REVALUATION ISSUES IN FINANCIAL REPORTING: CASE OF FINANCIAL INSTRUMENTS

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Abstract

During last 30 years financial reporting faced the shifting of the measurement bases from traditional concept of historical costs towards fair value concept. Numerous critics stress their attention on the problem of fair value measurement as one of the major factors of current crisis. This paper summarizes pros and cons or this reporting base.

Keywords: financial reporting, fair value, historical costs, international harmonisation
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1. INTRODUCTION

Measurement in financial reporting is one of factors which determines the quality and reliability of presented information. There may be seen a conflict between the requirements for relevance and timeliness of measurement on one side and the reliability and conclusive evidence on the other side. However, it shall be stated that the important problem of measurement issues is the possibility of subjective manipulation with values, which is possible when using certain measurement bases.

Applied principles of measurement and their regulations are interdependently correlated with the informational needs of external users (especially investors) and internal users (managers). Owners of the company may behave as external users (e.g. minority shareholders) or as internal users. Requirements on content of accounting information given by the used accounting (and measurement) method are strongly connected not only with the group of users (internal versus external) but also with economic environment. Actual economic environment strongly affects the requirements for measurement requested from users.

Upon economic boom there can be seen higher optimism of investors which leads towards requirement of measurement of all accounting items at fair value, which mainly represents current market prices of assets. Using this concept means the turn from the prudence principle and conservative historical costs concept in financial accounting. Moreover fair value concept in financial accounting leads to higher tendency of revaluation assets or liabilities affecting profit or loss of the company.

Upon economic crisis conditions users revaluate their views on accounting methods, especially the measurement bases. When we try to find out the reasons of economic crisis, we can hear opinions that it was very optimistic information given by fair value accounting in the period of economic boom. But history used to repeat: the greatest moment was of course Black Friday at New York Stock Exchange, after which the crisis smite almost all world in 30s of 20th century. Also at that time there was often heard that accounting was unable to provide the information which may help users to predict this abrupt change. The reaction on the mentioned crisis was the evolution of US GAAP – national standards which may be allowed to face the problems like this. Of course, it shall be stated that after the period of crisis economy tends to break up strict conservative rules and principles because of the pressure of the investors' requirements; there can be seen divergence from the prudence principle towards measurement based on actual market prices (or so called fair values). This evolution was visibly seen during last decades, not only at international level (standards IFRS and US GAAP) but also at national level (requirement to measure certain assets at fair value given by Czech Accounting Act). As a good example shall be stated the essential material of IASB (International Accounting Standards Board) prepared by group of Canadian experts which dealt with the measurement of assets and liabilities upon initial recognition and declared the divergence from historical costs measurement towards fair value concept. Quite important was also the common discussion paper of IASB and FASB (Financial Accounting Standards Board) which dealt with unification of fair value concept in IFRS and US GAAP. Of course all these materials were presented before eruption of current economic crisis. We think that the tendency of fair value measurement results from the investors' pressure: the main objective for investors was capital spill over and maximization of short-term profit. It is impossible to ignore the fact that all these requirements were strongly connected with economic boom conditions.

Current economic crisis may evoke the renaissance of conservative approaches in measurement, especially the applicability of prudence principle. Confidence in financial market upon crisis is thrilled; there can be seen strong price swings. Swings in market prices of financial instruments or breakdown of real estate market may also evoke valid doubts whether the fair value concept (and market price is the most reliable evidence) is really the most objective and most reliable approach suitable for wide spectrum of users of accounting information.

The research in the area of valuation and measurement is necessary to handle not only from concrete economic situation and current market conditions, but it is essential also to discuss the potential risks which are connected with such restricted view. Too "optimistic" approach applied upon economic boom is based on fair value approach. The high value of assets which is given by active market or it is based on the estimates in case that active market does not exist, leads towards rising equity as well as balance sheet sum and in case of revaluation through profit or loss also towards fictive profits which can be distributed to owners. It shall be also stated that the estimates of fair values for non-financial assets, but also for certain financial assets (e.g. shares) used to have low level of reliability because of subjective estimates of valuator or based on mathematical models which are connected with restrictive assumptions.

