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CHALLENGES IN APPLYING THE FAIR VALUE ACCOUNTING DURING FINANCIAL CRISIS

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ABSTRACT

Global financial crisis has made deep evidence and the consequences on the global financial market. This paper is focused on analyzing the use of fair value accounting in those business circumstances and in challenging economic times. Since the financial crisis started, and most of markets become illiquid, fair value accounting and its application in measurement of assets and liabilities, has been a topic of considerable debate. As the illiquidity of certain assets became more severe, financial institutions and other business entities turned increasingly to model-based valuations (level 2 and level 3 inputs). Through the comprehensive literature review, this paper analyzes how fair value accounting was influenced on the global financial crisis.

1. INTRODUCTION

Adequacy of the application of fair value accounting, during the financial crisis and still today, is a current topic of discussion and analysis not only by accounting standard-setters, but also among academics, business people, investors, regulator and others. In the practice are applied two basic models of measuring assets and liabilities: *the historical cost model* and *the fair value model.* On the basis of the applied model of measurement assets and liabilities, it differ two types of accounting: *historical cost accounting* and *fair value accounting*. The standard setters (The International Accounting Standards Board – IASB, and The U.S. Financial Accounting Standards Board – FASB) provide and allow the application of fair value accounting for reporting and evaluation of financial assets and liabilities, and certain other items.

The latest financial crisis substantially provides a comprehensive context in order to gain insights into the use of fair value accounting and to analyze broader consequences which derived from its implementation. Among the accounting questions in the context of financial crisis are this two: What is the fair value of financial assets and liabilities that financial institutions and other entities should report in the balance sheet? And, when the market is considered distressed, what is the appropriate level for disclosure in the fair value hierarchy? [19, p. 16]

Through the comprehensive literature review, the main objective of the paper is to analyze and discuss how fair value accounting was influenced on the global financial crisis, and what was the reaction of standard setters on the use of fair value accounting during the financial crisis.

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2. LITERATURE REVIEW

2.1. The definition of fair value

In the practice, for many years the historical cost model was a basic model of measuring economic categories, but today is not the only one. One of the most significant changes that imply and impose the interests of financial statement users is contained in the fair value model, which was introduced in the accounting standards in the late 20th century as the dominant principle of the measurement of assets and liabilities [4].

IASB officially introduced fair value reporting around mid 1970s as well, to act as an alternative approach to historical cost [16, p. 23]. At the beginning, the novelty was the application of fair value model in measurement of economic categories and its application in financial reporting. In the next phase of the application of fair value model, the emphasis is more on the ways of determination and measurement of the fair value.

IFRS 13 *Fair Value Measurement* defines *fair value* as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. That definition of fair value emphasises that fair value is a market-based measurement, not an entity-specific measurement. When measuring fair value, an entity uses the assumptions that market participants would use when pricing the asset or liability under current market conditions, including assumptions about risk. As a result, an entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring fair value [6, p. 2].

2.2. Determination of fair value – Fair value hierarchy

IFRS 13 introduced *"fair value hierarchy"* in order to increase consistency and comparability in fair value measurement and related disclosures. The fair value hierarchy categorises the inputs used in valuation techniques into three levels. According to defined hierarchy, the highest priority is given to unadjusted quoted prices in active markets for identical assets and liabilities, and the lowest priority to unobservable inputs.

Table 1
Fair value hierarchy according to IFRS 13

Level	**Input**
Level 1	• Quoted prices in active markets for identical assets or liabilities
Level 2	• Quoted prices for similar assets or liabilities in active markets • Quoted prices for identical or similar assets or liabilities in markets that are not active • Interest rates and yield curves observable at commonly quoted intervals, implied volatilities, credit spreads • Inputs that are derived principally from or corroborated by observable market data by correlation or other means

Level 3	Unobservable inputs for the asset or liability

Source: IFRS 13 Fair Value Measurement [7], items 76-89.

When quoted prices in active markets for identical assets and liabilities are available, they have to be used as the measurement for fair value (Level 1 inputs). If quoted prices in active markets are not available, Level 2 or Level 3 inputs should be used. As we can see in table 1, Level 2 input applies to cases for which there are observable inputs, which includes quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in inactive markets, or other relevant data. Level 3 input are unobservable inputs (e.g. model assumptions).

