Subsequent measurement of property, plant and equipment in hotel companies in the Republic of Serbia and the Republic of Croatia

Накнадно мерење некретнина, постројења и опреме у хотелијерским предузећима у Републици Србији и Републици Хрватској

Marko Milašinović [*]
University of Kragujevac, Faculty of Hotel Management and Tourism in Vrnjačka Banja, Vrnjačka Banja, Republic of Serbia, marko.milasinovic@kg.ac.rs
Vladimir Obradović
University of Kragujevac, Faculty of Economics, Kragujevac, Republic of Serbia, vobradovic@kg.ac.rs
Nemanja Karapavlović
University of Kragujevac, Faculty of Economics, Kragujevac, Republic of Serbia, nkarapavlovic@kg.ac.rs

Abstract: The aim of this paper is to consider the practice of subsequent measurement of property, plant and equipment in hotel companies in the Republic of Serbia and the Republic of Croatia, i.e., to determine whether the preparers of financial statements make greater use of the historical cost model or the model based on fair value. The sample consists of 220 hotel companies in the Republic of Serbia and the Republic of Croatia, observing their financial reports for 2019. The research reveals that most hotel companies in both countries subsequently measure owner-occupied property and plant and equipment according to the historical cost model. Hotel companies in Serbia most often apply the fair value model for subsequent measurement of investment property, while hotel companies in Croatia most often apply the historical cost model in the same context. We also find that a large number of hotel companies in the observed countries do not disclose the basis for subsequent measurement of property (including investment), plant and equipment in the notes to their financial statements, which means that the quality of financial reporting on those assets in the hotel companies should be improved.
Keywords: subsequent measurement, property, plant and equipment, hotel companies, historical cost model, revaluation model, fair value model.
JEL classification: M41, M42

Сажетак: Циљ рада је да се сагледа пракса накнадног мерења некретнина, постројења и опреме у хотелијерским предузећима у Републици Србији и Републици Хрватској, тј. да се утврди да ли састављачи финансијских извештаја у већој мери користе модел историјског трошка или модел заснован на фер вредности. Узорак се састоји од 220 хотелијерских предузећа у Републици Србији и Републици Хрватској, при чему су посматрани њихови финансијски извештаји за 2019. годину. Истраживањем је

---

[*] Corresponding author

утврђено да већина хотелијерских предузећа у обе земље накнадно мери некретнине различите од инвестиционих, постројења и опрему по моделу историјског трошка. Хотелијерска предузећа у Републици Србији најчешће примењују модел фер вредности за накнадно мерење инвестиционих некретнина, док хотелијерска предузећа у Републици Хрватској најчешће примењују модел историјског трошка у истом контексту. Утврђено је и да немали број хотелијерских предузећа у посматраним земљама не обелодањује основу за накнадно мерење некретнина (укључујући инвестиционе), постројења и опрему у напоменама уз финансијске извештаје, што значи да постоји значајан простор за унапређење квалитета финансијског извештавања о поменутим средствима у хотелијерским предузећима.

Кључне речи: накнадно мерење, некретнине, постројења и опрема, хотелијерска предузећа, модел историјског трошка, модел ревалоризације, модел фер вредности.

ЈЕЛ класификација: M41, M42

Introduction

Accounting information plays a key role in decision making in the business world (Mamić Sačer & Zyznarska-Dworczak, 2020). As the most important products of the company's accounting function financial statements are the main source of this information (Mitrović et al., 2015; Vasilev et al., 2019). Measurement (valuation) of the financial statements positions is one of the key problems in preparation of financial statements (Procházka, 2011). The measurement process, together with the recognition process, directly affects the financial position and performance of the company (Karapavlović, 2020). In relation to assets and liabilities, there are problems of a) initial and b) subsequent measurement, while in the case of income and expenses, the problem of measurement occurs only in the context of their initial recognition (Karapavlović & Obradović, 2020).

The historical cost concept and the fair value concept are the most common concepts for measuring economic categories in accounting theory and practice (Perčević et al., 2020). The concept of historical cost, as the oldest concept, implies that assets are measured in the amount of reimbursement provided for their acquisition, and liabilities in the amounts received in exchange for the obligation (Stojanović, 2016). In other words, the application of the historical cost concept implies ignoring current market prices when measuring assets and liabilities, but usually relies on costs incurred at the time of their acquisition, which more or less deviate from the economic reality, depending on market prices stability and time distance of transactions from the reporting day (Malinić, 2009, p. 310). In fair value accounting system, assets and liabilities are measured at their currently estimated values (Singh & Doliya, 2015, p. 64). Fair value, as a variant of current value, implies that assets and liabilities are measured by applying "visible" market inputs (mark-to-market), the most reliable of which are market prices in an active market, or by applying appropriate valuation techniques (mark-to-model). As Radić (2012) points out, fair value is the estimated sales (exit) value, while in the absence of market inputs, the discounted value obtained by applying certain valuation models are used.

