THE IMPACT OF THE APPLICATION OF THE ACCOUNTING CONCEPT OF FAIR VALUE ON THE QUALITY OF FINANCIAL STATEMENTS OF BUSINESS ENTITIES IN BOSNIA AND HERZEGOVINA

Abstract

The primary objective of financial reporting in a modern market economy, which is based on the capital market, is to inform the investor about the financial position of a business entity. The unavoidable theme in modern accounting research is the valuation of balance sheet positions, regardless of the type and size of the business entity whose reports are the subject of this paper. The purpose of the research is to investigate whether there is a connection between the frequency of applying the accounting concept of fair value in valuing property positions and the quality of financial statements for businesses in Bosnia and Herzegovina. The target population comprises 34,515 small, medium and large enterprises registered as joint stock companies and limited liability companies in Bosnia and Herzegovina, and the questionnaire will be used as the empirical research instrument. The questionnaire is structured in parts to obtain knowledge about which technique or approach business entities use when using the fair value for the valuation of balance sheet items, and consequently how it affects the relevance, comprehensibility, comparability and credibility of the information presented in the financial statements.

Keywords: Fair value, quality of financial reports, relevance, comprehensibility, comparability, credibility

1. Introduction

In scientific discussions on accounting, the subject of the “concept of evaluating balance sheet positions” is often raised, which provides quality information for external users. The most commonly used measure of value is the historical-cost method, but its shortcomings came to light in the late 1990s, due to the crisis of US financial and savings institutions. As an alternative that largely eliminates the discovered shortcomings, the concept of fair value for balance sheet positions has been proposed by competent institutions. In almost all IAS (International Accounting Standards) and IFRS (International Financial Reporting Standards), some form of fair value is applied, either as an option or mandatory requirement to evaluate balance sheet items/success rates. In recent years,
more specifically in 2011, IFRS 13 - Fair Value Measurement was published, whose role was to eliminate all the uncertainties regarding the concept of fair value in financial reporting. According to this standard, fair value is defined as the price that would be realized by selling some item of property or paid to transfer a liability in an orderly transaction between market participants on the measurement date, the so-called output price. In order to increase consistency and comparability in determining fair value and related disclosures, IFRS 13 establishes a hierarchy that categorizes an in-house valuation technique in three levels, with the highest priority given to quoted prices in existing markets for an identical asset or liability (Level 1 inputs), quoted prices for similar assets or liabilities (Level 2 inputs), and the lowest priority is given to inputs that are not available on the market (Level 3 inputs). The overall goal of the present research is to determine whether and to what extent business entities in Bosnia and Herzegovina prefer the use of some technique of fair value in valuing property positions and how it affects the quality of information presented in the financial statements. In this regard, the research hypothesis reads as follows:

The application of the accounting concept of fair value significantly influences the quality of financial statements of business entities in Bosnia and Herzegovina.

In addition to the key issue being investigated, and the question whether applying the accounting concept of fair value contributes to improving the quality of financial reports of business entities in Bosnia and Herzegovina, it would be useful to include the following issues in the research:

1. To what extent is the application of the concept justified for the financial reporting of business entities on the capital market?
2. Which technique of the accounting concept of fair value is most often used when valuing property positions?
3. What is the structure of the surveyed business entities according to the branch of the economy to which they belong, the size and the export orientation?
4. Are the surveyed businesses subject to a mandatory audit of financial statements?
5. What are the limits of applying the accounting concept of fair value?

Primary research will be conducted using a written test method, i.e. a questionnaire for accountants of the business entities. The test sample will be formed on the basis of a list of registered business entities in the form of joint stock companies or limited liability companies, in accordance with the obligation to apply all IFRSs and IASs. Small companies are not obliged to use all IFRSs and IASs, but in the past years they have been submitting a full set of financial reports. Because of that, small companies will not be excluded from the sample of this research in Bosnia and Herzegovina. The questionnaire will be divided into several groups of questions. The first group will refer to general information about a business entity. The next group of questions will cover issues related to the quality of financial reports. A third set of questions will be formulated for the purpose of verifying information on the application of the fair value concept, in the form of a Likert scale with accountants agreeing with the above-mentioned assertions, which cannot be obtained on the basis of financial and auditor reports. The software package offered by the Statistical Package for Social Sciences (SPSS v. 21.0) will be used to analyze the collected data. Correlation and regression analysis will be used to determine the relationship between the defined variables.

