Slobodan Popovic¹, Aleksandar Majstorovic², Zeljko Grubljesic³ VALUATION OF FACILITIES IN USE AND APPLICATION OF INTERNATIONAL ACCOUNTING STANDARDS

This study deals with the analysis of activities, related to the issues of realistic assessment of facilities. Those activities include forming a team of experts in various fields. In order to make a valid assessment in today's world, the team involved in its realization should take a multidisciplinary approach. We have shown this on the example of a greenhouse facility, and that it is desirable to appraise the value by the method of "fair value", in full compliance with international accounting standards, in particular IAS 16. The assessment, done in that way, is the basis for all future financial statements of management, and application of this approach, shown in this study, is preferred and can be used by a large number of transition countries. Keywords: fair value; international accounting standards.

Слободан Попович, Олександар Майсторович, Зелько Грублешич ОЦІНЮВАННЯ ЗАСОБІВ У ВИКОРИСТАННІ ІЗ ЗАСТОСУВАННЯМ МІЖНАРОДНИХ СТАНДАРТІВ БУХГАЛТЕРСЬКОГО ОБЛІКУ

У статті проведено аналіз дій щодо реалістичного оцінювання засобів підприємства. Даний вид діяльності включає формування команди експертів у різних галузях знань. Для максимально актуальної оцінки дана команда має використовувати міждисциплінарний підхід. Процедуру оцінювання продемонстровано на прикладі підприємства з теплицями. При оцінюванні теплиць було задіяно принцип «справедливої ціни», а також міжнародні стандарти бухгалтерського обліку. Коректно проведене оцінювання може слугувати основою формування майбутньої фінансової звітності. Дана методика підійде для більшості країн, що розвиваються.

Ключові слова: справедлива ціна; міжнародні стандарти бухгалтерського обліку. *Табл. 3. Літ. 17.*

Слободан Попович, Александар Майсторович, Зелько Грублешич ОЦЕНКА ИСПОЛЬЗУЕМЫХ СРЕДСТВ С ПРИМЕНЕНИЕМ МЕЖДУНАРОДНЫХ СТАНДАРТОВ БУХГАЛТЕРСКОГО УЧЕТА

В статье проведён анализ действий по реалистичной оценке средств предприятия. Данный вид деятельности включает формирование команды экспертов в различных областях знаний. Для максимально актуальной оценки данная команда должна использовать междисциплинарный подход. Процедура оценивания продемонстрирована на примере предприятия с парниками. При оценивании парников был задействован принцип «справедливой цены» и международные стандарты бухгалтерского учета. Правильно проведённое оценивание может служить основой формирования будущей финансовой отчётности. Данная методика подойдет для большинства развивающихся стран.

Ключевые слова: справедливая цена; международные стандарты бухгалтерского учёта.

Introduction. Transition countries are affected by the processes that take the form of continuous transformation. Social processes, particularly in the last decade, influenced companies and individuals, requiring them quickly react and adapt to new conditions of life and work. Company managements' financial reporting is carried out continuously, but it is done for the purpose of reporting to state authorities.

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Financial reporting is very important not only for managing companies' finances, but also for the overall management of companies, because survival, i.e. development of companies depends on the success of management (Popovic et al., 2014).

Decisions, concerning the management of newly established or transformed companies, are very different and largely based on management decisions that result from the analysis of financial statements. In many transition countries there are enterprises that consistently have negative business results in recent years. Negative operating results are the consequence of unfavorable business conditions over a long period of time. The results of ownership transformation are far from expectations and potentially possible outcomes (Vukoje et al., 2013). Contemporary economy is a complex mechanism, with needs for organizing economic life and in which the abstract formulas of scientific treatment of economic phenomena are replaced by concrete, empirical ones (Pejanovic, 2013). Based on the aforesaid, there is a growing need for unification of financial documents. Financial reporting of a company should be in conformity with the adopted accounting policy, with full compliance with international accounting standards and international financial reporting standards.

One of the company management decision tools should be valuation of assets, which the company operates with. This evaluation and the introduction of evaluation in financial statements may present a new quality to a company.

