented in the Table 2.

Table 2

Accounting methodic	MODELS						
component of tangible fixed assets	1	2	3	4	5	6	
Tangible fixed assets calculated by the cost price	Cost price of acquisition	Cost price of acquisition	Cost price of acquisition n	Cost price of acquisition	Cost price of acquisition	Cost price of acquisition	
Applied method of the following month for the calculation of the beginning of depreciation	First day of the following month	First day of the following month	First day of the following month	First day of the following month	First day of the following month	First day of the following month	
Accounting method	Directly proportional (linear)	Number of years	Double – declining value	Directly proportional (linear)	Number of years	Double – declining value	
Liquidation value dimension	Not be lover than LTL 1	Not be lover than LTL 1	Not be lover than LTL 1	Not exceed 10 percent of the acquisition price	Not exceed 10 percent of the acquisition price	Not exceed 10 percent of the acquisition price	

## Research of the application of TFA methods in Lithuanian organizations

Considering continuous communication with Lithuanian accounting specialists and previously done scientific researches, it is possible to state that the selection of TFA methods in Lithuanian organizations is determined by compatibility with statutory provisions, and much smaller attention is directed to more favorable reflection of results. Therefore when the application of TFA methods in the Lithuanian organizations was analyzed, the hypothesis was raised that the companies follow the statutory provisions and principle of simplicity and apply the methodology of united configuration, which could be defined as cost price of TFA accounting, applied method of the beginning of depreciation's accounting, accounting method, and amount of liquidation value.

In order to confirm or deny theoretical presumptions and the raised hypothesis, the research was done, the purpose of which is to substantiate, as accounting method of tangible fixed assets suits the best to reflect adequately financial indexes of the organization and to make the TFA accounting methods more compatible with BAS provisions and LCIT requirements. During the reconnaissance research four constituents were measured: cost price of TFA accounting, applied method of the beginning of depreciation's accounting, accounting method, and amount of liquidation value. In order to determine the most suitable TFA accounting method, six possible theoretical models of TFA accounting methods were suggested.

The reconnaissance research was done in 80 small and middle-sized organizations in Kaunas and Klaipeda districts, and it was determined that about 70 percent of organizations (middle-sized) follow the Law on Corporate Income Tax in pursuance of accounting policy, because its regulations are obligatory and their non-observance is punishable, while the Business Accounting Standards are of a recommendation character. While grouping tangible fixed assets, organizations attribute acquired assets to the fixed assets, following the principle of optimality, when its value is 1000 Lt (57 percent). Due to the promptitude of accounting data, more than 90 percent of organizations use

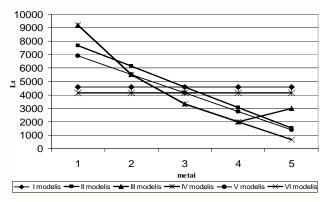
method of the next month for the calculation of the beginning of TFA depreciation. About 90 percent of organizations use linear or directly proportional method for the calculation of TFA depreciation, because it is simple and allows planning expenditure. The organizations argue that this selection allows forecast and attribute similar amount of depreciation of TFA to the expenditure of each reporting period.

With regard to BAS and LCIT requirements, organizations could choose one of the suggested methods of the adjustment direction of TFA depreciation for the calculation of tangible fixed assets depreciation. In the cases of the shortage of circulating, organizations could apply a better model, which would allow organizations to save circulating by not paying profit tax and advance corporation tax.

To generalize theoretical and practical researches, six composed and examined possible methods of accounting methodology of TFA, while replacing one of the constituent, are presented in the article.

After the simulation of situations it was determined that while varying the factors affecting depreciation's accounting, different amount of depreciation of TFA, that determines profit tax of the organization, is written off to expenditure.

The results of simulation are presented in Figure 1.



**Figure 1.** Annual TFA depreciation, according to the selected model of accounting methodology

According to Figure 1, already in the first usage year of TFA the amount of depreciation written off to expenditure may vary in 120 percent range depending on the selected accounting method. This range is smaller in the second year – about 50 percent. After the passage of half time of useful service of TFA, pursuant to all accounting methods, similar amount is attributed to expenditure. The selection of accounting method of TFA changes expenditure from 50 percent to 80 percent in the second half of exploitation period.