2. An overview of current research

The fundamental qualitative characteristics of the financial statements are relevance and credibility. In order to understand the role of the qualitative characteristics of the financial statements, it is necessary to start from the basic objective of financial reporting.

In order for the financial statements to fulfill their objective, it is necessary that the information provided by them is usable, which means that they have the following characteristics: comprehensibility, importance, significance, reliability, credibility, essence of form, neutrality, intelligibility, completeness, comparability, timeliness, balance of benefits and costs, truthfulness and fair presentation (Novalija Islambegović, 2015).

According to IASB, the important principle of assessing the quality of financial reporting relates to the credibility of the objectives and the quality of published information in the financial statements of a business entity. Qualitative characteristics improve and facilitate the estimates of the usefulness.
of financial statements, which will also lead to a higher level of quality of financial reporting itself. In order to achieve this level, the financial statements must be credible, comparable, verifiable, timely and understandable (Gajevszky, 2015).

Protecting investors’ interests by disclosing relevant and reliable information is one of the segments of harmonization of regulations within the European Union. In this regard, in an effort to harmonize the already existing requirements with respect to the reporting of the company whose securities are traded on the capital markets within the EU, in the past few years there has been intensive work on the adoption of directives, regulations and other acts by the European Commission and its bodies. Transparent reporting by companies in the capital markets implies that, in addition to the classical set of financial statements, other reports, such as the Management Report (Zajmi, 2011), will be made available to the public, and above all to investors.

Relevance as the basic criterion of information contained in the financial statements indicates the usefulness and necessity of this information when making business decisions. It’s actually an information feature to enable and help their users to understand the essence of business events and their repercussions on the business, as well as to eventually anticipate future events.

Accounting information, on the one hand, should confirm the occurrence of business events, and, on the other hand, enable the forecasting of business events and their effects. Laux and Leuz (2009) consider that it is nevertheless better to use fair value as the concept of valuation and to supplement these values with additional disclosures in terms of explanations in the financial statements, rather than to evaluate property positions at historical cost, since the underlying problems are clouded due to the lack of up-to-date accounting information. However, in order to obtain a clearer picture of the impact of the accounting concept of fair value on the quality of financial statements, it is necessary to consider the qualitative characteristics of relevance. Hirst et al. (2004) and Beretta-Bozzolan (2004) are trying to develop a test for a comprehensive assessment of the quality of financial reporting, which will include both financial and non-financial information about the business.

Hodder, Hopkins and Wahlen (2006) consider that for the various estimates and assumptions in the annual report it is very important to examine the reasoning. If the arguments are valid, then they are probably economic phenomena without prejudice. Information without prejudice is one of the indicators of the credibility of the information.

In addition, valid and well-founded arguments explaining accounting principles increase the likelihood that users will fully understand the measurement methods. This will reduce the possibility of unintentional material errors in the financial statements (Maines, Wahlen, 2006). They also claim that an unconditional audit opinion is a condition that cannot be perceived information from financial reports and their reliability and credibility. When the selected accounting principle is clearly described and well-grounded, the likelihood of reaching consensus and the disclosure of significantly misrepresented data for the user of the financial report, but also for the auditor, increases. Another notion that explains the authenticity of information is neutrality, and it is defined as the absence of prejudice that it intends to achieve a predetermined result or to trigger certain behavior. Poor management and internal control reduce the quality of financial reporting. More specifically, information provided by corporate governance increases the credibility of information (Rezaee, 2003).

Comparability is the requirement that the financial statements comply with the prescribed schemes and accounting standards. In case of frequent changes in the balance sheets, the problem of comparability will arise. The users of the financial statements perform their comparison over several time intervals to determine business trends and plan business processes in the coming period. When compared, the financial statements schemes between two years must have correspondence data. One of the conditions of data comparability between the two time intervals is the consistent application of adopted accounting policies, and if their change occurs then it is necessary to announce the effects of these changes.

Comparability requires that identical events in two situations reflect identical accounting facts and figures, and different events will be reflected in different accounting facts and figures in a comparable and easily understandable way (Cheung et al., 2010).