Literature review. A number of authors point out that improvement of economic integration on the global scale, among other things depends on the quality of financial reporting (Skaric-Jovanovic, 2011). Financial reporting includes fair valuation thoroughly (Dimitrovic-Saponja, 2012), but also the skill of managing (Bubic and Heinrich, 2012), particularly in different situations (Christmas, 2009), especially during the crisis. Some authors emphasize the importance of accounting in business finance (Marble, 1993), which becomes actual recently, especially the application of International Accounting Standards.

Evaluations in real life are extremely heterogeneous, being often used in a variety of situations, such as drawing up contracts, agreements, when determining company regarding following certain tax policy, decision making at strategic, tactical and managerial levels (Fusco, 2011). When completely presenting the framework for making evaluations of assets or parts of companies, we should mention the importance of establishing a group of experts, who will perform a variety of heterogeneous activities related to property evaluation. When making a decision to sell a company, for example, the importance of examining needs and characteristics of the demand side should not be ignored (Cowart and Goldsmith, 2007), which is also emphasized by (Sproles and Kendall, 1986).

The objective of proper valuation is reaching irrefutably proven property market value of company's assets. Serbia is still in the process of continuous transition and transformation. Appraising the value of capital is the process that results in giving opinion on the value of ownership interest in the company on a particular day. It should be done in a fair way, without favoring anyone, i.e. the approach must be impartial. In addition, fair presentation requires true presentation of all effects, the effects of transactions, other events and conditions, in compliance with defined criteria for the recognition of assets, liabilities, incomes and expenses, determined by the framework of financial statements. Increasing company's financial strength leads to the satisfaction of the general company's objective, which is to preserve and increase its assets.

The fair value of a company depends also on the evaluation, which is the basis for the entry in the books, and evaluation presents a basis for making strategic decisions about the future of the company (Rodic and Filipovic, 2010). Besides the application of IAS and IFRS, it should take into account the potential voluntary renunciation of consumption in relation to the present time in order to have higher consumption in some future time (Lewis, 1983).

Valuation is the first step of activities; the second is bringing decision to enter the results of assessment in company's books. The second step should be done with applying international financial reporting standards. They assume fair presentation of all parts of the company, activities and results of the reporting period. International Accounting Standards and International Financial Reporting Standards are necessary for the financial policy of a company since they facilitate the harmonization and standardization of economy and businesses.

Management needs to find internal control mechanisms (Cantino, 2009) within the company managed. This hypothesis can be seen in many studies such as (Reading et al., 2009; Galloway, 2010; Cutler, 2001), the main goal is reducing company risk with establishing the mechanisms of internal control.

The appraiser and assessment standards. The appraiser should be seen as an independent and qualified person that evaluates company or its parts for the needs of a client. The role of appraiser should be defined before starting the assessment. His engagement must be clearly defined, as for the company he/she conducts the assessment, as well as for him/her as a contractor, which can be more precisely defined by signing the letter of engagement.

In addition to objectivity in the assessment procedure, it is necessary to meet both professional standards and ethical rules. Professional standards usually include: objectivity of assessment, appraiser's obligations to a client, appraiser's obligations to other appraisers and their association, application of different assessment methods, application of ethical rules and rules of professional conduct.

Evaluation of company's market position includes the analysis of yields, material and financial positions of a company.

Valid assessment can be done only by a group of experts. It is important there are experts in this group familiar with the theory of the balance sheet, accounting rules, financial analysis, market experts, experts in technology field of the evaluated company and experts in evaluation of fixed assets, experts in civil engineering etc. Each expert within the team performs the tasks in his/her discipline and the coordination of the work of experts is conducted by the leader of the assessment team (Leko et al., 1997). Company's monitoring should be made taking into account the conditions of external environmental factors, as well as internal within the company.

Assessment activities can be performed by the companies on their own, or by authorized appraisers, which is a common practice in the EU countries. The possibility that companies carry out assessment on their own is contrary to the principle of objectivity. That practice does not exist in developed countries, and especially not in the EU. The authors believe that Serbia, moving closer to the EU, should harmonize this issue according to the assessment, carried out in the EU countries.