Level 2 or Level 3 inputs should be used to derive fair value if observable inputs are not available, which is commonly referred to as mark-to-model approach. According to this, it is clear that determining the fair value for illiquid assets is very difficult. Furthermore, the question is how the fair value for illiquid assets influences on the quality of financial reporting, respectively on financial position and financial success of the entity, and finally on the business decisions.

Many opponents of fair value accounting highlight the significant possibility of manipulation with accounting information and financial statements when the fair value accounting is used. After the explanation and analyse of fair value hierarchy we can conclude that if the prices from active markets for the same assets or liabilities are available – Level 1 inputs, than fair value accounting provide little place for manipulation and generally provide reliable and timely information. If the fair value is determined at the basis of Level 2 inputs, than fair value accounting offers some discretion to management. If the fair value is determined at the basis of Level 3 inputs, than management has considerable discretion and fair value provide a significant place for manipulation.

On the other hand, the historical cost accounting doesn’t offer any place for manipulation as long as original purchase prices or amortized costs are used, but this information is often criticized for not being relevant and timely [8, p. 97].

3. COMPARISON BETWEEN HISTORICAL COST ACCOUNTING AND FAIR VALUE ACCOUNTING

Historical cost is the oldest model of estimation which is used in the initial measurement of all assets and liabilities positions. The main advantage of the historical cost model compared to the other models of measurement is that it can be easily determined and proved with the accounting documents of already occurred events and transactions. 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 [5, item 100].

Historical cost accounting implies that asset is recorded at historical cost, which is usually equal to the fair value when the assets were originally purchased. In subsequent measurement, historical cost is adjusted for amortization and impairments, but not for increases in asset value. Impairments occur when the fair value of an asset falls below its amortized cost, and in circumstances when asset value decline and impairment is permitted, the historical cost accounting and fair value accounting are conceptually the same.

In its pure form, fair value accounting involves measuring and reporting assets and liabilities on the balance sheet at fair value, and recognizing changes in fair value as gains and losses in the income statement. When market prices are used to determine the fair value, fair value accounting is also called *mark-to-market accounting* [8, p. 93].

The debate between historical cost accounting and fair value accounting is usually framed by the issue of relevance and reliability. The introduction of the fair value lead to changes in priorities, and relevance becomes more important and significant than reliability of accounting information [2, p. 318-319; 13, p. 205].

Among academics, investors and business people, there are many proponents of the application of fair value accounting, as well as numerous opponents of the application of fair value accounting.

Proponents of the use of fair value accounting highlight that reporting about financial assets and liabilities, and other items, at fair value is more relevant than historical cost. They emphasize that fair value reflects the amount at which an assets can be bought or sold, and enables better insights to current risk. As a consequence of that, investors, managers and other decision makers can adopt better market discipline and take a more appropriate decision.

On the other hand, those who support historical cost accounting believe that fair value accounting is less reliable. They argue that fair value accounting leads to excessive volatility and short-term fluctuations that don't reflect the value at maturity and don't represent the fundamentals of the underlying financial assets and liabilities [17, p. 29]. Furthermore, many assets of financial institutions (such as loans) are illiquid, are not standardized, and are not traded in deep markets.

Opponents of the use of fair value accounting claim that fair value is not relevant and potentially misleading for assets that are held for a long period or to maturity; that prices could be distorted by market inefficiencies, liquidity problems or investor irrationality; that fair value based on models (Level 2 and Level 3 inputs) are not reliable; and that fair value accounting contributes to the procyclicality of the financial system [11; 15].

In researching the use of fair value accounting versus historical cost accounting in financial institutions, some studies found that fair value accounting adds artificial risk that diminishes the information value of asset prices, and leads to suboptimal decisions [12, p. 435]. Through analytical model, they found that the damage done by marking-to-market is greatest when claims are (1) long lived, (2) illiquid, and (3) senior. If we analyze the structure of balance sheet of banks and insurance companies, we can conclude that majority of assets in their balance sheets have these characteristics. So, Platin, Sapra and Shin [12] recommend the use of fair value accounting for claims that are short-term, liquid and junior, while they propose the use of historical cost accounting for claims that are long-term, illiquid and senior.

4. FAIR VALUE ACCOUNTING AND FINANCIAL CRISIS

4.1. The contribution of fair value accounting to the financial crisis

In order to explain the reasons for financial crisis, the spotlight has been turned to fair value accounting. The most significant influence of the use of fair value accounting is recorded in financial industry, especially in banks and insurance companies, but also in other business entities.