After the suggested potential theoretical models of TFA accounting methods have been examined, it is possible to answer the question: what accounting method of tangible fixed assets is the best in order to reflect adequately financial results of the organization and make the TFA accounting methods compatible with BAS and LCIT requirements? The accelerated calculation methods of TFA depreciation (model 1, 2 and 6) could be useful for profitably working companies, because when they increase expenditure in the current period, they have to pay smaller corporate income tax and thus postpone payments of corporate income tax until the period when tangible fixed assets get actually depreciated. However, in practice the models 1 and 4 of the TFA accounting methods are the most popular.

The done research allows stating that no sole TFA accounting methodology exists, which would take into account the factors of separate assets' groups in the organizations of various types, because each organization has to select the TFA accounting method of unique configuration that would correspond to its business strategy.

### **Conclusions**

- 1. According to the theory, the selection of accounting methodology of tangible fixed assets requires to adjust the provisions of Business Accounting Standards and the norms offered by Law of Corporate Income Tax.
- 2. The proper choice of an accounting method of depreciation of tangible fixed assets is very important, because it has significant influence on financial results of the organization's activity in the future periods.
- 3. The research on the TFA accounting methods applied in the Lithuanian organizations allows stating that:
- in majority organizations assets of 1000 Lt value is attributed to the tangible fixed assets, being usually calculated by the cost price of acquisition;
- it is easier for organizations to apply the method of next month rather than the method of a half-year;
- in the cases of the formation of accounting methodology of tangible fixed assets, organizations more often give preference to the provisions of Law on Corporate Income Tax rather than Business Accounting Standards;
- organizations set liquidation value of 1 Lt for tangible fixed assets;
- the superiority of statutory provisions, which are mandatory, whereas BAS are of the recommendation character, over the financial results of the organization determines the choice of accounting methodology;
- when the accounting information is formed in the organization, the priority is given to the principles of optimality, caution and promptitude.

### References

- Boguslauskas, V., & Kvedaraviciene, G. (2009). Difficulties in identifying Company's Core Competencies and Core Processes. *Inzinerine Ekonomika-Engineering Economics*(2), 75-81.
- Bruzauskas, V. (2004). Kaip suartinti ilgalaikio turto finansinės apskaitos ir pelno mokesčio nuostatas. *Apskaitos ir mokesčių aktualijos*. Nr. 11.
- Dytczak M., Ginda G. Identification of Building Repair Policy Choice Criteria Role. (2009 *Technological and Economic Development of Economy, 15*(2), 213-228.
- Domeika, P. (2008). Creation of the Information System of Enterprise Fixed Asset Accounting. *Inzinerine Ekonomika-Engineering Economics*(5), 7-15.
- Jagminas, V., Bagdzeviciute, A., Petrauskiene, D., Zakalskiene, R. (2005). Ilgalaikio turto apskaita ir apmokestinimas, Vilnius. Pačiolis.
- Jociuniene, D., Stonciuviene, N. (2008). Ilgalaikio materialiojo turto apskaita: ar išnaudojamos VAS teikiamos apskaitos metodų pasirinkimo galimybės. *Apskaitos, audito ir mokesčių aktualijos*. Nr.44 (524).
- Juskauskas, G. (2005). Pelno mokesčio finansinė apskaita 2. Apskaitos ir mokesčių apžvalga. Nr.9.
- Grundey, D. (2009). Training Specialists in Accountancy in Lithuania, in Lithuanian. *Transformations in Business & Economics*, 8(1), 180-183.
- Kalcinskas, G. (2007). Buhalterinės apskaitos pagrindai. Vilnius. Pačiolis. 863.
- Klimaviciene, I., & Mykolaitiene, V. (2008). Ilgalaikio turto apskaitos viesajame sektoriuje pokyciai. Ekonomika ir vadyba 2008. 39-47.
- Mackevicius, J. (2003). Valdymo apskaita: koncepcija, metodika, politika. Vilnius. TEV. 410.
- Macerniene, D. (2009). Nusidevejimo apskaiciavimo teorija, praktika ir galimos manipuliacijos. Apskaitos ir mokesciu aktualijos 6 (534).
- Markovic, M. R. (2008). Managing the organizational change and culture in the age of globalization. *Journal of Business Economics and Management*, 9(1), 3-11.