Correct execution of the evaluation process is essentially carrying out the procedures for determining the value and preparation of the corresponding report, which follows the assessment itself. The value of a company is the value of its capital. One company may have different values depending on the circumstances and the time of assessment.

Market value is defined as the amount of money for which an asset could be exchanged, in open and specific market, under normal circumstances and by a voluntary transaction between interested parties, which have a reasonable level of knowledge about the relevant facts. The term "assessment" indicates an expert opinion on the value, as well as the procedure for determining the value, based on the systematic approach.

Just or fair value is the amount for which a seller is willing to cede ownership of property or part of company's assets or some other value to a buyer. This implies that trade was voluntary and there is a reasonable degree of awareness of relevant facts.

The book value of a fixed asset of the company presents its purchase value minus depreciation.

The yield evaluation method of assessment is the basic method. It accepts internationally recognized attitude, according to which the value of company is equal to the present value of future benefits for its owner.

Therefore, the estimated value is based on the information available at the time. The definition of value, purpose of evaluation and type of equity interest influence the choice of assessment methods.

Taking into account the international standards of assessment, the authors of this study want to point out that there is a large degree of flexibility in the choice of assessment methods.

Assessment methods. For proper evaluation, it is important to establish a team of appraisers and there should be equal decision-making experts of different specialties with significant experience. In short, the approach should be multidisciplinary. There is no prescribed method to be used by appraisers. The authors give an overview of the most important methods in the study.

Yield method is the method by which the value of a company is equal to the present value of its future results.

Market method is the method by which you reach the value of a company by comparing to similar companies. In practice, it is quite difficult to find a similar company for comparison.

Cost method is the method by which the value of a company is evaluated on the basis of the costs of corporate assets replacement. This method requires the determination of equitable or fair value of assets.

Other assessment methods are essentially a combination of the presented above.

When you conduct practical company valuation, you usually choose two or more methods, depending on the purposes of assessment, definition of value, type of company, available data etc.

Appraiser's opinion on the usefulness of certain methods for a case is dominant in order to make assessment. The very choice of a particular method of assessment for a specific company affects the quality of assessment, i.e. reliability of results. Therefore, its results depend on the choice of assessment method.

It should be noted that the most common practice is applying a combination of several methods for assessment.

Material and methods. This study, inspired by the issue of evaluating for the purpose of improving financial reporting, had the task to point out the importance of evaluation in the process of real company management in Serbian economy. The research, described in this study, started in 2012 in Novi Sad, the second largest city in the Republic of Serbia, more precisely within the public utility service system of Novi Sad. Amongst the 19 companies of the kind in Novi Sad 2012 only three of them implemented the process of entering fair valuation in the books. Later, there were 6 in 2013 and 8 in mid 2014. The authors wish to emphasize that the process began to take hold and consider fair reporting certain and applicable and implementable in all companies of the said type.

The authors point out that multiple methods of assessment were used in the process of facilities' evaluation. It is allowed by IAS 16. The evaluation of the greenhouse was based on an assessment in accordance with the possible profit in the following years, because the company has a known customer, with which it cooperates continuously since its foundation and from which it receives funds for the acquisition of large and valuable means of production. Besides these facts, the size of the facility in operation was taken into account, as well as the value of new similar objects, e.g. the assessment presents a combination of shown. Such an assessment is, in the opinion of the authors, the only correct one in this particular case.

Results. The survey was conducted in a public utility company, which exists since 24/11/1962. By the decision on the arrangement, which was published in the Official Gazette Journal of Novi Sad No. 29/2005 and 53/2008, the company is arranged as a public utility company; the name of the company is not stated, because consent for it was not obtained, but the data are original and real. The survey lasted for one year and was completed in April 2014. The company has extremely heterogeneous facilities and infrastructure, i.e. buildings. The age structure is different. The obtained results refer to the facility of greenhouse, which was built in the mid-sixties. It is in poor condition and not used for production for about 10 years. It is used occasionally at great risk to workers during the spring production of flowers.

The evaluation team consisted of the team leader, an economist, a graduate civil engineer, architects, and a graduate mechanical engineer. There are permanent top management staffing changes in the company. For example, within the last 6 years there were 6 new people appointed as Director General and the same number of CFOs, some smaller number regarding technical directors, which means 4 different persons, appointed by the founder. For this reason, a new team of directors are not to take decisions that are multi-year type and therefore the decision on the evaluation was not initiated by top management, but by professionals in lower positions.

