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**Article**

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# How Do Czech Companies Report Fair Value Measurement Under IFRS 13?

*Jan Dvořák\**

## **Abstract:**

Although the IFRS 13 standard has been effective for more than 4 years, there is virtually no practical research on this topic. Therefore, this paper focuses on reporting of fair value measurement under IFRS 13 in the Czech Republic. Firstly, the author identifies and describes the theoretical basis of IFRS 13 with a relevant literature review of the conducted research. Subsequently, the actual empirical research is presented on a sample of companies from the Czech Republic. The author reaches a conclusion that in some cases, companies in the Czech Republic fail to report compulsory information, as required by the IFRS 13 standard. Moreover, the empirical research has revealed that the proportion of the fair value measurement within fair value hierarchy is approximately one third for each of the three levels, and it does not change over time.

**Key words:** IFRS 13; Fair value; International accounting standards.

**JEL classification:** M40.

## **1 Introduction**

Fair value measurement is presently one of the hottest topics in the accounting field. Nowadays, there is a major pressure on companies to report the true and fair value of assets and liabilities in their financial statements. Whether fair value measurement is an obstacle or a benefit was nicely explained by Žárová (2008).

The first part of the paper presents a clear evolution of the fair value definition. It has varied over the time quite often. The last definition is precisely stated in the IFRS 13 standard issued in May 2011 and applies to annual periods beginning on or after 1 January 2013. Also, a thorough literature review on the topic of fair value and related disclosures was compiled.

Since there is an obvious increase in the number of firms reporting in accordance to IFRS (Mejzlík, Arltová, Procházka, Vítek, 2015), the topic of ‘disclosure quality’ testing has become very popular as there are numerous papers from the recent time with such a straightforward goal. These are also mentioned in the literature review and their outcomes are compared with my own research results.

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Finally, the primary aim of the paper is to examine the disclosure requirements set by the current fair value standard IFRS 13, and to assess whether Czech listed companies report fair value measurement in compliance with these selected requirements. The research has been conducted on a sample of more than 50 companies in the time period 2013–2015.

## **2 History of Fair Value Definition and Comprehensive Literature Review**

The true and fair value principle formulated in 1947 in Companies Act issued in the United Kingdom (Ristea and Jianu, 2010) is considered as the most important principle in contemporary accounting.

The first ever attempt to define the fair value was made by the U.S. Financial Accounting Standards Board (FASB) in 1976 along with a publication of the accounting standard FAS 13 – this moment would be held as a reference point. According to this standard, the fair value definition was applicable to leased property only. The definition follows:

*“The price for which the property could be sold in an arm's-length transaction between unrelated parties.”* (FASB, 1976)

Evolution of the fair value definition continued in 1998 with the standard IAS 32 Financial instruments, issued by the International Accounting Standards Committee (IASC). The objective of this standard was to establish principles for presenting financial instruments as liabilities or equity, and for offsetting financial assets and financial liabilities. This standard defined fair value as:

*“The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.”* (Plus, 1998)

As a direct predecessor of the current IFRS 13 Fair Value Measurements containing the latest fair value definition can be, without any doubt, considered the Accounting Standards Codification (ACS) Topic 820: Fair Value Measurement<sup>1</sup>, issued by FASB. This standard for U.S. GAAP was a non-pretended template for the IFRS 13.

IFRS 13 provides the guidance for all fair value measurements, clarifies the definition of fair value and enhances disclosures regarding the reported fair value estimates. The latest definition of the fair value emphasises that it is a market based measurement. The definition of fair value in IFRS 13 (Plus, 2011) follows:

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<sup>1</sup> The newly issued ASU has amended the title of FASB's ASC Topic 820 from 'Fair Value Measurements and Disclosures' to 'Fair Value Measurement'.

*“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”*

Some of the key elements closely related to the fair value definition, such as the exit price, the highest and best use principle, as well as numerous valuation techniques are discussed in detail by Čibera (2016) or Dvořáková (2013).

Other authors, for instance Enahoro and Jayeoba (2013), are dealing with the importance of explanatory power of the fair value with respect to the quality of reported information. They claim that use of fair value measurement is suitable for assets only. I should also mention the article by Parbonetti, Menini and Magnan (2011) who are testing the level of confusion with respect to the fair value accounting.

