

THE IMPORTANCE OF APPLYING THE ASSET VALUATION MODEL TO MEDIUM-SIZED ENTERPRISES IN THE REPUBLIC OF SERBIA

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Abstract: *The study presents the importance of realistic asset valuation in medium-sized enterprises, which fundamentally requires the assessment of assets at fair value using valuation techniques as of the date of the appraisal. The aim of the paper is to highlight the importance of valuing company assets based on so-called fair value, which is entered into the company's year-end financial statements once per year. Such an approach forms the basis for a practical representation of the actual state of asset values, which in turn underpins sound managerial decision-making in the operations of medium-sized enterprises. Presenting accurate financial reports in this way is essential for reflecting the real business performance of companies in the Republic of Serbia. The results obtained show a significant deviation in asset valuation before and after the new fair value-based appraisal. Additionally, the study highlights differences in the valuation of construction facilities, transportation assets, and equipment before and after the fair revaluation. Only in the case of transportation assets and equipment related to workshop operations was a slightly weaker effect observed compared to other factors. The study has practical applicability across a wide range of companies and was conducted by comparing asset values before and after revaluation, particularly in the context of preparing year-end financial statements for enterprises in the Republic of Serbia.*

Keywords: *asset valuation, fair value, final account.*

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INTRODUCTION

The realistic valuation of the company's assets is of great importance for making valid management decisions, both by the management bodies in companies, and within the framework of making operational decisions by the company's top management.

Fair valuation of a company's assets is not just a meaningless presentation of systematized values of a company's heterogeneous assets, but the need for a company to realistically present the value of its assets in its business books. This is the basis for valid business decision-making by top management, regardless of the company's size, activity and other specificities it possesses. Only after proper valuation of assets, i.e. the correct and realistic expression of the value of the company's assets, can they be entered into the company's business books. Thus, realistically valued assets become a factor whose proper application allows top management to make correct decisions in management processes.

The fair value of assets represents a realistic method in the business of numerous legal entities. Namely, it is a market method, where purchase prices and other relevant information are applied on the basis of market transactions with the aim of arriving at the real value of the property on the day of assessment, all based on the same or similar funds used by companies in their business.

LITERATURE OVERVIEW

The importance of making rational business decisions made by the top management of numerous heterogeneous companies is extremely great. The importance of making rational business decisions by the top management of numerous heterogeneous companies is extremely high. One of the modern ways to improve the overall business decision-making by top management is the application of fair value of assets in companies. In this way, it is possible to achieve an improvement in the real reporting of numerous entities such as: management bodies in companies, shareholders, banks, state authorities and other interested entities. The fact is that management based on this is also based on the application of other important methods such as the application of control in all parts of the company, which is often related to the application of internal controls in companies, controlling and others.

This essentially refers to a large part of new observations that can have an impact primarily on decision-making related to the valuation of assets in companies (Arnautović et al., 2022).

The correct valuation of the assets of numerous heterogeneous companies operating in different markets is of great importance, first of all, from the point of view of examining the essential effects of business, which cannot be imagined without the valuation of everything essential for the business of the company (Abidoeye et al., 2021; Amidu et al., 2024).

Asset valuation problems and the market context of such activities have long been one of the key issues when making valid management decisions, which has been the subject of numerous studies (Reinert, 2020; Mooya, 2021; Cheloti & Mooya, 2022).

The accuracy of the assessment of external and internal valuations of assets in developed economies is one of the most important issues that must be taken into account by a large number of legal entities, and therefore also by a large number of companies (Reinert, 2021; Schulz & Wersing, 2021; Thaler & Koch, 2023; Aydinoglu et al., 2024).

Optimizing the business model of numerous companies as economic carriers are very heterogeneous, and it is precisely in such conditions that finding a valuation model gains more and more practical importance, as pointed out by numerous authors (Gunes, 2023; Krämer et al., 2023; Beracha et al., 2024).

METHODOLOGY

During the preparation of the study, the author conducted a survey of 131 medium-sized enterprises operating within the territory of the Republic of Serbia and headquartered in the Republic of Serbia.

