INFLUENCE OF THE ACCOUNTING MODELS OF MEASUREMENTS AT HISTORICAL COST AND FAIR VALUE ON THE QUALITY OF FINANCIAL STATEMENTS

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ABSTRACT

In the practice are applied two basic models of measuring assets and liabilities: the historical cost model and the fair value model. For the past two decades, the practice of measuring assets and liabilities at estimates of their current or fair value has been pronounced and on the ascent, while there is evident a major departure from traditional model of historical cost. Discussion of the advantages of one model over the other are relating to the question of whether the accounting information should be relevant or reliable. This study investigates the key characteristics and determinants of fair value model and historical cost model. Also, the study analyzes the impact of different model of measurement of assets and liabilities on the quality of financial statements.

1. INTRODUCTION

Accounting Theory and Practice differs two basic models of measurement of assets and liabilities which are used in preparing the financial statements of business entities. Those are: (1) the historical cost model (acquisition cost) and (2) the fair value model. Fair value model refers to the practice of updating the valuation of assets on a regular basis, ideally by reference to current prices for similar assets established in the context of a liquid market; historical cost model instead records the value of an asset as the price at which it was originally purchased [7]. The argument for fair value model is that it makes accounting information more relevant, while historical cost model is considered more conservative and reliable [17]. In almost all of the International Financial Reporting Standards (IFRS) both of these models are present. Application or "the dosing" of a particular model reflects on the quality of the financial statements and consequently affects the business decisions of different users of financial statements. Application of the historical cost model and the fair value model is usually combined. The initial recognition and measurement of transactions on assets and liabilities is carried out by applying the historical cost model. Subsequent measurement at the balance sheet date is carried out by applying the fair value, that is, the variations of the fair value model. Therefore, the initial and subsequent measurement is not carried out using the same model. The consistency in the measurement of assets and liabilities is there lost, which directly relativize the quality of financial statements, and with the

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subsequent measurement, the financial situation and the financial success adjusts to the interests of the users of the financial statements. Subsequent measurement is often typical estimate of the fair value (if it is not available) or the recoverable amount. Although the estimate of the fair value and/or the recoverable amount is carried out in accordance with the standards, is it difficult always to prove that the estimation of an asset or liability has no intention to favor the objectives of the owner or the management. Therefore, independent auditors have a problem in assessing the quality of financial statements since an estimate of the fair value and the objectivity of the financial situation and business success do not go hand in hand.

When it comes to models of measurement according to the IFRS then certainly their application has greater material significance when it comes to fixed assets compared to the measurement of current assets. The effects of changes in the fair value of fixed assets result in the balance sheet (revaluation reserves) or in the income statement (revenues or expenditures). With the financial crisis and recession during 2008, there was serious thinking in the global accounting community on the abolition of the fair value model. However, it did not happen because the investors were still over their bodies demanding standards with the model measurements at fair value.

This paper compares and analyzes the application of historical cost model and the fair value model on financial situation and performance of the company. In research, there were used secondary data sources and the relevant scientific research methods have been applied such as the method of induction, method of deduction, method of compilation and method of comparison.

2. MODELS OF MEASUREMENT OF ASSETS AND LIABILITIES

Based on the research of secondary sources, multiple models of measurement of assets and liabilities were defined, and some of them are: historical cost, current cost, market value, realizable value, recoverable amount, present value, fair value [20, 9, 10]. In practice the most frequently applied are two models: the historical cost model and the fair value model.

Historical cost is the oldest principle of estimation which is used in the initial measurement of all assets and liabilities positions. The main advantage of the principle of historical cost compared to the other principles is that it can be easily determined and proved with the accounting documents of already occurred events and transactions. The main weakness of this principle is in losing the reality in positions of financial statements during changes in prices, that is, in values between the initial and each subsequent valuation of assets and liabilities. Historical cost of an asset position is the amount of cash or cash equivalents paid for the acquisition of asset or fair value of the compensation given to acquire asset at the acquisition date [10, item 100.].

Fair value is the principle of assets valuation which is used in several accounting standards: IAS 16 *Property, Plant and Equipment*, IAS 39 *Financial Instruments: Recognition and Measurement*, IAS 38 *Intangible Assets*, IAS 40 *Investment Property* and IAS 41 *Agriculture* [13].