On the other hand the approach based on accounting conservatism and prudence principle in recession periods may (jointly with inflation) lead towards erosion of company's substance and deepen and prolong the recession.

Financial reporting outputs are intended for presentation of the company to external environment, i.e. to external users, who determine the requirements for reporting outputs (i.e. financial statements and annual report). These requirements are (in certain level) mapped to system of normative regulation of accounting in countries, or in global (multinational) level. The influence of external users on content of accounting information is dominant during last decades and the role of owners and managers is conformed to investors' interest. In case those companies want to come across a market and receive necessary sources of capital for their businesses, they have to provide investors required information. In many countries dominates strict accounting rules which provide to companies only very small manoeuvring space for presentation of information according to their specifics as well as investors' requirements.

The paper has been structured by framing the shifts in financial reporting paradigms for financial instruments within the trade literature, starting with previous researches on international accounting harmonization and continuing with specific issues concerning financial instruments. The research methodology presents the particular approach of the analyzed area, namely identifying the particularities of reporting for financial instruments as foreseen by national GAAPs in correspondence to IFRS, through both theoretical description and empirical analysis, and continuously linking the findings to the actual knowledge stage and theories developed in the field. The final part of the paper relates the conclusions of the study to national regulatory bodies and also to the international background.

2. LITERATURE REVIEW

In the review made while examining the European evidence for the relationship between accounting information and capital markets, [Dumontier and Raffournier, 2002] classify the European literature into three groups: studies of the market reaction to newly released accounting information; studies of the long term association between stock returns and accounting numbers and studies devoted to the use of accounting data by investors and to the impact of market pressure on accounting choices.

[Strouhal et al., 2009] also analyze the Czech derivatives' market. The authors performed an empirical study of data obtained from 51 companies listed on the Prague Stock Exchange. They focused on a comparison of the reporting of financial derivatives using IFRS versus Czech accounting regulations. The findings reveal the existence of information asymmetry which may be advantageous to some parties involved in derivatives trading. The low level of information reported on derivatives operations may produce difficulties for accounting information.

There must be mentioned that narrowing the alleged gap between accounting research and accounting practice was also previously approached within the trade literature [Schipper, 2005; Beresford and Johnson, 1995; Leisenring and Johnson, 1994].

Research in the field of accounting harmonization has focused primarily on two basic aspects – the reliability and the correctness of the evaluation [e.g. Aisbitt, 2001; Emenyonu and Grey, 1996; Herman and Thomas, 1995]. Beyond these aspects we should mention a set of conceptual approaches which emphasize a system of factors which are considered to be favourable or even determinant for the national accounting diversity. If we intend to identify the common elements of these approaches, it can be concluded that the most often met aspects, which on one hand influence or play an important role in matters concerning the development of national accounting standards, and on the other hand determine the positioning of the accounting profession within the context of international accounting harmonization, can be considered to be reflected through: the degree of global economic integration, the financing resources, the legal and political system, the fiscal system, the accounting professions' status, the culture, the accounting language and other external influences.

Before the IFRS standards were adopted in the EU, it was stock exchanges in particular which required that listed entities submit financial statements in compliance with the IFRS or US GAAP. Previous researches dealing with the degree of disclosure [Cooke, 1992; Meek et al., 1995], or the probability of using multinational standards [El-Gazzar et al., 1999; Murphy, 1999; Leuz, 2003] indicate a positive correlation between the listing of accounting units on foreign markets and the degree of disclosure and use of multinational standards as the basis for financial reporting.

[Strouhal et al., 2008] analyze accounting harmonization with reference to the standards which are most widely discussed in terms of their practical implementation, namely: IAS 32 Financial Instruments: Presentation, IFRS 7 Financial Instruments: Disclosures, and IAS 39 Financial Instruments: Recognition and Measurement. It is [Veron, 2008] who defends the international referential considering the current crisis circumstances, by underlying the importance of also analyzing the way IFRSs are applied, key issue often underestimated in Europe.