The data obtained came from the heads of accounting departments of the surveyed enterprises, who were guaranteed anonymity. The collected data referred to the valuation of assets held by these enterprises during a specific observation period. This observation period was from June 1 to December 31, 2024, and all surveyed enterprises were medium-sized enterprises operating in the Republic of Serbia.

From a methodological standpoint, the goal of this approach was to present the value of potential deviations in asset valuation before and after the application of fair value accounting, where asset values were entered into the business books only after being revalued at fair value.

Additionally, the assets of the enterprises were analyzed in terms of value through the examination of three asset groups owned by the enterprises: the value of business buildings, the value of transport vehicles, and the value of production and operational equipment of the surveyed enterprises.

The author decided to formulate the following hypotheses within the framework of a secure approach to valuing the assets of medium-sized enterprises:

H1: There are no significant differences in the valuation of buildings before and after the application of fair value reporting, compared to the previously stated value of the same assets in the business books of medium-sized enterprises.

H2: There are no significant differences in the valuation of transport vehicles before and after the application of fair value reporting, compared to the previously stated value of the same assets in the business books of medium-sized enterprises.

H3: There are no significant differences in the valuation of production and operational equipment before and after the application of fair value reporting, compared to the previously stated value of the same assets in the business books of medium-sized enterprises.

Only after this, the obtained data regarding fairly valued assets and those previously recorded in the business books were analyzed and statistically processed using the Statistical Package, version 25.

Further validation was achieved using the paired samples t-test to determine the statistical significance (with a significance level set at 0.05) of the differences in asset values before and after fair valuation. This revaluation served as the basis for entering asset values into the business books and subsequently as a foundation for valid decision-making by top management.

RESEARCH RESULTS

The author of the study systematized the obtained results into the following units, which reflect a realistic presentation of the obtained results based on the use of asset valuation models based on selected influence factors and the presentation of assets that can be properly entered into the business books with the aim of making valid management decisions in the future.

Valuation results before and after revaluation of assets at fair value

The valuation of assets after revaluation is compared with assets that have certain values in the business books. In the presentation of the obtained results, three categories of assets are presented in Table 1-3.

Table 1. Differences in the valuation of stationary construction objects before and after valuation in the business books of medium-sized enterprises

	Before fair valuation	After a fair evaluation	t	p
	Mean value			
Office buildings	1212.14 ± 125.29	1560.18 ± 130.85	-22.260	<0.0005*
Auxiliary buildings	1.43 ± 0.54	2.58 ± 0.59	-11.269	<0.0005*
Auxiliary technique	10.09 ± 1.55	12.15 ± 1.60	-36.700	<0.0005*
Workshops	899.85 ± 79.77	1027.40 ± 140.58	-11.478	<0.0005*
Production buildings	1978.08 ± 116.62	2501.33 ± 253.56	-24.002	<0.0005*
In total	780.23 ± 756.56	975.85 ± 965.95	-12.897	<0.0005*

*Statistical level of significance at the level of 0.05

Source: Author, 2024.

Based on the presentation of the obtained results in Table 1, it is clearly seen that there is a significant deviation in the presentation of assets, ie construction facilities, before and after the application of fair valuation of assets as a model that shows the reality of the same in the business books of medium-sized companies.

Table 2. Differences in the valuation of means of transport before and after fair valuation

	Before fair valuation	After fair valuation	t	p
	Mean value			
Office buildings	392.55 ± 19.27	493.38 ± 23.35	-26.759	<0.0005*
Auxiliary buildings	3.13 ± 0.84	5.50 ± 1.94	-22.554	<0.0005*
Auxiliary technique	1.79 ± 0.44	4.65 ± 0.50	-24.345	<0.0005*
Workshops	1.35 ±0.47	1.65 ± 0.81	-3.277	<0.002*
Production buildings	10.58 ±2.60	13.12 ± 4.26	-6.897	<0.0005*
In total	77.28 ±152.69	97.95 ± 196.96	-8.333	<0.0005*

*Statistical level of significance at the level of 0.05

Source: Author, 2024.