However, lately the term fair value as an estimation principle is mostly used in IAS 32 *Financial Instruments: Presentation*, and in particular in IAS 39 which includes financial instruments. According to IAS 32 (item 5) and IAS 39 (item 9) the fair value is defined as an *amount at which an asset could be exchanged or a liability settled between knowledgeable and willing parties in an arm's length transaction.* Since 2013, there is in the application IFRS 13 *Fair Value Measurement*, which defines fair value as the *price which would be realized from the sale of an asset or paid to transfer some liability in neat transaction between the market participants at the measurement date* [13]. In particular, IFRS 13 brings the fair value hierarchy at three levels: a) Level 1 are the prices from the market quotes, b) Level 2 are perceiving prices (prices of similar or identical positions) and c) Level 3 are unperceiving prices, and all the relevant information and inputs that can help in the estimating the fair value are used for the evaluation. This standard provides a framework for the measurement as well as the fair value measurement techniques.

3. CRISIS OF APPLYING THE FAIR VALUE MODEL

3.1. Fair value is a complex category

The global financial crisis has staggered the accounting based on fair value. Fair value model has been implemented for several decades in the United States; while in other countries fair value model is in the application of something later. IASB officially introduced fair value reporting around mid 1970s as well, to act as an alternative approach to historical cost [18, p. 23]. From the beginning, the fair value definition was not the best accepted by the preparers of financial statements, the users of financial statements and auditors, it was only strongly favoured by investors. Also, RAMANNA [17] highlights that those with a background in the financial service industry (investment banking and investment management) are more likely to propose the use of fair value.

According to IFAC research results, the definition fair value under IAS 39 is vague and imprecise [11, p. 30]. For balance sheet items that are liquid on the market and their values can be reached without difficulty the fair value is actually market value. For those balance sheet items that are not liquid and whose market value is estimated the fair value is actually modelled value. If for the liquid balance sheet items for financial institutions fair value (market value) can be determined, and for the other illiquid balance sheet items the fair value cannot be determined but the fair value for those items is modelled, there is doubt to the fair value model. The application of IFRS by the valuation at fair value increases the distrust of all users of financial statements due to the increasing the volatility of operating results.

3.2. Positive and negative aspects of the fair value

The use of fair value, above all, in the subsequent measurement of balance sheet items has its positive and negative aspects. The major critique relating to using fair value model is that it introduces higher volatility in the financial statement. Critics argue that fair value model can contribute to a stronger cyclicality of accounting measures: in booms the fair value would allow revaluation of assets, while the historical cost model would create “hidden” reserves [15, p. 829]. In times of crisis, wherein there are relevant decreases of market values, fair value model contributes to contain the financial results of firms by triggering a vicious circle [5].

Opponents of the fair value model are also among investors, preparers of financial statements, internal users, auditors and other users. The examinees of IFAC survey confirm that the fair value accounting is the biggest accounting challenge so far [11]. How to explain the decline in the value of balance sheet assets of the business entity by 70% in the short term? For a management as an internal user of financial statements this means that *“fair value indicates on the changes that are occurring in the business environment and on which management cannot control”* [11, p. 30]. Therefore the IFRS implementation is a problem for the preparation of financial statements, particularly in standards where the fair value model is a basic model of measurement. Illiquid and liquid assets are potential risks associated with the measurement and presentation of results. Therefore, one group of examinees consider that fair value can be useful if the basis for determination the fair value is clear. They suggest the publication of differences in results between the application of historical cost and fair value.

IFACs research indicates that investors are those who favour the fair value and force the national committees on standards for valuation of balance sheet items on its fair value [11, p. 30]. Their general attitude is that fair value is the value that says *“what something is worth today, while the historical cost gives only an idea of what something might be worth 20 years ago”*. Also, the management that needs information about the rates of return for business decision, on the basis of historical cost will have several times higher rate of return in relation to the use of fair value. Such information can be very poor basis for decision making for management as well as investors.

3.3. Auditors must increase cautiousness

Financial reporting which is based on the measurement and disclosure at fair value has great significance for all the entities that apply standards based on the fair value. The auditors are aware of the current situation in applying standards based on the fair value. It is especially complicated when it comes to entities that mainly have financial assets in their balance sheets. The Financial Stability Forum (a particularly founded body of the IFAC) made recommendations to the G7 Finance Ministers for the following areas: [12, p. 1-2]

1. Strengthened prudential oversight of capital, liquidity and risk management;
2. Enhancing transparency and valuation;

3. Changes in the role and uses of credit ratings;
4. Strengthening the authorities' responsiveness to risks;
5. Robust arrangements for dealing with stress in the financial system.

For the audit profession, and in the context of the difficulty in determining the fair value and the influence on the quality of financial reporting, the IFACs International Auditing and Assurance Standards Board made the changes to the International Standards on Auditing, including ISA 540-Audit of Accounting Estimates, and especially in ISA 545-Auditing Fair Value Measurements and Disclosures [12, p. 10]. The changes to ISA 540 relate more to the area of risk, judgment, methods of estimation, assumptions of management, the adequacy of disclosures and other. Especially important are changes to ISA 545 which relate to the fair value measurement and disclosure of positions under different financial reporting frameworks.