3. RESEARCH DESIGN

Paper develops a diagnosis of the national accounting system of the Czech Republic in the particular area of reporting for financial instruments. This is done through a descriptive analysis of the considered variables. The quintessence of the research methodology is based on the mutual relationship between information provided through financial reporting and the capital market. On one hand there are accounting regulations strongly influencing the outcome of financial reporting, and then, it is this outcome that determines the reaction of players on the capital markets. The reactions of players on the capital market often leads to financial engineering that must activate the reaction of standard setting bodies which will respond through the tool of accounting regulations and the circle is therefore reengaged. The reactions of players on the capital market and their financial engineering determine the investors' behaviour, while the reaction of standard setting bodies and accounting regulations are part of the accounting regulatory process. The outcome of financial reporting is also influences by the accounting profession and accounting practices. The investors' behaviour, the accounting regulatory process, the accounting profession and accounting practices are all influenced by one country's history, culture, political and economic environment.

An empirical analysis is performed on accounting regulations in the field of financial instruments. It involves closely analyzing the foresights of the national accounting regulation and of the IFRSs. The similarities and dissimilarities between the considered accounting regulations are therefore determined.

The most frequently used methods in trade literature when an analysis at the level of national accounting regulations is aimed are Jaccards' association coefficients. The Jaccard coefficient [Jaccard, 1901] is defined as the size of the intersection divided by the size of the union of the sample sets:

$$J(A,B) = \frac{|A \cap B|}{|A \cup B|} \qquad (1)$$

The Jaccard distance is complementary to the Jaccard coefficient and measures the dissimilarities. It is obtained by dividing the difference of the sizes of the union and the intersection of two sets by the size of the union:

$$J_\delta(A, B) = 1 - J(A, B) = \frac{|A \cup B| - |A \cap B|}{|A \cup B|} \qquad (2)$$

In order to achieve a quantification of the similarity degree between the considered accounting referential there was developed an empirical analysis with character of comparison. Based on the methodology of previous studies dealing with formal harmonization [Fontes et al., 2005; Strouhal et al., 2008] there was identified a series of elements regarding financial instruments which we then organized within five big topics as follows: 1. Financial assets, 2. Financial liabilities, 3. Equity instruments, 4. Derivatives and 5. Hedge accounting. For each one of the 20 elements which were identified we proceeded to achieve a comparison between the accounting treatment as it appears within the four accounting referential considered for analysis. Thus, for each possible and/or existent accounting treatment within at least one of the considered accounting referential we have allocated the 1 or 0 value, where the 1 value shows that the considered accounting treatment exists within the considered accounting referential, and the 0 value is given for the situation when the considered accounting treatment isn't found within the considered accounting referential.

4. FINDINGS

Based on the description of the empirical analysis which was done within the research methodology, there has been empirically tested the comparability degree between the selected accounting referential from two major points of view: 1. the one referring to the similarities between them, and 2. the one of the dissimilarities between the three accounting systems. In order to achieve the proposed comparison, we have considered that the best analysis, for this type of approach, is represented by the nonparametric correlation and the association degree between two or more than two considered variables. The major differences are given especially by the level of disclosures required for financial instruments. The comparative illustration of the obtained results is shown within the following tables.

Table no. 1 Similarity Analysis

	CZE	**IFRS**	**EU**
CZE	1.000	0.651	0.561
IFRS	0.651	1.000	0.811
EU Directives	0.561	0.811	1.000

Source: our analysis

Similarity coefficients calculated through the study and presented within the above tables show a great degree of similarity between all three considered sets of accounting regulations where issues of reporting for financial instruments are concerned. The Czech accounting regulations are similar with the foresights of the European Directives, but not as much as with the international referential (0.561 Jaccard's similarity coefficient).

The performed analysis also reveals an extremely high level of similarities between the foresights of the international referential (IFRS) and the European Directives on issues connected to financial instruments (0.811 Jaccard's similarity coefficient). These results will be further investigated within the drawn conclusions of the paper.