The greenhouse evaluation team collected independently the data related to the assessment of the company's facilities, processed them statistically. It can be used by management to make strategic decisions in the future. Table 1 provides an overview of the basic groups of company assets in use, with the given sources of procurement of fixed assets, as of 01/01/2013.

No.	Account number on which the group of fixed assets is registered	Name of the account of group of fixed assets	Total value of fixed assets, EUR	Participation of the group of fixed assets in total assets of the company, %
1.	020000	agricultural land	4,318,496.88	55.01
2.	02200	Facilities in operation	1,184,160.15	15.08
	022001	construction facilities (subsidies)	331,064.67	4.22
3.	023000	plants (equipment)	999,746.77	12.73
	023001	plants (equipment) subsidies	1,012,295.77	12.89
4.	026300	works of art, sculptural art	5,184.21	0.07
5.	025500	Other assets	141.15	0.00
Total	Total			100

Table 1. The structure of basic groups, showing the assets of the company as of 01/01/2013, authors' calculations

The authors collected data individually and presented them in Table 1. They made a step further and made sources of facilities visible, showing the percentage in the total value of fixed assets. About 4% of facilities that have been purchased from the subsidies of the founder of the company, which is an exception related to public companies. Such a source of procurement of fixed assets is almost never related to private companies. The total value of facilities is almost 1/5 of the total value of all fixed assets. On this basis, it can be noted that the valuation of fixed assets can be of great importance for fair presentation of the company's assets value.

Table 2 displayes the original research results including the book value of facilities, the value after reassessment, and realized difference between these values. The final presentation is expressed as an increase of 29.67% in the value of all facilities after the evaluation. It fulfilled a hypothetical questioning of importance of such research, mentioned at the beginning of this study, because there is extremely realistic deviation on the date of the valuation in the business books and the actual situation on the day on which assessment was conducted.

Tabl	e 2. Display of the	e book value	and the newly	estimated valu	e of facilities,	
	authors' calculations					
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No.	The structure of the construction facilities by the source of purchasing and registering in books	Facilities' book value as of 01/01/2013, EUR	Facilities' newly appraised value as of 30/06/2013, EUR	The realized difference between the book value of facilities and the newly appraised value, EUR	Arising increase / reduction related to the book and the newly estimated value of the facilities, %
1.	Operating facilities	1,184,160.15	1,740,838.99	556,678.85	47.01
2.	Construction facilities (subsidies)	331,064.67	223,916.34	-107,148.33	-32.36
Σ		1,515,224.81	1,964,755.33	449,530.52	29.67

Table 3 displays individual facilities, amongst which is a greenhouse with the area of 1000 sq m. The value deviation regarding this production facility is 4%, compared to the total value of all buildings.

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		The estimated	Participation of each facility in	
No.	Title	current value as of	relation to the total value of all newly	
		30/06/2012, EUR	appraised construction facilities, %	
1.	Brick-made cabins, 612 pcs	303,496.16	14.82	
2.	Irrigateon system	128,112.36	6.26	
3.	Greenhouse (1000 m ²)	82,651.46	4.04	
4.	Cabins, 110 pcs	67,278.29	3.29	
5.	Public lighting-strand	58,911.42	2.88	
6.	Locker room, 12 pcs	49590.88	2.42	
7.	Small cabin, 68 pcs	33,721.80	1.65	
8.	Water supply and sewage	30,390.65	1.48	
9.	Cabins, 30 pcs	14,877.26	0.73	
10.	Water well	6,501.91	0.32	
11.	Terrace, 5x6 m	2,004.91	0.10	
12.	Paths, 185 m	371.93	0.02	
13.	Shunt	23.14	0.00	
14.	Other facilities	1,269,392.66	62.00	
Total		2,047,324.14	100	

Table 3. The structure of facilities' fixed assets and its participation in the newly estimated value of the entire group of company's facilities as of 30/6/2013, *authors' calculations*

