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THE CHALLENGES IN AUDITING FINANCIAL STATEMENTS AT FAIR VALUE CONCEPT (FVC) IN DEVELOPING ECONOMIES: THE CASE OF REPUBLIC OF SERBIA

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Abstract. *Some balance sheet items are the result of judgments, including fair value estimates, so the relevant evidence is very complicated to collect by auditors, thus the risk of misstatements in financial statements is inevitably greater. The research objective of this paper is to: a) highlight the problems encountered by auditors from developing countries when auditing FV accounting estimates; b) identify the challenges that auditors from Serbia face in auditing FV accounting estimates; c) consider the possibility of adequately responding to these audit challenges in Serbia. The research confirmed that the problems of auditors in Serbia in the audit of FV estimates are generated by inefficient capital markets, and that they are primarily in the field of FV assessment which are connected to the impossibility of applying the market model and higher volatility of FV financial statements, as well as those in the field of auditing techniques used in providing assurance on the objectivity of FV assessments in various business activities, which requires additional training of auditors. Thus, the research confirmed the similarity of the problems in Serbia with the problems in the auditing FV estimates in developing countries.*

Key words: *fair value concept, IFRS 13, financial statement audit, ISA 540*

JEL Classification: M41, M42, C10, C34

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1. INTRODUCTION

The primary reason for introducing the FVC in accounting theory and practice was to bring financial statements close to the facts, although experience has shown that the application of FV and "creative accounting" opens room for manipulation of financial statements. The need to disclose assets at fair value arises as a result of the shortcomings of traditional accounting based on historical cost concept, which most often results in an underestimation of assets and financial results in the current period, but also due to the fact that the disclosure at FV allows for the recognition of unrealized income and gains, which enhances the picture of the company's financial position and disclosed performance. This brings an additional dose of subjectivity to financial statements and the risk of material misstatements in financial statements becomes greater.

Numerous researches related to the specifics of auditing FV assessment in developing countries have stimulated research in this paper on the case of Serbia, with the aim of identifying important challenges that auditors in Serbia face in auditing FV assessments and consider the possibilities to respond to them.

2. LITERATURE REVIEW

FVC in accounting is based on abandoning a centuries-old accounting model based on historical costs, conservatism, and the principle of income and expense causation. Nevertheless, FV-based accounting came to light without actual evidence that its estimates are better than traditional practice. This was observed even before the great economic crisis of 2008, when some practical cases suggested that the application of FV accounting has the potential to lead to misleading results (Stojilkovic, 2011, pp. 92-97). The Enron case showed that FV estimates used were largely based on inputs known today as Level 3 inputs. Enron used the FV model based on discounting the value of long-term gas contracts and derivatives and thus recognized in the ledgers (non-existent) assets of 21 billion dollars, i.e. 31% of their total assets (Haldeman, 2006, p. 5). At the same time, the FV was used to evaluate the managers' performance and to reward them in the form of bonus payments (Benston, 2006, p. 465).

Accounting estimates by FV have led auditors and audit standards makers to understand not only the assessment models and processes by which management defines model inputs, but also potential management misuse and probable errors in model application, market input identification and assumptions. Auditors should also understand possible sources of audit errors in the audit of financial statements under the FV. Also, auditors must acquire the knowledge and continuous training to audit FV estimates (Carpentier, Labelle, Laurent, Suret, 2008, p. 2). International audit standards makers, consciously or not, change the role of independent auditors who, from independent controllers of the truthfulness and objectivity of financial statements turn into subjective experts in FV assessment (Haldeman, 2006, p. 8).

Numerous financial scandals in early 21st century, like FV estimation problems following the 2008 financial crisis caused a decline in confidence in corporate financial statements, especially FV-based ones, on financial markets in developed countries where these involve central financial institutions, while on underdeveloped financial markets (late transition countries) this problem is not so obvious (due to negligible volume of trade and absence of investors), but is still present. This also demonstrated the exceptional importance of auditing and its safeguarding role, as well as the unsustainable self-regulation of auditors.