3.4. What happens next with the fair value model?

Accounting profession has strong reservations about the reliability of fair value accounting applications due to, among other things, difficulty and subjectivity of future cash flow estimation [14, p. 130]. Also, privately held companies in the United States, which are less oriented toward capital markets than their publicly traded counterparts are, have recently set up their own accounting standard board (the Private Company Council) in part to get away from fair value accounting [17, p. 2].

In accordance with the convergence of the US regulator (FASB) and the international IASB, the differences between the US GAAP and IFRS are minor. The opinions and procedures of the FASB are relevant for the IASB so that their views regarding the fair value model are essential to the further application of fair value model in IFRS. The US Securities and Exchange Commission clearly declares against suspension of the fair value model, but it requires a further improvement of current practice which includes: (1) additional manuals, guides and instruments for determining the fair value when relevant market information is not available from active markets, (2) strengthen the publication and presentation of the effects the fair value changes on the financial statements, (3) over the FASB, examine the impact of liquidity instruments on the measurement the fair value, (4) over the FASB, examine whether the incorporation of credit risk in liability measurement is useful for investors, (5) over the FASB, estimate different accounting models for financial instruments. [19]

New amendments to IFRS suggest that there is no question of the suspension of the fair value model. The greatest proof of this is the latest publication of IFRS 13 *Fair Value Measurement* which specifies and technically processing variants of the fair value model.

4. QUALITY OF FINANCIAL STATEMENTS AS A RESULT OF MEASUREMENT MODELS

4.1. Models of measurement are based on estimates

The quality of the financial statements is the old paradigm which is almost as old as the financial statements themselves. The quality of financial statements nowadays is more a result of the behaviour of accountants, and not exclusively of set of standardized accounting principles. Moreover, the *American Institute of Certified Public Accountants* in report [1] from 1994 points out that there was not made any significant reform of how to deal with the changes in the capital markets. Also, today there is argue for the facts (especially after the Enron case) that regulation has never been, neither will be able to achieve the optimal practice of financial reporting that meets the interests of investors and management [16, p. 3-5]. The trust of investors in the financial statements of companies more and more distorts due to the traps and temptations in the valuation and publication of the report according to the accounting policies (principles, methods and procedures) from the used accounting standards.

The global accounting literature nowadays talks about four accounting principles that it is not necessary to prove because they are obvious by itself, and they result from the application of the measurement models of assets and liabilities, and these are: [16, p. 2]

1. the financial statements of low quality and the incomplete financial statements cause uncertainty,
2. uncertainty causes risks,
3. risks motivate investors to require higher rates of return, and
4. requirements for higher rates of return result in higher costs of capital, decline in demand and prices of securities.

Despite of the simplification the mentioned principles generate logic about necessary transformation of financial reporting. With the absence of changes in the content, form as well as frequency of reports, the models of measurement still remains “fertile ground” for the manipulation in the financial markets and the capital markets. As the contact between the investor and the company generates through the financial statements, the distrust in the financial statements causes uncertainty and insecurity of the investors. This, sooner or later, reflects on the decline in share prices. This is an overture for manipulations such as *Pump&Dump* or *Insider Trading.* These stock exchange manipulations appear as a consequence of incompleteness and questionable quality of the financial statements.

With the introduction of subsequent measurement, better known as fair value model [13, IAS 39], estimations of increase or decrease in assets and liabilities and securities cause manipulation of the financial statements, especially of the financial sector. Every manipulated increase or decrease in the value of assets and liabilities causes manipulation of the financial statements and favouring the interests of certain users.

4.2. Models of measurement and manipulation of financial statements

Models of measurement of assets and liabilities are of particular importance for the preparation of financial statements. These models and principles are contained in all national accounting standards. Given the practical value of IFRS, as for the EU countries (especially since 2005) as well as for other countries where IFRS or national accounting standards are applied, it is necessary to compare the models of measurement of assets and liabilities [3, p. 120-123; 8]. The comparison of measurement models in the world accounting literature are reduced to the relationship between the historical cost and the fair value model [2; 4, p. 37-39; 6; 16].

The key question that is asked after the publication of the FASBs standard FAS 133 and IASBs standard IAS 39 is how to prevent the impact of stock manipulation on the financial statements and vice versa in which the basis for measurement is fair value or current market value.

It is particularly difficult to avoid manipulation in using the fair value model in the financial sector. This sector is the most sensitive for the financial assets held for trading, but also for loans that should be determined the recoverable amount and which is compared to the book value at the balance sheet date. The difference between fair value and book value (historical cost) is recognized in the income statement.