The authors point out that the evaluation of the facility of greenhouse, presented in this study was conducted by using the combined method. It means that the value of a similar operating facility was taken, with similar surface, on which production can be organized and respecting the values based on the value of goods that can be produced for a reliable buyer in the next 10 years. Evaluation of the existing facility, as for the value in comparison to the new one, was presented on about 30% of the value of such a new building, which is far more than the value of e.g. useful material of the facility on the date of evaluation. The fact is that the facility was poorly usable as an operating farmhouse on the assessment day. The third factor which is taken as an element of obtaining realistic or fair value is the market position of the company in the city of Novi Sad and the value is included in it, mentioning that there is a safe market for the sale of products that can be produced in such a facility in the next 10 years.

Conclusions and recommendations. The research was performed at fair value with the full application of IAS 16. The basis for evaluation is the display of real value of property, i.e. facilities, with special reference to the greenhouse in accounting and business books, with the aim of fair reporting of company's financial statements.

The assessment was conducted by applying various methodological approaches in order to have as realistic as possible displayed assessment value. On the occasion of making the assessment, the evaluation team established the objective value of the greenhouse facility, based on the elements which determine the value of the property. The basis for evaluation is the market value.

When collecting relevant data for present value estimation, attention was particularly paid to market value. The following methods were used: cost method (the method of determining actual value), the comparative method (the method of sales comparison, direct comparison of prices) and income capitalization method (the method of income evaluation).

Assessment is given by the projection of values, based on current market conditions and the information available at the time of assessment. The opinions of employees and individuals in charge are accepted. It should be noted that conditions at the market are subject to the strong influence of uncertainties, and very frequent change.

The assessment was conducted in accordance with the so-called possible values, by combining different approaches and methods presented, taking into account the information available. The authors stress that the book value of greenhouse was 0.00. The estimated value of the greenhouse on 04/12/2014 according to the middle exchange rate of the National Bank of the Republic of Serbia, calculated in EUR was 82,651.46. The authors presented this information in order to display the real value of greenhouse facility of 4% in comparison to the total value of the company's fixed assets, and that way once more point to the importance of the real display of assets in financial records.

The authors used the allowed and recommended IAS 16. The application of these standards in Serbia practically started in 2004. The research was conducted at fair value, with the possibility of practical entering to the books of the company.

Such researches are of great importance for quality management reporting through optimal financial statements. Finally, it should be noted that the fair value of statements are subject to external audit at the end of the financial year. Potentials of application of such researches are available in a number of companies at the level of the city Novi Sad, as well as the Republic of Serbia and abroad, including a number of scientific disciplines, having also socioeconomic characteristics (Popovic, 2014), especially in crisis situations (Popovic at al., 2014), primarily for public economies. Serbia's EU accession will further actualize this kind of researches, as well as the practical introduction of fair valuation in business books of many companies.

The application of international accounting standards, in particular IAS 16, enables management to form a team for valuation of a facility. The team consisting of experts with different specialties and approaches to evaluation is able to use different methods of estimation.

The authors in this study presented a possible solution, the valuation of the old facility that has been used for a long time for production purposes. In terms of a dilemma, for making the important decision of what to do with the object, the assessment can be crucial. Whether to demolish the facility of greenhouse and rebuild it? Whether to take the money from selling the steel material or have some other solution is only one of the dilemmas at the beginning of making decision on the assessment?

The evaluation team, using a combination of different methods and primarily starting from the real value, estimated value of the greenhouse to be about 30% of the new one to be made. The same is to be repaired, especially steel parts and glass surfaces to be completely replaced. The appraisers took into account the income that a company can achieve in the next few decades in the area of 1000 m^2 that is the net surface of the greenhouse, since it has a reliable customer for more than 5 decades, a monopoly position at the market and there are other factors which allow smooth operations over a longer period of time.

The authors believe that this kind of researches is justified, because it gives a new dimension to considering the value of facilities. That dimension is primarily marketobserved and such an evaluation makes more sense. There is also another tendency in crisis situations that must not be lost out of sight: entering new values in books, which are higher than the former, will increase property taxes. Having uniform reporting that is in practice in the EU, will give even bigger importance to fair evaluation, as the authors presented in this study.

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