Research on the challenges of auditing financial statements based on the FVC in countries with developed economies and financial markets has shown the following:

- Conceptual accounting shift from historical cost to FV – due to the high dose of subjectivism in estimating FV, as well as thepotential for widespread investor deception, a large number of companies take a conservative approach and/or lack initiative to use the FV concept (Haldeman, 2006, p. 11; Cairns, Massoudi, Taplin, & Tarca, 2009, p. 1);
- Increased volatility (the occurrence of major changes in the value of assets and liabilities in the balance sheet and greater fluctuations in the financial result) is due to market instability, inaccuracies and errors in measuring fair value, combined with historical cost accounting in a hybrid reporting model, as well as the feedback effects of its procyclicality (Malinić, 2009, pp. 319,321; Pantelić, 2021, pp. 207.)
- Auditors focus on testing subjective inputs (assumptions and estimation methods/ models) in FV measurement and assessing the adequacy of the measurement method used and the reasonableness of management's assumptions. This causes auditors to acquire knowledge regarding the FV estimate (Joe, Vandervelde, Wu, 2014, p. 1; Griffith and authors, 2012, p. 35; Badertscher, Burks, & Easton, 2012, pp. 59,90; Benston, 2006, pp. 465,484; Doliya, Singh. 2016, pp. 37, 48; Yao, Percy, Hu, 2015, pp. 31,45; Pantelić, 2021, pp. 205,207;);
- Because auditors often lack the knowledge to evaluate FV accounting estimates, they rely on experts (estimators), and do not test the key assumptions and estimation methods used by the estimator. Such experts need to be educated in order to adequately apply the FV concept (Joe, Vandervelde, Wu, 2014, p. 7; Griffith and authors, 2013, p. 35; Peng, Bewley, 2009, p. 13.);
- The need to increase the auditors' awareness of the risks associated with the client's business in FV measurement (Eilifsen, 2010, pp. 79, 93; Dauber, 2009, p. 162);
- The need for special audit obligations in the case of FV accounting fraud (assessing the risks of material misstatement in financial statements, including the risks of criminal activity; gaining an understanding of the design and implementation of client's internal controls for the application of FV accounting in financial statements; conducting audit procedures designed to ensure that FV estimates are made in accordance with the current financial reporting framework, including disclosures in notes to financial statements) (Zack, 2009, p. 203);
- Three key challenges for FV auditing have been identified: unrealized gains and losses, market liquidity or illiquidity, and "distorted" cash flow distribution, with market liquidity being the biggest challenge for auditors (Ryan, 2008, p. 1610);
- Multiple listing of some companies (simultaneous listing on the stock exchanges in China, Hong Kong and the USA) results in different prices for the shares of the same company, necessitating complicated determination of FV (Peng, Bewley, 2009, pp. 26-27);
- High-quality internal audit minimizes the auditor's efforts in auditing FV estimates. (Gremling and authors, 2004, p. 197).
- Research on the challenges of auditing financial statements under the FV concept in developing countries and in underdeveloped and inactive financial markets has shown the following:
- In most cases, auditors support the FV concept in financial reporting, but note problems with the application of this concept in both accounting and auditing (Bratten, Gaynor, McDaniel, Montague, Sierra, 2013, p. 11);
- Auditors sometimes do not understand the key risk factors in FV models used by client management due to lack of knowledge of the methods and models used, resulting

in misinterpretation of key assumptions of the models used (Carpentier, Labelle, Laurent, Suret, 2008, p. 1);

- The need for greater involvement of experts in assessing fair value and their training (Carpentier, Labelle, Laurent, & Suret, 2008, p.1; Kumarasiri, Fisher, 2011, p. 82; Okafor, Ogiedu, 2012, pp. 420-421.);
- The existence of inactive markets for assets and liabilities subject to valuation, which complicates FV measurement on a market basis. (Kumarasiri, Fisher, 2011, p. 68; Amanamah, Owusu, 2016, p. 26;);
- Difficulties regarding variations in FV measurement techniques in different industries (Kumarasiri, Fisher, 2011, p. 82);
- Problems in the application of future events and assumptions in return-based FV estimation models (Kumarasiri, Fisher, 2011, p. 82).

The application of the FV concept in financial reporting has greatly contributed to increased financial results, i.e. artificially increased profits and dividends in the financial statements of companies that have misapplied this method or due to inherent limitations in the application of this method in both developed and non-developed financial markets as well as countries that have experienced a market boom (Siam, Abdullatif, 2011; Nguyen, 2019) or the financial market crisis (Laux, Leuz, 2009; Procházka, 2011; Badertscher, Burks, & Easton, 2012). This has created numerous challenges for auditors, who are expected to express relevant opinion in terms of high inherent risk, since FV valuation arises as a result of judgment.