The subject of this paper is the practice of subsequent measurement of property (both investment and owner-occupied), plant and equipment in hotel companies in the Republic of Serbia (RS) and the Republic of Croatia (RC). When measuring those positions of the statement of financial position (balance sheet) subsequently, preparers of financial statements choose between the cost model, based on the concept of historical cost, and the

Subsequent measurement of property, plant and equipment in hotel companies in the Republic of Serbia and the Republic of Croatia

17

revaluation model (for owner-occupied property, plant and equipment) or the fair value model (for investment property), as models based on the concept of fair value. The aim of this paper is to identify whether the preparers of financial statements of hotel companies in RS and RC prefer the cost model or the model based on fair value. In addition, the practice of subsequent measurement of these assets is considered in more detail in terms of the legal form of the company and the financial reporting basis.

The practice of subsequent measurement of property, plant and equipment (PPE) has been the subject of empirical research in RS and RC, as well as in other countries. The specificity of the empirical research in this paper is that the focus is on hotel companies, as well as on the fact that the financial reporting practices of selected companies (hotels) are compared in neighbouring countries where International Financial Reporting Standards (IFRS) have been applied for a relatively long time. Unlike previous empirical research on financial reporting practices for non-investment property, plant and equipment in the RS, the research in this paper includes companies that apply IFRS for small and medium-sized entities (SMEs), as companies that have relatively recently been able to choose a model for measuring these assets.

The paper is structured in five sections. After the introduction, we consider the regulatory framework for subsequent measurement of PPE in the RS and the RC. In the same section, we present the results of previous research and, based on these results, we develop the research hypotheses. In the third section, we describe the research sample and methodology. The fourth section presents the results of the conducted empirical research. In the last section, we provide concluding remarks are the limitations of research in the paper, as well as directions of future research.

1. Literature review

In the RS, the issues of recognition and measurement of the financial statements positions are regulated by: a) full IFRS, b) IFRS for SMEs, and c) the Ordinance of the Ministry of on recognition, measurement and presentation and disclosure of positions in individual financial statements of micro and other entities. Under the Accounting Law of 2013, as the law applicable for 2019 financial statements, which are analysed in the paper, the following entities are required to apply full IFRS: a) large companies, b) financial institutions, c) companies that prepare consolidated financial statements, and d) listed companies and those in the preparation for listing. According to this law, medium-sized companies choose between full IFRS and IFRS for SMEs, small companies apply IFRS for SMEs, while micro-companies and entrepreneurs choose between the Ordinance and IFRS for SMEs. In the RC, the issues of the financial statement positions recognition and measurement are regulated by: a) full IFRS as adopted by the EU and b) Croatian Financial Reporting Standards (CFRS). Under the Accounting Law of 2015, large companies and companies of public interest apply full IFRS, while micro, small and medium-sized entities apply CRFS. Table 1 shows the components of the regulatory frameworks for financial reporting in the RS and the RC regarding subsequent measurement of PPE which was applicable for 2019 financial statements.

Table 1: Regulatory framework for subsequent measurement of property, plant and equipment in RS and RC

	Full IFRS	IFRS for SMEs	Ordinance of the Minister of Finance of 2013 (RS)	CFRS (RC)
Owner-occupied property and plant and equipment				
Document / document section	IAS 16 – Property, Plant and Equipment	Section 17 – Property, Plant and Equipment	Article 14 – Long-term Tangible Assets	CFRS 6 – Long-term Tangible Assets
Models for subsequent measurement	Choice: cost model or revaluation model	Choice: cost model or revaluation model	Cost model	Choice: cost model or revaluation model
The effects of fair values changes	Other comprehensive income and equity (revaluation surplus) or profit/loss	Other comprehensive income and equity (revaluation surplus) or profit/loss	/	Equity (revaluation surplus) or profit/loss
Investment property				
Document / document section	IAS 40 – Investment Property	Section 16 – Investment Property	Article 15 – Investment Property	CFRS 7 – Investment in Property
Models for subsequent measurement	Choice: cost model or fair value model	Fair value model in general	Fair value model in general	Choice: cost model or fair value model
The effects of fair values changes	Profit/loss	Profit/loss	Profit/loss	Profit/loss

Source: the authors, based on the documents mentioned in the table header

As Table 1 shows, hotel companies, but also all other companies operating in the RS and the RC that prepare their general-purpose financial statements following full IFRS, IFRS for SME or CFRS, when subsequently measuring owner-occupied property, plant and equipment, choose between the cost model and the revaluation model. In other words, the mentioned forms of regulation provide the same possibilities for subsequent measurement of the mentioned assets (Széles et al., 2019). The first version of IFRS for SMEs, published in 2009, did not allow the right to choose – the cost model was mandatory. However, the second version of this document published in 2015, whose official Serbian translation was published in 2018, gives entities the right to choose between the cost model and the revaluation model. Entities in the RS that apply the 2013 Ordinance could only use the cost model in the context of preparing financial statements for 2019.