- Mockute, D. (2006). Ilgalaikio turto apskaitos metodika. http"//sf.library.lt/marc/getobj.php?o=LT-eLABa-0001:E, 02~2006~D 20060524 111651-61936 [2009 10 05].
- Zinkeviciene, D., & Rudzioniene, K. (2005). Impact of Company's Leverage Financial Accounting Metchod Choice. *Inzinerine Ekonomika-Engineering Economics*(5), 25-30.
- Stonciuviene, N. Tilvikaite, N. (2002).Ilgalaikio materialiojo turto nusidėvėjimo apskaitos tobulinimas. Organizacijų vadyba: Sisteminiai tyrimai. Vytauto Didžiojo universitetas. 24, 151-159.
- Strumickas, M., & Valanciene, L. (2009). Research of Management Accounting Changes in Lithuanian Business Organizations. *Inzinerine Ekonomika-Engineering Economics*(3), 26-32.
- Ponikvar, N., Tajnikar, M., & Pusnik, K. (2009). Performance Ratios for Managerial Decision-Making in a Growing Firm. Journal of Business Economics and Management, 10(2), 109-120.
- Rudzioniene, K., & Gipiene, G. (2008). Model of Accounting Regulation in Lithuania. *Transformations in Business & Economics*, 2(14), 171-185.
- Stukalina, J. (2008). How to Prepare Students For Productive and Satisfying Careers in the Knowledge-Based Economy: Creating a More Efficient Educational Environment. *Technological and Economic Development of Economy*, 14(2), 197-207.
- Timoshenko, K. (2008) Russian Public Sector Reform: the Impact on University Accounting. *Journal of Business Economics and Management*, 9(2), 133-144.
- Valanciene, L., & Gimzauskiene, E. (2009). Dimensions of Performance Measurement System in Changes Research. *Inzinerine Ekonomika-Engineering Economics*(4), 41-48.
- Valancene, L., & Gimzauskiene, E. (2007). Changing Role of Management Accounting: Lithuanian Experience Case Studies. *Inzinerine Ekonomika-Engineering Economics*(5), 16-23.
- Vecerskiene, G., Valanciene, L., & Boguslauskas, V. (2008). Training Accounting Specialists at Kaunas University of Technology Economics and Management Faculty: Past, Present and Perspectives. *Inzinerine Ekonomika-Engineering Economics*(4), 9-17.
- Valuzis, K., & Palubinskiene, S. (2005). Apskaitos politika. I dalis. Kaunas.
- Zakalskiene, R. (2007). Pirma paruosk, paskui naudok. Kas žinotina įsigijus ilgalaikį turtą? *Apskaitos ir mokescių apzvalga*. Nr. 5.

Violeta Mykolaitienė, Giedrė Večerskienė, Kristina Jankauskienė, Loreta Valančienė

### Ilgalaikio materialiojo turto apskaitos ypatumai

### Santrauka

Ekonomikos nuosmukio sąlygomis kiekvienai organizacijai labai svarbu priimti teisingus finansavimo ir investavimo sprendimus, efektyviai valdyti turimą turtą, disponuoti teisinga ir laiku pateikiama apskaitine informacija, leidžiančia atspindėti organizacijos finansinius rezultatus.

Siekiant, kad būtų parengtos tikslios ir teisingos finansinės ir mokestinės ataskaitos, reikalinga vieningos konfigūracijos ilgalaikio materialiojo turto (IMT) apskaitos metodika, kuri padėtų suderinti Verslo apskaitos standartų (VAS) nuostatas ir Pelno mokesčio įstatymo (PMĮ) reikalavimus.