3. KEY CHALLENGES IN AUDIT OF FINANCIAL STATEMENTS AT FVC IN THE REPUBLIC OF SERBIA

Specific economic conditions, as well as underdeveloped and under-active financial markets in Serbia, cause specific audit of FV estimates in these areas. Auditors face challenges posed by the effects of applying the FVC in a) evaluating FV estimates in Serbia and b) selecting techniques and procedures in auditing FV financial statements.

3.1. Challenges for Serbian auditors in evaluating FV estimates

The regulatory framework for financial reporting under the FVC in the Republic of Serbia is the Law on Accounting, as well as IFRS 13: Fair Value Measurement and other international standards that indirectly relate to the valuation of FV assets and liabilities.

The specificity of IFRS 13 application in financial reporting in Serbia is conditioned by underdeveloped financial market, which causes problems in the selection of an adequate FV estimation method and the specific definition of levels in the hierarchy of inputs for FV determination.

IFRS 13 provides that a company should apply valuation techniques in line with the circumstances with sufficient data available to measure FV and the maximum application of relevant observable inputs and the minimum use of non-observable inputs. The three most common valuation techniques used in FV estimation are (www.mfin.gov.rs): market access, cost approach and revenue approach

IFRS 13 introduces, for the first time, FV hierarchy that classifies valuation inputs used to measure FV in three levels. In Serbia, as a developing economy, active capital markets are underdeveloped, which complicates FV measurement based on market approach. This

also conditions the specific three-level hierarchy for estimating FV in Serbia (Rupić, Bonić, 2015, p. 135): level 1, level 2 and level 3 inputs.

Level 1 inputs in Serbia are inputs on active financial markets at quoted prices for the Belgrade Stock Exchange listed and prime market stocks and bonds, the Commodity Exchange Novi Sad quoted prices of agricultural products, as well as inputs from publicly organized sales at the publicly available real estate prices and the catalog sale of motor vehicles of the Serbian Auto-Moto Association (Negovanović, 2014, p. 182). The level 1 inputs in Serbia are scarce, due to underdeveloped financial markets. Perhaps the best illustration of the underdeveloped financial markets in the Republic of Serbia is the number of companies listed on the Belgrade Stock Exchange "prime market", being only four at the time of writing this paper: NIS ad Novi Sad, Airport Nikola Tesla ad Belgrade, Energoprojekt holding ad Belgrade and Fintel energija ad Belgrade.

In some cases, the inputs for FV measurement of assets or liabilities can be classified into categories within different levels of the FV hierarchy. In these cases, FV measurement is categorized as a whole at the same level of the FV hierarchy as is the lowest-level input that is significant for the entire measurement. Assessing the significance of a particular input for the entire measurement requires judgment. The availability of relevant inputs and their relevant subjectivity may influence the choice of appropriate valuation techniques. However, the FV hierarchy prioritizes the inputs to the choice of valuation technique rather than the valuation techniques used to measure FV.

Level 2 inputs are inputs that are observable for an asset or liability directly or indirectly on the market. Level 2 inputs include quoted prices for similar assets or liabilities on an active market, quoted prices for identical or similar assets or liabilities on markets that are not active. An example of level 2 inputs in Serbia are inputs with market prices for company shares on a multilateral trading platform (MTP).

Level 3 inputs are unobservable inputs for an asset or liability, which should be applied to FV measurement if relevant observable inputs are not available. Unobservable inputs should reflect the assumptions that market participants would use when determining the price of an asset or liability, including risk assumptions. Risk assumptions include the risk inherent in a particular valuation technique applied to FV measurement, as well as the risk inherent in Level 3 inputs. IFRS 13 provides that an entity should develop unobservable inputs using the best available information under the given conditions, which may include the entity's own data. An example of Level 3 input in Serbia may include FV estimate of the share for which there is no active market, nor quoted prices for similar entities that were subject to sale, so the application of the return method based on the present value of future cash flows projected by management is imposed as a logical choice.