The considered regulatory bases define both models (cost and revaluation model) in the same way. Namely, the cost model implies measurement at cost less accumulated amortization and impairment losses, while the revaluation model involves measuring at fair value at the date of revaluation, provided that this value can be reliably estimated, less

subsequent accumulated amortization and impairment losses. The revaluation process is performed as often as necessary to prevent a material difference between the carrying amount and the fair value at the end of the reporting period. An increase in the carrying amount of an asset due to revaluation is included in revaluation surplus, as a component of equity, and other comprehensive income (if it is reported, which is not an obligation of companies in the RC applying CFRS) or in profit/loss, up to previously recognized revaluation loss on the same asset. A decrease in the carrying amount is included in profit/loss or decreases previously recognized revaluation surplus on the same asset.

Companies that follow full IFRS (in both countries) and CFRS (in the RC), when subsequently measuring investment property, can choose between the cost model, which is the same as for other (owner-occupied) property (and also plant and equipment), and the fair value model. Companies that apply IFRS for SMEs or the Ordinance (in the RS) use the fair value model. However, they use the cost model if excessive costs or efforts are necessary for reliable fair value estimation. Under the fair value model, an asset is measured at its fair value at the end of the reporting period. As it can be seen in Table 1, all companies in the RS and the RC, regardless of the financial reporting basis, include gains or losses from changes in fair values in profit/loss in the period of their occurrence. IAS 40 and CFRS 7 require companies using the cost model to disclose fair values of investment property in the notes to the financial statements.

The research conducted on a sample of 200 companies in the EU reveals that about 95% of the observed companies subsequently measure owner-occupied property and plant and equipment at the cost model (The Institute of Chartered Accountants in England and Wales – ICAEW, 2007). Cairns et al. (2011), based on a survey of 228 listed companies in the UK and Australia, point out that companies dominantly choose a cost-based model when they can opt between a fair value model and a cost model in the context of subsequent measurement of assets and liabilities. The results of the part of the survey related to owner-occupied property and plant and equipment are consistent with the general conclusion – a small number of companies use the revaluation model. Lourenço et al. (2015), based on a sample of 300 European companies applying full IFRS, find that most companies use the cost model in the same context. A survey conducted on a sample of 1,100 companies in South Korea reveals that about 18% of companies apply the revaluation model during 2008 and 2009 (Baek & Lee, 2016). Pobrić (2019), based on a sample of 190 companies in Bosnia and Herzegovina (B&H) that applied full IFRS for preparation of financial statements for 2017, finds that more than 75% of the observed companies use the cost model for all owner-occupied property and plant and equipment, about 15% use the revaluation model for the same assets, while about 8% use the revaluation model to measure some (not all) items of these assets.

A survey conducted on a sample of 300 companies in the RS in 2013 found that the largest number of companies (61%) use the cost model for subsequent measurement of owner-occupied property and plant and equipment (Obradović & Karapavlović, 2014), that 19% of companies apply the revaluation model, and that 12% of companies apply a mixed model, i.e., measure some assets according to the revaluation model, and others according

to the cost model. The research also reveals that 8% of the analysed companies did not disclose the model of subsequent measurement in the notes to the financial statements. The research conducted by Karapavlović et al. (2020) on a sample of 300 randomly selected companies in the RS that apply full IFRS and based on the financial statements for 2014, 2015 and 2016, confirms that the largest number of the observed companies, i.e. 57.8% on average, use the cost model, 15.6% use the revaluation model, 9.1% use both models, while 17.6% of the companies do not clearly disclose the model. On the other hand, based on a survey on a sample of 53 companies in RS, Pantelić (2019) reveals that about 76% of companies use the revaluation model, and about 24% use the cost model to measure the mentioned assets.

Observing 50 small processing companies in the RC, Tušek et al. (2018) find that 60% use the cost model to subsequently measure owner-occupied property and plant and equipment. Both models are applied by 14 companies, with the revaluation model most commonly used for property and the cost model for plant and equipment. The research reveals that only one company applies the revaluation model for all items of the observed assets, while 5 companies do not disclose the basis of subsequent measurement. Based on a survey conducted on a sample of 100 randomly selected medium-sized and large companies the real sector in 2016, Perčević et al. (2020) find that companies in the RC apply the cost model to a greater extent than the model based on fair values for subsequent measurement of assets and liabilities. In particular, they find that 16% of the observed medium-sized companies and 22% of large companies use the fair value model for subsequent land measurement, and 18% of medium-sized and 12% of large enterprises use the fair value model for subsequent measurement of buildings, plants and equipment.