The intelligibility of the information implies good classification and organization of information in
the report, the number of narrative explanations in the notes to the financial statements, and the number of tabular and graphic formats in the report. If annual reports are well organized, it is easier to understand where to look for specific information. Detection of information in notes can be very valuable in terms of explaining and providing a better insight into earnings figures. In particular, descriptive explanations are useful in increasing the intelligibility of information. In addition, the presence of tabular and graphic formats can also improve the intelligibility of information (Beest et al., 2009).

Claims that assets are measured at current market prices date back to the 19th century. The term fair value was first mentioned in 1844 when the first Joint Stock Companies Registration and Regulation Act was adopted, which was followed by a new law in 1856. These laws required that the financial statements of business entities (companies) were made fair and complete so that it can be seen that the business of a company is being conducted prudently and honestly. Prior to the introduction of compulsory accounting standards, the companies themselves could choose their accounting policies for valuation, so US companies in the 1920s used market rates in the accounting valuation (Šodan, 2014).

The ‘80s and ‘90s are marked by repeated initiatives for defining and introducing values that should be considered as a fair measure of presentation of elements in financial reporting. Although the reasons for standardization were clear and justified, there were also numerous implementation problems that can be reduced to differentiating the definition of fair values in different conditions and for different elements of financial statements, the scattered and inconsistent requirements for fair valuation according to different standards, of which is the area of the standard, and very often the incomprehensibility and complexity of determining the fair value (IASB, 2006).

In explaining the concept of fair value, preference is given to market values, which are considered to fully cover the characteristics of future economic benefits; the fair value matches the market prices stemming from the market of perfect competition. They reflect the assessment of market participants who participate in the sale of assets and include the time value of money in the calculation (Knežević, 2009).

Stipic (2015) states that the International Accounting Standards Board has adopted the International Standard on Financial Reporting 13 - Fair Value Measurement, which establishes a single framework for measuring fair value for all IFRSs. Due to frequent manipulations with property values and property investments, it was necessary to define a single standard for measuring fair value and determining its mandatory use. IFRS 13 applies when other IFRSs require or permit fair value measurements or disclosures about fair value measurements, as well as measurement and impairment of fair value sales costs or disclosure of those measurements. This is characteristic for developed markets, however, in recent papers, the importance of open market margins is emphasized by reference to the concept of fair value (Ngueyen, 2014).

Empirical research by various authors on the relationship between the engagement of large audit firms and the quality of the published information in the financial reports has given different results. Ahmed and Nicholls (1994) and Wallace and Naser (1995) find a positive relationship between the size of the auditing house that exerts an external audit and the quality of disclosure in the financial statements. In contrast, Rupic and Bonic (2015) did not find any evidence of a statistically significant relationship in their research.

Businesses operating on the international market are more motivated to publish more quality information in their financial statements in order to better present themselves to different stakeholders. Business entities operating in several geographical areas have systems of control over the superior administration due to the complexity of their business activities. Such supervisory management provides reliable and accurate information in its financial statements (Cooke, 1989).

A survey conducted on 222 large, small and medium-sized businesses in Bosnia and Herzegovina, by means of a random sample, showed that the lack of an active market and expert evaluators is not an obstacle to making an estimate of the value of the property. Rather, the problem lies in the large costs that are an obstacle to business entities trying to reevaluate tangible assets in accordance with the requirements of the international accounting standard (Kapić, Bajraktarević, 2015).

Elfaki and Hammad (2015) investigate the impact of the application of fair value accounting on the
quality of accounting information and come to the conclusion that fair value contributes to the provision of useful information to users of financial statements and helps in making business decisions. Other authors (Savić, 2014) consider the subsequent valuation at fair value to be in collision with at least two accounting principles, the principle of caution and the principle of realization, since the prudence principle requires that the assets are stated at a lower value in the balance sheet, whereas liabilities should be stated at a higher value. However, in the case of an estimate at fair value, assets are stated at a higher, not lower value. Regarding the principle of realization, when accounting for an increase in the value of investment property resulting in an increase in income, early recognition of profits that are not yet confirmed on the market are carried out. In such cases, an estimate at fair value is not in line with the principle of realization.