3.2. Challenges in auditing financial statements based on FVC in Serbia regarding the selection of techniques and procedures in the audit of FV estimates

The regulatory framework within which auditors operate in Serbia is the Audit Law and ISA 540: Auditing Accounting Estimates, including Fair Value Accounting Estimates, and Related Disclosures.

The FV estimation is intended to determine the exit price on the measurement date from the perspective of a market participant who has an asset or a liability (www.mfin.gov.rs). According to ISA 540, an auditor should obtain sufficient and adequate audit evidence that the

accounting estimates are reasonable, including FV accounting estimates in financial statements, and related disclosures thereon. Also, accounting estimates based on significant assumptions are characterized by a relatively high degree of uncertainty, which is especially true in the case of FV accounting estimates of non-publicly traded derivatives, as well as FV accounting estimates based on a specialized client-developed model or estimates based on assumptions that cannot be verified on the market.

The challenges and problems auditors face in auditing FV financial statements in Serbia are multiple. First of all, FV accounting is a much bigger challenge for auditing than historical cost accounting. Auditors do not have sufficient skills in assessing FV estimates, which is partly due to the underdeveloped and inactive financial market in Serbia. Also, there are very few experts in Serbia (real estate appraisers, actuaries and other specialists) who have the necessary knowledge and skills in applying the appropriate FV estimation techniques and International Valuation Standards that auditors could engage in the audit process. There are also difficulties with the application of variations in FV measurement techniques in different industries, as well as with the application of future events and assumptions in FV estimation models. Assistance in addressing these challenges auditors in Serbia face should come from audit professional organization – Chamber of Chartered Certified Auditors. The Chamber should identify the main problems auditors encounter in auditing financial statements under the FVC and assist in resolving them, and provide auditors with additional professional training on the valuation of assets and liabilities under the FV in order to conduct a quality audit under this concept.

4. RESEARCH HYPOTHESIS, PHASES AND METHODOLOGY

The following hypotheses have emerged from the research of the challenges in audit of financial statements at FVC in Serbia:

Main hypothesis (H): The underdeveloped and under-active financial market in Serbia does not provide sufficient conditions for the application of all FV accounting (FVA) techniques, and thus conditions specific challenges to audit of FVA estimation.

Auxiliary hypotheses:

(H1): Auditors' awareness of the application of FVC in Serbia is closely related to the understanding of IFRS 13 and ISA 540;

(H2): The dominant challenge in FVA in Serbia is the complexity of assessing FV estimates and the need to hire an expert (appraiser, actuary, expert) for FV estimation;

(H3): Auditors in Serbia do not have sufficient technical knowledge of the techniques and procedures for auditing FVA estimation.

The stages in the research of the challenges in audit of financial statements at FVC in Serbia are:

Phase 1 – Selection of variables from the sample based on the criteria of their relevance for the application of the FVC in audit in the Republic of Serbia.

Phase two – Applying descriptive statistics to consider homogeneity of respondents' responses to challenges in financial reporting and auditing at FVC in Serbia.

Phase three – Applying factor analysis of selected variables using the PCA (Principal Component Analysis) method to reduce the constraints of variables and create new latent variables that would play the role of independent variables in the regression analysis.

Phase four – Applying multiple regression analysis to measure the impact of three independent variables on the dependent variable. The dependent variable implies that the belief about the reality of valuation under the FV in Serbia is harder to come by, much like in other developing countries, compared to developed countries. The three independent variables are:

- Auditor's awareness of the importance of fair value estimation issues. This variable contains 4 components: 1) Auditors fully understand IAS 39; 2) Auditors fully understand IFRS 13; 3) IFRS 13 seeks to reduce the subjectivity of an accounting estimate that has an effect on the amounts in the financial statements; 4) Auditors fully understand ISA 540.
- Challenges of auditors in evaluating accounting estimates under FV. This variable contains 5 components: 1) Determining the FV of assets is significantly more complex than determining the historical cost of assets; 2) Determining FV assets and liabilities is a time-consuming task; 3) Most assets and liabilities subject to FV estimation in business practice in Serbia are not subject to transactions on active markets; 4) FVC requires the auditor to continuously acquire additional knowledge regarding the specific assets and liabilities that are subject to FV estimation; 5) Verification of FV measurement of assets and liabilities requires the involvement of an expert.
- Challenges of auditors conditioned by the choice of techniques and procedures in auditing the financial statements under the FV. This variable contains 3 components: 1) Auditors in Serbia do not have sufficient technical knowledge on FV measurement; 2) Techniques for determining FV may vary significantly from one industry to another; 3) Auditors have effective procedures for verifying the accuracy of transactions and balances that are valued at cost, but these procedures are not very helpful in measuring FV.