Another article from Riedl and Serafiem (2011) is using a sample of US companies to test the relation between the respective betas and the level of fair value hierarchy used for financial instruments' fair value estimates. They have concluded that companies which value their financial instruments on the third level of fair value hierarchy tend to have higher betas.

In recent years I registered an increasing number of papers on disclosure requirements' testing. Čevela (2016) examined the periodic information duty of companies on the Prague Stock Exchange in relation to the information disclosed within annual reports (e.g. financial statements, Report on relations and the Report of the Board of Directors). The fulfilment of these requirements was first rate for all the companies.

Ašenbrenerová (2016) tested Czech listed companies whether they disclose information on joint ventures and associates according to IFRS 12. She found out that in some cases the disclosed information are not satisfactory, especially in the category of summarized financial information. In another paper (Ašenbrenerová, 2015) she compared the quality of disclosed information in statements of financial and non-financial firms with no observed difference.

Other papers focused on IFRS 8 or IFRS 15 application in the Czech Republic. Regarding the fulfilment of disclosure requirements of IFRS 8, the results based on Míková and Valášková's (2016) research are not so optimistic. Some of the requirements are disclosed quite well (more than 90 % or more than 70 %), some reasonably well (around 50 %), and some quite poorly (30 %). The authors noted that entities do not pay enough attention to the disclosure requirements comprised in IFRS 8. Kopecká (2016) confirmed these results and compared the requirements of IAS14 and IFRS 8. Analogic comparison has been carried out by Knorová (2016) with IAS 18 and IFRS 15 regarding revenue disclosures.

Results of the ‘disclosure quality’ testing from these papers will be therefore compared with my own research conducted in the Chapter 3.

### 3 Fair Value Measurement in the Czech Republic

As I looked through papers published over the past 3 years, there is only a single one (Čibera, 2016) dealing with the practical application of IFRS 13 in the Czech Republic. His research is unfortunately very brief, as the author wanted to answer just two basic questions: i) whether companies on the PSE (Prague Stock Exchange) do apply IFRS 13 and ii) whether they also use the level 2 or 3 of fair value hierarchy. His research delivered positive answers to both these questions.

For me, there was a clear opportunity to continue in Čibera’s work and I tried to extend the sample of companies (with respect to the Section 19a of the Act on Accounting), as well as the period of time used in the analysis (data from 2013 to 2015), and the quantity of observed specifications.

To begin with, I have specified a sample of companies that would be eventually assessed. According to the Section 19a of the Act on Accounting, companies that issue marketable securities (bonds or shares) on the European regulated market are obliged to assemble their financial statements in compliance with the international accounting standards (IFRS). For these purposes, the official register administered by the Czech National Bank (ČNB, 2017) was used. As a result, I have got 65 subjects at 31 December 2013, 64 subjects at 31 December 2014 and 83 subjects at 31 December 2015. Then I carried out a manual elimination.

During the process, the following companies had to be eliminated: companies that entered the regulated market during the period, companies with other purpose of business than profit, companies with no accounts available, companies subject to U.S. GAAP, investment funds, and companies in liquidation.

Tab. 1 presents the process of elimination for each year

**Tab. 1 Elimination process**

	2013	2014	2015
Number of subjects before elimination	65	64	83*
Enter during period	7	5	20*
Other purpose of business	3	2	2
N/A financial statements	4	4	4
U.S. GAAP	1	1	1
Investment fund	1	1	2
In liquidation	3	1	1
<b>Number of subjects after elimination</b>	<b>46</b>	<b>50</b>	<b>53</b>

Source: Czech National Bank (2017), author’s adjustments.

Note: \*15 investment funds (closed or open-ended) are from 2015 considered to be companies that emit marketable securities.

This gave me quite a large sample of companies in all selected years. All these companies are subject to the IFRS reporting.

The sample contains financial institutions, leading energy companies in the Czech market, developers, and many companies with specific products. Some of the financial statements were written in the Czech language, while others offer English mutations as well.

From my point of view, I have to say that the most precious, clear, and of course the most elaborated financial statements were published by financial institutions as well as companies that are obliged to deliver reports to their foreign parent companies for their respective national regulators. If I had to highlight one company that had its financial statements in the highest quality, it would be the Erste Group Bank AG, with absolutely perfect and complete information, not just within the scope of this paper. Among the Czech-based companies, I can mention the energy giant ČEZ, a.s. that has all the necessary information organized in a nice and reader-friendly manner.