Negovanović (2007) also highlights the lack of access to fair value in a situation where the asset is sold, disposed of, gifts exchanged or otherwise disposed of. The corresponding amount of revaluation reserves can be transferred to undistributed profits, and only the portion that represents the difference in depreciation calculated, revalued and depreciated are calculated on the cost.

3. Methodology

The survey was conducted with the aim of examining the relationship between the frequency of applying the accounting concept of fair value and the quality of financial statements of business entities in Bosnia and Herzegovina, registered as limited liability companies (d.o.o.) and joint stock companies (d.d). The list of registered business entities representing the population is downloaded from the Register of Business Entities in Bosnia and Herzegovina.²

The total population of small, medium and large business entities registered as limited liability companies and joint stock companies is 34,515, of which 34,050 are limited liability companies and 465 are joint stock companies. Empirical research was conducted through a survey questionnaire on a sample of hundreds of small, medium and large business entities in Bosnia and Herzegovina in 2017.

In order to determine the fair value in more detail and more precisely, valuation techniques are used to estimate the price at which the property could be sold, and the obligation transferred in a regular transaction between market participants at a specific date when the measurement is carried out. The condition for using a particular technique is a sufficient amount of data to measure. If transactions are directly visible in the market, the determination of fair value is easy; however, if transactions are not directly visible, particular valuation techniques are used. The chosen technique must be consistently applied (Green, 2015; Tan, 2015).

IFRS 13 lists three valuation approaches that business entities can use to determine fair value: the market, profit and cost approach. The market approach implies that a market operator uses prices and other essential information from market transactions with the same or similar assets / liabilities or a group of assets or liabilities. It is a primary approach and it is very important that the information is available on an active or inactive market. Furthermore, the gain (approach) implies that a market entity will reduce its future amounts (e.g., cash or income and expenses) to one current or discounted amount. It is mainly used for the valuation of tangible and intangible assets and liabilities, as well as for valuing a business entity as a whole. A cost approach means that using this technique gets the amount that would be needed in the present to replace the service capacity of an asset. The cost approach is used mainly for the determination of tangible assets in those cases where the market is inactive and when it is difficult to estimate future cash flows expected from that asset (Šodan, 2014).

The indicators we used to measure the frequency of using the accounting concept of fair value with business entities in Bosnia and Herzegovina relate to the following three situations:

- measurement based on the price available on the market
- measurement based on the price available on the market for similar positions
- measurement based on the estimation of future cash flows.

The following schematic view shows the relationship between the availability of fair value measurement inputs and the hierarchical levels, and the approach or technique of measurement applied in that situation.
The quality of the financial statements, which is a dependent variable in performance, is measured by indicators of relevance, credibility, comprehensibility and comparability of information. All measurements of quality were investigated by the Likert scale from 1 to 5, where 1 represents absolute disagreement and 5 absolute agreement with the stated claim. The relevance is measured for the question of whether the information provided by the financial statements helps to assess the future of a business entity and whether non-financial information is important under the estimates of the relevance of the financial statements. The credibility is measured by the claim that the information provided by the financial statements helps to assess the future of a business entity and whether non-financial information is important under the estimates of the relevance of the financial statements. The comparability is measured by the claims that the application of the fair value concept contributes to the comparison of positions from one period to another, and fair value valuation allows users of financial reports to be comparable with others from the branch and the environment (Agcun, 2016; Kovacs, 2013).

The central research hypothesis reads:

*The application of the accounting concept of fair value significantly influences the quality of financial statements of business entities in Bosnia and Herzegovina.*

### 4. Research results

The structure of the sample of business subjects in which the written questionnaire was conducted through the survey questionnaire, according to size, looks like this: 20% small, 51% medium and 29% large companies. The affiliation with different branches of industry in the area of production, trade and service activities is represented. 52% does not have an export orientation, while 48% is export-oriented.
The question of the normal distribution of the dependent and independent variables in the population was established on the basis of the standard Kolmogorov-Smirnov and Shapiro-Wilk tests of the normal distribution of variables in the population. It can be seen that $P < 0.05$ in the Sig column, so the test can be used to calculate the correlation between the dependent and the independent variables defined in the model.