The methodology for researching the challenges in audit of financial statements at FVC in Serbia includes: a) descriptive statistics, b) factor analysis and c) multiple regression analysis.

4. Sample Description and Descriptive Statistics of the Variables Selected

The research used the primary source of data obtained through the survey method. The basic research tool used was the questionnaire. The questionnaire is a pre-prepared set of questions/statements to be answered by the respondents in the form of expressing agreement on a one-to-five scale (Likert scale), where 1 indicates total disagreement with the statement (I totally disagree), 2 indicates disagreement with the statement (I don't agree), 3 indicates indeterminacy (I neither agree nor disagree), 4 indicates agreement (I agree) and 5 indicates full agreement (I fully agree).

The questionnaire is to a certain extent based on world experience, i.e. on previous research by Kumarasiri and Fisher (66-87). These authors conducted a survey in 2011 on the audit perception of FVA in developing countries and concluded that auditors are generally in favor of applying FVA, although they are aware of the specific issues and issues they face when performing audit.

The questionnaire was sent to licensed certified auditors, members of the Chamber of Certified Auditors from Belgrade, who are auditing the financial statements in our country under the Audit Law. The aim of the survey is to collect information directly from the questionnaire from practitioners who, in their daily professional work, face the challenges posed by the application of FVC.

The survey was conducted in November and December 2014 by sending the questionnaire electronically to all 258 licensed certified auditors in Serbia. The register of licensed certified auditors is publicly available on the Chamber of Chartered Certified Auditors website. Due to the complexity of the subject matter and the purpose of the research, and in order to obtain as representative results as possible, the questionnaire was only sent to licensed certified auditors, not to all auditors in Serbia. Of the total number of licensed certified auditors in Serbia, 86 auditors completed the questionnaire, or one third (33.33%), i.e. every third licensed certified auditor answered the questionnaire. The data collected was statistically processed using IBM SPSS Statistics 20 software.

Regarding the age structure of the respondents, 40% of the respondents were between 26 and 40 years old, 32% of the respondents between 41 and 55 years of age, while auditors over 56 made up 28% of the respondents.

The number of male and female respondents was almost the same (51% vs. 49%). Regarding the position of certified auditor in the audit company, 47% of the respondents were audit partners, 45% audit managers and 8% auditors (senior and junior). Another important parameter of the respondent structure in terms of sample representativeness and the relevance of research results relates to professional audit experience, where as many as two thirds of respondents (65%) had more than ten years of audit experience, 26% between six and ten years, and only 9% between one and five years.

It is interesting to analyze the structure of the respondents from the point of view of the audit firm in which they are employed (the so-called "Big Four" (KPMG, Price Waterhouse Coopers, Deloitte & Touche, Ernst & Young or other audit firms), with auditors working for the so-called "Big Four" audit firms making up 14% of the respondents, while the other 86% referred to auditors employed by other audit firms in Serbia. According to publicly available data from Chamber of Chartered Certified Auditors for 2014, the "Big Four" auditors had 42 licensed certified auditors, which is 16% of the total number of licensed certified auditors in Serbia. The share (percentage) of the total number of auditors working in large audit firms answering the questionnaire almost coincides with the proportion of "Big Four" auditors in the total population of licensed certified auditors in our country (14% vs. 16%).

Respondents' views, which are the research subject in this paper, are grouped into 3 areas:

1. Justification for the FVA application
2. Auditors' awareness of the issue of FV measurement
3. Audit challenges regarding the FV accounting estimates and the selection of techniques and procedures in the audit of FV estimates.

Each of these areas gave a set of views that, in the author's view, was directly related to the research subject in this paper. The mean values of the degree of respondents' agreement with the selected statements, as well as the variance in attitudes are given in the following table.