The presented results of the studies, which were conducted in different countries and whose subject of observation were companies of different activities, indicate the dominance of the cost model in the context of subsequent measurement of owner-occupied property and plant and equipment. Based on this, we formulate the first research hypothesis as follows:

H_1: Hotel companies in the RS and the RC prefer the cost model for subsequent measurement of owner-occupied property and plant and equipment.

As noted earlier, Cairns et al. (2011) find a general dominance of the cost model as the basis for measuring assets and liabilities. However, they also find that investment property is an exception. Muller et al. (2008), on the basis of observing 77 companies in continental Europe, found that about 75% of them use the fair value model for subsequent measurement of investment property. Conducting a survey based on financial statements in the period from 2009 to 2013 of 110 companies listed on stock exchanges in EU countries, Mäki et al. (2016) find that 80% of companies use the fair value model. Conducting research on a sample of 96 randomly selected Chinese companies listed at the end of 2008, Taplin et al. (2014) find that one half (48) use the fair value model, while the other half use the cost model. The mentioned research in B&H (Pobrić, 2019) reveals that about 60% of the observed companies use the fair value model. On the other hand, some studies reveal a prevalence of the cost models. The aforementioned study of the ICAEW (2007) finds that

71.6% of companies in the EU subsequently measure investment property using the cost model. According to Prewysz-Kwinto & Voss (2016), who conducted a survey on a sample of 30 companies listed on the Warsaw Stock Exchange, about 63% of companies used the cost model in 2014.

A survey conducted on a sample of 233 manufacturing companies in the RS, based on financial statements for 2014, 2015 and 2016, finds that, on average, about 47% of companies that have investment property use the fair value model (Karapavlović et al., 2018). The same research reveals that the cost model is used by an average of 29% of companies, and that about 23% do not disclose the model of subsequent measurement in their notes to the financial statements. Pantelić (2019) finds that all observed companies in the RS apply the fair value model. The research conducted by Karapavlović et al. (2020) confirms that the largest number of companies in the RS that have investment property use the fair value model. On the other hand, research conducted by Pavić et al. (2016) on a sample of 132 non-financial companies listed in the RC, at the Zagreb Stock Exchange, find in 2013 that more than half of these companies that have investment property apply the cost model. Another research conducted in the RC (Perčević et al., 2020) reveals that 8% of the observed medium-sized and 15% of the observed large real sector companies apply the fair value model. Since research shows that companies in the RS more often use the fair value model than the cost model for subsequent measurement of investment property, and that in the companies in the RC it is the opposite, the second research hypothesis is as follows:

H_2: Hotel companies in the RS prefer the fair value model, while hotel companies in the RC prefer the cost model for subsequent measurement of investment property.

2. Research sample and methodology

The empirical research was conducted on a sample of 110 randomly selected hotel companies in the RS that apply either full IFRS or IFRS for SME and 110 randomly selected hotel companies in the RC (that apply either IFRS or CFRS). These are the companies whose activity code, in both countries, is 55.10 – Hotels and similar accommodation. We used the notes to the financial statements for 2019 to identify the accounting policies regarding the subsequent measurement of PPE, as well as balance sheets relating to the end of 2019 to identify the importance of PPE for companies. The mentioned financial statements are available on the official internet presentations of the Business Registers Agency of the RS and the Financial Agency of the RC. Hotel companies in RS that apply the Ordinance of the Minister of Finance are not included in the sample because they are not obliged to publish the notes to the financial statements. Therefore, the accounting policies of those companies related to the subsequent measurement of PPE could not be identified. The sample structure from the aspects of legal form and basis for preparing financial statements is shown in Table 2. This structure is used as a basis for a deeper analysis of accounting policies related to subsequent measurement of PPE, which aims to determine whether there are differences in the mentioned accounting policies between different types of companies. Data on companies in the sample were processed

using descriptive statistics. In the context of their interpretation, the method of comparison is used to a significant extent.