The major differences in the field of reporting of financial instruments under national regulation of Czech Republic shall be seen in the lower level of disclosed information which is required by Czech accounting law.

For the area of financial securities, there may be used several revaluation models:

- historical costs approach;
- equity method through OCI (other comprehensive income);
- fair value through OCI;
- fair value through profit or loss.

The accounting regulations in the Czech Republic prefer to use equity method for measurement of shares with higher than substantial influence, while for other long-term shares prefer to use fair value through OCI model. Measurement via P/L is used for short-term shares held for trading.

However these models have different effect on certain financial measures such as Return on Assets (ROA), Return on Equity (ROE) or EPS (Earnings per Share). Therefore was provided sensitivity analysis of these measures on various revaluation models for the revaluation of shares in the rank of -10 % ; + 10 % from the initial historical costs (see Figures no. 1 – 3).

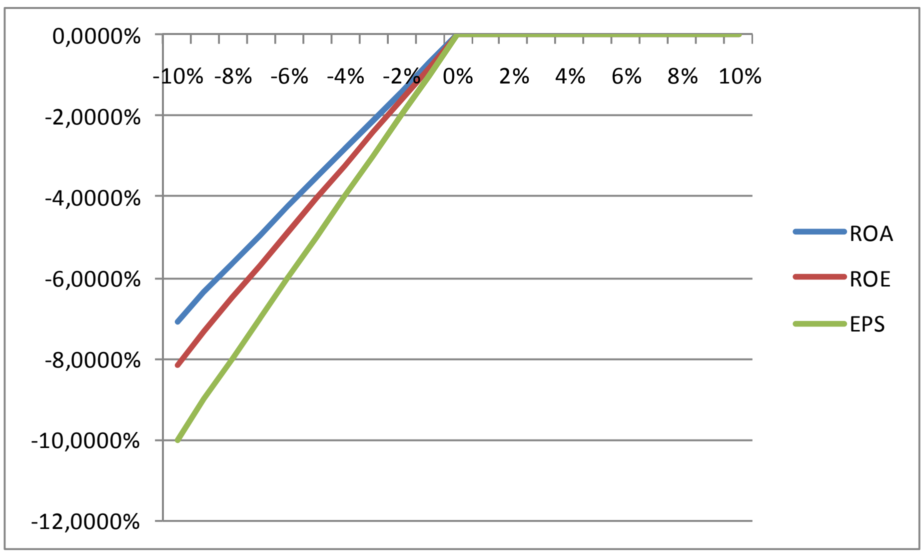

Figure no. 1 Sensitivity Analysis of ROA, ROE and EPS on Historical Costs Model

The most sensitive ratio on Historical Costs Model is Earnings per Share (the effect is proportional). Historical cost model does not allow the revaluation on higher values, therefore it is clearly seen, that there is any effect on revaluation higher than 0 % from the initial historical costs.

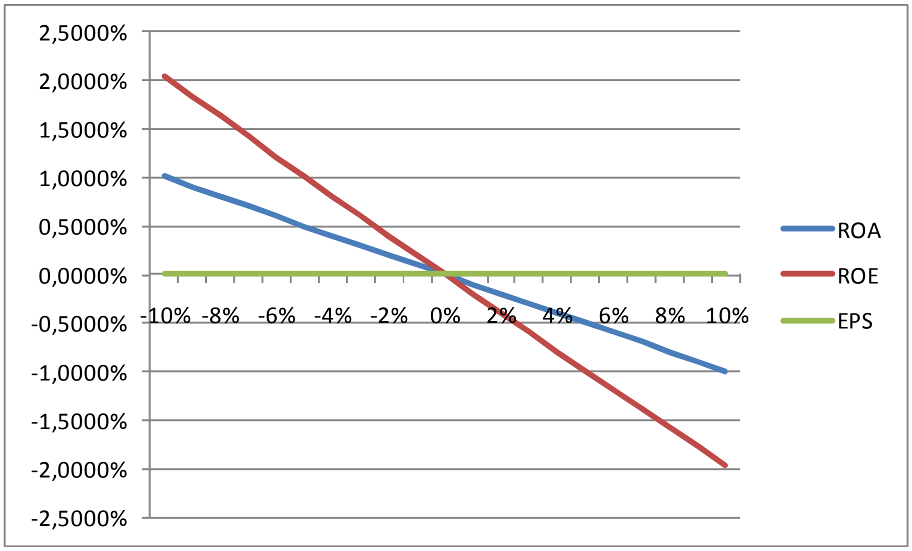

Figure no. 2 Sensitivity Analysis of ROA, ROE and EPS on OCI Models (Equity Model, FV through OCI)