Based on the presentation of the obtained results in Table 2, it is clearly seen that there is a significant deviation in the presentation of transport equipment before and after the application of the fair valuation of assets as a model that truly wants to show their value in a realistic way in the business books of medium-sized companies.

Table 3. Differences in the valuation of production and business equipment before and after fair valuation

	Before fair valuation	After far valuation	t	p
	Mean value			
Office buildings	377.33 ± 119.67	487.44 ± 123.34	-18.770	<0.0005*
Auxiliary buildings	1.166 ± 0.82	2.99 ± 0.67	-21.434	<0.0005*
Auxiliary technique	5.34 ± 2.11	8.45 ± 1.02	-22.022	<0.0005*
Workshops	1.92 ±0.91	4.33 ± 1.80	-13.279	<0.002*
Production buildings	46.98 ±3.15	77.14 ± 14.76	-19.038	<0.0005*
In total	82.98 ±152.99	110.85 ± 194.29	-10.078	<0.0005*

*Statistical level of significance at the level of 0.05

Source: Author, 2024.

Based on the presentation of the obtained results in Table 3, it is clearly seen that there is a significant deviation in the presentation of assets, i.e. in the valuation of production and business equipment before and after the application of fair valuation of the same, which basically represents two methods or models, the application of which shows its real value in the business books of medium-sized enterprises.

The connection between the valuation of construction objects, means of transport and equipment

The author presented the connection between the valuation of construction objects, means of transport and equipment before and after re-valuation according to fair valuation in Tables 4-5.

The results obtained in Table 4 are such that they show the existence of differences in the value of all three analyzed categories of assets used by medium-sized enterprises in business in the Republic of Serbia before the immediate reassessment of its value.

Table 4. Correlation of valuation of construction facilities, means of transport and equipment before revaluation

	Construction objects	Means of transport	Equipment
Construction objects	1		
Means of transport	0.292**	1	
Equipment	0.339**	0.932**	1

*Statistical level of significance at the level of 0.05

Source: Author, 2024.

Table 5. Correlation of valuation of construction facilities, means of transport and equipment after revaluation

	Construction objects	Means of transport	Equipment
Construction objects	1		
Means of transport	0.310**	1	
Equipment	0.401**	0.952**	1

*Statistical significance level at the 0.05 level, **Statistical significance at the 0.01 level

Source: Author, 2024.

The results obtained in Table 5 are such that they show the existence of even more differences in the value of all three analyzed categories of assets used by medium-sized companies in business in the Republic of Serbia after the reassessment of the value of assets that are essentially in use.

DISCUSSION

The valuation and realistic presentation of company assets is the focus of this study. The assumptions in this paper in the form of hypotheses 1-3 were that there are no significant differences in the valuation of buildings, transport vehicles and business equipment before and after the valuation performed using the fair value method. The results presented in the obtained tables 1-3 clearly show that there are differences in all three analyzed forms of assets, i.e. in the valuation of buildings, transport vehicles and equipment before and after the revaluation of the listed categories, which leads to the fact that all three hypotheses can be safely rejected. This is of great importance for overall business and business decision-making because only a representation, and a realistic representation of the value of assets in business books, is the basis for

rational and optimal business decision-making in the real business of medium sized enterprises (Čavlin et al., 2022; Puvača et al., 2023; Lekić et al., 2023; Čolović et al., 2024; Bakmaz et al., 2024) that were the focus of this study.

Apart from the presented primary presentation of the results, it is necessary to point out that in the case of means of transport that accompany workshop facilities, as well as equipment that accompanies the work of workshops of medium-sized enterprises, a slightly weaker influence can be seen compared to all other analyzed factors (Baffour & Gyamfi-Yeboah, 2017; Alexandridis et al., 2018; Amidu et al., 2019).