Table 2: Sample structure

		RS		RC	
		No.	%	No.	%
Legal form	Limited liability company	93	84.55	78	70.91
	Stock company	17	15.45	32	29.09
Financial reporting basis	IFRS	47	42.73	23	20.91
	IFRS for SMEs / CFRS	63	57.27	87	79.09

Source: authors' calculation

3. Research results and discussion

The share of owner-occupied property and plant and equipment in the total assets of the observed hotel companies in the RS ranges from 0.01% to 99.26%, with an average level of 65.70%. The share of the same assets in the total assets of the observed hotel companies in the RC ranges from 0.51% to 99.83%, with an average level of 67.84%. It follows that, in general, these assets have a very high share in the total assets of hotel companies in both the RS and the RC, which further means that accounting policies related to their subsequent measurement can significantly affect the reported financial position and performance. Therefore, hotel companies in the RS and the RC cannot afford to be indifferent regarding the choice of accounting policies in a given area. The average share of owner-occupied property and plant and equipment, in both countries, is higher in limited liability companies than in stock companies, with more pronounced difference between the mentioned legal forms in RS (66.76% vs. 59.87%) than in RC (69.14% vs. 67.54%). In the RS, companies that apply IFRS for SMEs have a higher share of the same assets compared to those that apply full IFRS (67.86% vs. 62.79%). On the other hand, in the RC, companies that apply full IFRS have a higher share of these assets than companies that apply CFRS (74.04% vs. 66.20%).

By analysing the content of the notes to the financial statements, we identify a large number of hotel companies in the RS and the RC (more than 30%) that did not disclose the model for subsequent measurement of owner-occupied property and plant and equipment or did not clearly do so. Table 3 shows that, in the companies that disclosed the measurement model, in both countries, the cost model dominates, with this dominance being more pronounced in the RC than in the RS. Specifically, when focusing only at companies that disclosed the measurement model, we conclude that 69.74% of these companies in the RS and 83.56% of these companies in the RC use the cost model for all items of owner-occupied property and plant and equipment. The share of companies that opted for the revaluation model for all items of this category of assets is significantly higher in the RS than in the RC. In the RS, this determination was expressed by 22.37% of companies that disclosed the measurement model, while in the RC, the same determination was expressed by only 5.48% of such companies. Simultaneous application of both models was observed in 7.89% of companies in the RS and 10.96% of companies in the RC that disclosed the

model of subsequent measurement. These companies mainly apply the revaluation model for the subsequent measurement of property (land and buildings), and the cost model for the subsequent measurement of plant and equipment. The presented data show that 23 observed hotel companies in the RS, i.e., 30.26% of the total number of companies that disclosed the measurement model, use the revaluation model at least for some items of owner-occupied property and plant and equipment. In the RC, 12 companies, i.e. 16.44%, did the same. Only 9 companies in the RS provided information on the person who estimated the fair values (certified appraiser in 5 cases and employees in 4 cases). Three companies in the RS disclosed that they estimated fair values using the depreciated replacement cost method, two that applied the yield method and two that applied the comparable price method. Eight (out of 12) hotel companies in the RC that use the revaluation model for at least some items of non-investment property, plant and equipment disclosed who determined the fair values (certified appraiser in all cases). Three companies in the RC used the method of depreciated replacement cost, while two used the method of comparable prices for the fair value estimation. The results of empirical research show that hotel companies both in the RS and the RC, when choosing a model for subsequent measurement of owner-occupied property and plant and equipment, follow the general preferences of companies in their countries, identified by previous research in the RS (Obradovic & Karapavlović, 2014; Karapavlović et al., 2020) and the RC (Tušek et al., 2018; Perčević et al., 2020).

Table 3: Subsequent measurement of owner-occupied property and plant and equipment in hotel companies in RS and RC

Model for subsequent measurement	RS		RC	
	No.	%	No.	%
Cost model	53	48.18	61	55.45
Revaluation model	17	15.45	4	3.64
Mixed model	6	5.45	8	7.27
Do not completely or clearly disclose	34	30.91	37	33.64
Total	110	100.00	110	100.00

Source: the authors' calculation

Table 4 shows that, in RS, the cost model is the dominant basis for subsequent measurement of owner-occupied property and plant and equipment of limited liability hotel companies, and that half of stock companies that have clearly disclosed the measurement model use only the cost model, while the other half uses the revaluation model at least for some items of the mentioned assets. Therefore, stock companies in the RS, in comparison to limited liability companies in the same country, use the revaluation model more frequently. This can be explained by the higher level of public accountability of stock companies, which results in a stronger need to provide more relevant information. In the RC, the cost model is dominant in both legal forms, and the dominance is somewhat more pronounced in limited liability companies (when only companies that clearly disclosed the measurement model are observed). In both countries, the share of companies that did not clearly disclose the measurement model is higher in limited liability companies. This, again, can be explained by a lesser degree of their public responsibility. However, a lower level of public accountability cannot be a justification for the lack of information on the

measurement model, especially given the general importance of PPE for hotel companies of all legal forms.