Straipsnyje atskleidžiamas ilgalaikio turto apskaitos metodikos parinkimo reikšmingumas įmonės finansiniams rezultatams pateikti aptariama IMT metodikų įvairovė, analizuojamos ilgalaikio materialiojo turto apskaitos įstatyminės nuostatos ir jų suderinamumo problematika, atskleista ilgalaikio materialiojo turto nusidėvėjimo skaičiavimo neatitikimų įtaka įmonės veiklos rezultatams, pateikti IMT metodikų taikymo Lietuvos įmonėse tyrimo rezultatai

Ilgalaikį materialųjį turtą turi ir naudoja visos įmonės, nepriklausomai nuo jų dydžio ir veiklos pobūdžio. Daugelyje įmonių IMT sudaro didžiąją disponuojamo turto dalį, todėl jo nusidėvėjimo sumos, priskirtos sąnaudoms, daro didelę įtaką jų apmokestinamajam pelnui. Svarbu šį turtą įtraukti į apskaitą ypač tiksliai ir teisingai, nes menkiausi pasikeitimai ar netikslumai šioje apskaitoje turi didelį poveikį įmonės veiklos rezultatams.

Tikslus ir teisingas Verslo apskaitos standartų (VAS) nuostatų ir PMĮ reikalavimų suderinimas lemia sėkmingą IMT apskaitos metodikos parinkima, leidžia imonei išnaudoti visas istatymų teikiamas galimybes sumažinti mokamų mokesčių apimti ir taip padidinti apyvartines lėšas.

**Problema.** Siekiant pateikti tikrą ir teisingą informaciją apie organizacijos būklę ir jos veiklos rezultatus, organizacijų vadovams ir finansininkams svarbu pasirinkti tinkamiausius jų verslo sąlygas atitinkančius ilgalaikio materialiojo turto įtraukimo į apskaitą ir nusidėvėjimo būdus, kurių pasirinkimas derėtų su Verslo apskaitos standartais ir Pelno mokesčio įstatymo nuostatomis. Todėl šio straipsnio tyrimo klausimas formuluojamas taip: kokią ilgalaikio turto apskaitos metodiką geriausia taikyti, kad būtų adekvačiai atspindėti įmonės finansiniai rezultatai ir IMT apskaitos metodika būtų suderinta su Verslo apskaitos standartu ir pelno mokesčio įstatymo nuostatomis?

IMT apskaitos metodikos pasirinkimui daro įtaką darbo imlumo, strateginio planavimo paprastumo ir tolygumo, perspektyvinių išlaidų konkretumo veiksniai.

Tyrimo tikslas-atskleisti IMT apskaitos metodikos pasirinkimo organizacijose ypatumus.

Tyrimo metodai – mokslinės literatūros ir teisės aktų analizė, atvejo analizė, sisteminimas, vertinimas, palyginimas ir apibendrinimas.

- Lietuvoje buhalteriams įtraukiant į apskaitą ilgalaikį materialųjį turtą, atsiranda apskaitos problemų, nes:
- nusidėvėjimo skaičiavimo objektu gali būti tiek grupė vienarūšių ar tarpusavyje susijusių turto vienetų, jeigu jų nudėvėjimo periodas yra panašus, tiek atskiros vieno objekto dalys, jeigu jų nusidėvėjimo periodai ir naudojimas nesutampa;
- sudėtinga nustatyti teisingą nusidėvėjimo normą, nes finansinėje apskaitoje ji turi kuo tiksliau atspindėti realiai sumažėjusią turto ekonominę vertę, o mokestinėje nusidėvėjimo norma negali viršyti nustatyto maksimalaus dydžio, kuriam daro įtaką apmokestinamasis pelnas, mokami mokesčiai ir apvvartinės lėšos

Norint parinkti ilgalaikio materialiojo turto apskaitos metodiką, reikalinga išanalizuoti pagrindinius apskaitos reglamentus Lietuvoje: verslo apskaitos standartus, Buhalterinės apskaitos įstatymą, Pelno mokesčio įstatymą numatyti IMT nusidėvėjimo normatyvą, atsižvelgiant į PMĮ siūlomus nusidėvėjimo normatyvus.