Proponents of the use of fair value accounting argue that fair value accounting is not responsible for the financial crisis [18]. On the other hand; critics argue that fair value accounting has significantly contributed to the financial crisis [20; 10], and has a significant impact on financial institutions especially [20]. The issue is that fair value accounting loses many of its desirable properties when prices from active markets are no longer available, and hence model for determination fair value have to be used, which accordingly makes it very difficult to determine and verify the fair value of certain assets or liabilities. That implies the use of Level 2 or Level 3 input in determination of fair value. In circumstances of illiquid market, most assets must be fair valued using Level 3 inputs (one step down in fair value hierarchy). Finnegan [3] argued that the fact that fair value can be difficult to determine in the absence of readily available market prices is not a reason to abandon this model.

Due to the inactivity of the markets, most of opponents of the fair value accounting argue that fair value accounting contributes to excessive leverage in boom periods and leads to excessive write-downs in crisis. The write-downs due to falling market prices deplete bank capital and set off a downward spiral, as banks are forced to sell assets at “fire sale” prices, which in turn can lead to contagion as prices from asset fire sales of one bank become relevant for other banks [8, p. 93].

At the time of financial crisis, liquidity is a more important than the future earning potential in determining asset prices. In the case of illiquid markets, fair value accounting is inefficient, since it does not report assets at their future earning potential [1].

The criticism of fair value accounting was based on an apparent difference between the market value of certain securities in distresses markets and the value indicated by holding the securities to maturity [19, p. 16]. Many of opponents of fair value accounting have opined that the use of fair value accounting, as opposed to historical cost accounting, has helped cause the turmoil in the financial markets [17, p. 26].

4.2. Standards setter’s reaction on the use of fair value accounting during the financial crisis

The application of fair value accounting requires from business entities reporting the losses if fair value of their assets decrease, or fair value of liabilities increase. Those losses reduce business entities’ reported equity, and may also reduce its reported net income. On the other hand, if the fair value of an asset increase or fair value of liabilities decreases than the business entity will report gains that can increase reported equity, or reported net income.

From the beginning, the fair value model was not the best accepted by the preparers of financial statements, the financial statements users and auditors, it was only strongly favoured by investors. Ramanna [14] highlights that; those with a background in the financial industry (investment banking, insurance companies and investment management) are more likely to propose the use of fair value accounting.

Many have argued that the fair value accounting need a substantial reform because it is perceived that it has to contributed to the financial crisis started in 2008. Accordingly, regulators have put meaningful pressure on the accounting standard setters (IASB and FASB) to relax the accounting rules. The standard setters prepare some adjustments of IAS 39 *Financial instruments: recognition and measurement*, new IFRS 13 *Fair value measurement* and FAS 157 *Fair value measurement.* Through IFRS 13 and FAS 157 is presented the hierarchy of fair value, and they are expanded guidelines specifying how fair value should be measured. This hierarchy provides little help to prepares who have to decide whether to base their fair valuations on the poor quality signals currently being generated by markets versus highly judgmental firm-supplied inputs such as forecasts of house price depreciation [9, p. 238].

This relaxing the accounting rules means giving the management more flexibility in order to avoid potential problems of fair value accounting in times of crisis. Furthermore, that opens the area for manipulation and can decrease the reliability of the accounting information at a crucial moment. Finally, in order to be useful, accounting standards should impose a reasonably high degree of consistency in application.

5. CONCLUSION

Based on the discussion above and literature review, we can conclude that there are two inclusive clarifications which provide the role of fair value accounting in the financial crisis: one group argue that fair value is not responsible for the financial crisis, while the other group argue that fair value accounting has significantly contributed to the financial crisis.

The financial crisis has shown that a financial statement prepares need additional and detailed guidance regarding how to determine fair values in illiquid markets. The financial statement users need better disclosures about estimates (level 3 inputs) which were used in determination of fair values, and how sensitive fair values are to those estimates. The standard setters need to consider, and then to consolidate, in accounting standards what guidance and disclosure are required.

Finally, the use of fair value accounting or historical cost accounting should be applied depending on the situation, current market circumstances, and depending on the nature of the financial instrument. But, it is generally accepted that the use of fair value accounting is more appropriate than historical cost accounting when the markets of a certain assets ate liquid.

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