Table 4: Subsequent measurement of owner-occupied property and plant and equipment in hotel companies in RS and RC – sample segmentation according to the legal form of entities

Legal form	Model for subsequent measurement	RS		RC	
		No.	%	No.	%
Limited liability company	Cost model	46	49.46	41	52.56
	Revaluation model	11	11.83	2	2.56
	Mixed model	5	5.38	5	6.41
	Unknown	31	33.33	30	38.46
Stock company	Cost model	7	41.18	20	62.50
	Revaluation model	6	35.29	2	6.25
	Mixed model	1	5.88	3	9.38
	Unknown	3	17.65	7	21.88

Source: the authors' calculation

Table 5 shows that the cost model is dominant among hotel companies in the RS that use IFRS for SMEs, but not among hotel companies in the same country that use full IFRS. Specifically, when only companies that clearly stated the measurement basis are taken into account, we conclude that the number of those who use the revaluation model for at least some items of owner-occupied property and plant and equipment is higher than the number of those who use the cost model for all items of these assets. In the RC, the cost model dominates in both companies that apply full IFRS and those that apply CFRS, with this dominance being more pronounced among those that apply CFRS (excluding companies that did not clearly disclose the measurement model). The dominance of the cost model among companies in RS that apply IFRS for SMEs is undoubtedly influenced by the fact that these companies relatively recently, after the changes in the mentioned standard (which were incorporated into the regulatory framework in the RS with a significant delay), gained the right to apply the revaluation model. In other words, the vast majority of these companies did not switch to the revaluation model when the opportunity arose. In both countries, the share of hotel companies that did not disclose the measurement model is higher for companies that do not apply full IFRS (but IFRS for SMEs or CFRS), which is not surprising given the fact that full IFRS are intended for companies with greater public responsibility.

At the end of 2019, 24 hotel companies in the RS and 16 hotel companies in the RC have investment property. However, 9 hotel companies in the RS that prepared financial statements in accordance with IFRS for SMEs were excluded from further analysis, since these companies, as Table 1 shows, do not have the right to choose the accounting policy for subsequent measurement of investment property. The share of investment property in the total assets of hotel companies in the RS ranges from 0.52% to 89.31%, with an average of 25.9%. In three hotel companies in the RS, investment property accounts for more than 80% of total assets. In the RC, the share of investment property ranges from 0.10% to 59.89%, with an average of 8.44%. In both countries, the share of investment property is higher in stock companies than in limited liability companies (42.47% vs. 9.61% in the RS,

and 8.94% vs. 4.94% in the RC). In companies in the RC that use full IFRS, the average share of investment property in total assets is higher than in companies in the same country that use CFRS (8.27% vs. 3.96%).

Table 5: Subsequent measurement of owner-occupied property and plant and equipment in hotel companies in RS and RC – sample segmentation according to financial reporting basis

Basis	Model for subsequent measurement	RS		RC	
		No.	%	No.	%
Full IFRS	Cost model	16	34.04	14	60.87
	Revaluation model	13	27.66	0	0.00
	Mixed model	6	12.77	4	17.39
	Unknown	12	25.53	5	21.74
IFRS for SMEs / CFRS	Cost model	37	58.73	47	54.02
	Revaluation model	4	6.35	4	4.60
	Mixed model	0	0.00	4	4.60
	Unknown	22	34.92	32	36.78

Source: the authors' calculation

Table 6: Subsequent measurement of investment property in hotel companies in RS and RC

Model for subsequent measurement	RS		RC	
	No.	%	No.	%
Cost model	5	33.33	9	56.25
Fair value model	7	46.67	0	0.00
Do not completely or clearly disclose	3	20.00	7	43.75
Total	15	100.00	16	100.00

Source: the authors' calculation

Table 6 shows that a significant number of hotel companies in the RS (20%) and especially the RC (43.75%) did not provide information on investment property in accordance with regulations, since the basis of their subsequent measurement is not clearly disclosed in the notes to the financial statements. Of the companies in the RS that disclosed the measurement basis, most apply the fair value model. In the case of two hotel companies in the RS that use this model, the fair value is determined by a certified appraiser, while in one case it is done by an internal commission. One company stated that a certified appraiser or an internal commission estimated fair values. Three companies did not disclose who estimated the fair values. No company in the RS disclosed which method was used to determine fair value. On the other hand, all hotel companies in the RC that disclose the measurement basis use the cost model. No company in the RS and the RC using the cost model discloses the fair values of investment property in their notes to the financial statements. Given that the number of hotel companies with investment property is small, the segmentation of the sample from the aspects of legal form and basis for preparing the financial statements was not performed.

Conclusion

The research in this paper, conducted on a sample 220 hotel companies in the RS and the RC, reveals that hotel companies in these countries prefer the cost model over the revaluation model, as a model based on fair value, in the context of subsequent measurement of owner-occupied property and plant and equipment. This means that hotel companies in the RS and the RC, when choosing accounting policies for the subsequent measurement of the mentioned assets, behave similarly to companies of other activities in these and many other countries. Therefore, the first research hypothesis is confirmed. Nevertheless, the research in the paper shows that the revaluation model is more frequently used in hotel companies in the RS than in companies of the same activity in the RC.