Pasirinkti IMT nusidėvėjimo metodą reikia labai atidžiai, nes nuo šio apsisprendimo priklausys ateinančių laikotarpių finansinis rezultatas. Renkantis IMT nusidėvėjimo metodą, reikia vadovautis tuo, kad patirtos ataskaitinio laikotarpio nusidėvėjimo sąnaudos būtų siejamos su to laikotarpio uždirbtomis pajamomis.

Ilgalaikio materialiojo turto nusidėvėjimo apskaičiavimo tvarka finansinėse ataskaitose yra svarbi tik tiek, kad būtų teisingai pasirinkti skaičiavimo metodai, teisingai prisilaikoma nustatytų normatyvų, kada pradedamas ir kada nutraukiamas apskaičiavimas.

Finansinę apskaitą ir pelno mokesčio apskaičiavimą reglamentuojantys norminiai aktai numato skirtingas nuostatas, skaičiuojant IMT nusidėvėjimą. Įstatymai nėra harmoningi, todėl parenkant IMT nusidėvėjimo skaičiavimo metodą būtina įvertinti kiek įmanoma objektyviau verslo aplinką, įmonės veiklos perspektyvas ir veiklos vystymosi prielaidas, todėl reikėtų vadovautis ekonomine logika, nes aklai taikant vieną ar kitą metodą veiklos rezultatai gali gerėti tik "teoriškai".

Įmonėse kartu su finansinėmis ataskaitomis rengiama ir vadinamoji mokestinė ataskaita, kuri, skirtingai nei finansinės ataskaitos, rengiama pagal principus, nustatytus mokesčių įstatymuose ir poįstatyminiuose aktuose. Ypač daug problemų dėl nesuderinamumo tarp finansinės ir mokestinės apskaitos iškyla apskaičiavimo ir įtraukiam į apskaitą pelno mokestį. Todėl pelno mokesčio apskaičiavimo ir įtraukimo į apskaitą metodika, suderinanti skirtingus Verslo apskaitos standartų ir LR pelno mokesčio įstatymo reikalavimus, praktikoje yra būtina, nes visa informacija, reikalinga skirtingoms ataskaitų rūšims, turi būti įtraukiama į apskaitą vienu metu. PMĮ nuostatos, taikant apmokestinamo pelno dydį, daugeliu atveju nesutampa su finansinių ataskaitų rodikliais. Daugelis Lietuvos įmonių nusistato tokią IMT apskaitos metodiką, kuri neprieštarautų nei IMT finansinės apskaitos, nei apskaitos pelno mokesčiui apskaičiavimas ir kuo tikslesnis informacijos pateikimas mokesčiu tikslais.

Norint apskaičiuoti naudojamo ilgalaikio materialiojo turto nusidėvėjimo per ataskaitinį laikotarpį sumą, turi būti teisingai nustatyta IMT įsigijimo vertė, naudingo tarnavimo laikas, likvidacinė vertė, nusidėvėjimo skaičiavimo pradžios būdai, nusidėvėjimo skaičiavimo metodai, nusidėvėjimo skaičiavimo apribojimai.

Sudėtingiausias ir aktualiausias klausimas dėl nusidėvėjimo skaičiavimo yra sietinas su apmokestinamojo pelno apskaičiavimu ir pelno apmokestinimu, todėl yra akcentuojama IMT skirtingų įsigijimų šaltinių įvairovė, nuo kurių priklauso pelno mokesčio priskaičiavimas. Maksimaliai suvienodinus ilgalaikio turto finansinės apskaitos ir jo apskaitos pelno mokesčiui apskaičiuoti metodikas, būtų išvengta apskaitos darbo padidėjimo, o rezultatinė informacija ir liktu pakankamai kokybiška.

Atsižvelgiant į VAS ir PMĮ reikalavimus, įmonės siekdamos apskaičiuoti ilgalaikio materialiojo turto nusidėvėjimą, galėtų pasirinkti vieną iš siūlomų IMT nusidėvėjimo metodų derinimo krypčių. Trūkstant apyvartinių lėšų, įmonė galėtų pritaikyti tinkamesnį modelį, kuris leistų sutaupyti apyvartinių lėšų, nemokant pelno ir avansinio pelno mokesčio.