Table 1 Descriptive statistics of selected variables (statements)

Group	Statement	Mean	Std. dev.
Justification of FVA implementation in Serbia	The belief in fair value estimate reality is harder to come by in developing countries like Serbia than in developed countries (Var1)	4.35	0.682
Auditors' awareness of FV measurement issues	Auditors fully understand IAS 39: Financial Instruments: Recognition and Measurement (Var2)	2.77	1.28
	Auditors fully understand IFRS 13: Fair Value Measurement (Var3)	3.42	0.99
	IFRS 13: Fair Value Measurement seeks to reduce subjectivity in an accounting estimate that has an effect on the amounts in the financial statements (Var4)	3.72	0.85
	Auditors fully understand ISA 540 Audit of accounting estimates, including fair value accounting estimates and related disclosures (Var5)	3.49	0.93
Audit challenges regarding the evaluation of FV accounting estimates and the choice of techniques and procedures in auditing FV estimates	Auditors in the Republic of Serbia do not have sufficient technical knowledge to measure fair value (Var6)	3.84	1.06
	Determining the fair value of assets is significantly more complex than determining the cost of assets (Var7)	4.65	0.647
	Determining the fair value of assets and liabilities is a time consuming task (Var8)	4.42	0.727
	Fair value techniques may vary significantly from industry to industry (Var9)	4.37	0.81
	Most assets and liabilities that are subject to fair value measurement in our business practice are not subject to active market transactions (Var10)	4.12	0.90
	Auditors have effective procedures for verifying the accuracy of transactions and balances that are valued at cost, but these procedures are of little use in measuring fair value (Var11)	3.72	1.025
	Fair value requires the auditor to continuously acquire additional knowledge of the specific assets and liabilities that are being measured at fair value (Var12)	4.37	0.87
	Verification of fair value measurement of assets and liabilities requires the involvement of an expert (Var13)	4.09	0.94

Source: Authors' calculations

Judging by mean values, respondents expressed the highest degree of agreement with the statement *Determining the fair value of assets is significantly more complex than determining the cost of assets* (4.65), while standard deviation of dispersions in the respondents' answers in this regard is the lowest (0.65). Auditors expressed the lowest degree of agreement with the statement *Auditors fully understand IAS 39: Financial Instruments: Recognition and Measurement* (2.77), with their views being the most heterogeneous in this respect (standard deviation is 1.28).

5. RESEARCH RESULTS AND DISCUSSION

Following descriptive statistics, factor analysis was applied to the data obtained from the survey. Factor analysis is a method of multivariate analysis, which is used in research to reduce the number of variables while retaining the amount of information they carry.

The factor analysis was first applied to the *Auditors' awareness of the issue of FV measurement*.

After verifying that all the assumptions related to the application of factor analysis have been fulfilled, the Principal Component Analysis (Nicoletti et al. 2000) was applied to extract the factors. The purpose of applying factor analysis in this case was to create a new variable that will play the role of composite indicator by which respondents' views of the 4 statements from this group will be expressed. The weights assigned to each of the statements in the composite indicator structure were based on the value of factor loadings (Janković-Milić, Jovanović, 2019). Factor loadings show the degree of agreement of the original variable (statement) with the newly formed composite indicator, while squared factor loadings show the degree of variability of the original variable explained by the newly created factor, i.e. composite indicator. In accordance with the structure of the variables involved, this indicator has been called *Auditors' awareness of the issue of FV measurement* (CI1).

Table 2 Factor loadings and weights in the first composite indicator

Statement (variable)	Factor loadings	Weights
Var2	0.800	0.252
Var3	0.856	0.269
Var4	0.714	0.224
Var5	0.812	0.255

Source: Authors' calculations

Based on the weight value (Table 2), it can be observed that all four statements are generally equally represented in the CI1 structure. Nonetheless, greater share (significance) of views related to the statement *Auditors fully understand IFRS 13: Fair Value Measurement* may be noted (weight = 0.269), while the least important views were with the statement *IFRS 13: Fair Value Measurement seeks to reduce subjectivity in an accounting estimate that has an effect on the amounts in the financial statements* (weight = 0.224).

Factor analysis was also applied to the respondents' views of the *Audit challenges regarding the FV accounting estimates*. The application of the Principal Component Analysis in factor extraction in this case resulted in the extraction of two factors.