The disclosure of historical cost or market value is an issue that touches the essence of financial reporting, that is for whom financial statements are intended and why? From this issue are generated a few more, namely: (1) whether the financial statements should disclose current or historical value, (2) whether the manipulation and disclosure of financial statements only for the historical values or only at current market values, (3) whether the financial statements can be treated incomplete if only one of the alternatives is selected which could endanger the investors decision etc. [16].

5. CONCLUSION

Disclosure of financial statements using the fair value model assists investors in assessing the future earnings and cash flow. Estimates that are based on current market values have greater relevance for investors because it will be easier to estimate future cash flow, especially when it comes to the part of the portfolio held for trading. The market value of such portfolios or buildings reflects their current ability to create future cash flows. This is a huge advantage of the current market value model. However, manipulation from the market affecting the Achilles heel of the current value model. Sometimes they can be of such proportion that it is losing confidence in such financial statements. Nowadays, the publication of the financial statements at historical cost, any of the financial sector and even the real sector, is comparable with designed car of the 21st century with an engine from the early 20th century. It is possible, but obviously something is wrong and illogical. The possibility of earnings estimates or future cash flows on such a basis is very difficult.

Therefore, investors do not oppose the application of the fair value model, and regulatory bodies enabled them this by the transition into 21st century. Yet if there was no manipulation, majority of them would be satisfied. Dissatisfied would be only those who have benefits from the manipulation regardless of the satisfaction or dissatisfaction of investors due to gains or losses.

LIST OF REFERENCES

[1] AICPA: **Improving Business Reporting – A Customer Focus,** 1994., www.aicpa.org

[2] ALBRECHT, S., ALBRECHT, C.: **Root Out Financial Deception,** *Journal of Accountancy,* April, 2002.

[3] CAIRNS, D.: **A Guide to Applying International Accounting Standards,** London, Butterworths, 1999.

[4] CASTELLANO, J.: **Restoring Public Confidence,** *Journal of Accountancy,* April, 2002, p. 37-39.

[5] COSTA, M., GUZZO, G.: **Fair Value Accounting *versus* Historical Cost Accounting: a theoretical framework for judgement in financial crisis,** *Corporate Ownership & Control,* Vol. 11, Autumn, 2013.

[6] GERBER, J., FELDMAN, E.: **Is Your Business Prepared for the Worst?,** *Journal of Accountancy*, April, 2002.

[7] GREENBERG, M. D., HELLAND, E., CLANCY, N., DERTOUZOS, J. N.: **Fair Value Accounting, Historical Cost Accounting, and Systemic Risk,** Cambridge, Uk, RAND, Corporation, 2013.

[8] GULIN, D.: **Odnos načela opreznosti i fer vrijednosti u procjeni imovine i obveza,** XXXVI. Simpozij HZRIF, Zagreb, 2000.

[9] GULIN, D. et al.: **Računovodstvo,** Zagreb, Hrvatska zajednica računovođa i financijskih djelatnika, 2010.

[10] IASB: **Conceptual Framework for Financial Reporting,** 2010.

[11] IFAC – PAIB: **Financial Reporting Supply Chain: Current Perspectives and Directions,** USA, New York, March, 2008.

[12] IFAC – IAASB: **Challenges in Auditing Fair Value Accounting Estimates in the Current Market Environment,** IAASB, October, 2008.

[13] INTERNATIONAL FINANCIAL REPORTING STANDARDS, 2014.

[14] KAYA, C. T.: **Fair Value versus Historical Cost: Which is actually more „Fair“?,** *The Journal of Accounting and Finance,* October, 2013., p. 127-137.

[15] LAUX, C., LEUZ, C.: **The crisis of fair-value accounting: Making sense of the recent debate,** *Accounting, Organizations and Society,* Vol. 34, No. 6-7, p. 826-834.

[16] MILLER, P. B.: **Quality Financial Reporting – Finding Customer Focus through the Power of Competition,** *Journal of Accountancy,* April, 2002.

[17] RAMANNA, K.: **Why „Fair Value“ Is The Rule,** *Harvard Business Review,* March, 2013.

[18] SHANKLIN, S. B., HUNTER, D. R., EHLEN, C. R.: **A Retrospective View Of The IFRS' Conceptual Path And Treatment Of Fair Value Measurements In Financial Reporting,** *Journal of Business & Economic Research,* March, 2011., p. 23-28.

[19] U.S. SECURITIES AND EXCHANGE COMMISSION, www.sec.gov

[20] WARREN, C. S., REEVE, J. M., DUCHAC, J. E.: **Corporate Financial Accounting,** USA, Cengage Learning, 2014.