The most sensitive ratio on Equity Method or Fair Value through OCI is Return on Equity (higher values than initial historical costs have negative under-proportional effect on profitability ratios given by the higher value of revaluation fund in equity). These revaluation methods do not have any effect on Earnings per Share.

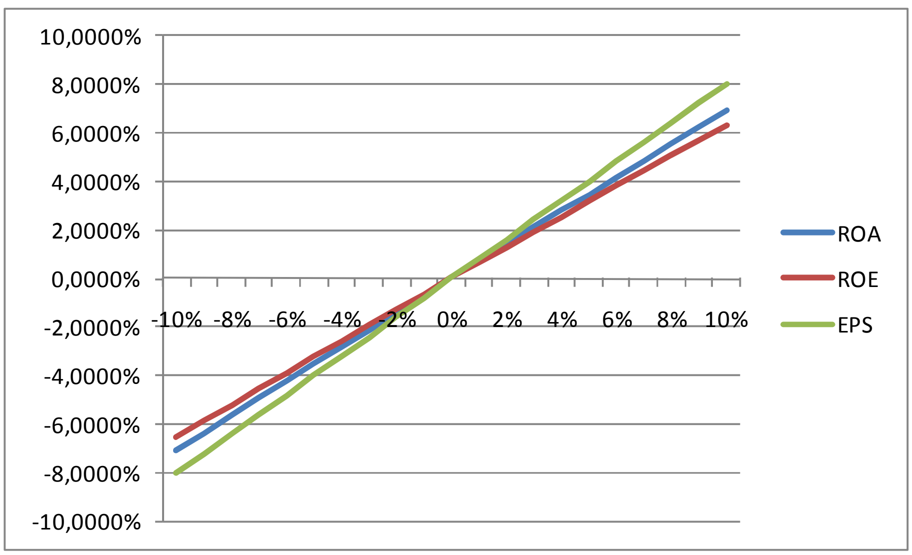

Figure no. 3 Sensitivity Analysis of ROA, ROE and EPS on FVPL Model

The most sensitive ratio on Fair Value through Profit/Loss is Earnings per Share, however this sensitivity is under-proportional.

5. CONCLUSION

The performed empirical analysis on aspects concerning reporting for financial instruments documented the existence of a high similarity degree among all considered accounting referential (IFRS, European Directives and Czech accounting regulations). The real state of facts is that nowadays European Directives actually incorporate a great deal of the foresights of IFRS which shouldn't therefore be blamed for all the wrongs in the international financial arena. It is also true that the prudence, so highly valued by continentals, seems to have saved some of the damages of the financial crisis in some cases, but prudence itself can be thought of as professional judgement amidst sound accounting principles.

It is clear that countries like Czech Republic are far from making themselves herd at international level just by considering the degree of development of their national capital market. Still we have European organism representing them and trying to keep feet with international developments.

It is clear that accounting for financial instruments is likely to remain an extremely difficult area, both in the short term and for a number of years. Still there seems to be a general consensus among the major standard setters and their representatives that fair valuing all financial instruments can be the only ultimate solution. IASB (International Accounting Standards Board – IFRS Standards Setter) and FASB (Financial Accounting Standards Board – US GAAP Setter) have also reiterated their long term objective of requiring all financial instruments to be measured at fair value with realised and unrealised gains and losses recognised in the period in which they occur. This controversial view has to deal with considerable resistance even though the standards setters are trying to move ahead of current practices in offering suitable solutions.

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