Table 3 Factor loadings and weights in the second composite indicator

Statement	Factor		Weights	
	1	2	Factor 1	Factor 2
Var6		0.679		0.324
Var7	0.494		0.153	
Var8	0.820		0.254	
Var9		0.634		0.302
Var10	0.493		0.153	
Var11		0.784		0.374
Var12	0.680		0.211	
Var13	0.741		0.229	

Source: Authors' calculations

According to the values of factor loadings, the first factor in this factor analysis consists of the following statements:

- Determining FV assets is much more complex than determining the historical cost of assets;
- Determining FV assets and liabilities is a time-consuming task;
- Most assets and liabilities subject to FV estimation in Serbia are not subject to transactions on active markets;
- FVC requires the auditor to continuously acquire additional knowledge related to the specific assets and liabilities subject to the FV estimation;
- Verification of FV measurement of assets and liabilities requires the involvement of an expert.

Given the content of the above statements, a factor created may be called *Auditors' challenges in evaluating FV accounting estimates* (CI2). In this case, the weights, which show the importance of certain statements in the composite indicator structure, were calculated on the basis of factor loadings. According to the weight values, the most important in the structure of this indicator is the statement *Determination of FV assets and liabilities is a time-consuming task* (0.254), while the equally low (weight = 0.153) importance goes to statements *Determination of FV assets is much more complex than determining the historical cost of assets* and *Most assets and liabilities subject to FV estimation in Serbia are not subject to transactions on active markets*.

The following statements are included in the structure of the second factor:

- Auditors in Serbia do not have sufficient technical knowledge on FV measurement;
- Techniques for determining FV may vary significantly from one industry to another;
- Auditors have effective procedures for verifying the accuracy of transactions and balances that are valued at historical cost, but these procedures are of little use in measuring FV.

The content of the statements included in the second factor suggests the name of the newly created composite indicator, i.e. *Auditors' challenges conditioned by the choice of techniques and procedures in auditing financial statements under FV* (CI3). According to the weight values, which indicate the relative importance of certain statements in the structure of this indicator, it can be concluded that the greatest relative importance in the structure of this indicator goes to the statement *Auditors have effective procedures for checking the accuracy of transactions and balances that are valued at historical cost, but these procedures are not of great use when measuring FV* (0.374). The following statement, by importance, is that *Auditors in Serbia do not have sufficient technical knowledge on FV measurement* (0.324), while the least significant statement in the structure of this indicator FV is *Determination techniques may differ significantly from one industry to another* with a weight of 0.302.

Multiple regression analysis was applied to examine the impact of respondents' views on the *Auditors' awareness of the issue of FV measurement* (CI1), *Audit challenges regarding the FV accounting estimates* (CI2), and *Auditors' challenges conditioned by the choice of techniques and procedures in auditing financial statements under FV* (CI3) on the belief that fair value estimate reality is harder to come by in developing countries like Serbia than in developed countries (Var1). In the created multiple regression model, variables CI1, CI2 and CI3 were denoted as independent variables, while Var1 had the role of a dependent variable. First, the assumptions for applying the regression analysis

were checked and it was concluded that there were no obstacles for the application of this method of statistical analysis.

Although the adjusted determination coefficient (0.127) points to the fact that the selected independent variables explain only 12.7% of the variability of the dependent variable, testing its significance leads to the conclusion that the estimated model is representative (Sig. 0.003) (Tabachnick, Fidell, 2007. p. 147).

Table 4 ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15.827	3	5.276	5.106	.003[a]
	Residual	84.731	82	1.033		
	Total	100.558	85			

a. Predictors: (Constant), CI1, CI2, CI3.
b. Dependent Variable: Var1

The values of the regression model parameters were estimated using ordinary least squares. This method provides parameter estimates that are at the same time unbiased, consistent and efficient.

Table 5 Regression coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Variables	B	Std. Error	Beta	T	Sig.
(Constant)	-1.477	1.250		-1.181	.241
CI1	.458	.148	.345	3.093	.003
CI2	.491	.200	.262	2.448	.017
CI3	.362	.171	.240	2.120	.037

Dependent Variable: Var1

The standardized values of the regression coefficients indicate the importance of the independent variables in predicting the value of the dependent variable. According to these values, the highest relative importance in predicting the belief that fair value estimate reality is harder to come by in developing countries like Serbia than in developed countries belongs to *Auditors' awareness of the issue of FV measurement* (0.345), while the views on *Auditors' challenges regarding the FV accounting estimates* and *Auditors' challenges conditioned by the choice of techniques and procedures in the audit of financial statements by FV* are of minor importance. Based on the results of testing the significance of the regression coefficients, it can be concluded that the impact of all independent variables is statistically significant (Sig. <0.05).