### **3.1 Testing of compulsory information reporting**

The first practical goal of this paper is to decide whether companies from the filtered sample do fulfil the conditions of fair value reporting with respect to the IFRS 13 including specific disclosures required. The list of tested information follows:

- Question 1: Does the company report whether assets or liabilities measured by their fair value are distinguished by the fair value hierarchy (Level 1, 2 or 3)?
- Question 2: Does the company report changes within the fair value hierarchy levels?
- Question 3: Does the company report for fair value measurements categorised within the Level 2 and the Level 3 of fair value hierarchy a description of the valuation technique(s) and the inputs used in fair value measurement?

Also, it would be very interesting to find out if the level of fulfilment of these requirements is increasing or decreasing during the tested time period. The results of this empirical research are presented in the Tab. 2:

**Tab. 2 Compulsory information reporting**

Results	Question 1			Question 2			Question 3		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Yes	30	34	39	21	22	24	14*	18*	19*
No	14	14	12	23	26	27	30	30	32
No assets or liabilities measured by fair value	2	2	2	2	2	2	2	2	2
Yes	65.2%	68.0%	73.6%	45.7%	44.0%	45.3%	30.4%	36.0%	35.8%
No	30.4%	28.0%	22.6%	50.0%	52.0%	50.9%	65.2%	60.0%	60.4%
No assets or liabilities measured by fair value	4.3%	4.0%	3.8%	4.3%	4.0%	3.8%	4.3%	4.0%	3.8%

Source: Companies' financial statements, author's research.

Note: \*One company uses only Level 1 of the fair value hierarchy and it is not obliged to report information regarding the Question 3 – this company was thus included in the answer category “Yes”.

The positive discovery is that most of the companies (65–74 %) distinguish fair value measurements with respect to the fair value hierarchy. Gratefully, I could clearly observe a slightly improved situation in 2015. Nevertheless, it is important to emphasize that this process is compulsory, which means that nearly a quarter of the companies does not respect the IFRS 13 requirements.

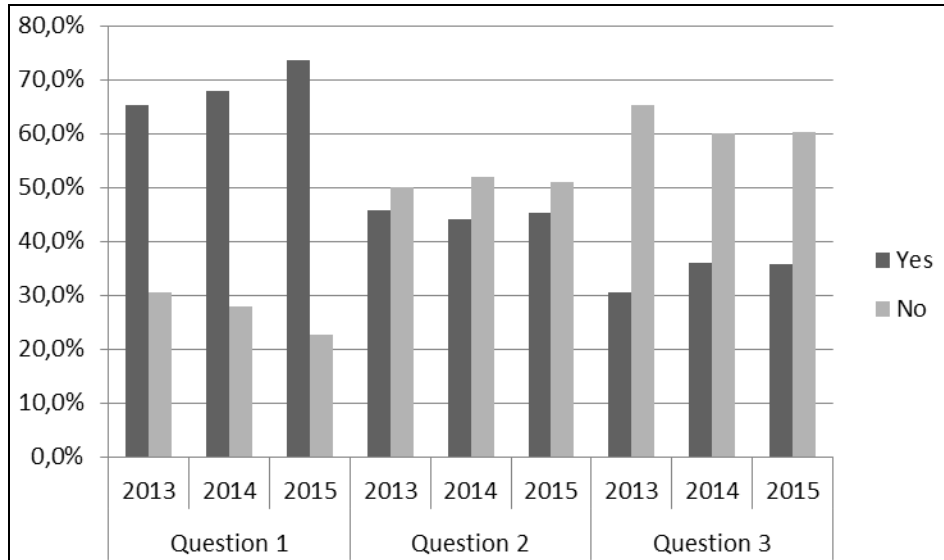
Even worse results were delivered from evaluation of the Question 2 and Question 3. Fifty per cent of the companies do not refer to changes between the levels. Moreover, this ratio is not getting any better over the time. This might arise from situations when companies do not change the process of measuring the fair value, but omit to report this fact in their statements, not even realizing it is one of the compulsory reporting pieces of information.

Over 60 % of the companies fail to present any description of the valuation technique(s) and the inputs used in the fair value measurement when the Level 2 or 3 of the fair value hierarchy is recognized. Without this information, the user of financial statements has absolutely no chance to discover how the fair value of an asset or liability was determined. Minority of companies report valuation techniques (the most common is the discounted cash flow model). As I mentioned previously, mainly financial institutions are honest in releasing this type of information.