Apibendrinant teorinius ir praktinius tyrimus, straipsnyje pateikti atlikto mokslinio tyrimo, keičiant atitinkamai vieną iš dedamųjų, sudaryti ir ištirti 6 galimi IMT apskaitos metodikos modeliai.

Modeliuojant situacijas nustatyta, kad keičiant IMT nusidėvėjimo įtraukimui į apskaitą darančius įtaką veiksnius, į sąnaudas nurašoma skirtinga IMT nusidėvėjimo suma, kuri lemia imonės apmokestinamajį pelna.

Jau pirmaisiais IMT naudojimo metais nusidėvėjimo suma, kuri nurašoma į sąnaudas priklausomai nuo pasirinktos apskaitos metodikos, gali svyruoti apie 120 proc. Antraisiais naudojimo metais ši suma svyruoja apie 50 proc. Praėjus pusei IMT normatyvinio tarnavimo laiko, pagal visas apskaitos metodikas sąnaudoms priskiriama panaši suma. Eksploatavimo laikotarpio antroje pusėje pasirinkus IMT apskaitos metodą, sąnaudų sumą keičiasi nuo 50 iki 80 proc.

Teisingai pasirinkti ilgalaikį materialiojo turto nusidėvėjimo apskaitos metodą yra labai svarbu, kadangi daro didelę įtaką ateinančių laikotarpių finansiniam įmonės veiklos rezultatui.

Atlikus taikomų IMT apskaitos metodų tyrimą Lietuvos organizacijose, galima teigti, jog:

- daugumoje organizacijų 1 000 Lt vertės turtas laikomas ilgalaikiu materialiuoju turtu, kurį jos dažniausiai įtraukia į apskaitą įsigijimo savikainos būdu;
  - įmonėms paprasčiau taikyti ilgalaikio materialiojo turto nusidėvėjimo mėnesio pradžios būdą nei pusmečio;
- sudarinėjant ilgalaikio materialiojo turto apskaitos metodiką, įmonės dažniau pirmumą teikia mokesčio įstatymo nuostatoms nei verslo apskaitos standartams:
  - įmonės ilgalaikiam materialiajam turtui nustato 1 Lt likvidacinę vertę;
- apskaitos metodikos pasirinkimą lemia tai, kad įstatyminės nuostatos, kurios yra privalomos, o VAS yra rekomendacinio pobūdžio, yra viršesnės nei organizacijos finansiniai rezultatai;
  - organizacijoje, formuojant apskaitos informaciją, prioritetas teikiamas optimalumo, apdairumo ir savalaikiškumo principams.

Ištyrus pasiūlytus teorinius potencialius IMT apskaitos metodikos modelius, galima atsakyti į klausimą: kokią ilgalaikio turto apskaitos metodiką geriausia taikyti, kad būtų adekvačiai atspindėti įmonės finansiniai rezultatai ir IMT apskaitos metodika būtų suderinta su VAS ir PMĮ nuostatomis? Pagreitinti IMT nusidėvėjimo metodai galėtų būti naudingi pelningai dirbančioms įmonėms, nes padidindamos savo sąnaudas einamuoju laikotarpiu, jos apmokestinamos mažesne pelno mokesčio suma, taip nutolindamos pelno mokesčio mokėjimus tam laikotarpiui, kai ilgalaikis materialusis turtas bus realiai nudėvėtas.

Atlikus tyrimą galima teigti, jog nėra vieningos IMT apskaitos metodikos, įvertinančios įvairių tipų įmonių atskiroms turto grupėms darančius įtaką veiksnius, nes kiekviena organizacija turi pasirinkti unikalios konfigūracijos IMT apskaitos metodiką atitinkančią jos verslo strategiją.

Raktažodžiai: apskaita, ilgalaikis materialusis turtas, ilgalaikio materialiojo turto nusidėvėjimas, nusidėvėjimo apskaitos metodai, ilgalaikio materialiojo turto nusidėvėjimo apskaitos metodika.

The article has been reviewed.

Received in December, 2009; accepted in April, 2010.