6. CONCLUSION

The survey showed that the respondents are most in agreement with the statement that the *Determination of FV assets and liabilities is much more complex than the determination of historical costs* (mean value is 4.65) and their views on this statement are the most consistent (standard deviation is 0.65).

Based on the results of factor analysis:

- Within the *Auditors' awareness of the issue of FV measurement*, the auditor's views regarding the *Understanding IFRS 13: Fair value measurement* are of the greatest relative importance. Auditors in the Republic of Serbia, as well as auditors in other developing countries, need more additional professional training to fully understand IFRS 13, compared to auditors in developed countries.
- In the structure of *Auditors' challenges in evaluating FV accounting estimates*, the statement *Determining FV assets and liabilities is a time-consuming task* is the most important. This also leads to more time (number of working hours) required to audit a company measuring assets and liabilities per FV. It should be borne in mind that the average fee for audit services in Serbia has been declining in recent years, primarily due to the increased number of audit firms and licensed certified auditors, on the one hand, while on the other, the number of companies that are bound by statutory audits is more or less constant. Due to the above, the possibilities of auditors in Serbia for additional professional development in understanding the concept of FV and auditing in the circumstances of FV application, or hiring an expert to evaluate by FV, have been further reduced. The above calls into question the quality of the audit carried out under the conditions of FV application.
- Within the *Auditors' challenges conditioned by the choice of techniques and procedures in auditing financial statements under the FV*, the most important statement is *Auditors have effective procedures for verifying the accuracy of transactions and balances that are measured at historical cost*, but these procedures are of little use in measuring at FV. Audit companies have a growing need to hire external experts in the field of permanent property valuation according to FV but their number in the Republic of Serbia is relatively small, especially when it comes to FV estimation of plants and equipment.

Based on the results of the regression analysis: The greatest relative importance in predicting the belief that fair value estimate reality is harder to come by in developing countries like Serbia than in developed countries belongs to *Auditors' awareness of the issue of FV measurement*.

The research showed that auditors in Serbia face similar problems in auditing FV assessments as auditors in other developing countries, and that solving them requires additional training of auditors and an increased need for audit firms for assessment experts. An important factor limiting the application of FVC and revision of FV estimates in Serbia are underdeveloped capital markets, which requires the development of techniques for FV assessment for various business activities, which are not based on market model estimates, and future research in Serbia related to this topic could be focused in that direction.

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IZAZOVI U REVIZIJI FINANSIJSKIH IZVEŠTAJA U USLOVIMA KONCEPTA FER VREDNOSTI U EKONOMIJAMA U RAZVOJU: SLUČAJ REPUBLIKE SRBIJE

Neke stavke bilansa stanja su rezultat prosuđivanja, uključujući procene fer vrednosti, tako da je revizorima veoma teško da prikupe relevantne dokaze, pa je rizik od pogrešnog prikazivanja u finansijskim izveštajima je neizbežno veći. Cilj istraživanja u ovom radu je a) isticanje problema sa kojima se susreću revizori iz zemalja u razvoju prilikom revidiranja računovodstvenih procena FV; b) identifikovanje izazova sa kojima se susreću revizori iz Srbije prilikom revidiranja računovodstvenih procena FV; c) sagledavanje mogućnosti adekvatnog odgovora na te izazove u reviziji u Srbiji. Istraživanje je pokazlo da su problemi revizora u Srbiji u reviziji procena po FV generisani neefikasnim tržištima kapitala, i da se prvenstveno nalaze na polju procene FV što je povezano sa nemogućnošću primene tržišnog modela i pojačanom volatilnošću finansijskih izveštaja, kao i na polju revizorskih tehnika koje se koriste za pružanje uveravanja o objektivnosti procena FV u različitim delatnostima, što zahteva dodatne edukacije revizora. Time je istraživanje potvrdilo sličnost porblema u Srbiji sa problemima u reviziji FV procena u zemljama u razvoju.

Ključne reči: *koncept fer vrednovanja, MSFI 13, revizija finansijskih izveštaja, MSR 540*