As mentioned earlier, it is possible to relate the results from my research with an outcome from papers regarding disclosure quality testing done in 2016. Some

required disclosures are fulfilled on a high level (Čevela, 2016), but some (Miková and Valášková, 2016) tend to be insufficient and readers of such financial statements will not get a proper picture with respect to the IFRS standards. As the following Figure 1 shows, Czech listed companies mostly do report some of the compulsory information while some fail to comply.

**Fig. 1 Proportion of Yes/No answers**



Source: Companies' financial statements, author's research.

I have to admit that these conclusions were quite shocking to me, since IFRS 13 standard has been effective for more than 4 years and still, there are major problems in fulfilling its reporting requirements. Very interesting would also be to compare data from the Czech Republic with another European country to see if it is a standard practice or not. This may pose a research subject of some future paper.

### 3.2 Proportion of the fair value measurement within fair value hierarchy

In this chapter, I focus on the proportion of the fair value measurement within the fair value hierarchy. IFRS 13 recognizes three levels of fair value hierarchy:

- Level 1 inputs are quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs are inputs other than quoted market prices included within the Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the given asset or liability.



The company should always try to measure the fair value of an asset or liability by the Level 1 inputs. If this is not possible, the entity should alternatively use the Level 2 inputs. If even this procedure is not applicable, it is supposed to use the Level 3 inputs as the last choice. The purpose of this hierarchy is to match values to the market as much as possible.

I performed an analysis on the same sample of companies and examined the proportion of fair value hierarchy levels in companies' financial statements. The final numbers for each of the respective years were calculated as an arithmetic mean for the total number of observations. Median is not an appropriate measure since there are too many extreme results.

The Tab. 3 displays the results:

**Tab. 3 Proportion of the fair value measurement**

	2013	2014	2015
Number of companies	30	34	39
Level 1	34.5%	29.9%	36.8%
Level 2	35.5%	41.3%	31.1%
Level 3	30.0%	28.8%	32.1%

Source: Companies' financial statements, author's research.

Note: The analysis was conducted only on assets and liabilities measured by fair value. Some financial statements recorded the level of fair value hierarchy of assets and liabilities as not measured by fair value. This was not taken into account because of possible distortion of results.

The proportion of the fair value measurement seems to be distributed within three levels of fair value hierarchy quite uniformly. The average company values approximately 1/3 of its assets and liabilities by the Level 1 inputs, 1/3 by the Level 2 inputs and 1/3 by the Level 3 inputs. This proportion is almost steady over the years. In 2014, we can observe a slight increase in the Level 2 percentage proportion. Nevertheless, in 2015 the situation is again in the ratio 1:1:1 for the Level 1, 2 and 3.

The table shows a clear inability of companies to value most of their assets and liabilities using the Level 1 inputs and the resulting need for the Level 2 or the Level 3 inputs.

#### **4 Conclusion**

The aim of this paper was set as an examination of the IFRS 13 Fair Value Measurement standard application in the Czech Republic. In the first part of this paper, the theoretical basis of the issue was explained with some important references to the published literature and papers.

In the second part of this paper, the author's attention was focused on the practical application of IFRS 13 in companies' financial statements in the Czech Republic. To date, there was only Čibera's (2016) paper published on this topic – clearly, there was a potential for a follow-up. The practical part of this paper was focused on compulsory information reporting with respect to the specific disclosures required by the IFRS 13 and the proportion of the fair value measurement within fair value hierarchy. The analysis performed highlighted certain deficiencies in publishing information on fair value measurement in financial statements of companies in the Czech Republic. Another important note relates to a very low level of reporting on valuation technique(s) and inputs whenever the Level 2 or 3 of fair value hierarchy was used.

The final part of the paper was dedicated to the proportion of fair value measurement within fair value hierarchy on the sample of companies in the Czech Republic. The results showed surprising uniformity when approximately one third of assets and liabilities were valued using the Level 1 inputs, one third using the Level 2 inputs and one third using the Level 3 inputs with no major changes over time.

This study is limited to Czech listed companies and similar research in other European countries might deliver different results. Moreover, the paper is dealing with selected IFRS 13 disclosure requirements, although these are the most important.

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