Hotel companies in the RS more often choose the fair value model than the cost model for subsequent measurement of investment property. On the other hand, hotel companies in the RC more often choose the cost model in the same context. It follows that the second research hypothesis has been confirmed. However, given that, in both countries, a very small number of observed hotel companies have investment property, these results should be accepted with reservations.

The research results indicate national specifics in the accounting policies of hotel companies regarding the subsequent measurement of property, especially investment property, plant and equipment. Namely, models based on fair value (the revaluation model and the cost model) are more frequently used in hotel companies in the RS than in companies of the same activity in the RC.

The research also reveals that a significant number of hotel companies in the RS and the RC do not disclose, or do so but not clearly enough, the basis for subsequent measurement of PPE in the notes to the financial statements. This means that hotel companies in the RS and the RC do not fully comply with applicable standards. We also find that none of the companies in the RS and the RC that use the cost model disclose the fair value of investment properties, as required by the applicable standards. In this regard, the results of the research in the paper are in line with the results of previous research, which indicate a significant space for improving the practice of disclosing information in the notes to the financial statements of companies in these countries. In other words, hotel companies in the RS and the RC are no exception.

The limitation in the paper is the stated fact that a relatively small number of hotel companies in both countries have investment property. The paper raises numerous questions in relation to subsequent measurement of PPE, but also other items of financial statements where there is a choice between a model based on historical cost and a model based on fair value. Further research in this area should focus on examining the motives of companies to choose a model of subsequent measurement of PPE. In this regard, it would be useful to investigate the impact of the origin of the company's capital, profitability levels, (under)development of the market for items that are the subject of measurement, and the education of accountants on the choice of the measurement model. The results of future research in the field of subsequent measurement of PPE in the RS may be affected by

recent changes in regulation. The Accounting Law of 2019 enables all micro and small companies to apply full IFRS, which, above all, can influence the practice of subsequent measurement of investment property. In addition, the same law imposes an obligation on all micro-companies (not micro-entrepreneurs) to prepare the notes to the financial statements, which will enable a wider range of companies to be included in future research. Finally, the Ordinance of the Ministry of Finance, adopted in 2020, gives micro companies the opportunity to choose between the cost models and the revaluation model in the context of subsequent measurement of owner-occupied property and plant and equipment, which was not possible according to the previous Ordinance (of 2013).

References

Baek, H.Y., & Lee, D.Y. (2016). Motives for and effects of asset revaluation: an examination of South Korean data. *Emerging Markets Finance and Trade*, *52*(12), 2808-2817. Doi: https://doi.org/10.1080/1540496X.2016.1209360

Cairns, D., Massoudi, D., Taplin, R., & Tarca, A. (2011). IFRS fair value measurement and accounting policy choice in the United Kingdom and Australia. *The British Accounting Review*, *43*(1), 1–21. Doi: https://doi.org/10.1016/j.bar.2010.10.003

Karapavlović, N. (2020). Specifičnosti revizije pozicija finansijskih izveštaja merenih po fer vrednosti. *Računovodstvo*, *64*(1-2), 55-80.

Karapavlović, N., & Obradović, V. (2020). Računovodstvo fer vrednosti u Evropskoj uniji i Republici Srbiji. In D. Despotović, G. Milovanović, S. Savović, D. Rejman Petrović & Z. Đurić (Red.), *Aktuelni makroekonomski i mikroekonomski aspekti evropskih integracija Republike Srbije* (str. 483-498). Kragujevac: Ekonomski fakultet Univerziteta u Kragujevcu.

Karapavlović, N., Obradović, N., & Milutinović, S. (2018). Financial reporting of investment properties in Serbian manufacturing enterprises. In V. Babić (Ed.), 5th *International Scientific Conference Contemporary Issues in Economics, Business and Management* (pp. 445-454). Kragujevac: Faculty of Economics University of Kragujevac.

Karapavlović, N., Obradović, V., & Bogićević, J. (2020). The use of historical cost and fair value for property and plant and equipment measurement: Evidence from the Republic of Serbia. *Economic Annals*, *65*(227), 95-118. Doi: https://doi.org/10.2298/EKA2027095K

Lourenço, I.C., Sarquis, R., Branco, M.C., & Pais, C. (2015). Extending the classification of European countries by their IFRS practices: a research note. *Accounting in Europe*, *12*(2), 223–232. Doi: https://doi.org/10.1080/17449480.2015.1111520

Mäki, J., Somoza-Lopez, A., & Sundgren, S. (2016). Ownership structure and accounting method choice: a study of European real estate companies. *Accounting in Europe*, *13*(1), 1–19. Doi: https://doi.org/10.1080/17449480.2016.1154180

Malinić, D. (2009). Računovodstvo fer vrednosti i volatilnost finansijskih izveštaja u uslovima finansijske krize. *Ekonomika preduzeća*, *57*(7-8), 308-326.