**Figure 2 Structure of the sample by size**

Source: Authors' review

**Figure 3 Sample structure according to export orientation**

Source: Authors' review

### Table 1 Examination of the normal distribution of a dependent and independent variable

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
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<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>Financial reports quality</td>
<td>0.165</td>
<td>100</td>
</tr>
<tr>
<td>Frequency of fair value application</td>
<td>0.107</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors' review
The model for calculating the coefficient of single linear regression is:

**Compute KFI = α0 + β • Compute FV**

Compute KFI = weighted average of attitudes to improve the relevance, reliability, comprehensibility and comparability of the financial statements of business entities shown on the Likert scale from 1 to 5 (1 absolute disagreement, 2 disagreement, 3 neutral position, 4 agreement, 5 absolute agreement). Compute FV = weighted average of attitudes about the frequency of applying individual techniques for measuring balance positions shown on the Likert scale from 1 to 5 (1 never used, 2 rarely used, 3 used, 4 often used, 5 always used).

Given that it has been previously established that the phenomenon is normally distributed, the Pearson’s correlation coefficient will show us that the application of fair value correlates with the quality of financial statements in business entities in Bosnia and Herzegovina.

### Table 2 Correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>Financial reports quality</th>
<th>Fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial reports quality</td>
<td>Pearson Sig. N</td>
<td>1</td>
</tr>
<tr>
<td>Fair value</td>
<td>Pearson Sig. N</td>
<td>0.560 0.000 100</td>
</tr>
</tbody>
</table>

*Source: Authors’ review*

Based on the data from the table, it can be concluded that the dependent variable positively correlates with the independent variable. The correlation is very strong and we will see below whether there is a causal relationship between the variables mentioned, so that the research hypothesis can be confirmed or disproved.

### Table 3 Regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjust R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.560</td>
<td>0.314</td>
<td>0.307</td>
<td>0.568</td>
</tr>
</tbody>
</table>

*Source: Authors’ review*

The single linear regression coefficient is shown in column R, the coefficient of determination is shown in the R square column, and the corrected determination coefficient in the Adjust R Square column. The corrected determination coefficient is a less biased indicator in relation to the determination coefficient. This means that 30.70% of individual differences in terms of the quality of financial statements can be predicted or explained based on differences in terms of the frequency of applying the accounting concept of fair value in the financial statements of business entities in Bosnia and Herzegovina.

### 5. Conclusion and discussion

The results of the survey indicate that the application of the accounting concept of fair value positively influences the quality of financial reports of business entities in Bosnia and Herzegovina. Although the results are promising, there are additional factors to be considered.

Factors that determine the application of fair values are also important information for further research.
The most important factor in choosing the application of the accounting concept of fair value is that of the application of the set. The least important factor is the unclear regulations. Namely, in recent times regulations were clarified through the introduction and application of comprehensive IFRS 13, the purpose of which was to simplify the application and use of this concept.

As noted in the previous research, the application of the accounting concept of fair value finds its place on the marginal capital markets. It has been proven that the size of a business entity affects the level of the application of the accounting concept of fair value in the above-mentioned companies in Bosnia and Herzegovina (Delić, Gadžo, 2017), and even though the level of companies in the structure of business entities is very small, from year to year this number has increased, and thus the capital market is increasing and developing.

As was expected, in this research the most commonly used technique for valuing property positions in business entities in Bosnia and Herzegovina is the market approach, which corresponds to a price-based measurement for the same or similar positions, while measurement based on the estimation of future cash flows is less represented. This is supported by the fact of the underdeveloped financial market and the capital market.

80% of the surveyed businesses are subject to a mandatory audit of financial statements, so future research can focus on that aspect when it comes to the application of fair value and the quality of financial statements.

Since the quality of the financial statements in this paper was measured only by the qualitative characteristics of the information, it would be useful to include the quantitative characteristics of the information in financial statements for further research in order to get a complete picture of the quality of financial reporting under the influence of fair value. Also, in terms of applying fair value, other indicators that measure the level of implementation of this concept, such as detailed analysis of property positions and calculation of the index of disclosure of information at fair value, must be taken into account. As the paper has focused on the impact of the application of the accounting concept of fair value on the quality of financial statements of business entities, the data that may support the research are missing, and they are related to financial statements. In future research it is necessary to include value indicators from the profit items, which reflect the use of the concept of fair value.
References


Endnotes