Based on the obtained values of the correlation coefficient ($r=0.294$) between construction facilities and means of transport, it can be seen that the connection is small and positive. The positive correlation indicates that with an increase in the valuation of construction facilities, there is an increase in the valuation of transport means.

Based on the value of the correlation coefficient ($r=0.341$) between construction facilities and equipment that monitors the functioning of the company, it can be seen that the connection is medium and positive.

The positive correlation indicates that with an increase in the valuation of construction facilities, there is an increase in the valuation of the equipment that monitors the work of the mentioned companies.

Based on the value of the correlation coefficient ($r=0.927$) between the fleet and the equipment, it can be seen that the connection is high and positive.

The positive correlation indicates that with an increase in the valuation of transport means, there is an increase in the valuation of the equipment that accompanies the work of the mentioned medium-sized enterprises in the Republic of Serbia, which was pointed out by numerous authors in the context of consideration of possible models of behavior in valuation (Krause et al., 2020).

The presentation of the results in this study, in the author's opinion, enabled a realistic presentation of the actual business of a large number of medium-sized companies in the Republic of Serbia based on the presentation of the value of assets in regular business. This strongly emphasizes the importance of business that will respect the reality of fair valuation of the company's assets in business, because in this way it is possible to introduce assets into the business books of the company and later make valid management decisions by the top management. In the future, this research can be extended to other forms of organizing companies as well as to a larger number of other countries, especially from

the surrounding area, in order to make further comparisons and gain new experiences in the quality of property valuation and management.

CONCLUSION

The results of the study showed that there is a strong deviation in the valuation of all analyzed factors: buildings, vehicles and equipment before and after revaluation at fair value. The fact is that the results obtained are the basis for entering the obtained values into the business books of medium-sized enterprises. The authors pointed out another important action, what happens to the obtained values, or rather pointed out the importance of entering the fair value model into the business books because in this way security is achieved in business and making business decisions in the future, and in the work of medium-sized enterprises as an important organizational form of organization in the economy of the Republic of Serbia. The introduction of legal values of assets into business books In the Republic of Serbia, it is increasingly used as a safe factor, the application of which makes it possible to make valid management decisions by top management in an optimal way. In addition, the application of fair valuation of assets is essential for the work of people in accounting because the application of such a business model ensures security in business, but also in decision-making and financial reporting.

CONFLICT OF INTEREST

None is declared.

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ZNAČAJ PRIMENE MODELA VREDNOVANJA IMOVINE SREDNJIH PREDUZEĆA U REPUBLICI SRBIJI

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Sažetak: Studija daje prikaz značaja realnog vrednovanja imovine srednjih preduzeća, što suštinski zahteva procenu imovine po fer vrednosti primenom tehnike procene na dan izvršene procene imovine. Cilj rada je da prikaže važnost vrednovanja imovine preduzeća po tzv. fer vrednosti koja se jednom godišnje unosi u završni račun preduzeća. Takav pristup predstavlja osnovu za praktično prikazivanje realnog stanja vrednosti imovine koja čini osnovu donošenja validnih upravljačkih odluka u poslovanju srednjih preduzeća. Tako prezentovanje realnih finansijskih izveštaja bitno je za realno poslovanje preduzeća u Republici Srbiji. Dobijeni rezultati pokazuju značajno odstupanje u vrednovanju imovine pre i nakon nove procene imovine po tzv. fer vrednosti. Osim toga, dobijen je rezultat koji ističe da postoje razlike u vrednovanju građevinskih objekata, transportnih sredstava i opreme pre i nakon ponovnog fer vrednovanja. Samo kod transportnih sredstava i opreme koja prati poslovanje radioničkih objekata postoji nešto slabiji uticaj u odnosu na sve ostale faktore. Studija ima praktičnu primenu od strane velikog broja različitih preduzeća i posmatrana je putem primene komparacije vrednosti imovine, odnosno pre i nakon ponovnog vrednovanja, pogotovo prilikom sastavljanja završnog računa u poslovanju preduzeća u Republici Srbiji.

Ključne reči: vrednovanje imovine, fer vrednost, završni račun.