Mamić Sačer, I., & Zyznarska-Dworczak, B. (2020). Assets measurement principles according to Croatian and Polish accounting standards. *Croatian Economic Survey*, *22*(1), 41-64. Doi: https://doi.org/10.15179/ces.22.1.2

Mitrović, A., Knežević, S., & Veličković, M. (2015). Ratio analysis specifics of the family dairies' financial statements. *Economics of Agriculture*, *62*(4), 1061-1078. Doi: https://doi.org/10.5937/ekoPolj1504061M

Muller, K.A. III, Riedl, E.J., & Sellhorn, T. (2008). Consequences of voluntary and mandatory fair value accounting: evidence surrounding IFRS adoption in the EU real estate industry. *Working Paper* 09-033, Boston: Harvard Business School.

Obradović, V., & Karapavlović, N. (2014). Finansijsko izveštavanje o nekretninama, postrojenjima i opremi u Srbiji. *Računovodstvo*, *58*(11-12), 38-50.

Pantelić, M. (2019). Implementation of fair value accounting in Serbia: empirical research. *Ekonomika preduzeća*, *67*(5-6), 345-355. Doi: https://doi.org/10.5937/EKOPRE1906345P

Pavić, I., Mamić-Sačer, I., & Brozović, M. (2016). Do Croatian quoted companies satisfy IFRS disclosure requirements of accounting estimates for investment property?. *Procedia Economics and Finance*, *39*(2016), 389-398. Doi: https://doi.org/10.1016/S2212-5671(16)30340-9

Perčević, H., Hladika, M., & Valenta, I. (2020). The analysis of the appliance of fair value concept in Croatian companies from real sector. In: M.H. Bilgin, H. Danis & Demir E. (Eds.), *Eurasian Economic Perspectives. Eurasian Studies in Business and Economics*, *14*(1), 17-29. Cham: Springer. Doi: https://doi.org/10.1007/978-3-030-53536-0_2

Pobrić, A. (2019). The application of fair value accounting in Bosnia and Herzegovina. *Acta Economica*, *17*(31), 149-167. Doi: https://doi.org/10.7251/ACE1931149P

Prewysz-Kwinto, P. & Voss, G. (2016). Investment property in the financial statements of capital groups listed on the Warsaw stock exchange. *European Journal of Economic and Business Studies*, *4*(1), 230–237. Doi: https://doi.org/10.26417/ejes.v4i1.p229-236

Procházka, D. (2011). The role of fair value measurement in the recent financial crunch. *Prague Economic Papers*, *39*(1), 71–88.

Radić, S. (2012). Računovodstvo fer vrednosti kao faktor unapređenja efikasnosti finansijskog tržišta. *Računovodstvo*, *56*(9-10), 5-18.

Singh, J.P., & Doliya, P. (2015). On the audit of fair value measurements. *Ekonomski horizonti*, *17*(1), 61-71. Doi: https://doi.org/10.5937/ekonhor1501061s

Stojanović, R. (2016). Koncept fer vrednosti versus nabavne vrednosti. *Računovodstvo*, *60*(2), 66-87.

Széles, Zs., Dečman, N., & Rep, A. (2019). Opportunities and Challenges in the Practical Application of Fair Value Model in the Field of SMEs Financial Reporting. In Resperger, R. & Czeglédy, T. (Eds.), *Proceedings of the International Scientific Conference Modern economy, smart development* (pp. 475-489). Sopron: University of Sopron Press.

Taplin, R., Yuan, W., & Brown, A. (2014). The use of fair value and historical cost accounting for investment properties in China. *Australasian Accounting Business and Finance Journal*, *8*(1), 101–113. Doi: http://dx.doi.org/10.14453/aabfj.v8i1.6

The Institute of Chartered Accountants in England and Wales (2007). *EU Implementation of IFRS and the Fair Value Directive: A report for the European Commission*. London: ICAEW Financial Reporting Faculty.

Tušek, B., Decman, N., & Rep, A. (2018). Fair value measurement of long-term tangible assets: existing experience and possible challenges for Croatian small manufacturing enterprises. In K.S. Soliman (Ed.), *32nd International Business Information Management Association Conference* (pp. 1461-1473), 15-16 November 2018, Seville, Spain.

Vasilev, D., Cvetković, D., & Grgur, A. (2019). Detection of fraudulent actions in the financial statements with particular emphasis on hotel companies. *Hotel and Tourism Management*, *7*(1), 115-125. Doi: https://doi.org/10.5937/menhottur1901115V